The XXIV FIG International Congress 2010

Program Book



11 – 16 April 2010 Sydney Convention & Exhibition Centre Sydney, Australia



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Welcoming Messages

Greeting from FIG President

Dear Colleague,

The FIG Congress Sydney 2010: Facing the Challenges – Building the Capacity is the highlight of the four-year term of office of the current FIG Council and Commissions. At the Congress we have a full professional program consisting of more than 150 technical and flash sessions, several workshops, and special forums. The technical program includes more than 800 papers from more than 80 countries. We expect more than 2,000 participants from 100 countries to join attend this biggest professional FIG congress in the history. I am happy to reassure that there is no doubt that Sydney 2010 will be the global venue of all surveying activities in April 2010.

From the professional program I want to highlight the opening ceremony to begin the congress in Australian style; the four plenary sessions focusing on the hot issues of the global agenda and of our profession: namely the big challenges – climate change, disaster risk management and good land governance; spatially enabled society; and different aspects of the technological futures.

As novelties at the Congress we will introduce a series of after lunch talks with international well-known professionals, a special Forum for the Director Generals of National Mapping and Cadastre Agencies, and a special seminar on Small Island States and the Millennium Development Goals.

For the first time at an FIG Congress we have offered the opportunity for presenting both peer review and non peer review papers. This has been well received with more than



100 papers for review. I am sure that this guarantees increased quality of the papers and also offers academics a more attractive way to participate in the FIG conferences.

The high level professional program will offer an unbeatable reason to visit Australia, but do not forget also to see other parts of this great country. The congress offers an excellent opportunity to meet with local experts, who are contributing both to the technical program and making introductions during the technical tours. I also draw your attention to the exhibition, which gives a good insight in the surveying business in the southern hemisphere as well as globally.

I know from my personal experience through several visits that the Australian hosts will provide a first class Congress with the special "Aussie" hospitality.

I wish you an outstanding congress and an exciting time here in Sydney.

Prof. Stig Enemark FIG President



Welcoming Messages

Greeting from SSSI President

Dear Colleague,

As co-host of the momentous XXIV FIG International Congress, the Surveying & Spatial Sciences Institute (SSSI) proudly welcomes all surveyors, land professionals and spatial science experts to Sydney, Australia.

It is our pleasure to welcome both those who have been in Australia earlier, or even attended FIG 1994 in Melbourne, again to Australia as well as those of you who have made this your inaugural visit. I can assure you that from a professional point of view there is lot to see and learn from our experiences in Sydney, New South Wales and Australia.

The Surveying and Spatial Sciences Institute is the national peak body representing some 2,700 surveyors and spatial professionals in Australia and New Zealand. SSSI comprises members who work within Government, Education and the private sector. Our members are involved in a diverse range of activity, falling generally within several of the FIG commissions, and including Land Administration, Cadastral Surveying, Remote Sensing, Photogrammetry, GIS, Hydrography, Mining and Engineering Surveying and Education.

The XXIV FIG will see the largest number of proposals in the technical program in FIG history. A plethora of special forums, workshops and technical sessions will certainly make this a valuable event for any professional, but also will provide the

forum for surveyors and spatial professionals to unite and tackle the biggest challenges we see today.

An International Congress is for most of us a window of opportunity we rarely see. The XXIV FIG is an exciting time to meet fellow professionals from other parts of the world, to hear their issues first hand, and to reflect on solutions proposed or implemented by others and how that may apply to the local situation. Our issues are surprisingly similar, as are our challenges; therefore the solutions are also likely to have a degree of commonality.

On behalf of the Surveying & Spatial Sciences Institute, I welcome all surveyors and spatial professionals from Australia, New Zealand and abroad to the XXIV FIG Congress and to Sydney, Australia.

Michael Giudici SSSI President







Welcoming Messages

Greeting from FIG 2010 Congress Director

Dear Colleague,

On behalf of the organising committee of XXIV FIG International Congress and Australian surveyors, it is my pleasure to welcome you to FIG 2010 'Facing the Challenges – Building the Capacity', which is being held in Sydney, Australia: 11-16 April 2010. The FIG 2010 Congress has bought together thousands of surveyors, land professionals and other experts who work with land related issues from across the globe to meet and share experiences and achievements! FIG 2010 will be an experience of a life time!

Our Congress keynote speaker, Professor Tim Flannery, is the current Chair of the Copenhagen Climate Council, a global collaboration between business and science, a group strongly engaged with the recent UN Copenhagen Summit. Tim's keynote address will be highly relevant and thought provoking when he speaks about Climate Change as one of the world's greatest challenges.

Sydney is at its best in April with warm, temperate weather, waiting for you to enjoy all its attractions including the Sydney Opera House and the Harbour Bridge climb. We can now give you a taste of these wonderful attractions during the social events and tours arranged for Congress delegates which include the FIG Foundation dinner cruise on Sydney Harbour and the Gala dinner overlooking spectacular Cockle Bay. Australian surveyors have spent several years preparing for the Congress and as a gesture of our 'Aussie' hospitality, are inviting you for a home visit on one of the free evenings during the Congress.

FIG 2010 is the largest surveying Congress to be held in Australia and the Pacific region and has been a major attraction for both international, Australian, Asian and other regional visitors. We have been highly successful in our special efforts to bring delegates from the Pacific Islands to attend the Small Island Developing States seminar. FIG 2010 includes the biggest trade



show and technical exhibition of it's type in Australia and has been strongly supported by exhibitors and sponsors from around the globe. Almost 100 exhibition booths have been reserved to showcase the international expertise, knowledge, products and services provided across the broad FIG spectrum. Ten exciting technical tours have been arranged to cater for all commissions. Our famous red shirt army of young ambassadors and a cohort of student helpers will be here to assist you throughout the FIG Congress.

Sydney, Australia's gateway city and the capital of New South Wales, is built around one of the largest, most beautiful harbours in the world with miles of golden beaches stretching north and south of the city on the shores of the Pacific Ocean. To make the most out of your stay in Sydney a number of full day optional tours are available to experience the golden beaches, ancient Blue Mountains and famous Hunter Valley vineyards. The Congress venue is located in the Darling harbour precinct with many attractions and entertainment options including museums, Sydney Aquarium, Sydney Wildlife World and restaurants to suit all tastes

I am delighted to assure you the XXIV FIG International Congress will be a wonderful event you will never forget!

Paul Harcombe Congress Director, FIG 2010





Congress Organisers

The International Federation of Surveyors, FIG

The International Federation of Surveyors is an international, non-government organisation whose purpose is to support international collaboration for the progress of surveying in all fields and applications.

FIG is the premier international organization representing the interests of surveyors worldwide. It is a federation of the national member associations and covers the whole range of professional fields within the global surveying community. It provides an international forum for discussion and development aiming to promote professional practice and standards.

FIG was founded in 1878 in Paris and was known as the Fédération Internationale des Géomètres. This has become anglicized to the International Federation of Surveyors. It is a UN-recognised non-government organization (NGO), representing more than 120 countries throughout the world, and its aim is to ensure that the disciplines of surveying and all who practise them meet the needs of the markets and communities that they serve.

FIG Council members (2007-2010):

President:

Prof. Stig Enemark (Denmark)

Vice-Presidents:

Dr. Dalal S. Alnaggar (Egypt)

Mr. Matthew B. Higgins (Australia)

Mr. G. K. (Ken) Allred (Canada) (2007-2008)

Prof. Paul van der Molen (Netherlands) (2007-2008)

Mr. Iain Greenway (United Kingdom) (2009-2010)

Mr. Teo CheeHai (Malaysia) (2009-2010)

ACCO Representative:

Dr. Chryssy Potsiou (Greece)



FIG web site: www.fig.net
The FIG Profile: www.fig.net/general/profile.htm

FIG's technical work is led by ten Commissions (Commission Chairs 2007-2010):

Commission 1 - Professional Standards and Practice -

Mr. Yaacoub Saade (Lebanon)

Commission 2 - Professional Education -

Prof. Bela Markus (Hungary)

Commission 3 - Spatial Information Management -

Dr. Chryssy A. Potsiou (Greece)

Commission 4 – Hydrography –

Mr. Andrew Leyzack (Canada)

Commission 5 – Positioning and Measurement –

Prof. Rudolf Staiger (Germany)

Commission 6 - Engineering Surveys -

Prof. Alojz Kopacik (Slovakia)

Commission 7 - Cadastre and Land Management -

Mr. András Osskó (Hungary)

Commission 8 - Spatial Planning and Development -

Dr. Diane Dumashie (United Kingdom)

Commission 9 - Valuation and the Management of Real Estate -

Prof. Kauko Viitanen (Finland)

Commission 10 - Construction Economics and Management -

Mr. Andrew Morley (United Kingdom)

The Surveying & Spatial Sciences Institute (SSSI)

The Surveying & Spatial Sciences Institute (SSSI) is the national peak body representing spatial professionals in Australia and New Zealand. SSSI is a not-for-profit membership association that encourages its members to strive for excellence in the spatial professional disciplines, including: land surveying, hydrographic, engineering and mining surveying, cartography, remote sensing and photogrammetry, and spatial information science.

SSSI aims to support, represent and empower its members in the practice of spatial science and to provide a national identity to



enable the development of the surveying and spatial sciences industry as a whole.

SSSI is proud to host the FIG2010 Conference and continues to play an active role in Australia and New Zealand, and in the international spatial community.

Committees

Steering Committee



Stig Enemark FIG President



Jim Curnow SSSI President Representative on FIG 2010 Steering Committee



Paul Harcombe Congress Director



Markku Villikka FIG Director

Organising Committee



Mark Gordon Administration



Jonathan Saxon
Treasurer and Finance



Matt Higgins FIG Vice President



Bill Kearsley Technical Program and Tours



Mal McCoy Exhibition



Craig SandySponsorship



Dean Wallington Member Association Liaison



Graham Marion SSSI Nominee

FIG Office



Louise Friis-Hansen FIG Personal Assistant



John Neel FIG General Manager

General Information - Congress

Registration

The Registration Desk is located in the Parkside Promenade on Level 1 of the Sydney Convention and Exhibition Centre.

Opening hours:

 Saturday 10 April:
 1300 – 1730 hours

 Sunday 11 April:
 0800 – 1730 hours

 Monday 12 April:
 0730 – 1800 hours

 Tuesday 13 April:
 0800 – 1800 hours

 Wednesday 14 April:
 0800 – 1800 hours

 Thursday 15 April:
 0800 – 1800 hours

 Friday 16 April:
 0800 – 1600 hours

Entitlements

	Full Registration	Student Registration	Day Registration	Full Accompanying Person Registration	Accompanying Person Registration
All Sessions	✓	✓	(on nominated day)		
All Congress documentation	✓	✓	✓		
Welcome Reception, Sunday 11 April 2010	✓	✓		√	√
FIG Farewell Reception, Friday 16 April 2010	✓	✓		✓	✓
Morning and Afternoon Teas	✓	✓	(on nominated day)		
Lunches, 12-14 April 2010	✓	✓	(on nominated day)		
Satchel	✓	✓	✓		
Entrance to FIG2010 Exhibition	✓	✓	(on nominated day)	✓	✓
Opening Ceremony	✓	✓		✓	✓
Closing Ceremony	✓	√		✓	✓
Sydney Harbour Coffee Cruise, Tuesday 13 April 2010				✓	
Sydney City Sights Tour, Wednesday 14 April 2010				✓	
Gift				✓	

General Information - Congress

General Information

Name Badges

Each delegate registered for the Congress will receive a name badge at the Registration Desk. This badge will be your official pass and must be worn to obtain entry to all sessions, the exhibition and social functions.

Speaker Preparation Room

The Speaker Preparation Room is located in **Bayside 109 on Level 1** of the Sydney Convention and Exhibition Centre.

Speaker Preparation Opening Hours:

 Sunday 11 April:
 0800 – 1730 hours

 Monday 12 April:
 0730 – 1800 hours

 Tuesday 13 April:
 0800 – 1800 hours

 Wednesday 14 April:
 0800 – 1800 hours

 Thursday 15 April:
 0800 – 1800 hours

Presentations are to be delivered to the Speaker Preparation Room one day prior or at least two hours prior to the presentation session.

Messages

All messages received during the Congress will be placed on the Message Board in the registration area. To collect or leave messages please visit the Registration Desk.

Delegate List

The delegate list containing the names, country of origin, organisations and email address of registered delegates and registered exhibitors at the Conference are included in the Congress satchels. Late registrations will be given in an appendix available from the registration desk from Wednesday 14 April 2010. Full list of participants will be available on FIG web site.

