

24th International FIG Congress

Sydney, April 11–16, 2010

The largest congress of the International Federation of Surveyors (FIG) was held in Sydney, Australia, from April 11 to 16, 2010. There were more than 2000 participants and the main conference theme was *Facing the Challenges – Building the Capacity*. The congress was organised by FIG and Surveying and Spatial Sciences Institute (SSSI), an organisation encompassing and representing about 2700 geodesists and spatial experts in Australia and New Zealand.

The Sydney Convention and Exhibition Centre was the conference site. It is a large building located in a bay and the Darling Harbour. It is surrounded by several hotels, lots of restaurants, shops, coffee bars, boulevards, everything that might interest tourists from around the world. However, it should be mentioned

cadastre and land organisation, as well as a special seminar about small island developing states. Meetings of all FIG commission were also held.

One of the social activities was the welcome reception in the large chamber of the City Hall. It started with an organ concert, which gathered many participants. Additional payment was necessary for the FIG Foundation Dinner, the FIG Gala Dinner and the FIG Farewell Reception, and a special invitation was required for the Reception at the Government House.

Participants who wanted to see something beside professional content were offered several trips and attractions, such as Sydney City Sights, Northern Beaches Tour, Sydney Harbour Coffee

According to the official list, there were 13 participants from Croatia, six of them from the Faculty of Geodesy of the University of Zagreb and seven from the State Geodetic Administration. They presented following 10 papers:

- ❑ Bačić, Ž., Obradović, Ž.: South-East Europe Regional SDI Cooperation – SEE Inspiration
- ❑ Bosiljevac, M., Bačić, Ž.: The Implementation of New Official Geodetic Datum and Map Projections in the Republic of Croatia
- ❑ Kordić, B., Đapo, A., Pribičević, B.: Multibeam and Sidescan Sonar Application for Determining the Position and Shape of the Remains of Hadrian Bridge on Drava River
- ❑ Lapaine, M., Frangeš, S.: Education in Geodesy and Geoinformatics at the University of Zagreb and the Bologna Process
- ❑ Medak, D., Pribičević, B., Frangeš, S., Car, A., Kozak, J.: Impact of TEMPUS CARDS Project GIST-CroHE on the New MSc in Geoinformatics Curriculum and on the Implementation of Bologna Process at the Faculty of Geodesy, University of Zagreb, Croatia
- ❑ Miler, M., Odobašić, D., Medak, D.: Efficient Web-GIS Solution based on Open Source Technologies: Case-Study of Urban Planning and Management of the City of Zagreb, Croatia
- ❑ Rašić, Lj., Bačić, Ž.: The Role of National Mapping and Cadastre Agencies in Establishment of NSDI: Croatian Example
- ❑ Unger, J.: Cadastre Involvement in Sustainable Development as an Essential Component
- ❑ Vilus, I.: The Official Topographic and Mapping System of the Republic of Croatia
- ❑ Zekušić, S.: Official Spatial Data as a Base for Management in Agriculture

The congress in Sydney was a great success for the profession, for FIG and

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that Sydney is a rather expensive city. For example, food and drinks are three to four times more expensive than in Croatia.

There were more than 800 papers in four plenary sessions and multiple technical sessions held at the same time and were organised according to 10 commissions of FIG, or their combinations. In addition, there were several "After lunch talks", a Workshop on the history of surveying, a Forum of directors of national organisations for cartography,

Cruise, Bridge Climb, Sydney Opera House Guided Tour, Hunter Valley Wine Tour and Discover Blue Mountains Tour, truly a great selection of various activities.

A large technical exhibition could be seen from Monday to Thursday, where about 40 presenters exhibited newest products and services. A lunch for all participants was organised in the exhibition area each day and it was also a place where one could have a free Internet access.



Sydney, 2010



Sydney Opera House, 2010

24. međunarodni kongres FIG-a

Sydney, 11–16. travnja 2010.

