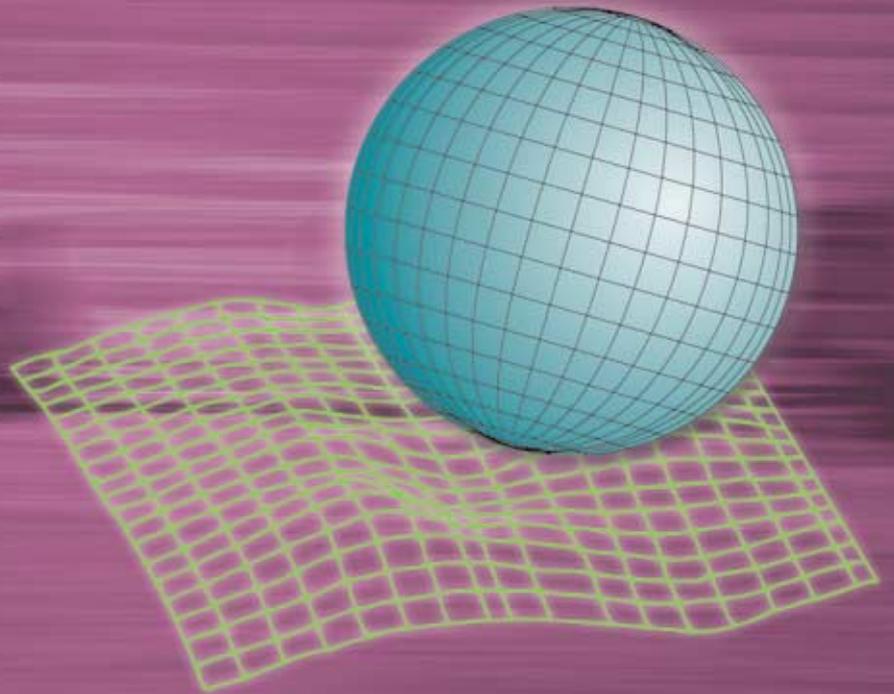


Spatial Sciences 2003

INAUGURAL CONFERENCE OF THE SPATIAL SCIENCES INSTITUTE



Spatial Knowledge without Boundaries

22–26 September 2003

National Convention Centre, Canberra, Australia

This is YOUR Conference meeting the professional needs of all the members from:

AURISA • IEMSA • ISA • MSIA • RSPAA

In April 2003, the above five organisations voted to become founding members of the Spatial Sciences Institute

Registration Brochure

Register online at www.spatialscience.org/Conference

Sponsors

The Organising Committee would like to thank the following companies for their generous support of the Spatial Sciences Conference 2003

Internet Hub



Conference Dinner



Cappuccino Café



Welcome Reception



Happy Hour



Satchels



Name Badges & Lanyards



Advertising



Spatial Sciences Institute
Golf Day



Spatial Sciences 2003

The inaugural national Conference of the Spatial Sciences Institute addressing the interests of professionals working in the fields of Surveying, Geographic Information Systems, Mapping Sciences and Remote Sensing

Contents

Invitation	1
Keynote Speakers	2
Invited Speakers	5
Special Sessions	6
Preliminary Conference Program	9
Workshops	13
Site Visits	15
Social Functions	16
Registration	16
User Group Meetings	17
Social Tours	19
Accommodation Bookings	20
Travel	20
SSC2003 Registration Form	
SSI Membership Form	

Sponsorship and Exhibition Opportunities

There are still sponsorship and exhibition opportunities available. Please contact Conference Logistics for a copy of the Sponsorship and Exhibition Prospectus.

SSC2003 Secretariat

Conference Logistics*
PO Box 201
DEAKIN WEST ACT 2600
Phone: 02 6281 6624
Fax: 02 6285 1336
Email: conference@conlog.com.au

*Acting as agent for AURISA on behalf of the Spatial Sciences Institute

Invitation



On behalf of the Conference Organising Committee it is my great pleasure to extend to you an invitation to participate in the historic Spatial Sciences Conference 2003 (SSC2003) bringing together for the first time the conferences of AURISA, IEMSA, ISA, MSIA and RSPAA as one under the banner of the Spatial Sciences Institute.

The growth of our Spatial Information Industry is reflected in the success of the recent Action Agenda, the formation of ASIBA—the Australian Spatial Information Business Association, and the recent formation of the Spatial Sciences Institute—the unified body for all professionals in the spatial community. SSC2003 is a practical affirmation of the unity and confidence of the entire spatial community.

At SSC2003, participants will benefit from a conference that aims to enhance their capacity to manage *Spatial Knowledge without Boundaries*. It will help us to integrate our professional and technical knowledge in a way that transcends previous boundaries and divisions both in terms of supply and demand for spatial information services and products. We hope that SSC2003 will also attract new delegates from industries and agencies previously outside the boundary of the spatial community and unaware of the powerful applications of spatial information technology.

In accordance with the tradition of past conferences of the various associations, the Conference Organising Committee has formulated an exciting and innovative program. The setting for SSC2003 has been chosen for its centrality, its accessibility by major agencies and peak bodies, and for the relaxed style that its surrounding environmental values promote.

The workshops, presentations, exhibitions and networking sessions cater for the needs of everyone in the spatial community from technical experts to policy-makers, from field practitioners to information consumers. There will be particular attention given to people who may be just coming to understand spatial technologies and the benefits they can bring to their core business areas.

I look forward to enjoying SSC2003 with you in Canberra this September.