Floor plan

A floor plan of meetings rooms at the Sydney Convention and Exhibition Centre is on page 9 of this booklet and in the Technical Program.

Lunch and Coffee Breaks

Monday 12 April: Lunch and coffees in the Exhibition Hall
Tuesday 13 April: Lunch and coffees in the Exhibition Hall
Wednesday 14 April: Lunch and coffees in the Exhibition Hall
Thursday 15 April: Morning coffee/tea in the Exhibition Hall
Afternoon coffee/tea in the Bayside Foyer,
Level 1

Friday 16 April: Morning coffee/tea and afternoon coffee/tea in Parkside Ballroom B Foyer, Level 1

If you have notified the Congress Managers of any special dietary requirements, please be advised that this information has been supplied to the conference venue. It is requested that you make yourself known to the venue catering staff during meal breaks.

Internet Centre and Wireless Internet

The Congress Internet Centre and Wireless Hot Spots are available to all delegates within the Congress Exhibition. The exhibition is open from Monday - Thursday. The wireless network is called FIG 2010, no password is required.

Wireless internet is also available throughout the entire Convention Centre. If you wish to access the internet when the exhibition is not open, a wireless card can be purchased from the information desk on Bayside Ground Level of the Convention Centre. Wireless runs 24 hours a day and costs A\$10 for an hour or A\$20 for a day.

Cloakroom

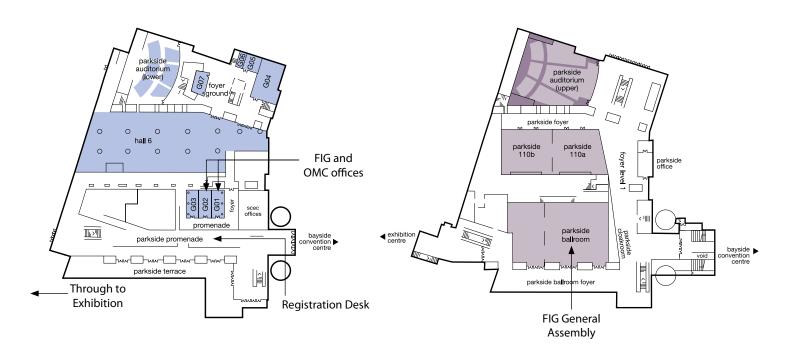
The cloakroom at the Convention Centre is located on the Ground Level of Bayside Convention Centre at the Information Desk. This facility is free of charge.



Sydney Convention and Exhibition Centre

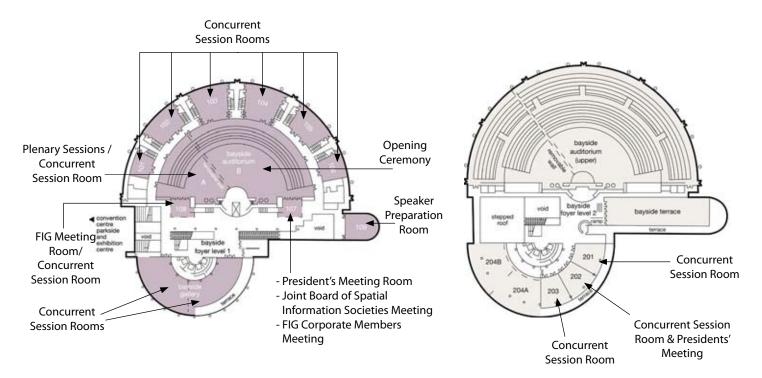
Parkside Ground Level

Parkside Level 1



Bayside Level 1

Bayside Level 2



Opening Ceremony

Program

The Congress opening session will provide a spectacular introduction to congress, its theme and its unique location. Formal welcome addresses will be given in balance with more entertaining features.

Date: Monday 12 April 2010

Time: 1000 – 1130

Doors to be opened 0930

participants to be seated by 0945

Location: Bayside Auditorium B of the Sydney

Convention Centre

Chair: Mr. Paul Harcombe, FIG 2010 Congress Director, Australia

Michael Giudici, SSSI President (Australia):

Welcome Address

Stig Enemark, FIG President (Denmark):

Opening Address

Tony Kelly, Minister for Lands (Australia):

Welcome Address

Marie Bashir, AC CVO, Governor of New South Wales (Australia): Opening Address

Tim Flannery (Australia):

Opening Keynote Address

Tim Flannery



The Congress Keynote will be presented by Professor **Tim Flannery**, who is one of Australia's leading thinkers, an internationally acclaimed scientist and conservationist and 2007 Australian of the Year. In line with our Congress theme of "Facing the Challenges", Tim will speak about Climate Change; one of the greatest challenges facing our world and our Profession in the 21st Century.

For his keynote presentation Tim will draw on ideas from his groundbreaking book, "The Weather Makers: How Man Is Changing the Climate and What It Means for Life on Earth", which debuted on The New York Times bestseller list. Tim will explore the connection between climate change, global warming, and human activity. He will also lay out a game plan for halting current warming trends and beginning to reverse the damage we have done. Tim has said that his goal is to mobilize his listeners "both personally and politically" to recognize that we are all "weather makers" and that the only choice, both logically and ethically, is to face this challenge before it's too late. Tim Flannery is a former director of the South Australian Museum, and is currently a professor at Sydney's Macquarie University. He spent a year as professor of Australian studies at Harvard, where he taught in the Department of Organismic and Evolutionary Biology. In 2002, he became the first environmentalist to deliver The Australia Day address to the nation. In 2005 he was honoured as Australian Humanist of the Year and, in 2007, he was named Australian of the Year.



Plenary Sessions

Plenary Session 1 - FIG Achievements for 2007-2010

Monday, 12 April 1300 – 1430 Bayside Auditorium B, SCEC

The Congress marks the culmination of the four-year Work Plans of the FIG Council and the 10 FIG Commissions. This first Plenary Session will take stock of that work through a keynote presentation of the FIG President as well as invited presentations by selected FIG office bearers. The session will profile the work of the FIG Council, Commissions, and Task Forces, and highlight particular achievements such as seminal workshops, agreements, declarations and publications.

Stig Enemark



The FIG President Stig Enemark will present the overall achievements of FIG for 2007-2010 in relation to the FIG work plan and the policies of the FIG Council. The role of FIG in both "flying high" and also keeping the "feet on the ground" will be

explained through a range of examples and activities that have increased the standing of the surveying profession world wide. This can influence the global agenda and at the same time provide interesting opportunities for member associations and individual surveyors at national level.

Stig Enemark is President of FIG. He is Professor in Land Management and Problem Based Learning at Aalborg University, Denmark, where he was Head of School of Surveying and Planning 1991-2005. He has been substantially involved in the Danish Association of Chartered Surveyors (DdL) being President 2003-2006, and he chaired the FIG Commission 2 on Professional Education 1994-1998. He is an honorary member of both DdL and FIG.

He is a well know international expert in the areas of land administration systems, land management and spatial planning, and related educational and capacity building issues. He has published widely in these areas and undertaken consultancies for the EU and World Bank especially in Eastern Europe and Sub Saharan Africa.



Plenary Sessions

Plenary Session 2 - Spatially Enabled Society

Tuesday, 13 April 1030 – 1200 **Bayside Auditorium A, SCEC**

The second plenary session will examine the accelerating trend towards a more spatially enabled society and what that means for our Profession. The topic will be addressed by three internationally recognised keynote speakers addressing topics ranging from the global perspective to what spatial enablement means in two quite different region of the planet, Latin America and Australasia.

Abbas Rajabifard



Abbas Rajabifard will draw on his experience as President of the Global Spatial Data Infrastructure (GSDI) Association to speak on issues facing the profession globally, as we move towards a Spatially Enabled Society.

Dr Abbas Rajabifard is an Associate Professor and Director of the Centre for Spatial Data Infrastructures and Land Administration at the Department of Geomatics, the University of Melbourne. He is President of the GSDI Association, and has been a driving force within the UN supported Permanent Committee on GIS Infrastructure for Asia and the Pacific (PCG IAP). His research interests include the design and development of SDIs in different jurisdictions, benchmarking worldwide cadastral systems and administration and SDI in marine areas.. He has also consulted widely to many national government agencies and ministries.

Santiago Borrero



Santiago Borrero is Secretary General of the Pan American Institute of Geography and History (PAIGH) and will outline some of the key challenges being faced by administrators in the Latin American Region as they work to build Spatial Enabled Government.

Born in Bogotá, Colombia, Santiago graduated from MIT in 1977. He has more than 28 years of experience in Information and Development, mainly in the production and application of spatial information to land administration and governance and the strategic value of geographic information for developing nations. Santiago is well known and respected internationally, where he has chaired the Global Spatial Data Infrastructure (GSDI) Association, the Permanent Committee on SDI for the Americas (PC-IDEA) and the PAIGH Cartographic Commission. During his career In Colombia, he has been Director General of the "Agustin Codazzi" National Geographic Institute (1994-2002).

Warwick Watkins



The third invited presentation in this Plenary Session gives a local perspective on how spatial enabled government is facilitated in the State of New South Wales and the region of Australia and New Zealand. The focus is on making spatial information easily accessible to government, business and citizens. This will be delivered by Warwick Watkins, the Chair of the Australian and New Zealand Land Information Council (ANZLIC).

As well as his role in ANZLIC, Warwick is the Director General of the Department of Lands in New South Wales (NSW), where he is also the Surveyor General, the Registrar General and the Commissioner of the Soil Conservation Service. His Department has a broad set of responsibilities including Land and Property Information, administration and management of Crown Lands, Native Title and Aboriginal Land Claims, Soil Conservation Service, Land Boards, the Emergency Information Coordination Unit, the Office of Rural Affairs and the Office of Biofuels. Warwick has received a number of awards and is an Honorary Fellow of the Institution of Surveyors.

Plenary Session 3 - The Big Challenges

Wednesday, 14 April 1030 – 1200 Bayside Auditorium A, SCEC

The third Plenary Session will further develop the Congress theme of "Facing the Challenges". Three internationally recognised keynote speakers will explore in detail three of the Big Challenges of the 21st Century and their relevance to our Profession namely Climate Change, Disaster Management and Land Governance.

Daniel Fitzpatrick



Daniel Fitzpatrick will speak about another of our Big Challenges, Disaster Management. In his presentation entitled "From Vulnerability to Resilience: Addressing Land Issues after Natural Disasters", Daniel will outline the new UN guidelines on addressing land issues after natural disasters (UN HABITAT and FAO). His presentation will focus on developing country land systems that are vulnerable to natural disasters because of poor land use planning and weak land administration systems. His presentation will use the Indonesian tsunami as a case-study.

Dr. Daniel Fitzpatrick is a Reader in Law at the Australian National University. He was the UN's land rights adviser for tsunamiaffected Indonesia (2005-6). Currently he is finalizing the UN's Guidelines on Addressing Land Issues after Natural Disasters. He has been a Visiting Professor at the University of Muenster and the National University of Singapore, and a Distinguished Visitor at the University of Toronto.

Paul Munro-Faure



The second speaker in this Plenary Session will be Dr. Paul Munro-Faure from the Food and Agriculture Organization (FAO). Paul will speak on the crucial role played by Good Land Governance in the work of FAO. The focus will be on the current development of Voluntary Guidelines on Responsible Governance of Tenure of Land and Natural Resources.

Dr. Paul Munro-Faure is Chief of the Land Tenure and Management Unit of the Food and Agriculture Organization (FAO) based in Rome. He is a Chartered Surveyor with qualifications in land management, rural planning and public sector land management, with extensive practical experience in the agricultural and urban sectors in the developed market economies, in the transitional economies of Central and Eastern Europe and the CIS, in the Asia/Pacific region and in Africa. He has been substantially involved in the UK's Royal Institution of Chartered Surveyors and chaired the International Federation of Surveyors' (FIG) Commission 7 on Cadastre and Land Management 1998-2002.

Mohamed El-Sioufi



The final speaker in the third Plenary Session is Dr. Mohamed El-Sioufi from UN-HABITAT (The United Nations Human Settlements Programme). He will speak about Climate Change and Sustainable Cities: major challenges facing cities and urban settlements in the coming decades.