Dosad najveći kongres Međunarodne federacije geodeta (International Federation of Surveyors – FIG) održan je od 11. do 16. travnja 2010. u Sydneyu u Australiji, a okupio je više od 2000 sudionika. Glavna tema simpozija bila je *Su-čeljavanje s izazovima – izgradnja kapaciteta* (Facing the Challenges – Building the Capacity). Organizatori kongresa bili su FIG i Surveying and Spatial Sciences Institute (SSSI), organizacija koja objedinjuje i predstavlja oko 2700 geodeta i stručnjaka za prostor u Australiji i na Novom Zelandu.

Sydney Convention and Exhibition Centre bilo je mjesto održavanja simpozija. To je veliko zdanje smješteno u

uvali i luci Darling Harbour. U blizini je nekoliko hotela, mnoštvo restorana, dućana, kafića, uređena šetališta, ukratko sve ono što turiste koji se tu nađu, a ima ih iz svih krajeva svijeta, može zanimati. Ipak, treba spomenuti da je Sydney prilično skup grad. Npr. hrana i piće su tri do četiri puta skuplji od cijena na koje smo navikli u Hrvatskoj.

Bilo je izloženo više od 800 referata na 4 plenarne sjednice i većem broju paralelnih tehničkih sjednica koje su bile organizirane u skladu s 10 povjerenstava (Commissions) FIG-a, odnosno njihovim kombinacijama. Uz to bilo je održano nekoliko "govora poslije ručka" (After Lunch Talk), radionica o

povijesti mjerništva, forum ravnatelja i direktora nacionalnih organizacija za kartografiju, katastar i organizaciju zemljišta te posebni seminar o malim otočkim državama u razvoju (Small Island Developing States). Održani su i sastanci svih povjerenstava FIG-a.

Od društvenih aktivnosti spomenimo domjenak dobrodošlice (Welcome Reception) u velikoj dvorani gradske vijećnice. Započeo je koncertom na orguljama i okupio velik broj sudionika. Sudjelovanje na FIG Foundation Dinner, FIG Gala Dinner i FIG Farewell Reception trebalo je posebno doplatiti, a za Reception at Government House trebala je posebna pozivnica.

Za one koji su osim stručnih sadržaja željeli vidjeti još nešto, organizatori su ponudili nekoliko izleta i atrakcija, kao što su Sydney City Sights, Northern Beaches Tour, Sydney Harbour Coffee Cruise, Bridge Climb, Sydney Opera House Guided Tour, Hunter Valley Wine Tour i Discover Blue Mountains Tour. Zaista velik izbor različitih sadržaja.

Od ponedjeljka do četvrtka održavala se velika tehnička izložba na kojoj je 40-ak izlagača izlagalo najnovija proizvode i usluge. U tom je prostoru svaki dan poslužen ručak za sve sudionike, a tu je bilo i mjesto za priključak na bežični i besplatni internet.

Prema službenom popisu, na kongresu u Sydneyu bilo je 13 sudionika iz Hrvatske. Od toga 6 s Geodetskog fakulteta Sveučilišta u Zagrebu i 7 iz Državne geodetske uprave. Oni su podnijeli sljedećih 10 referata:

- ❑ Bačić, Ž., Obradović, Ž.: South-East Europe Regional SDI Cooperation – SEE Inspiration
- ❑ Bosiljevac, M., Bačić, Ž.: The Implementation of New Official Geodetic Datum and Map Projections in the Republic of Croatia
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especially for its president Stig Enemark, who promoted FIG globally and achieved an undoubtedly recognition of the profession. As the president noticed in his closing speech, land professionals need to enhance their role in development of sustainable cities. They have to accept a more engaged and leading role in the field of climate changes. Partnership with UN agencies is the key for the acknowledgment and status broadening of the global surveying community which is going to lead to the most efficient solutions to global issues related to land.

The FIG General Assembly was held within the 24th International FIG Congress in Sydney. The new chairmanship for the period 2011–2014 was elected. The new FIG President is Teo CheeHai from Malaysia. New FIG members are associations from Albania, Benin, Bosnia and Herzegovina, Cyprus and Nepal. FIG

now has 103 members, 37 associate members, 89 academic members and 35 corporate members.