Jim Connolly
CONFERENCE CONVENOR

Conference Committee Members

Jim Connolly

Conference Convenor (AURISA/SSI)

Brian Lees

Program Committee Coordinator, Australian National University (AURISA)

Michelle Miran

Social Committee Coordinator (ISA/SSI)

Frank Blanchfield

Promotions Committee Coordinator, Australian Bureau of Statistics (ISA)

Jenny Bone

ANZLIC—the Spatial Information Council (SSI)

Damien Cassin

MapInfo Australia (AURISA)

Drew Clarke

Commonwealth Department of Industry, Tourism and Resources (MSIA)

Stephen Hogan

GPS Australia (ISA)

Ian O'Donnell

National Mapping Division, Geoscience Australia (MSIA)

Narelle Perriman

Institute of Engineering and Mining Surveyors, Australia (IEMSA)

Dennis Puniard

Consultant (RSPAA)

Craig Smith

ACRES, Geoscience Australia (RSPAA)

Noel Ticehurst

Canberra Institute of Technology (IEMSA)

Ehsan Ullah

ACT Land Information Centre (AURISA)

Elizabeth Medley

Conference Logistics

Jane Carter

Conference Logistics

Conference Venue

National Convention Centre
31 Constitution Avenue, Canberra
Australian Capital Territory

The Spatial Sciences Institute

In April 2003, the members of AURISA, ISA, IEMSA, MSIA and RSPAA voted to unite the professional associations and become founding members of the Spatial Sciences Institute (SSI). The SSI is convening its inaugural Conference in Canberra. This event replaces the annual or biennial conferences of the following associations previously scheduled for 2003:

- Australasian Urban and Regional Information Systems Association AURISA
- Institution of Engineering and Mining Surveyors, Australia IEMSA
- Institution of Surveyors, Australia ISA
- Mapping Sciences Institute of Australia MSIA
- Remote Sensing and Photogrammetry Association of Australasia RSPAA

Who Should Attend?

Members of AURISA, IESMA, ISA, MSIA and RSPAA; professionals involved in the spatial disciplines including Surveying, Geographic Information Systems, Mapping Sciences and Remote Sensing; and Communities of Practice that use spatial information and related technologies to support their business operations, such as health, education, natural resource management, forestry, agriculture or marine environment.



Batterham



Lombard

KeynoteSpeakers

Dr Robin Batterham

The Chief Scientist

The Chief Scientist advises the Federal Government, on a part-time basis, on the contributions of science, technology and innovation to national goals and assists in ensuring that public investment in science and technology properly focuses on issues of national priority.

The Chief Scientist's activities include providing advice on science, technology and innovation issues to the Federal Government and creating linkages between Government and science, engineering, innovation and industry groups. The Chief Scientist is Executive Officer of the Prime Minister's Science, Engineering and Innovation Council and chairs the Council's Standing Committee. He provides media commentary on science and innovation issues.

One of his recent activities has been to chair a group that consulted on developing a set of national research priorities, initially focusing on science, engineering and technology, for government-funded research programs. The priorities will, in his mind, focus the research effort towards the areas in which Australia has expertise and can develop further to add value to the national economy.

Ms Martha Lombard

President, URISA International and Director of Consulting Services, Spatial Focus, Inc

Martha is an experienced GIS Manager and a founder of Spatial Focus, Inc. She brings over 25 years of experience in local government planning and zoning, organisational issues, budgeting, project management, real estate development, transportation planning, and coastal zone management.

Martha was Director of International Projects for American Cadastre, Inc. She worked on GIS needs analysis and specifications to support the title registration system in the Republic of Kazakhstan, and on a land records modernisation study for the Republic of Ghana. She was also project leader for an automation study for the Land Title Registry of the Republic of Malawi. She was project manager for several projects in the United States, including Needs Analysis, System Design and Implementation Plans for GIS in several counties in the State of Georgia. Ms Lombard served as consultant in Russia and the USAID funded development of a title registration and real estate information system for the cities of St Petersburg, Pskov and Tver.

She received her BA in Geography from San Francisco State University and an MS in Resource and Regional Planning from the University of Massachusetts.

Martha is the current President of URISA International.





Lawrence



Ryan

KeynoteSpeakers

Dr Vanessa Lawrence

Director General & Chief Executive, Ordnance Survey UK

Vanessa has an Honours Degree in Geography from the University of Sheffield and received an MSc in remote sensing, image processing and its applications from the University of Dundee. The first 11 years of her career were in publishing with the Longman Group UK Ltd and then as the Technical Director of GeoInformation International.

In 1996 she joined Autodesk as Regional Business Development Manager covering areas including UK, Ireland, the Middle East and Africa, where she worked with both private sector and government organisations to spread the use of geographic information systems to integrate, analyse and interpret information. Projects included helping to create one of the largest GIS in the world to help organise and run the 1999 General Election in South Africa.

In February 2000, she was appointed to the post of Global Manager, Strategic Marketing and Communications in Autodesk's GIS Solutions Division. This role gave her a worldwide remit to position Autodesk and its GIS division strategically with major organisations such as governments, national mapping organisations and new customers.

When she took up her post as Director General and Chief Executive of Ordnance Survey in September 2000, the Government Minister responsible for Ordnance Survey, Beverley Hughes,

said, "Vanessa Lawrence is a world-class professional, known in both the private and public sectors for her vision, dynamism and wealth of knowledge. I am delighted that she is to lead Ordnance Survey and drive forward the work which has already established it as the world's leading national mapping organisation." In the UK, she was elected as the 1999 chair of the Association for Geographic Information, the professional association representing the industry on which she has been a council member since 1996.