Dr. Mohamed El-Sioufi is the Head of the Shelter Branch in UN-HABITAT. He has 32 years of experience in architecture, housing and urban planning. His experience bridges professional practice, academia, research, training and technical advice. He has worked for UN-HABITAT since 1995 in training and capacity building, policy and technical cooperation and the development of global norms and guidelines. His experience in human settlement spans a variety of specialized fields including capacity building in sustainable urban development including historic cores, housing policy and strategies, slum upgrading, climate change mitigation through sustainable building materials and construction technologies, post disaster rehabilitation, environmental planning and management.

Plenary Sessions

Plenary Session 4 - Technological Futures

Thursday, 15 April 1030 – 1200 Bayside Auditorium A, SCEC

The final Plenary Session for the Congress will take a look into the future, including the technologies that will influence our profession as we move into the second decade of the 21st Century. This glimpse into the future will be described from three quite diverse perspectives, an eminent scientist, a commercial technology evangelist and a custodian of public infrastructure.

Mary O'Kane



Mary O'Kane is the Chief Scientist for New South Wales and will draw on her experience in two recent reviews by the Australian Government into the important roles played by Research and Science in modern Australian society. Mary is especially well qualified to put these issues into the context of our Profession, based on her role as Chair of Australia's Cooperative Research Centre for Spatial Information.

Mary is a specialist in high technology commercialisation, national and international research strategy and higher education policy and is Executive Chairman of Mary O'Kane & Associates Pty Ltd, a Sydney-based company that advises governments, universities and the private sector on innovation, research, education and development. Professor O'Kane was Vice-Chancellor of the University of Adelaide from 1996-2001 and Deputy Vice-Chancellor (Research) from 1994-96. She was also Professor of Electrical and Electronic Engineering within the University. Professor O'Kane serves on a number of boards and committees in the public and private sectors. She is Chair of the Australasian CRC for Interaction Design.

Ed Parsons



Ed Parsons is Google's Geospatial Technologist for Europe, Middle East and Africa and a driving force in the development of Google's geospatial technologies. Ed will outline his vision for evangelizing Google's mission to organize the world's information using geography, and tools including Google Earth, Google Maps and Google Maps for Mobile.

Ed Parsons is Geospatial Technologist at Google Inc and is also a Founder of Open Geomatics, a strategic consultancy focused on geospatial technology tracking and neogeography. Ed joined Google following his role as Chief Technology officer at the Ordnance Survey of Great Britain. While at OSGB, he set the strategic direction in Information Technology and specifically GeoSpatial data management. Before joining Ordnance Survey, Ed was EMEA GIS Applications Manager at Autodesk and prior to that a Senior Lecturer at Kingston University.

Matt Higgins



The final presentation in this Plenary Session will be given by FIG Vice President, Matt Higgins. Matt represents FIG in the UN mandated International Committee on Global Navigation Satellite Systems and will speak on the rapidly developing area of positioning technology, the move towards ubiquitous positioning infrastructure and the implications for FIG members.

Matt Higgins is Principal Survey Advisor with the Department of Natural Resources and Water in the Queensland Government in Australia. He holds Bachelor and Masters Degrees in Surveying. Through his role as FIG Vice President, Matt represents the Federation on the UN mandated International Committee on GNSS. In May 2008, GPS World magazine named Matt in the 50+ leaders to watch in GNSS business. Also in 2008, Matt was elected President of the Australian based International GNSS (IGNSS) Society. At the 2005 Asia-Pacific Spatial Excellence Awards, Matt received the award for "Professional Eminence and Excellence in the Spatial Sciences". The award is the SSI's highest form of recognition for professional eminence.

After Lunch Talk 1 - Data Management Framework Using GIS

Tuesday, 12 April 1300 – 1400 **Bayside Auditorium A, SCEC**

Information is increasingly accessible and integrated, as such we all need systems that allow this information to be better managed and exploited over time. We cannot imagine how this data maybe used in 10 years, so data management and integration is increasingly important to protect and grow the valuable data asset. Geographic information must be understood in relation to what's around it in space and in time in order to provide the best possible tools for planning and building our communities into the future. GIS plays a critical role in providing an integrated framework for leveraging this information in all land administration functions. This talk will discuss how the changing patterns of use and the expected patterns of use have transformed geographic data, and how GIS becomes the framework to make this data manageable, useful and meaningful, extracting its full value.

Damian Spangrud



Damian Spangrud is the Senior ArcGIS Product Manager at ESRI. In this role Damian has helped direct the product releases around ESRI's ArcGIS product line for the last 15 years. Damian has a MSc in Earth Science from Montana State University, and has participated in numerous design, analysis and cartographic projects around the globe. His vision and insight on the direction of geospatial technology is well recognized throughout the industry.

After Lunch Talk 2 - The Fourth Wave of Property Reform

Wednesday, 13 April 1300 - 1400 **Bayside Auditorium A, SCEC**

This presentation will provide a retrospective look at international property reform over the past six decades, both from an economic and social perspective and from the perspective of the professional land administrator. It will then examine some of the emerging challenges and trends.

The First Wave of Property Reform after the Second World War occurred largely in South-east Asia, was concentrated in Japan, Taiwan and South Korea, and was largely based on institutions and structures imported from the West in order to change the existing political and militaristic culture. The Second Wave of Property Reform, with its strong ideological flavour, was a phenomenon of the land reform movements that peaked in the mid-60s. It was based largely in South America and elsewhere in order to address major inequities in land access, and peaked in the mid-1960s. Twenty years later the Third Wave of Property Reform emerged under different guises in a large number of jurisdictions including Russia, Estonia, Thailand, Peru and South Africa. This was fuelled in part by a renewed interest in the importance of institutions to development and by new technology imperatives. In each wave lessons were learned and progress made, but as well limits were tested and failure was widespread - serious problems remain.

Now a Fourth Wave of Property Reform is just emerging. It will differ from all previous "waves" in a variety of predictable and not so predictable ways. It will occur everywhere property reform has occurred previously and will be much slower to be adopted. It will cost more in time and effort to implement and it will be more difficult to manage since there is now a strong realization that context is critical, and that property reform is unsustainable without addressing the context. The new contextual issues include a global drive to meet the Millennium Development Goals, a rising middle class and civil society, a much stronger environmental consciousness related to climate change and land degradation, an appreciation that culture matters, and a commitment to improved governance as a foundation for development.

John McLaughlin



John McLaughlin is a Professor of Geomatics Engineering at the University of New Brunswick. After serving as the University's 17th President and Vice-Chancellor, he was appointed President Emeritus in 2009.

After Lunch Talks

Professor McLaughlin spent much of his academic and professional career as a leader in building the North American geomatics industry. He also worked extensively overseas in more than forty countries on the development of property systems with the World Bank, UNDP and many other international organizations. He has authored or co-authored more than two hundred publications.

Dr. McLaughlin has been recognized as one of Atlantic Canada's top CEO's by Atlantic Business Magazine. In 2007 he received the Lieutenant Governor's Award for Excellence in Public Administration and in 2009 he was installed as a member of the Order of New Brunswick.



After Lunch Talk 3 - Surveying in the Year 2020

Thursday, 14 April 2010 1300 – 1400 Bayside Auditorium A, SCEC

The last 20 years have seen enormous changes in the way modern survey work is conducted, triggered by astonishing advancements in product development, which are based on new technologies like GNSS, wireless communication, electronics and software in general. Not only have the products changed, but also the people using the products, who have often not undergone a proper education in surveying. Instrument manufacturers like Leica Geosystems are an integral part of this continuous change process which every professional surveyor is experiencing. The question which is of equal interest to the professional surveyor as well as to a surveying instrument manufacturer is how surveying products and surveying workflows might change in the coming ten years. This question will be discussed primarily from a product and technology point of view.

Johannes Schwarz



Johannes Schwarz is President of the Geomatics Division of Leica Geosystems. As such, he is responsible for all surveying products of Leica. Johannes has been with Leica Geosystems in Switzerland for the past 21 years, where he served in various functions of Product Management and Product Development. Before joining Leica, he studied Geodesy and Geomatics Engineering at the Technical University of Vienna. After finishing University, he worked as a lecturer at the University, as well as a land-surveyor in Austria.



Special Seminars

History Workshop

Friday 9 and Saturday 10 April Old Government House, Parramatta

The history workshop is organised on Friday 9 and Saturday 10 April 2010, see details in Congress Proceedings. This two day workshop is organised in association with the FIG Permanent Institution on the History for Surveying and Measurement. The workshop will examine the development of the surveying profession in Australia and will be held in the Old Government House in Parramatta, which is the oldest existing public building in Australia. The workshop includes a focus on the first Surveyors General of the Australian States and Territories, with an interesting twist being that the presentations will be made by the current Surveyors General of those States and Territories.

Director General Forum

Tuesday, 13 April 2010 1400 - 1700 Bayside Gallery B

The Director General Forum brings together senior managers of national mapping, cadastral and land organisations from around the world to discuss topics of mutual interest and importance. This event is the 3rd in a series which FIG has hosted. About 40-50 countries are expected to be represented. The Forum in Sydney will consider in particular: organisational mergers and government restructuring; delivering in challenging financial times; and building strong relationships with the private and academic sectors. The Forum will agree key issues in a communiqué from national organisations to FIG to be presented

at the closing ceremony of the congress. The Forum will be closed with a reception to the Forum participants.

This meeting is for the Director Generals and leaders of national mapping and cadastre agencies. Attendance by invitation only.

Special Seminar on Small Island Developing States and the Millennium Development Goals

Wednesday 14 April 2010, 0830 - 1730 & Thursday 15 April 2010, 0830 - 1000 Bayside Gallery B

With the Congress located in Sydney, within the Pacific region, the Congress includes a special seminar looking at the issues confronting so-called "Small Island Developing States". These island nations face special challenges as they struggle with Land Governance issues associated with achieving the Millennium Development Goals. This seminar will bring together decision makers and practitioners from several Island States with experts on many land governance issues drawn from the many areas of expertise available across the FIG membership. Many of FIG key UN partner organizations will attend. AusAID, FAO and the Commonwealth Foundation have supported delegates from the small island states to attend. All interested congress participants are invited to follow the seminar and discussion.



Technical Program

Technical Program and Administrative Meetings

The FIG Congress 2010 is a showcase of the work of FIG and its Commissions, Task Forces and Permanent Institutions. The technical program is underpinned by invited presentations and papers submitted through open call for papers. The authors have been able to submit their paper through peer review process, as a non peer review paper or for flash presentation. In total almost 1,000 proposals for papers were made.

In the technical program there are more than 100 technical sessions and more than 30 flash sessions. These include almost 800 presentations that is the highest number of papers in the FIG history. The technical program will run 10-12 sessions in parallel for four days. Detailed program is presented in the separate Technical Program brochure.

The main administrative meetings are the FIG General Assembly sessions on Sunday 11 April and on Friday 16 April 2010. These meetings are for all FIG members but all congress participants are welcome to follow these meetings as observers.

All FIG Commissions have their Annual and other administrative meetings during the congress. These meetings are scheduled on Monday 12 April from 8:00 to 9:30. These meetings are for national Commission delegates but also open for interested participants as observers. For additional commission and their working group meetings see the Technical Program.

Young Surveyors Network



Young Surveyors Network is one of the latest networks established under FIG. The idea to form such a Network has been based on the need to increase the number of young surveyors participating at FIG events as well as promoting FIG as a global network for surveyors.

SURVEYORS The vision is to integrate the youth of the profession within FIG comes out with the aims of Young Surveyors Network

- To improve the number of young professionals participating within the FIG.
- To help young professionals in the beginning of their careers with contacts.
- To increase co-operation between the commissions and young professionals.

In order to generate the seamless structure of the profession without any borders, Young Surveyors Network is the bridge between young and experienced colleagues. The group is dedicated for the next generation of the surveyors with support from today's experienced professionals. The Network consists of a board with young surveyors from different countries and a database pool of Young Surveyors' Members; from Undergraduate to PhD students and young professionals, mentors, academic members and sponsors. More, the group has good connections with different international, regional and local organisations. The Network is a portal to provide the communication for all.

Beside the network, events are organised during FIG Working Weeks and Congresses. Special registration fees to the events are supported for the young surveyors from FIG. With the periodic e-newsletter and special event bulletins FIG YS keep

its members updated with the technical, social information, opportunities and events.

We would like to welcome you to the Young Surveyors Network and attend the meetings at FIG 2010 in Sydney.