Croatian Geodetic Society represents Croatia in FIG, and the Faculty of Geodesy of the University of Zagreb is an academic member of the Federation.

Sydney is the most populated and oldest city in Australia, established in 1788. About 4.1 million people live in the Sydney area. Sydney is the capital of the Australian federal state New South Wales. Considering finances, traffic, culture, science and economy, Sydney and Melbourne are the two most important cities in Australia. The 27th Olympic Games were held in Sydney in 2000, and it also hosted the World Youth Day in 2008. The city is also a favourite tourist destination due to its beautiful position, beaches and climate, which made it voted the best

location for living or vacation on multiple occasions.

Sydney is located in southeast Australia, around Botany Bay. The bay is divided into numerous smaller bays. The internal part of the bay, called Port Jackson is the largest natural harbour in the world. A suitable harbour is the main cause of the city being there. There are also many sand beaches, the most famous being Bondi.

The southern part of the city (south of the bay) is the Cumberland Plain. To the north of the bay, there is a hilly area called the Hornsby Plateau, which reaches 200 m above sea level. In the city hinterland, there area Blue Mountains with famous steep rocks and remains of Aboriginal culture which are a part of the UNESCO World Heritage. Numerous rivers flow through the city (Nepean River, Warragamba River, Parramatta River, Georges River and Cooks River).

The climate is oceanic with lots of precipitation and small annual temperature differences. The lowest winter temperature is 8°C, while the highest summer temperature is 26°C.

The Sydney Opera by the Danish architect Jørn Utzon is the most famous building in Sydney and is recognized by people all over the world. It is a multi-venue performing arts centre and a part of the UNESCO World Heritage. Another globally famous sight is the *Harbour Bridge* by architect Ralph Freeman. The city has three botanical gardens, the most famous one being the *Royal Botanic Gardens*. The *Sydney Tower* is 305 m high, making it the second highest in Australia and the third highest in the southern hemisphere.

Most participants of the 24th International FIG Congress are going to remember their return home. Namely, it was the time when a cloud of volcanic ashes from Iceland covered Europe and made air transport very chaotic. Large quantities of ashes were generated due to rapid cooling of magma in contact with icy glaciers, and most airports in Europe were closed for several days. The author of this text flew from Sydney to Singapore, but could not travel further. It was necessary to wait several days, find a suitable flight and happily return to Zagreb via Istanbul.

The next FIG congress is going to be held in Kuala Lumpur, Malaysia from April 9 to 16, 2014. More information can be found at www.fig.net.

Miljenko Lapaine



- ❑ Lapaine, M., Frangeš, S.: Education in Geodesy and Geoinformatics at the University of Zagreb and the Bologna Process
- ❑ Medak, D., Pribičević, B., Frangeš, S., Car, A., Kozak, J.: Impact of TEMPUS CARDS Project GIST-CroHE on the New MSc in Geoinformatics Curriculum and on the Implementation of Bologna Process at the Faculty of Geodesy, University of Zagreb, Croatia
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Kongres u Sydneyu bio je velik uspjeh za struku, za FIG i posebno za njegova predsjednika Stiga Enemarka, koji je FIG promovirao globalno i postigao nedvojbeno priznanje za struku. Kao što je predsjednik primijetio u svojoj završnoj riječi (closing speech), stručnjaci za zemljište moraju povećati svoju ulogu u razvoju održivih gradova. Oni moraju prihvatiti angažiraniju i vodeću ulogu na području klimatskih promjena. Partnerstvo s agencijama UN-a je ključ za priznavanje i proširenje statusa globalne geodetske (surveying) zajednice što će voditi k učinkovitijim rješenjima globalnih pitanja u vezi sa zemljištem.