Previous honorary posts have included being a council member of the Institute of British Geographers (1994–95), council member of the Remote Sensing Society (1991–94), and member of the Research Resources Board of the economic and Social Research Council (1995–99).

Vanessa is an external examiner with University College, London for its MSc geographic information science course; was appointed a Visiting Professor at the University of Southampton in September 2000 and elected a member of the Court of the University of Southampton in March this year. In addition, she holds an Honorary Degree of Doctor of Science from the University of Sheffield, an Honorary Doctorate from the School of Planning at Oxford Brookes University and has been elected an Honorary Fellow of the Institution of Civil Engineering Surveyors.

Ms Barbara Ryan

Associate Director for Geography, US Geological Survey

Barbara is the Associate Director for Geography for the US Geological Survey (USGS) at the National Headquarters in Reston, Virginia. USGS collects information about the Earth's systems and processes, and employs more than 10,000 people in nearly 400 offices nationwide. The Geography unit for which Barbara works is most known for the production of the 55,000 topographic maps covering the United States.

Barbara began her career as a hydrologic technician in 1974, and in her 27 years with USGS, she has worked as a hydrologist concentrating on groundwater contamination, and spent the last 10 years in science management and administration.

Barbara holds a Bachelor Degree in Geology from the State University of New York and Master Degrees in Geography from the University of Denver and Civil Engineering from Stanford University.



Moody



Woodgate

KeynoteSpeakers

Mr James Moody

Managing Director, Natural Resource Intelligence

James is the Managing Director of Natural Resource Intelligence (NRI), Australia's first publicly listed environmental spatial information company. NRI provides environmental, social and economic intelligence to assist organisations in monitoring and evaluating land and natural resources to meet their business and environmental objectives. NRI applies a combination of remotely sensed data, site data and expertise to generate highly detailed resource information.

In the last five years James has been heavily involved with the United Nations, and is co-chair and Australian representative of the 40 strong youth advisory council to the UN Environment Program (UNEP) responsible for advising the United Nations on environmental affairs. He was also a member of the Science and Technology delegation to the UN World Summit on Sustainable Development earlier this year, was recently invited to become a member of the 10 strong Secretary General's taskforce on the Digital Divide and has been invited to attend the World Economic Forum as a Global Leader of Tomorrow in 2003.

The application of engineering to space activities has been another of James' passions. James was also the systems manager for FedSat, the first Australian Satellite to be launched in thirty years. It is anticipated that this satellite, funded by the Cooperative Research Centre for Satellite Systems, will be a catalyst for

Australia's re-entry into the space arena and is hoped to pave the way for other future endeavours.

In 2000, James was named Young Professional Engineer of the Year. While holding this title he promoted the engineering profession and his particular brand of 'socially conscious engineering'. He was also awarded Young Queenslander of the Year in 2000 and Young Australian of the Year in Science and Technology in 2001.

James is passionate about the supporting role that young socially conscious business people can play in society. He actively works towards communicating these views to the general community and makes regular appearances at industry conferences, schools and other events. He believes that issues such as sustainability and environmental management are only going to become more important in society. James actively applies these values in his business.

Mr Peter Woodgate

Chief Executive Officer, Cooperative Research Centre for Spatial Information

Peter is the first Chief Executive Officer (CEO) of the Cooperative Research Centre for Spatial Information (CRC-SI).

Prior to this appointment, Peter was CEO of the Geospatial Science Initiative at RMIT University.

During this period Peter was responsible for a number of significant developments that included helping establish the spin-off company Spatial Vision Innovations Pty Ltd, the creation of the Risk and Community Safety Research Centre in partnership with Emergency Management Australia and the Australian National University; the establishment of the Global Sustainability Institute, and working as a foundation member of UNESCO's new Mornington Peninsula and Westernport Biosphere Reserve in partnership with the Commonwealth, State and local governments and many local community groups and businesses.

Peter is widely recognised for his work in the use of remote sensing for the management of natural resources, in particular forest cover monitoring, old-growth forest management and the development of technologies for managing dryland salinity.

In recent years Peter has been an active collaborator with a range of organisations including the Australian Greenhouse Office, the Bureau of Rural Sciences, and Land and Water Australia.



Nairn



Reed



Sheehan

Invited Speakers

Mr Gary Nairn MP

Gary is the current Federal Member of Parliament for Eden-Monaro. Gary has 25 years experience as a registered surveyor, working in Australia, the United Kingdom and Europe, and ran his own survey and mapping business for 13 years.

He is a member of the Association of Consulting Surveyors Australia, of which he was Vice Chair (1995–1996), and was awarded the Association of Surveyors Special Award for dedication and commitment to the profession of surveying in 2001.

Gary holds a degree in Surveying from the University of New South Wales and is a strong supporter of the Spatial Information Industry Action Agenda.

Dr Carl Reed

Executive Director, OpenGIS Consortium Specifications Program

Carl is the Executive Director for the OpenGIS Consortium Specification Program.

Previously Carl worked as an independent GIS consultant, Vice President of Marketing at Intergraph, President and CTO for Genasys II a GIS software company. His accomplishments include designing and implementing two major GIS packages, MOSS and GenaMap. In 1995, Carl's peers voted him as one of the 10 most influential people in GIS.

Carl obtained his PhD in GIS from the State University of New York, Buffalo in 1979.