There will be speed networking every afternoon and a young surveyor event each night of the Congress, keep up to date with the young surveyor crowd by visiting the Surveyors Lounge in the Exhibition Hall or follow us on Facebook or Twitter: HYPERLINK "http://twitter.com/FIG_young" \o "http://twitter.com/FIG_young" \o "http://twitter.com/FIG_young; Facebook: FIG Young Surveyors. Following networking options will be offered:

Young Surveyor Speed Networking

Finding FIG2010 overwhelming? Need some advice on career, some contacts in the industry or just some fresh ideas? Perhaps you're a seasoned professional and keen to help the young ones out a little!

Join the Young Surveyors Network for Speed Networking. Sessions will be held on Monday, Tuesday and Wednesday during the afternoon coffee break. Find us in the Surveyors Lounge in the Exhibition Hall - all welcome!

Aussie Barbeque

Join the Young Surveyors get together at FIG2010! Come to the traditional Aussie barbeque at the picturesque Coogee beach on Tuesday 13 April from 1730 onwards. Meet 1700 at the Surveyors Lounge or, for the more adventurous, catch the 373 bus and find us at the barbeques on the south side of the beach (opposite the Crowne Plaza Hotel Coogee, corner of Carr Street and Arden Street). Come to the Surveyors Lounge on Monday to register your interest. All welcome!

A number of attractive and informative Technical Tours have been organised to complement the Congress experience. These tours will visit sites and organisations of particular interest to Congress delegates. The chosen venues are generally within half hour of the Convention Centre, and delegates will be bussed to and from the more distant sites. Afternoon tea will be provided at most of the venues.

Some of the tours are not fully subscribed, so there is the possibility that you may still be able to join one. Those interested please see the Registration Desk for additional tickets.

The Technical Tours Meeting Point will be located in the **Registration Desk area in the Parkside Promenade** on Ground Level of the Convention Centre.

Tuesday, 13 April 2010

Infrastructure and Cadastral Surveys

Commission 1, 6, 7 & 10

Time: 1300 - 1600

One of Sydney's largest multidisciplinary private Survey companies will brief you on their role in major infrastructure projects including the A\$5 Billion Sydney CBD Metro project.

This company has the primary role of undertaking all of the necessary survey and spatial information work including engineering and cadastral surveys, Spatial information management and visualisation for the single largest piece of new transport infrastructure for Sydney. The visit will showcase 3D modelling/visualisation, innovative practices and the vital role of surveyors in supporting new public infrastructure and development.

Cost: A\$44.00

Spatial Data Management

Commission 3

Time: 1300 - 1600

Come and watch "Big Brother" watching you! Sydney's Transport Management Centre operates 24/7 and collects information from over 1000 CC TV cameras Statewide to manage the NSW traffic network: providing traffic information and monitoring traffic conditions resulting from incidents and large impact events such as FIG2010. View the 24-panel video wall and experience SCATS, controlling over 3,400 traffic signals in response to changes in traffic flow. The Transport Management Centre demonstrates the importance of spatial information in one of its most dynamic applications. This tour is truly "outer-Spatial"!

Cost: A\$44.00

E-PLANNING: Applications in Land use Planning and Development in NSW

Commission 8

Time: 1340 - 1600

Visit a heritage listed government building close to Circular Quay and a short walk from the site of the Australia's first Government House where the NSW Department of Planning will present to you an overview of the NSW Planning system and how electronic planning systems (e-Planning) are being used to spatially enable land use planning and development activities state-wide as well as delivering sustainable residential building design through the innovative BASIX program. Following the presentations, a short walk (weather permitting) will take you through the birthplace of European settlement in Australia and on to view first hand best practice commercial building design in Sydney's CBD.

Cost: A\$44.00



Wednesday, 14 April 2010

Land Management

Commission 3 & 7

Time: 1300 - 1600

A short trip across town brings us to the NSW Department of Lands. This government department is responsible for land administration in NSW including titling, valuation, surveying and land information for a state more than twice the size of Germany and Denmark combined. The Lands Department is also the lead agency responsible for spatial information policy and standards for whole of State government.

The visit will showcase the electronic lodgement and processing of survey information for land titling using the world wide web and "ePlan". This tour highlights the latest spatial data infrastructures and governance supporting a spatially enabled society as well as the integrated management and delivery of information including all rights, restrictions and responsibilities underpinning land markets.

Cost: A\$44.00

Technical Tours

Sydney Emergency Operations Centre

Commission 3

Time: 1300 - 1635

Visit one of Sydney's Emergency Services Operations Centres to see first hand how major events and emergencies are planned and managed utilising spatial information tools and applications. The Centre deals with major events including New Years Eve Celebrations and most recently the World Youth Week which involved half a million additional visitors into the Sydney CBD.

Cost: A\$44.00

Hydrographic Surveying-Sydney Harbour

Commission 4

Time: 1250 - 1700

Newcastle Port Corporation and Sydney Ports Corporation will provide delegates with a working demonstration of the latest multi-beam sonar technology including a visit to the historic Fort Denison tide gauge situated in the middle of Sydney Harbour with the best waterfront views of Sydney's icons including the Harbour Bridge, Opera House, City CBD skyline and historic buildings.

Cost: A\$44.00

History of Surveying in Sydney - Walking Tour History

Time: 1225 - 1700

Enjoy a short ferry ride under the Harbour Bridge to Circular Quay for a presentation on surveying the unique Opera House sails before heading along historic Macquarie Street to the imposing Lands Department building with its statues of early Australian surveyors and explorers. Walk down to the Quay and through the historic Rocks area to the Sydney Harbour Bridge Pylon Lookout and Museum to view the theodolite that built the Bridge and learn about the surveyors involved in its construction.

Cost: A\$44.00

Thursday, 15 April 2010

Professional Education of Surveyors and "Spatialists"

Commission 2

Time: 1300 - 1630

Welcome to the University of New South Wales for a guided tour of the School of Surveying and Spatial Information System's world renowned SNAP (Satellite Navigation And Positioning) laboratory, teaching facilities and instrument collection. The tour will include a visit to the Award Winning Quadrangle with the School's very own Millennium Sundial- the largest vertical sundial in the world.

Cost: A\$44.00

CORS Network: GNSS for Sydney and New South Wales

Commission 5

Time: 1300 - 1600

Visit to the COR S Network Data Centre at the NSW Department of Lands, and see the real-time monitoring of network station performance and processing of GN SS positioning in real-time. Observe the methods used and results achieved by this advanced technological innovation for geopositioning. This is a collaboration between the UNSW Satellite Navigation And Positioning Group and the NSW Department of Lands that we are sure you will enjoy.

Cost: A\$44.00

Valuation

Commission 9

Time: 1300 - 1600

Delegates will be given a comprehensive briefing on the NSW Land Valuation system, best practice and processes underpinning land markets. Discussions will cover all aspects of valuation in NSW including the Mass Appraisal approach.

Cost: A\$44.00



Congress Sponsors

Titanium Sponsor



Leica Geosystems customers are active across a wide spectrum of industries. And what our customers measure is equally diverse. Sometimes it's a single point: a height above sea level, the distance from one wall to the other. Sometimes, many points are involved, as complex objects are positioned and assembled with micron-level precision, or the entire face of a building is scanned into a 3-dimensional drawing. And sometimes, a complete image must be captured and analyzed, to create accurate maps, multilevel representations and 3D fly-through models.

From measurement to map to model

Like no other company, Leica Geosystems offers solutions for all these needs. From an architect calculating how much paint is needed, to an engineer designing a bridge, to a surveyor optimizing wireless phone tower coverage.

Leica Geosystems solutions encompass a workflow that transforms raw data into useful information, turning measurements into maps, and maps into models that capture the real world. With the broadest range of competencies within the geomatics industry, Leica Geosystems delivers a comprehensive range of products that work together in a complete, end-to-end workflow. Systems that integrate and operate consistently allow our customers to work faster, more efficiently, and more productively.

Capture

In the data processing business, there's an expression: "garbage in, garbage out," and it's nowhere more true than in the capture phase of the geomatics workflow. Accurately capturing reality is the starting point for valid measurements.

Reference

To be meaningful, a captured reading must be compared to a known reference point. Once referenced, the reading becomes a data point with a known position and significance, the basis for measurement.

Measure

Gather two or more referenced data points and you have a single, accurate measurement – the distance between them. Additional information can be gleaned from the relationships between points in a group, building up a data model that matches the real world.

Analyze

Once complete, the data model can be analyzed to determine meaningful, useful information about the real world. Complex models comprise thousands of measurements, demanding powerful software algorithms to crunch through the spatial data - software that Leica Geosystems specializes in.

Present

The results of these analyses are presented to the user in the most practical form for use. Sometimes all that's needed is a single numerical reading; in other cases, graphical presentation - graphs, maps and 3D representations - is easier to work with. Leica Geosystems software sets the standard for this critical last

Not every Leica Geosystems customer operates across the entire workflow; many have specialized needs within one phase. But all benefit from the breadth of expertise we offer, the depth of our research, and the commitment to each other's success. Our customers recognize the advantage of sourcing solutions from a single supplier who can meet their needs – both today and tomorrow, as demands change, business expands, and activities grow more complex.

Leica Geosystems and their Australian partner, CR Kennedy & Company welcome everyone to Sydney, Australia and look forward to meeting as many delegates as possible either at stand 37, or our Corporate suite.



Congress Sponsors

Platinum Sponsor



ESRI's geographic Information system (GIS) technology has given clients the power to think and plan geographically for over 40 years. Used today in more than 350,000 organizations worldwide, GIS helps cities, governments, universities, and Fortune 500 companies save money, lives, and our environment. GIS helps you understand and question data in ways that reveal relationships, patterns, and trends. So whether you are transporting ethanol or studying landslides, you can use GIS to solve problems and make better decisions, because a GIS enables you to look at your valuable data in a way that is quickly understood and easily shared.

ESRI supports the implementation of GIS technology on the desktop, servers, online services, and mobile devices.

Gold Sponsor



Trimble transforms the way work is done through the application of innovative positioning. By integrating a wide range of positioning technologies such as GPS, laser, optical and inertial with application software, wireless communications and services, Trimble provides complete solutions that are focused on applications requiring position or location - including surveying, construction, mining, agriculture, utilities, public safety, asset management and mapping.

Trimble solutions are used in over 100 countries around the world. Our portfolio includes over 900 patents and serves as the basis for the broadest positioning offerings in the industry. With employees in more than 21 countries and a highly capable network of distribution partners, Trimble customers are served and supported with world-class training, support and service capabilities.

Visit our booth to see the latest Trimble positioning solutions including surveying, mapping, GNSS infrastructure network, photogrammetry and LIDAR. Find out how Trimble's unique positioning solutions can help you increase your productivity and grow your business!

Full list of FIG Congress sponsors is in the inner cover.

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**	OTHER SPONSORSHIP: Den danske Landinspektørforening (DdL), http://ida.dk/sites/ddl/

Welcome Reception

Proudly sponsored by:



Sunday 11 April 2010 1830 - 2030

Venue: Sydney Town Hall **Dress:** Smart Casual

Price: Included in the registration fee for full

delegates and accompanying persons,

and exhibitors.

Additional Tickets: A\$85.00 per person

The Welcome Reception will be a memorable event in an historic setting. A warm welcome will be provided with light entertainment, drinks and canapés – an ideal start to the Congress.

All delegates and registered accompanying persons are invited to attend the official Welcome Reception. This is an excellent opportunity to renew old friendships and make new acquaintances as we welcome you to Sydney.

Meeting place: If you are unfamiliar with the Sydney Town Hall, located at 483 George Street, Sydney, please assemble in the foyer area of the Convention Centre at 1810.



FIG Foundation Dinner



Monday 12 April 2010 1900 - 2200

Venue: Captain Cook Cruises

Dress: Smart Casual

Cost: A\$180.00 (includes donation to FIG

Foundation)

Guests are invited to dine on stunning Sydney Harbour, cruising by such icons as the Sydney Opera House and Harbour Bridge. Join us for an enchanting scenic cruise whilst enjoying a sumptuous / three course meal complemented by Australian wines, beers and assorted soft drinks.

Delegates are to assemble at 1845 at Kings street Wharf 8 and 9 to board at 1850 for boat departure at 1900.



Reception at Government House

Tuesday 13 April 2010 1800 - 1930

Venue: Government House, Macquarie Street,

Sydney

The Reception is hosted by the Governor of NSW, Prof. Marie Bashir AC CVO and is for Presidents of FIG Member Associations. Buses are departing for the Sydney Convention Centre from 1740. Please note, this event is invitation only.