U sklopu 24. međunarodnoga kongresa FIG-a u Sydneyu održana je generalna skupština FIG-a. Na njoj je izabrano novo predsjedništvo za razdoblje 2011-2014. Novi predsjednik je Teo CheeHai iz Malezije. Nove članice FIG-a su društva (member associations) iz Albanije, Benina, Bosne i Hercegovine, Cipra i Nepala. FIG sada ima 103 članice, 37 pridruženih članica (Associate members), 89 akademskih članica (Academic members) i 35 korporacijskih članica (Corporate members).

Hrvatsku u FIG-u predstavlja Hrvatsko geodetskog društvo, a Geodetski fakultet Sveučilišta u Zagrebu akademska je članica te federacije.



Sydney je najmnogoljudniji i najstariji grad u Australiji, osnovan 1788. godine. Na području utjecaja Sydneya živi oko 4,1 milijun stanovnika.

Sydney je glavni grad australske savezne države New South Wales. Financijski, prometno, kulturno, znanstveno i gospodarski Sydney je, uz Melbourne, jedan od dva najvažnija grada u Australiji. U njemu su se 2000. godine održale XXVII. Olimpijske igre, a bio je i domaćinom Svjetskog dana mladih 2008. godine. Grad je također omiljeno turističko odredište, zbog svojeg lijepog položaja, plaža i klime mnogo je puta biran kao najbolje odredište za život ili odmor.

Sydney je smješten na jugoistoku Australije, oko zaljeva Botany Bay. Zaljev je podijeljen na mnogo manjih zaljeva. Unutarnji dio zaljeva nazvan Port Jackson najveća je prirodna luka na svijetu. Pogodna luka je osnovni uzrok nastanka grada na tom mjestu. Postoji mnogo pješčanih plaža, od kojih je najpoznatija Bondi.

Južni dio grada (južno od zaljeva) ravnicu je Cumberland Plain. Sjeverno od zaljeva brežuljkasti je prostor Hornsby Plateau, koji dolazi do 200 m nadmorske visine. U zaleđu je grada planina Blue Mountains s poznatim strmim stijenama i ostacima kulture Aboridžina koje su na listi Svjetske baštine UNESCO-a. Prostorom grada teče mnogo rijeka (Nepean River, Warragamba River, Parramatta River, Georges River i Cooks River).

Klima je oceanska s mnogo padalina i malim godišnjim razlikama temperature. Najniža zimska temperatura ne

pada ispod 8 °C, a najviša ljetna ne prelazi 26 °C.

Sydneyska Opera (*Sydney Opera House*) danskog arhitekta Jørna Utzona najpoznatija je sydneyjska zgrada, po kojoj je grad prepoznatljiv širom svijeta. Sagrađena je u kao višenamjenski umjetnički prostor i uvrštena na listu Svjetske baštine UNESCO-a. Druga je svjetski poznata znamenitost most preko luke (*Harbour Bridge*), arhitekta Ralpa Freemana. Grad ima tri botanička vrta, od kojih je najpoznatiji *Royal Botanic Gardens*. Toranj *Sydney Tower* je s 305 m drugi po visini u Australiji i treći na južnoj Zemljinoj polutici.

Za većinu sudionika 24. međunarodnoga kongresa FIG-a ostat će u trajnoj uspomeni povratak kući. Naime, tih je dana oblak vulkanskog pepela što su ga vjetrovi s Islanda otpuhali na ostatak Europe već stvorio pravi kaos u zračnom prometu. Velike količine pepela nastajale su zbog brzog hlađenja magme u dodiru s ledom glečera, a većina zračnih luka u Europi bila je više dana zatvorena. Pisac ovih redaka odletio je iz Sydneya i stigao do Singapura, no dalje se nije moglo. Trebalo je pričekati nekoliko dana, pronaći odgovarajući zamjenski let i na kraju se ipak sretno, preko Istanbula vratiti u Zagreb.

Sljedeći kongres FIG-a održat će se od 9. do 16. travnja 2014. u Kuala Lumpur u Maleziji. Više o tome može se naći na internetskoj adresi www.fig.net.

Miljenko Lapaine



Taronga Zoo, Sydney, 2010



Royal Botanic Gardens, Sydney, 2010