Mr John Sheehan

President, Australian Property Institute, NSW Division

John Sheehan is a distinguished scholar in the disciplines of land economy and planning, and is a Chartered Town Planner and Fellow of the Australian Property Institute (formerly the Australian Institute of Valuers and Land Economists). He is the author of a number of papers on native title, and has spoken in Australia, New Zealand, PNG and the United States to universities, professional and community groups on the subject since 1995.

In January 1997, he was appointed the Institute's Native Title Spokesman, and is the Institute member of the National Liaison Committee of the National Native Title Tribunal.

In 1998, John was appointed for a 5-year term as a Member of the Land Tribunal by the Minister for Natural Resources pursuant to the Aboriginal Land Act, 1991 (Qld). He is the only interstate Member of the Tribunal.

Recently, John was invited by the Faculty of Architecture, University of Sydney to formalise his research in the area of compensation for native title as a PhD candidate.

John is currently President of the New South Wales Division, Australian Property Institute, and Co Chair of the Definition of Water Property Rights (DWPR) Project.

Key Themes

The Spatial Sciences Conference 2003 aims to address the interests of individual spatial disciplines while also recognising that there are increasing overlaps and convergences of interests. Regardless of whether you're interested in cadastral surveying, photogrammetry, remote sensing, mapping sciences, geographic information systems or involved in any other aspect of spatial information gathering, you will find topics of relevance.

This is YOUR opportunity for you, as spatial professionals in a dynamic and evolving industry, to look beyond your boundaries and expand your knowledge of how the spatial disciplines can interact to provide more informed solutions.

We all belong to the Spatial Information Industry and the keynote addresses and special sessions are designed to bring you all together.

To assist you navigate through the program symbols are provided to indicate what may be directly relevant to your area of interest. We do, however, encourage you not to limit your choices as there is much in the program to broaden your knowledge and appreciation of the spatial information industry and its future direction.

- S = surveying
- R = remote sensing
- M = mapping sciences
- G = geographic information systems/spatial data management

SpecialSessions

Special sessions are included each day that address issues that are important to the whole of the spatial community and are relevant to all the spatial disciplines represented at this Conference.

Tuesday, 23 September 2003

Launch of OGC Australasia

1.30pm–2.30pm

Dr Carl Reed

Executive Director, OpenGIS Consortium Specification Program

OpenGIS Consortium—Australasia (OGC-A) is a bold initiative to enhance inter-operability and technical standards in this region. Already, DOLA (WA) and DNRM (Qld) have signed up and ANZLIC is promoting the benefits of OGC-A to its jurisdictions. Of the many areas of focus of the OGC members, Critical Infrastructure Protection Initiative (CIPI) is perhaps the one that has created the widest interest. As critical infrastructure protection becomes further integrated into government functions, decision makers need the management “edge” that interoperable geoprocessing provides. Today's systems offer a range of capabilities for users to quickly render one or more layers of digital geospatial data into map-like products for visualisation, analysis and decision-making. Through the use of open interfaces developed by OGC members, geospatial information and application services operating on different computing platforms across the Web can be rapidly mobilised and applied to critical infrastructure protection issues in support of a standards-based Spatial Data Infrastructure.

OGC's CIPI takes a new approach to help organisations publish, discover, access, exchange, and maintain vital geospatial information and online geoprocessing services required to support critical infrastructure protection. OGC is advancing a “plug and play” capability enabled by a range of vendor software products that implement OpenGIS® specifications over the World Wide Web and other networks. CIPI is an opportunity for vendors, users, and other interested parties to mutually shape needed services, interfaces and protocols in the context of a hands-on engineering experience.

Defining and Valuing Water Property Rights in Australia

2.30pm–3.30pm

Mr John Sheehan

President, Australian Property Institute, NSW Division

The notion of property rights has undergone fundamental change recently as a result of the commodification of natural resources such as water and biota. However the transition from open access to property rights for natural resources has drawn attention to just how we define whether “particular rights” are in fact property rights. Property in the more familiar sense of land and buildings conveys a tenor of regularity, constancy, and fixity—this is not so with the new forms of property which are inherently *sui generis*.

There is a need for a definition of water property rights in Australia in order that a true market may exist, providing confidence to the holders of such rights, and especially to the banking and financial institutions who require certainty and fixity in the collateral base for lending.

Mr Paul Harcombe

Chair, Intergovernmental Committee on Surveying and Mapping; Chief Surveyor of New South Wales

Mr Steven Jacoby

Chair, Queensland Spatial Information Infrastructure Council; General Manager, Information Policy, Strategic Directions, Queensland Department of Natural Resources and Mines

The Australian Spatial Data Infrastructure (ASDI) is a national initiative, sponsored by ANZLIC—the Spatial Information Council, to provide better access for all Australians to essential spatial data and services. The ASDI comprises the people, policies and technologies necessary to enable the use of spatially referenced data through all levels of government, commerce and academia.

ANZLIC recently released an ASDI Action Plan. The Plan identifies five priority areas critical for the successful implementation of the ASDI, including governance, access to data, data quality, interoperability and integratability.

This session will give an insight into the strategic importance and benefits of a national spatial data infrastructure. The four speakers will identify the roles that all members of the spatial information industry can play in its implementation and use.

Dr Neil Williams is the Commonwealth representative on ANZLIC—the Spatial Information Council; Chair of the ANZLIC Spatial Data Infrastructure Standing Committee; Chair of the Commonwealth Spatial Data Policy Executive; and member of the Spatial Information Industry Joint Steering Committee.