Social Program

FIG Gala Dinner

Proudly sponsored by:



Thursday 15 April 2010 1930 - 2330

Venue: Dockside, Cockle Bay **Tickets:** A\$155.00 per person

Dress: Lounge Suit

The social highlight of the Congress is the Dinner which will be held at Dockside, conveniently located opposite to the Sydney Convention and Exhibition Centre, offering stunning views of Darling Harbour and the Congress venue The Gala Dinner offers delegates and their accompanying persons the opportunity to relax, mingle and generally unwind . Guests will be treated with fine Australian wine while dining on Docksides' award winning culinary offerings. After the evening enjoy a short walk back to your hotel.

Dockside is located on the upper level. If you are unfamiliar with Darling Harbour please visit the Registration Desk prior to the evening for directions.



FIG Farewell Reception



Friday 16 April 2010 1600 - 1700

Venue: Parkside Foyer, Sydney Convention and

Exhibition Centre

Dress: Smart Casual

Price: Included in the registration fee for full

delegates and accompanying persons,

and exhibitors

Additional Tickets: A\$50.00

All participants are invited to farewell the FIG 2010 Congress in an informal environment. Join us as we toast to a successful Congress and meeting again in Marrakech in May 2011.

Accompanying Persons' and Full Accompanying Persons' Program

The following tours are included in the cost of registration for Accompanying Persons:

- Entrance to Congress Exhibition
- Entry to Opening Ceremony
- Entry to Closing Ceremony

Time:

Attendance at Welcome Reception:Date: Sunday 11 April 2010

Time: 1830 – 2030
Location: Sydney Town Hall

Attendance at FIG Farewell Reception:
Date: Friday 16 April 2010

1600 - 1700

Location: Parkside Foyer, Sydney Convention and

Exhibition Centre

The following tours are included in the cost of registration for a Full Accompanying Persons only:

- Entrance to Congress Exhibition
- Entry to Opening Ceremony
- Entry to Closing Ceremony
- Attendance at Welcome Reception:
 Date: Sunday 11 April 2010
 Time: 1830 2030

Location: Sydney Town Hall

Attendance at FIG Farewell Reception:
Date: Friday 16 April 2010

1600 - 1700

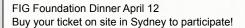
Location: Parkside Foyer, Sydney Convention and

Exhibition Centre

- Sydney Harbour Coffee Cruise on Tuesday 13 April 2010
- Sydney City Sights tour on Wednesday 14 April 2010
- A Congress gift

Time:

The meeting point for the Accompanying and Full Accompanying Person will be located in the Registration Desk area in the Parkside Promenade on Ground level of the Convention Centre.





The FIG Foundation – Building a Sustainable Future

- Gives grants and scholarships to support curricula development and capacity building, especially in developing countries
- Promotes high standards of surveying education and facilitates CPD (Continuous Professional Development) activities
- Promotes virtual academies and the use of distance learning in surveying education
- Encourages research activities and the dissemination of research results

Examples of grants provided:



To **William Kalande** from **Kenya** for his project "Development of a Cadastral Land Dispute Classification System Using Geographical Data Modelling"

"...the FIG Foundation enabled me to collect field data and buy relevant secondary datasets for my Msc thesis... and to probe, have insights into and to contribute to modelling of solutions to land disputes. It is also worth noting the research enabled me to positively contribute to the well being of the community in his study area. In the words of the tribunal chairman: 'This was a rare convergence of academic knowledge, real problems, victims of these problems and great international acts of generosity and thoughtfulness...'"



To Ganesh Prasad Bhatta from Nepal for his project "Cadastral Surveying 'For the People, By the People': Developing a Participatory Model for Cadastral Resurveying in Nepal"

"I am one among the luckiest surveyors to get benefit from the opportunities offered by the FIG Foundation. In fact, these research projects would not have been possible without the support of the FIG Foundation... I feel proud to state that FIG Foundation is the source of motivation, inspiration and encouragement for me to continue my research interest in the sector of cadastral surveying. I would encourage surveyors, especially from the developing world to cash the opportunities offered by the FIG Foundation to enhance their capacity and professional development. In my understanding, FIG Foundation is really playing a role of the foundation of empowering surveyors in developing world."



To Jayanta Kumar Ghosh from India to present his paper "GEOWARNS: A System to Warn Geo-deformation failure"

"The Foundation it possible for the first author to present the paper personally. This has helped to disseminate how latest technologies can be applied for interdisciplinary works and thus made use of latest surveying technologies for societal benefits. It helped to interact with other participants from all over the world and get aware of other salient developments in the surveying techniques."



To **Habtemicael Weldegiorgis** from **Eritrea** to present his paper "The Cadastral System in Eritrea: Practice, Constraints, and Prospects"

"My participation at the FIG Conference in Eilat, Israel assisted through the Foundation's Grants was eye-opening, rare- opportunity, which exposed me to world class experts where valuable experiences and best practices were learnt. The interactions with such august body of experts enabled me to initiate revisions into the arbitrary service charge regime...and ensuring self sustainability of the Eritrean Cadastral Office."

Decision on the fellowships for the FIG Congress 2010 will be announced at the General Assembly here in Sydney...

See www.fig.net/figfoundation for more information and details of how to apply.

Please help the FIG Foundation to help by attending the **FIG Foundation Dinner** at FIG 2010 on **Monday 12 April 2010** from 19:00 to 22:00. The FIG Foundation Dinner will this time be a dinner cruise on stunning Sydney Harbour, cruising by such icons as the Sydney Opera House and the Harbour Bridge. Join us for an enchanting scenic cruise whilst enjoying a three course meal complemented by Australian wines, beers and assorted soft drinks. Ticket price **AUD 180.00** includes a donation to the FIG Foundation.

Optional Tours

To attend following tours please purchase your tickets from the Tours Desk.

Sydney City Sights

Sunday 11 April 2010 or Wednesday 14 April 2010

Duration: 0830 – 1200 Cost: A\$67.00 per person

Explore the vibrancy and style of cosmopolitan Sydney, one of the world's most beautiful harbour cities. Discover colonial buildings and cobbled lanes in The Rocks, Sydney's oldest historical precinct. Enjoy views of the Harbour Bridge and Opera House from Mrs Macquarie's Chair, a waterfront seat carved into the rock for the wife of visionary colonial governor, Lachlan Macquarie. Travel through Sydney's fashionable eastern suburbs, renowned for their elegant homes and harbour vistas, on the way to world-famous Bondi Beach – a haven for surfers and sun lovers.

The city tour on Wednesday 14 April 2010 is included in the Full Accompanying Persons Registration Fee.



Northern Beaches Tour

Wednesday 14 April 2010

Duration: 1345 – 1730 Cost: A\$67.00 per person

Take an afternoon tour across the Harbour Bridge onto Milsons Point where you will have a great photo opportunity of the Opera House. Continue on past Middle Harbour and the Spit Bridge before arriving at beautiful Manly beach for afternoon tea (at own expense). Capture the beauty and lifestyle of Manly and the Northern Beaches followed by a trip along the Sydney's coastline taking in the beauty of Curl Curl, Harbord and Freshwater.

Guests can choose to stay on and explore Manly on their own, then take the ferry home at leisure taking in sights including Watsons Bay, Shark Island, Fort Denison, Kirribilli House, home to the Australian Prime Minister plus spectacular photo opportunities of the Sydney skyline and Opera House from the water.

Please note that this is a non exclusive tour, guests can either return by ferry or coach. Additional costs will be incurred for ferry return.



Sydney Harbour Coffee Cruise

Cruise departs daily at 1000 and 1415

Cruise can be taken any day during the congress Duration: 2 hours

Cost: A\$52.00 per person

The Sydney Harbour Coffee Cruise with Captain Cook departs daily from Jetty No 6 Circular Quay at both 10:00hrs and 2.15pm. Onboard, take in all the splendid Harbour attractions including the Opera House, Harbour Bridge and Fort Denison. The coffee cruise offers a truly Australian flavour, with fresh espresso coffee and fine teas accompanied with tasty Australian fare.

Transport not included, guests are required to make their own way to the Captain Cook Jetty at Circular Quay.

Bridge Climb

Climbs are available daily during the Congress

Cost: A\$198.00 per person for a day climb, \$188.00 per person for a night climb and \$258.00 per person for a twilight climb.

Climbing the Sydney Harbour Bridge is an exhilarating experience. Rendezvous at the BridgeClimb office for a safety briefing and prepare for your three-hour adventure! Accompanied by an experienced leader your small team will cross the catwalk to the pylon and walk up to the summit of the Bridge's upper arch - 130 metres above sea level. Harnessed to a static line for the duration of the climb, be treated to spectacular 360-degree views across one of the greatest harbours in the world.

Please note transport is not included, guests are required to make their own way to the BridgeClimb office in the Rocks.



Sydney Opera House **Guided Tour**

Tours are available Monday – Friday during the Congress

Time: Tours run every 30 minutes between 0900 - 1700 Cost: A\$37.00 per person

Your Opera House guide will bring to life the stories and secrets behind this international landmark, it's original design and building period as well as today's uses. See inside the major theatres and halls, where some 2,500 events and performances are staged each year and learn what's on during your stay. There are approximately 200 steps on this tour.

Please note that this is a non exclusive tour and guests are required to make their own way to the Sydney Opera House.



Discover Blue Mountains Tour

Tuesday 13 April 2010 or Saturday 17 April 2010

Duration: 0800 - 1800 Cost: A\$195.00 per person

Heading across the western plains of metropolitan Sydney you will make your way to the Great Dividing Range of Australia. It is here that you leave the 'average' Blue Mountains tourist behind and enter the National Park to unlock a piece of Australia you would never have known existed.

Visit outstanding lookouts, examine rock formations and the unusual plants and wildlife that abound the area. After lunch, soak up magnificent views of Govetts Leap Lookout, then the Jamieson Valley, and the Three Sisters famous rock formation.



Hunter Valley Wine Tour

Tuesday 13 or Saturday 17 April 2010

Duration: 0730 - 1830 Cost: A\$165.00 per person

A trip to Sydney is not complete without a visit to the world class wineries of the Hunter Valley.

Wind your way through the leafy Northern Suburbs, and then escape through the brilliant sandstone outcrops of Ku-ring-gai National Park to reach the mighty Hawkesbury River.

From Mt View you will descend into the Hunter Valley and begin your wine tasting experience at a few boutique wineries in the area. Here you will have the opportunity to chat to the owners, admire their cottage locations and let them show off the best of their vintages.

At the foothills of the Broken Back Range, you will enjoy a sumptuous lunch and then spend the afternoon visiting some of the larger vineyards for more superb wine tasting. As the afternoon approaches you will return to Sydney via the scenic freeway to conclude this relaxing and enjoyable day.

Tours Departure Point

All tours (except those listed below) will be departing from the Bayside Foyer, Ground. All participants are requested to assemble 10 minutes prior to the departure of each tour.

Please note that delegates will be required to make their own way to the following:

- Bridge Climb
- Coffee Cruise
- Sydney Opera House

For further information on the itineraries for these tours and the optional post tours, please see the staff at the Tours Desk.

Congress Hotels

Crowne Plaza



THE PLACE TO MEET.

Crowne Plaza Darling Harbour is perfectly located on the city side of Darling Harbour. Not only is the hotel on the fringe of the CBD, but it within easy walking distance to the Sydney Convention and Exhibition Centre and many of Sydney's best tourist attractions.

The Hotel boasts spacious rooms all with 24-hour room service, STD/ISD telephone with voicemail, radio/remote control plasma TV, in-house movies, cable channels available, coffee/tea making facilities, mini-bar, hairdryer, iron and ironing board, bath and shower and individually controlled air-conditioning. This Hotel is a smoke free property.

Delegates and Exhibitors who stay at the Hotel will also receive one complimentary \$10.00 telephone card per person per stay. This will include any local, STD and ISD telephone calls. This telephone card is non transferable and non refundable.