Neil is also the Chief Executive Officer of the Commonwealth's national geoscientific research and spatial information agency, Geoscience Australia. As CEO of Geoscience

Wednesday, 24 September 2003

Breaking Down Barriers to Use of Spatial Data Using SDI

8.30am–10.30am

CHAIR:

Mr Warwick Watkins

Director General, New South Wales Department of Lands; Chair, ANZLIC

PANEL:

Dr Neil Williams

Chief Executive Officer, Geoscience Australia; Chair, ANZLIC SDI Standing Committee

Mr Tony Wheeler

Principal, Spatial, Sinclair Knight Merz

Special Sessions

Australia, he is responsible for all spatial information policy development for the whole of the Commonwealth.

He graduated with First Class Honours in Geology from the Australian National University and later received his PhD from Yale University.

Mr Tony Wheeler is a Principal of Sinclair Knight Merz and was instrumental in the formation of its spatial division in 1997 which he headed until 2002, when he moved into SKM's international and defence businesses. He is a Director of the Australian Spatial Information Business Association (ASIBA); a member of the ANZLIC Spatial Data Infrastructure Standing Committee and is on the advisory boards of the Department of Geomatics, University of Melbourne and the School of Surveying and Spatial Information Systems, University of New South Wales.

Tony has tertiary qualifications in surveying and business administration. His experience includes roles with surveying and mapping practices, State and Commonwealth Government spatial information agencies, information technology companies, and has encompassed surveying, photogrammetric and remote sensing projects, GIS consulting, environmental, defence procurement and systems integration.

Tony was the inaugural Chair of ASIBA and a member of the Steering Committee for the Spatial Information Industry Action Agenda.

Mr Paul Harcombe is the Chief Surveyor of New South Wales and is responsible for the Survey, Cadastral Integrity and Geographical Name Programs in the Department of Lands.

Paul is currently the Deputy Chair of the NSW Board of Surveyors which will be replaced in July 2003 by the Board of Surveying and Spatial Information with the introduction of the *Surveying Act 2002*. Paul has convened the Industry Working Group which has contributed to the new Act and Regulations.

Paul is also Chair of the Intergovernmental Committee for Surveying and Mapping, and Deputy Chair of the Geographical Names Board of New South Wales.

Mr Steven Jacoby is Chair of the Queensland Spatial Information Infrastructure Council (QSIIC), Queensland representative on ANZLIC—the Spatial Information Council & General Manager Information Policy, Queensland Department of Natural Resources and Mines.

Steven has 20 years experience in the spatial information industry. Prior to joining the Department of Natural Resources and Mines he was the Director of the Land Information Group in Victoria for 6 years. Steven has formal qualifications in cartography and surveying and is an Associate Professor with the Department of Geomatics, University of Melbourne.

Thursday, 25 September 2003

Sharing the load—progress with the Action Agenda

2pm–3.30pm

CHAIR:

Mr Jim Connolly
Conference Convenor

PANEL:

Mr Warwick Watkins
Chair, ANZLIC—the Spatial Information Council

Dr Gail Kelly
Vice Chair, Australian Spatial Information Business Association

Mr Graham Baker
President, Spatial Sciences Institute

Mr Mike Lawson
General Manager, Aerospace and Defence Industries Branch, Commonwealth Department of Industry, Tourism and Resources

It was exactly two years ago on 25 September 2001 that Senator the Hon Nick Minchin, the then Minister for Industry, Science and Resources launched the Spatial Information Industry Action Agenda.

The purpose of the Action Agenda is to reposition the spatial information industry through the adaptation to and adoption of new technologies under the global information economy; alleviation of impediments to growth; and creation of greater synergies between the public and private sectors.

Peak bodies representing government, business and professional interests are working together at a national level to achieve a strong, sustainable and internationally competitive spatial information sector in Australia.

A panel of senior industry leaders from ANZLIC—the Spatial Information Council; the Australian Spatial Information Business Association (ASIBA); the Spatial Sciences Institute; and the Commonwealth Department of Industry, Tourism and Resources will review progress of the Action Agenda and provide insights into what the future holds for our industry.

Mr Warwick Watkins is Chair of ANZLIC—the Spatial Information Council, the peak intergovernmental body for spatial information in Australia and New Zealand.

Warwick has 30 years of technical, policy and administrative experience in natural resource and integrated land management, land information data and systems and related land titling, mapping, information technology and associated areas.

Warwick is currently Director General of the New South Wales Department of Lands, as well as NSW Surveyor General and Registrar General. He is also Deputy Chair and a Director of Land and Water Australia; President of the Board of Surveyors; Chair of the Geographical Names Board; a Councillor of the University of Technology, Sydney; and a Director of the Cooperative Research Centre for Spatial Information.

He previously headed the Electricity Reform Taskforce, is a former Vice President of the World Association of Soil and Water Conservation and Deputy Commissioner of the Murray Darling Basin Commission. He has held the positions of Commissioner, NSW Soil Conservation Service; Director General of the Department of

SpecialSessions

Conservation and Land Management; Director General, State and Regional Development; Chief Executive, Waterways Authority; and Director General, Department of Information Technology and Management. He is a past foundation Director of Landcare Australia Limited and a former Director of the Cooperative Research Centre for Smart Internet Technology.

Dr Gail Kelly is Vice Chair of the Australian Spatial Information Business Association (ASIBA) and National Business Development Manager at Fugro Spatial Solutions. Gail has honours and doctorate qualifications in satellite remote sensing and mapping. She has worked in the public sector, private enterprise and academia. As a result she can view our industry from several perspectives. Gail's interests lie in marketing, technology trends and spatial data applications for business.