1. Crowne Plaza Darling Harbour

150 Day Street Sydney NSW 2000 Ph: +61 2 9261 1188 Fax:+61 2 9261 8766

2. Hilton Hotel Sydney

488 George Street Sydney NSW 2000 Ph: +61 2 9266 2000 Fax:+61 2 9265 6065

3. Novotel Sydney on Darling Harbour

100 Murray Street, Pyrmont NSW 2009 Ph: 61 2 9934 0000 Fax: 61 2 9934 0099

4. Four Points By Sheraton Sydney

161 Sussex Street Sydney NSW 2000 Ph +61 2 9290 4000 Fax: +61 2 9290 4040

5. Hotel Ibis Darling Harbour

70 Murray Street Pyrmont NSW 2009 Ph: +61 2 9563 0888 Fax: +61 2 9563 0899

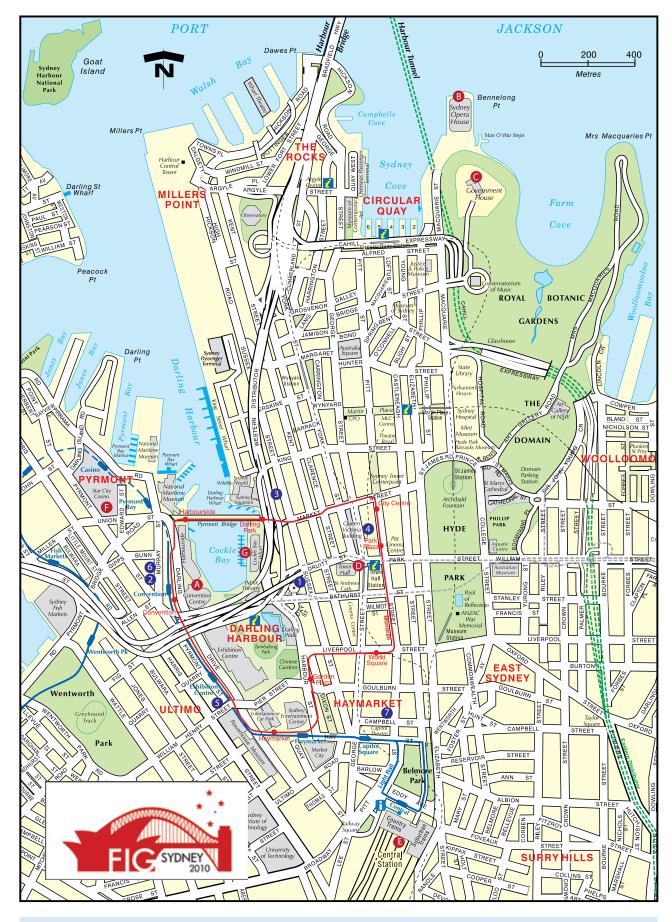
6. Metro Hotel Sydney Central

431-439 Pitt Street Sydney NSW 2001 Ph: +61 2 9281 6999 Fax: +61 2 9281 6899

7. Oaks Goldsbrough Apartments

243 Pyrmont Street
Darling Harbour NSW 2000
Ph:+61 2 9518 5166





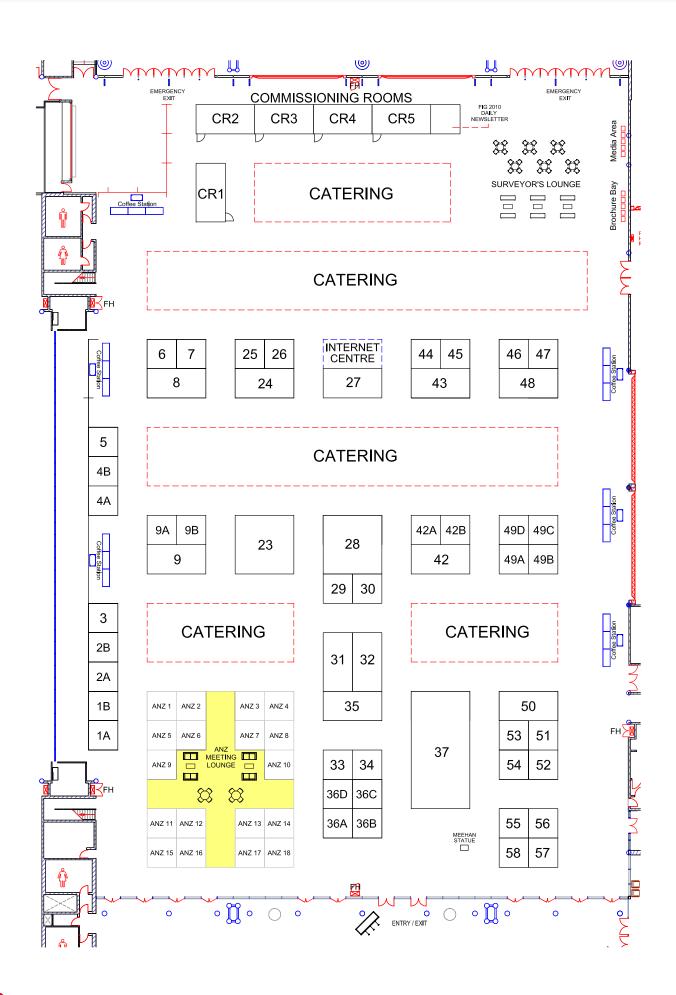
Landmarks

- A Sydney Convention and Exhibition Centre Congress Venue
- B Sydney Opera House
- **G** Government House
- D Sydney Town Hall
- (E) Central Railway Station
- Star City Casino
- G Dockside, Cockle Bay

Accommodation

- 1 Crowne Plaza Darling Harbour Official Congress Hotel
- 2 Novotel Sydney on Darling Harbour
- 3 Four Points by Sheraton, Darling Harbour
- 4 Hilton Sydney
- 5 Oaks Goldsgrough Apartment, Darling Harbour
- 6 Hotel Ibis Darling Harbour
- Metro Hotel Sydney Central

Exhibition Floorplan



Please visit the exhibition in Hall 5 to meet the exhibition representatives in attendance and to view the products and services on display. Please note, coffee and lunch is being served in the exhibition hall. The exhibition hall features the surveyors lounge, internet centre and Commission meeting rooms.

Exhibition operating hours:

Monday 12 April 2010: 1130 - 1730 Tuesday 13 April 2010: 0800 - 1730 Wednesday 14 April 2010: 0800 - 1730 Thursday 15 April 2010: 0800 - 1100

12d Solutions Pty Ltd

Stand Number:

Graham Wirth Contact Person: info@12d.com Email: Website: www.12d.com Phone: +61 2 9970 7117 Fax: +61 2 9970 7118 Address: PO Box 351

Narrabeen NSW 2101 Australia

Distributed in over 55 countries & on the market for over 20 years, 12d Model is a proven world leader in civil engineering & surveying software.

AAM

Stand Number: 55

Contact Person: Stuart Gordon Fmail: info@aamgroup.com Website: www.aamgroup.com Phone: +61 7 3620 3111 +61 7 3620 3133 Fax: Address: 152 Wharf Street

Brisbane QLD 4000 Australia

AAM Pty Ltd (previously AAMHatch): A team of 200 specialists in geocontent (aerial, satellite, land) and geospatial professional services in Australia, Africa and Asia.

Adminsoft

Stand Number: 5

Contact Person: Graeme Evans Email: sales@adminsoft.com Website: www.adminsoft.com Phone: see website for toll-free number

Fax: +64 9 262 2021 Address: PO Box 76-239

Manukau City Auckland 2241 New Zealand

Software for surveying practices with 1 to 100 staff. Powerful Jobs database, invoicing, full financials, document generation and management, workflow, retrieve plans. Supports multiple offices.

ANZLIC – the Spatial Information Council

Stand Number: ANZ12 Contact Person: Susie Salisbury

Email: susie.salisbury@ga.gov.au Website: www.anzlic.org.au Phone: +61 2 6249 9677 Address: Geoscience Australia

Cnr Jerrabomberra Ave and Hindmarsh Drive

Symonston ACT 2609 Australia

ANZLIC – the Spatial Information Council develops policies and strategies to promote accessibility to, and usability of, spatial information in Australia and New Zealand.

ashtech S.A.S.

Stand Number: 50

Contact Person: Barry Liston

barry-liston@codycorp.com.au Email:

Website: www.ashtech.com Phone: +61 8 8337 4888 +61 8 8337 4888

Address: **Authorised Dealer: Cody Corporation**

> 65 Glynburn Road Glynde SA 5070 Australia

Ashtech has over 25 years experience in both survey-grade and GIS systems. The ProMark and ProFlex 500 are state of the art RTK Solutions for land survey and machine guidance.

Australian Hydrographic Service

Stand Number: ANZ10

Contact Person: Melinda McMullen

melinda.mcmullen@defence.gov.au Fmail:

Website: www.hvdro.gov.au Phone: +61 2 4223 6665 +61 2 4223 6599 Fax: Address: 8 Station Street

Wollongong NSW 2500 Australia

The Australian Hydrographic Service. The national charting authority for hydrographic standards and services including provision of official nautical charts and publications to support safe navigation.

Bentley Systems

Stand Number:

Chris Hoffman **Contact Person:**

Email: chris.hoffman@bentley.com Website: www.bentley.com.au Phone: +61 7 3270 4317 Fax: +61 3 3217 4311 Address: Level 8, 545 Oueen Street

Brisbane QLD 4000 Australia

Bentley Geospatial provides solutions for Communications service providers, Mapping organizations, Governments, Electric/Gas/Water and Wastewater utilities, with integration between GIS and infrastructure engineering solutions.

Exhibitors

Bosch Measuring Tools - CST/Berger, David White, **Rola Tape**

Stand Number: 49C-49D Contact Person: Robin Ritchie

Email: robin.ritchie@us.bosch.com Website: www.boschtools.com

> www.cstberger.com www.davidwhite.com www.rolatape.com

Phone: +1 765 464 0723 Address: 1435 Win Hentschel Blvd

Suite 215 West Lafayette IN 47906

United States of America

CRC for Spatial Information

Stand Number: ANZ11 **Contact Person:** Jane Inall

Email: jinall@crcsi.com.au Website: www.crcsi.com.au Phone: +61 3 8344 9200 +61 3 9349 5185 Fax: Address: 723 Swanston Street

University of Melbourne VIC 3010 Australia

CRCSI builds powerful multi-sector collaborations and alliances to accelerate the take up of Spatial Information based solutions in key end-

user organisations.

Carlson Software

Stand Number:

Contact Person: Felicia Provencal

Email: fprovencal@carlsonsw.com Website: www.codycorp.com.au Phone: +1 606 564 5028 Fax: +1 606 564 5028 Address: 102 W 2nd St.

Maysville KY 41056 United States of America

Founded in 1983, based in Maysville, Kentucky, Carlson Software produces technically advanced software solutions for civil engineering, land surveying, machine control, mining & law enforcement industries.

ESRI

Stand Number: 28-30 **Contact Person:** Joe Johnson Email: info@esri.com Website: www.esri.com Phone: +1 909 793 2853 +1 909 307 3072 Address: 380 New York Street

Redlands CA 92373 United States of America

ESRI's geographic information system (GIS) software allows you to collect, manage, and analyze spatial information and present the results in an easy-to-understand map.

Cody Corporation

Stand Number:

Contact Person: **Barry Liston**

Email: barry-liston@codycorp.com.au Website: www.codvcorp.com.au +61 8 8337 4888 Phone: Fax: +61 8 8337 4333 65 Glynburn Road Address:

Glynde SA 5070 Australia

Cody Corporation are importers and distributors for ashtech/Magellan, Nikon Surveying Instruments, Bear Scientific Surveying Accessories and the range of Handheld PDA's & Tablets (Sweden).

Definiens AG

Stand Number: 42R

Contact Person: Christina Schmidt Fmail: cschmidt@definiens.com Website: www.ecognition.com +49 89 231180 0 Phone: +49 89 231180 90 Fax: Address: Trappentreustr. 1 80339 Munich Germany

Definiens eCognition® is the most advanced image analysis software available for geo-spatial applications. Using eCognition highly accurate feature extraction, change detection and object recognition can be created.

Copyright Agency Limited

Stand Number:

Contact Person: Jennifer Grim

Email: jgrim@copyright.com.au Website: www.copyright.com.au Phone: +61 2 9394 7737 Fax: +61 2 9394 7601

Address: Level 15, 233 Castlereagh Street

Sydney NSW 2000 Australia

FIG Working Week 2011

Stand Number:

Contact Person: Prof. Mohamed Ettarid, Conference Director

Email: oniat@vahoo.fr

www.fig.net/fig2011 and www.onigt.ma/fig2011 Website:

Phone: +212 (0) 3767 5555 Fax: +212 (0) 3767 5567

Address: Ordre National des Ingénieurs Géomètres

Topographes

8 Avenue Michlifen,1er étage, Agdal

Rabat Morocco

The FIG Working Week 2011 - Bridging the Gap between Cultures will be held in Marrakech. Morocco, 18-22 May 2011. The theme reflects the role that Morocco and Marrakech have as a meeting point of cultures. About 1,000 participants are expected to this main FIG event in 2011.