Mr Graham Baker is the inaugural President of the Spatial Sciences Institute (SSI). He represented the Mapping Sciences Institute, Australia during the discussions leading to the formation of the SSI but, during his career, has been a member of four of the five founding institutions.

Graham has been engaged in the spatial information industry for 39 years as a surveyor, cartographer and photogrammetrist. He is currently the Senior Resource Manager of the National Mapping Division, Geoscience Australia and his career includes 22 years in the Australian Army's Royal Australian Survey Corps and 15 years in the Australian Survey Office/AUSLIG/Geoscience Australia.

Graham was the ANZLIC Executive Officer for 10 years and has an MSc in Cartography from Glasgow University.

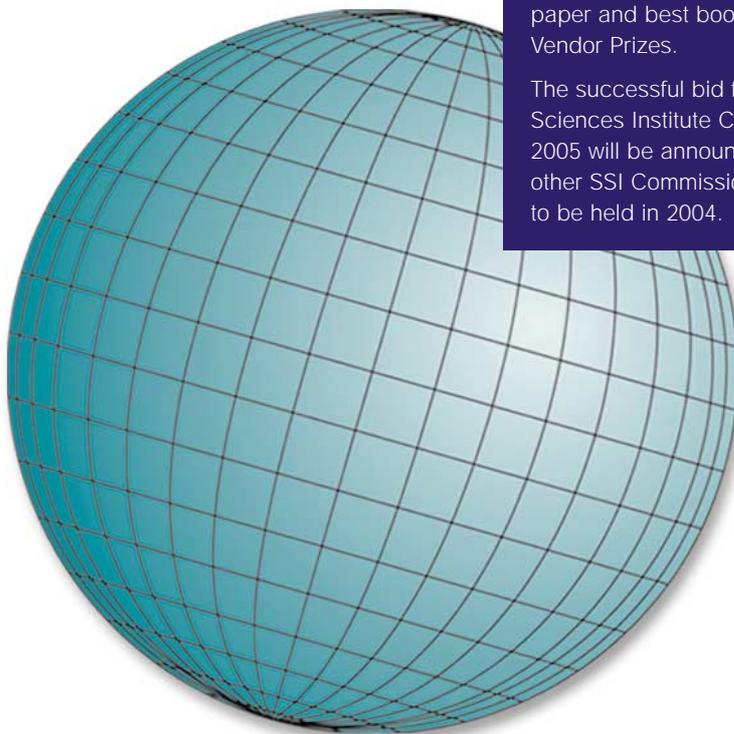
Mr Mike Lawson has been General Manager of the Aerospace and Defence Industries Branch of the Department of Industry, Tourism and Resources since September 2002. Mike has had a number of roles in the Industry Department, including automotive industry policy, ecologically sustainable development, industry policy, energy minerals and business taxation. He was an adviser in Industry Ministers' parliamentary offices in 1992 and 1993. He was a Principal Administrator in the Energy Technology and R&D Office of the International Energy Agency, based in Paris, from 1994 to 1997. Mike has a Masters Degree in Economics from the Australian National University.

Closing Ceremony

Jim Connolly (Conference Convenor) and Graham Baker (President, Spatial Sciences Institute) will host the Closing Ceremony and pull together the most significant outcomes and developments of the Conference and thank our many supporters. As one, we will acknowledge the importance of where we've come from and the significance of where we are now. More importantly we will look to the way forward and the challenges ahead for us. The unification of our collective professions will be important in shaping our profession and retaining our future relevance to the broader community.

During this session we will recognise professional excellence and service to the spatial community through the Spatial Sciences Institute Awards (including GIS in Schools). Presentations will be made for Conference Awards (including best paper and best booth) and some Vendor Prizes.

The successful bid for the Spatial Sciences Institute Conference in 2005 will be announced, along with other SSI Commission Conferences to be held in 2004.



Preliminary Conference Program

For updates visit www.spatialscience.org/Conference

- S = surveying
- R = remote sensing
- M = mapping sciences
- G = geographic information systems/
spatial data management

Please note: The Conference program is correct at the time of printing. However, the Organisers reserve the right to change the program where necessary. The Spatial Sciences Institute does not necessarily endorse the views expressed in the presentations and in the papers.

Monday, 22 September 2003

Time	Workshops
10am–4.30pm	W1 Geospatial Standards in Action—the Australian Story G M
10am–4.30pm	W2 Understanding Native Title from a Geospatial Perspective G M S
8.30am–12.30pm	W3 MapInfo Australia 1—Real World Enterprise GIS G M
8.30am–12.30pm	W4 MapInfo Australia 2—Practical Implementation of OpenGIS Standards & GIS in a .NET World G M
Time	Site Visit
1pm–4pm	SV1 Canberra Reconstruction G M S R
Time	User Group Meetings
1.30pm–4pm	MapInfo Australia
6pm–7pm	Welcome Reception and Exhibition Opening <i>(sponsored by ICSM)</i> National Convention Centre



PreliminaryConferenceProgram

For updates visit www.spatialscience.org/Conference

S = surveying **R** = remote sensing **M** = mapping sciences **G** = geographic information systems/
spatial data management

Tuesday, 23 September 2003

Time						
7.30am	Registration Opens					
8.30am	Welcome and Introduction to the Spatial Sciences Institute Gary Nairn, <i>Federal MP for Eden Monaro</i>					
9am	Opening Address Robin Batterham, <i>The Chief Scientist</i>					
9.45am	Keynote Address Vanessa Lawrence, <i>Director General & Chief Executive, Ordnance Survey UK</i>					
10.30am	Morning Tea					
11am	Keynote Address Insurmountable Opportunities: Spatial Information, competitive advantage and the next wave of innovation James Moody, <i>Managing Director, Natural Resource Intelligence</i>					
11.45am	Keynote Address Martha Lombard, <i>President, URISA & Director of Consulting Services, Spatial Focus, Inc</i>					
12.30pm	Lunch					
1.30pm	Forest Biomass Remote Sensing I R	Marine & Oceanographic Spatial Information R G	Spectroscopy S R	SPECIAL SESSION OGC Australasia Launch SPECIAL SESSION Water Property Rights S R M G	Management Issues I M G	Health & Mapping Disease I G
3.30pm	Afternoon Tea					
4pm–6pm	Forest Biomass Remote Sensing II R	Marine & Oceanographic Remote Sensing R	Mapping I M G	GIS Developments I S G	Management Issues II M G	Health & Mapping Disease II G
6pm–7pm	Happy Hour (<i>sponsored by CR Kennedy</i>)					

Preliminary Conference Program

For updates visit www.spatialscience.org/Conference

● S = surveying
 ● R = remote sensing
 ● M = mapping sciences
 ● G = geographic information systems/ spatial data management

Wednesday, 24 September 2003

7am–8.15am	User Group Meeting Intergraph	User Group Meeting Trimble		User Group Meeting Listech		
8am	Registration Opens					
8.30am	Environmental Remote Sensing I ● R	<i>SPECIAL SESSION</i> Breaking down the barriers to use of spatial data using Spatial Data Infrastructures ● S ● R ● M ● G			Education I ● S ● R ● M ● G	Spatial Modelling I ● G
10.30am	Morning Tea					
11am	Environmental Remote Sensing II ● R	Mapping II ● R ● M ● G	Urban Systems ● R ● G	SDI Development I ● M ● G	Management Issues III ● M ● G	Spatial Modelling II ● G
1pm	Lunch					
2pm	Keynote Address Barbara Ryan, <i>Associate Director for Geography, US Geological Survey</i>					
2.45pm	Keynote Address Peter Woodgate, <i>CEO, Cooperative Research Centre for Spatial Information</i>					
3.30pm	Afternoon Tea					
4pm–6pm	Hyperspectral Remote Sensing ● R ● M	Planning I ● M ● G	Agriculture & Rural Planning ● G	Water Resources ● G	SDI Standards ● S ● M ● G	Education II ● S ● R ● M ● G
7pm for 7.30pm	Gala Dinner (<i>sponsored by PSMA Australia Limited</i>) Australian Institute of Sport					

PreliminaryConferenceProgram

For updates visit www.spatialscience.org/Conference

S = surveying **R** = remote sensing **M** = mapping sciences **G** = geographic information systems/
spatial data management

Thursday, 25 September 2003

Time						
8am	Registration Opens					
8.30am	Agriculture Remote Sensing I R	GPS S G	SDI Development II M G	Location-Based Services M	Planning II M G	Decision Support G
10.30am	Morning Tea					
11am	Agriculture Remote Sensing II R	Geodesy S R	Remote Sensing Applications R	Internet-Services M	Planning III M	Sampling, Interpolation & Accuracy M G
1pm	Lunch					
2pm	SPECIAL SESSION Sharing the Load—progress with the Spatial Information Industry Action Agenda S R M G				System Development M	Geometric Correction S R
3.30pm	Afternoon Tea					
4pm–5.30pm	Closing Ceremony Graham Baker, <i>President, Spatial Sciences Institute</i> ; Jim Connolly, <i>Conference Convenor, Spatial Sciences Institute</i> ; Drew Clarke, <i>Head of Division, Energy and Environment, Commonwealth Department of Industry Tourism and Resources</i> ; Gail Kelly, <i>Vice Chair, ASIBA</i>					

Friday, 26 September 2003

Time	Workshops	
9am–12noon	W5 The Uptake of GIS within Australian Schools	M G
1pm–4pm	W6 Census For Schools	M G
10am–12noon	W7 Cinematographic Experience. Superstar Surveying: Hollywood Style!	S
Times	Site Visits	
1.30pm–5pm	SV2 Geoscience Australia	R M G
9am–12noon	SV3 Kingston Foreshore Development Project	S
Times	User Group Meetings	
9am–11am	Research Systems, Inc	
9am–11am	Apogee & Intermap Technologies Inc	
11am–1pm	Apogee & ImageSat International	

Workshops

Delegates and non-delegates are welcome to attend the pre and post Conference Workshops. Please use the attached registration form to register, even if you do not plan to attend the Conference itself.

Additional workshops are being planned. For updates visit www.spatialscience.org/Conference

Monday, 22 September 2003

W1

Geospatial Standards in Action: the Australian Story

10am–4.30pm

Delegate: \$250 per person

Non-Delegate: \$295 per person

FACILITATOR:

Dr Steve Blake *ANZLIC National Project Manager*

SPEAKERS:

Mr Andrew Jones *Chair IT-004 & Australian member on ISO/TC211*

Mr Maurits van der Vlugt *Senior GIS Consultant, SKM*

Mr Jonathon Doig *Program Director CANRI*

Dr Simon Cox *Principal Research Scientist, CSIRO Exploration & Mining*

Mr Rob Atkinson *Chief Technical Officer, Social Change Online*

Mr Graham McColm *Principal Information Policy Officer, Queensland Department of Natural Resources and Mines*

There are a plethora of international Internet, geospatial and interoperability standards currently available. Some standards are more mature than others. In addition, there are considerable efforts underway to establish components of the Australian Spatial Data Infrastructure (ASDI) through the coordinated activities of governments, industry, the professions and academia.