FUGRO

Stand Number:

Contact Person: Michael De Lacy

Email: m.delacy@fugrospatial.com.au

Website: www.fugro.com Phone: +61 3 9780 0610 Fax: +61 3 9780 0641 Address: Level 7, 390 St Kilda Rd

8

Melbourne VIC 3004 Australia

FUGRO operates worldwide; at sea, on land and from the air, providing; topographic and hydrographic surveying, GIS, photogrammetry, lidar, radar mapping and precise positioning services.

Hemisphere GPS

Stand Number:

Contact Person:

Email:

Website:

Phone:

Address:

equipment.

Fax:

Stand Number:

Contact Person: Michael Manning

GPSat Systems Australia Pty Ltd

46

Graeme Hooper

+61 3 9455 0041

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info@gpsatsys.com.au

www.gpsatsys.com.au

Suite 1/28 Aberdeen Road

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Phone: +1 403 259 3311 Fax: +1 403 259 8866 Address: 4110 9St. SE

Calgary AB T2G 3C4 Canada

Hemisphere GPS designs and manufactures innovative GPS products for positioning, guidance, and machine control applications in agriculture, marine, survey and other markets.

Geocopia

Stand Number: 1A

Contact Person: Luke Kiefte

Email: lukekiefte@geocopia.com Website: www.geocopia.com Phone: +604 614 5751 Address:

14071 - Bear Creek Drive

Vancouver B.C. V3W-8Z1

Canada

Geocopia: the world's most advanced 3D Mobile Mapping technology, <4cm absolute accuracy in x, y, and z on 360° georeferenced 3D high resolution video images.

Geoscience Australia

Stand Number: ANZ 2 & ANZ 6 **Contact Person:** Adam Lewis Email: feedback@ga.gov.au Website: www.ga.gov.au Phone: +61 2 6249 9111 Fax: +61 2 6249 9999

Canberra ACT 2601 Australia

GPO Box 378

As the Nation's geoscience and geospatial agency, Geoscience Australia informs Australian Government and community decisions about resources, environmental management, community safety and critical infrastructure protection.

Hi-Target Surveying Instrument Co. Ltd

Stand Number: 56 **Contact Person:** Jackie Cao Email: info@zhdqps.com Website: www.Hi-Target.cn Phone: +86 20 22883930 +86 20 22883900 Fax:

Address: 10th Floor, ChuangXin Tower

> Tian'An Technology Zone, No.730, YingBin Rd Panyu District Ghangzhou 511400 China

GlobalPOS

Address:

Stand Number:

Contact Person: Jane McCallum Email: jane@globalpos.com.au Website: www.globalpos.com.au Phone: +61 2 4948 4509 Fax: +61 7 3488 0075 Address: 478 The Esplanade

Warners Bay NSW 2450 Australia

GlobalPOS Pty Ltd is a privately owned Australian company specialising in the hire and supply of GNSS equipment and solutions for various precision GNSS markets.

Imagemaps Pte Ltd

Stand Number:

Contact Person: Lee Sze Keong Email: info@imagemaps.com Website: www.imagemaps.com Phone: +65 6773 1281 Fax: +65 6775 2166

Address: #02-02 UIC Building, 5 Shenton Way

Singapore 068808 Singapore

Imagemaps provides digital mapping cameras,LIDAR systems,inertial measurement, positional systems, digital photogrammetry, imaging technology, lidar data processing, workflow mgt of large multimedia spatial databases.

Exhibitors

Industrial Measurement Solutions Pty Ltd

Stand Number:

Contact Person: Bruce Cameron info@measure.com.au www.measure.com.au Website: Phone: +61 2 9457 7794 +61 2 9457 7796 Fax:

Address: Unit 3 15-17 Beamount Road

Mt Kuring-gai NSW 2080 Australia

Industrial Measurement Solutions are the Australian representatives for OxTS' range of INS/GPS Systems. We service customers in all areas of mapping and dynamics measurement.

Land and Property Management Authority

Stand Number: ANZ13-ANZ14, ANZ18

Contact Person: Shem Semple

Email: shem.semple@lpma.nsw.gov.au

Website: www.lpma.nsw.gov.au Phone: +61 2 9228 6091 +61 2 9223 1271 Fax: Address: 1 Prince Albert Rd

Queens Square NSW 2000 Australia

For 150 years LPMA has been the custodian of NSW's land and property information; providing quality, timely and reliable geospatial information products and services.

INTERGEO®

Stand Number: ANZ17

Contact Person: Christiane Salbach

Email: Christiane.salbach@dvw.de

Website: www.intergeo.de Phone: +49 7662 949 287 +49 7662 949 288 Address: c/o DVW GmbH Egbertstr. 46

D-40489 Düsseldorf Germany

The INTERGEO® - organized by DVW - is the most important and largest event of this kind in the world, covering all disciplines of geodesy, geoinformation and land management.

Leica Geosystems

Stand Number:

Colin Plumb **Contact Person:**

Email: cplumb@crkennedy.com.au Website: www.crkennedy.com.au Phone: +61 3 9823 1553 +61 3 9827 7248 Address:

663 Chapel Street

South Yarra VIC 3141 Australia

With 200 years of pioneering solutions, Leica Geosystems products and services are trusted by professionals worldwide to help them capture, analyze, and present spatial information.

Intergraph

Stand Number: 49A-49B Contact Person: Fiona Lorenzini

Email: fiona.lorenzini@intergraph.com

Website: www.intergraph.com Phone: +61 3 9856 1937 +61 3 9856 1999 Fax: Address: 660 Doncaster Road

Doncaster VIC 3108 Australia

Intergraph Security, Government & Infrastructure (SG&I) is a leading, global provider of geospatially powered solutions to the defense and intelligence, public safety, government, transportation, photogrammetry, utilities, and communications industries.

Malaysia Convention & Exhibition Bureau (MyCEB)

Stand Number: ANZ1

Contact Person: Nuwal Fadhilah Ku Azmi / Joyce Joeman

Fmail: nuwal@tourism.gov.mv Website: www.tourism.gov.mv Phone: +603 26158188 +603 26922953 Fax:

Address: 30th Floor, Menara Data Onn.

Putra World Trade Centre

Jalan Tun Ismail

Kuala Lumpur Federal Territory 50480 Malaysia

MyCEB is Malaysia's one-stop centre for M.I.C.E activities, operating as the country's official destination marketing organisation in relation to

business events.

International Federation of Surveyors, FIG

Stand Number: ANZ16

Mr. John Neel, General Manager **Contact Person:**

Email: John.Neel@fig.net Website: www.fig.net Phone: +45 3886 1081 Fax: +45 3886 0252 Address: Kalvebod Brygge 31-33

DK-1780 Copenhagen Denmark

The International Federation of Surveyors is an international, nongovernment organisation representing all surveying disciplines. FIG has member associations in more than 100 countries representing more than 350,000 surveyors. FIG is organiser of the FIG 2010 Congress.

Maptek

Stand Number:

Contact Person: Jason Richards

Email: jason.richards@maptek.com.au

Website: www.maptek.com Phone: +61 8 8338 9222 Fax: +61 8 8338 9229 Address: 63 Conyngham Street

Glenside SA 5065 Australia

Maptek™ is the leading global provider of innovative software, hardware and services for the mining industry. Maptek develops the Vulcan™, I-Site™ and MineSuite™ products.

Marcom Watson Group

Stand Number:

Contact Person: Eric Smith

esmith@marcomwatson.com.au Website: www.marcomwatson.com.au

Phone: +61 3 6323 8800 Fax: +61 3 6326 3080 Address: 47 McKenzie Street

Mowbray TAS 7248 Australia

Marcom Watson Group are the sole Australian distributors for Kongsberg Maritime AS (Hydrographics), Kongsberg Seatex AS, Simrad AS (Fisheries Research) and QPS BV (QINSy Software).

McMullen Nolan and Partners Surveyors Pty Ltd

Stand Number:

Contact Person: Gerry Nolan

Email: info@mapsurvey.com.au Website: www.mapsurvey.com.au Phone: +61 8 6436 1599 Fax: +61 8 6436 1500 Address: Level 1, 2 Sabre Crescent

Jandakot WA 6164 Australia

Surveying and Spatial Solutions Specialists. MAPS has led Australian Industry since 1989 introducing new technology. MAPS launches Australia's first Mobile Scanning Solution at FIG2010.

OxTS Ltd.

Stand Number: 26

Contact Person: Steve Boyle Email: info@oxts.com Website: www.oxts.com Phone: +44 1869 238 015 +44 1869 238 016 Fax: Address: 77 Heyford Park

Upper Heyford

Oxfordshire OX25 5HD United Kingdom

OxTS offers high-precision Inertial and GPS navigation systems for measuring motion, position and orientation. Typical applications include aerial surveys, road profiling and mobile mapping.

Photomapping Services

Stand Number:

Contact Person: Peter Saunders

Email: ps@photomapping.com.au Website: www.photomapping.com.au

Phone: +61 3 9328 3444 Fax: +61 3 9326 6476 Address: 133 Abbotsford St

North Melbourne VIC 3051 Australia

Photomapping Services is involved in acquisition, manipulation, management and presentation of spatial data to government and private industry throughout Australia and the Asia Pacific.

PSMA Australia

Stand Number:

Contact Person: Sarah MacDonald

sarah.macdonald@psma.com.au

Website: www.psma.com.au Phone: +61 2 6295 7033 Fax: +61 2 6295 7756

Address: Level 1, 115 Canberra Ave

Griffith ACT 2603 Australia

PSMA Australia is a recognised provider of spatial data. We offer six comprehensive, high quality and accessible datasets, derived from authoritative government data sources.



Exhibitors

RIEGL Laser Measurement Systems GmbH

Stand Number:

Contact Person: Nikolaus Studnicka sales@riegl.com Website: www.riegl.com Phone: +43 2982 4211 Fax: +43 2982 4210 Address: Riedenburgstrasse 48

3580 Horn Austria

RIEGL, leading manufacturer of airborne, mobile, terrestrial and industrial laser scanners, is presenting the new, fully integrated high-performance VMX-250 Mobile Laser Scanning System.

Roads & Traffic Authority of NSW

Stand Number: ANZ3

Contact Person: Mark T Gordon

Email: mark_gordon@rta.nsw.gov.au

Website: www.rta.nsw.gov.au Phone: +61 2 8837 0440 Fax: +61 2 8837 0042 Address: Pod A, Level 4

99 Phillip Street

Parramatta NSW 2150 Australia

RTA NSW showcases leading-edge technology and innovation at FIG2010. Sharing its expertise with industry, RTA has won an impressive 12 NSW Surveying Excellence Awards.

Shanghai HuaCe Navigation Technology Ltd (CHC)

Stand Number:

Contact Person: Rebecca Zhang Email: sales@chcnav.com Website: www.chcnav.com Phone: +86 21 54260273 Fax: +86 21 64950963

Floor 5, Building 35, No.680, Guiping Road Address:

Shanghai 200233 China

We are professional surveying GNSS hardware and software designer and manufacturer, continuously being dedicated to the surveying applications and solutions with high precision GNSS products.

SMIC – Surveying & Mapping Industry Council of NSW

Stand Number:

Contact Person: Mark Gordon

mark_gordon@rta.nsw.gov.au

Website: www.smicnsw.org.au Phone: +61 2 8837 0440 +61 2 8837 0042 Fax:

Address: Pod A, Level 4, The Octagon

99 Phillip Street

Parramatta NSW 2150 Australia

The Surveying & Mapping Industry Council of NSW comprises professional, business, government and tertiary education sector organisations. Our strength lies in both our unity and diversity.

SPECTRA PRECISION

Stand Number:

Contact Person: Shinichi Kuramochi Email: sales@spectraprecision.com Website: www.spectraprecision.com

Phone: +61 7 3216 0044 Fax: +61 7 3216 0088 Address: 1/120 Wickham Street

Fortitude Valley QLD 4006

Australia

Focusing on the needs of surveying market, Spectra Precision offers a complete product portfolio including GNSS/GPS, Robotic Total Stations, data collectors, field and office softwares.

Surveying & Spatial Sciences Institute

Stand Number: 36A

Contact Person: Roger Buckley

Email: roger.buckley@sssi.org.au

Website: www.sssi.org.au +61 2 6282 2282 Phone: +61 2 6282 2576 Fax: Address: 27-29 Napier Cl

Deakin West 2600 ACT Australia

SSSI is the national peak body representing spatial professionals in Australia and New Zealand and is the proud co-host of the XXIV FIG Congress.

Sivan Design

Stand Number:

Contact Person: Shai Cheruty

Email: shai@sivandesign.com Website: www.sivandesign.com Phone: +972 9 7427991 Fax: +972 9 7469295

Address: 17 Hatidhar Street (Beit Hatamar)

> PO Box 3019 Raanana 43656 Israel

Sivan Design is a world leader provider of custom-made GIS solutions integrated with ERP capabilities and developer of civil engineering surveying and mapping CAD software.

Terrasolid Ltd.

Stand Number:

Contact Person: Mika Salolahti Email: info@terrasolid.fi Website: www.terrasolid.fi Phone: +358 500 445 179 Address: Kanavaranta 7 B 00160 Helsinki

Finland

Terrasolid is the world leader in airborne and mobile laser scanning software solutions with customers all over the world in over 85 countries with 1600+ TerraScan licenses in use.

Exhibitors

Topcon Positioning Systems

Stand Number:

Contact Person: Hannah Ashor Email: hashor@topcon.com Website: www.topconpositioning.com

Phone: +1 925 245 8536 +1 925 245 8572 Address: 7400 National Drive

Livermore CA 94550 United States of America

University of Southern Queensland

Stand Number:

Contact Person: Raylene Jones Email: engsurv@usq.edu.au Website: www.usq.edu.au Phone: +61 7 4631 2525 +61 7 4631 2526

Address: USQ

West Street

Toowoomba QLD 4350 Australia

Offering world class Engineering and Surveying degree programs that are fully accredited by professional and industry bodies and which prepare our graduates to be leaders in our rapidly changing world.

TRIMBLE NAVIGATION LTD

Stand Number: 31-32

Contact Person: Ronald van Coevorden Email: trimble_support@trimble.com

Website: www.trimble.com Phone: +61 7 3216 0044 +61 7 3216 0088 Fax: Address: 1/120 Wickham Street

Fortitude Valley QLD 4006 Australia

By integrating technologies such as GPS, laser, optical and inertial with software and wireless communications, Trimble provides positioning solutions including surveying, photogrammetry, GNSS networks, GIS. \\

Vekta

Stand Number: 34

Contact Person: Malcolm McCoy Email: mal@survey21.com.au Website: www.survey21.com.au Phone: +61 3 9882 2268 +61 3 9882 9109 Fax: 12/9 Seven Hills Road Address: Baulkham Hills NSW 2153

Vekta is the new name of Qasco and Survey21 following their recent merger. Vekta has a staff of over 160 and offers a full range of survey and spatial solutions through its Australia wide offices.



General Information - Sydney and Australia

Time

Sydney operates on Australian Eastern Standard time (AEST) which is GMT + 10 hours during the congress.

Language

The official language of FIG is English. Some technical sessions marked in the technical program for Francophone sessions will be in French. There is no interpretation in any of the sessions.

No Smoking Policy

Public places, congress venues, restaurants and workplaces in Australia are smoke free.

Currency and Banks

Decimal currency is used in Australia with the dollar as the basic unit. 100 cents (c) = one dollar (\$). Notes come in \$100, \$50, \$20, \$10, and \$5 denominations. Coins come in 5c, 10c, 20c, 50c, \$1 and \$2 denominations. Note that the \$2 coin is smaller than the \$1 coin. Australia no longer has 1c or 2c coins in operation, however shops commonly charge odd amounts for products (e.g. \$1.99). The bill will be rounded to the nearest 5c.

Exchange rate in USD and EUR in March 2010: 1 AUD = 0.68 EUR and 1 EUR= 1.46 AUD 1 AUD= 0.91 USD and 1 USD= 1.08 AUD

Currency exchange facilities are available in most banks, hotels and airports and operate normal business hours. 2 foreign currency exchange services are located in the Harbourside Shopping Centre, adjacent to the Congress venue:

- UAE Exchange; Shop 431a, Harbourside Shops, Darling Harbour
- UAE Exchange; Shop 175, Harbourside Shops, Darling Harbour

Credit cards are accepted at most restaurants and shops, the most widely used being MasterCard, Visa, American Express and Diners Club. Shops may prefer that you use cash to pay for small purchases, and some may have a minimum purchase limit (e.g. \$10) for the use of credit cards or debit cards (EFTPOS). Visa and Mastercard will be accepted at the Registration Desk.

The nearest ATM (Automatic Teller Machines / cash machine) is located in the Hall 3 Foyer opposite Exhibitor Services. Additional ATMs are located within the Harbourside Shopping Centre, and throughout Sydney and Australia. ATMs can be used 24 hours a day.

Electricity

In Australia, the voltage for domestic use is 220-240 volts, AC 50Hz, with 3-pin power outlets. With the use of an adaptor, UK appliances will work; US 110V appliances also need a transformer.

Business Hours

General office hours are 0900-1700, Monday to Friday. Post Offices operate to general office hours; however stamps are often available from hotels. Late night retail shopping is available on Thursday evenings. Sydney's largest Department stores are David Jones (2 stores on Hyde Park) and Myers in the city centre.

Goods & Services Tax (GST)/Tourist Refund Scheme (TRS)

Since 1 July 2000, Australia's taxation system has incorporated the Goods & Services Tax (GST). All prices quoted in this brochure are inclusive of GST, unless otherwise specified.

As part of this taxation system, the Australian Government introduced the Tourist Refund Scheme (TRS). The scheme is administered by the Australian Customs Department. The TRS enables travellers departing Australia to claim a refund of the Goods and Services Tax (GST) and Wine Equalisation Tax (WET) paid on goods bought in Australia.

To claim the refund, you must:

- Spend A\$300 (GST inclusive) or more in one store and get a single tax invoice (receipt)
- Buy goods no more than 30 days before leaving Australia
- Wear/carry the goods when leaving Australia, presenting them with your tax invoice, passport and international boarding pass to a Customs Officer at a TRS facility (at the international airport, located past Customs and Immigration outwards processing)
- Claims are available up to 30 minutes prior to the scheduled departure of your flight

This does not apply to services or goods consumed or partly consumed in Australia (eg. wine, chocolate, perfume). Most goods can be used prior to leaving Australia (eg. clothing, camera). Your refund will be processed as a cheque, credit to an Australian bank account, or payment to a credit card.

Australian aviation security measures limit the amount of liquids, aerosols and gels that can be taken as hand luggage on flights. Goods that are therefore not allowed to be taken on as hand luggage may still be claimed under the TRS. If however the

General Information - Sydney and Australia

goods are oversize (eg. a case of wine), these must be sighted before you check-in, at the Customs Client Services counter. For more information, phone 1300 363 263 or visit www.customs.gov.au.

Travel by train to the airport

The nearest public train station is Town Hall Station for the Convention Centre. Town Hall Station is approximately 10 minutes from the venue by foot. The State Transit Website www.131500.com.au - has useful information regarding public transport options, including a trip planner function that will provide you with detailed information on how to get around Sydney.

Travelling within Sydney

There are a wide range of varieties of transport in and around the city including buses, trains and ferries. Probably the best option if you plan to do a lot of travelling around Sydney is the 'Travel Card' which allows for one weeks worth of travelling on Government buses, ferries and trains.

You can also hire bikes to get around, which are a great option in busy traffic.

The State Transit Website - www.131500.com.au - has useful information regarding public transport options, including a trip planner function that will provide you with detailed information on how to get around Sydney.

For information on transport in Sydney you can call 131 500 daily between 0600 - 2200.

Train

There are 7 city centre train stations, although not all trains stop at all stations except for Central Station. Trains run from 0500 - midnight, with cheaper tickets after 0900 on weekdays and also at weekends. Tickets vary in price. You can also get trains to Sydney's suburbs and coastal bays and beaches, as well as to the Blue Mountains, Central Coast and South Coast.

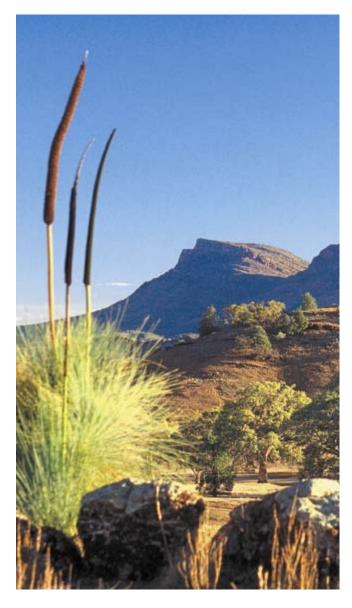
Monorail

The monorail journey makes an enjoyable ride and passes are available for one day or longer. This is a great way to gain access to Darling Harbour.

Ferries

Ferries are popular in Sydney so many have connecting bus services. Some ferries run from 0600 until midnight, although the tourist ferries tend to run shorter hours. All ferries leave Circular Quay where you'll find an information board. You can also telephone Ph: (02) 8113 3002.

These include Jetcats which travel to Manly, Rivercats which travel to Parramatta, Matilda's Cruises Ph: (02) 9264 7377 travelling to the Casino and Darling Harbour, Captain Cook Ferries Ph: (02) 9206 1167 travelling to Kirribilli, Lavender Bay, McMahons Point and Milsons Point.





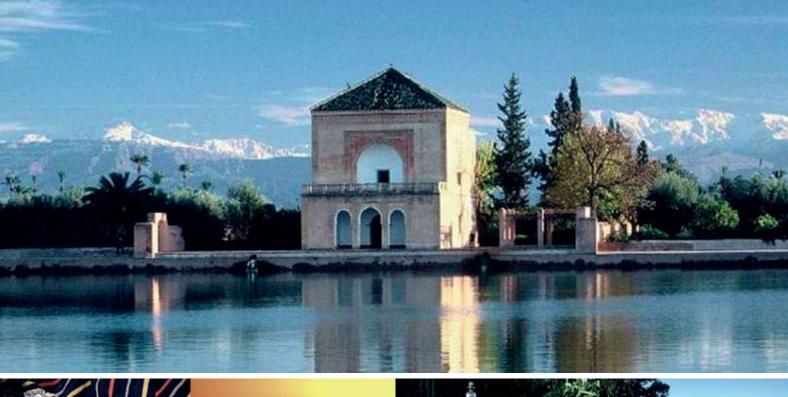




FIG Working Week 2011

Bridging the Gap Between Cultures

18-22 MAY, MARRAKECH, MOROCCO

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Program at a Glance



FIG 2010 Program

Time	Friday 9 April	Satur 10 A		Sunday 11 April		nday April	Tuesday 13 April			Wednesday 14 April			Thursday 15 April		Friday 16 April
Morning	History Workshops	History Workshops	ACCO Meeting (by invitation)	General Assembly	Commission Annual Meetings		Technical Sessions (10 - 12 Parallel)		Technical Sessions (10 – 12 Parallel)			Technical Sessions (10 - 12 Parallel)		Presidents' Meeting	
					Opening Ceremony		Coffee Break		Coffee Break			Coffee Break	Exhibition Open	Coffee Break	
							Plenary Session 2		Plenary Session 3			Plenary Session 4		General Assembly	
		Lunch I	Break	Lunch Break	Lunch		Lunch	า		Luncl	h		Lunch Break		Coffee Break
Afternoon	History Workshops	History Workshops			Plenary		Flash Sessions	After Lunch Talk	Exhibition Open	Flash Sessions	After Lunch Talk	Exhibition	Flash Sessions	After Lunch Talk	Closing Ceremony
					Session 1	ion 1 Creak Exhibition Open Inical Ions — 12 allel)	Technical Sessions (10 - 12 Parallel)			Technical Sessions (10 - 12 Parallel)		Open	Technical Sessions (10 - 12 Parallel)		FIG Farewell Reception
		Coffee	Break	Coffee Break	Coffee Break		Coffee Break	Technical Tours		Coffee Break			Coffee Break	Technical Tours	
		History Workshops			Technical Sessions (10 – 12 Parallel)		Technical Sessions (10 - 12 Parallel)			Technical Sessions (10 - 12 Parallel)			Technical Sessions (10 - 12 Parallel)		
					Flash Sessions		Free Time			Free Time			Free Time		
Evening		ACCO E (by invit		Welcome Reception		indation iner	SSSI Reception (by invitation) Commission Dinners		ers	Home Visits			Gala Dinner		



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Next FIG Working Weeks:



18-22 May, Marrakech, Morocco

FIG Working Week 2011 – Bridging the Gap between Cultures

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6-11 May, Rome, Italy

FIG Working Week 2012 – Territory, Environment and Cultural Heritage

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