The workshop will focus on the Internet, geospatial and interoperability standards currently available for national SDI implementation and will suggest those standards which are both essential and mutually beneficial. An eclectic group of experts will provide:

1. An update on where the ISO TC 211, OpenGIS and WWWC standards are at;
2. Comment on their availability within commercial products and uptake;
3. Discussion on the recommended minimum set of standards to forward the ASDI;
4. Practical learnings from industry and government experts involved in implementing these standards.

W2

Understanding Native Title from a Geospatial Perspective

10am–4.30pm

Delegate: \$250 per person

Non-Delegate: \$295 per person

FACILITATOR:

Mr Peter Bowen *Manager, Geospatial Analysis and Mapping, National Native Title Tribunal*

The National Native Title Tribunal, with support from the Intergovernmental Committee on Surveying & Mapping's Working Group on Native Title, will be hosting a workshop for the purpose of sharing an understanding of the geospatial characteristics of native title and considering opportunities to enhance the associated the spatial data infrastructure. Perspectives and/or case studies from parties and stakeholders engaged in the process are planned.

Whilst participation will initially be by invitation, full time conference delegates who have an interest in learning about this subject will be welcome to attend.

W3

MapInfo Australia 1: Real World Enterprise GIS

8.30am–12.30pm

Delegate: \$150 per person

Non-Delegate: \$190 per person

GIS has been liberated! No longer can GIS professionals be comfortable with desktop, single-user solutions. Even the results of the most intricate level of analysis should be deployed to the enterprise.

This workshop covers the concepts, demonstrates practical examples and provides hands-on experience of building a Web-deployed GIS using spatial databases and providing access via remote devices.

W4

MapInfo Australia 2: Practical Implementation of OpenGIS Standards & GIS in a .NET World

8.30am–12.30pm

Delegate: \$150 per person

Non-Delegate: \$190 per person

Part A: Practical Implementation of OpenGIS Standards

The OpenGIS Consortium defines a number of standards relating to the interoperability and sharing of data between different geographic information systems.

Are you absolutely sure of their significance? Have you seen them demonstrated?

Attend this informative workshop and get hands-on experience using OpenGIS standards in a practical demonstration which will highlight their significance and power.

Part B: GIS in a .NET World

.NET—seldom has there been a new standard shrouded in so much confusion and lack of understanding. This workshop will provide a valuable insight into the world of .NET, enabling you to:

- understand the components of .NET;
- understand their application in the GIS world; and
- learn how to build a GIS Web service.

Workshops

Friday, 26 September 2003

W5

The Uptake of GIS within Australian Schools: Implementation Approaches and Challenges for GIS professionals

9am–12noon

Delegate: \$75 per person

Non-Delegate: \$95 per person

FACILITATOR:

Mr Malcolm McInerney *ESRI*

Over the past five years, the use of geographic information systems within Australian schools has grown from a limited number of schools using GIS within their gifted and talented programs to a broader implementation as part of the senior social science curriculum.

This workshop will discuss the many challenges Australian school teachers have faced and overcome to achieve the use of GIS as part of mainstream teaching. We will also examine how the GIS professional, and the spatial industry as a whole, can help facilitate the learning of spatial information to teachers and students.

W6

Census For Schools

1pm–4pm

Delegate: \$75 per person

Non-Delegate: \$95 per person

FACILITATOR:

Ms Julie Nankervis *Australian Bureau of Statistics*

Census For Schools has been developed to address the needs of teachers across a range of subject streams to present, use and analyse Census and other geographic information in the classroom. Census For Schools consists of 3 CD-ROMs containing 1.5 billion cells of 2001 Census small area data combined with digital boundaries and base map data. The product provides instant access to information on Australian communities and allows the user to create maps, graphs and reports that will bring the information to life.

Census For Schools aims to increase student interest in statistics via spatial applications. To support teachers using Census For Schools, both curriculum and training materials are available free on the ABS web site.

This presentation intends to develop an awareness of the Census For Schools product and offer practical examples of classroom applications.

Julie Nankervis of the National Education Services Unit, Australian Bureau of Statistics, will present this workshop.

W7

Cinematographic Experience Superstar Surveying: Hollywood Style!

10am–12noon

Delegate: \$75 per person

Non-Delegate: \$95 per person

FACILITATOR:

Mr John Brock *Rose Atkins & Associates Pty Ltd*

The minimum number of Hollywood style movies that contain references or scenes of surveying has swollen to over 90!!

Incredibly, Silver Screen legends like Randolph Scott (4 times!!), Cary Grant, Anthony Quayle, John Wayne, Maximilian Schell, Charlton Heston (twice), Charles Bronson, Val Kilmer, Harrison Ford, Edmund O'Brien (twice) assisted by Alan Ladd and Virginia Mayo, James Mason, Hugh Grant, Brad Pitt, Wes Bentley and many more have lined up to take the choice roles as the cinematic surveyor, while epic producers such as Cecil B. De Mille (Moses) and Akira Kurosawa incorporated surveying footage readily into their immortal sagas with vigour!

Obviously, surveying is highly regarded as a worthy inclusion in these wonderful sagas of world history.

The sequel to Superstar Surveying: Hollywood Style (IV) is Hollywood Surveyors: The "R" Rated Version, in which we see Secret Agent 007 encouraged to inspect the survey marks for an oil pipeline, by his voluptuous femme fatale, Electra, in *The World Is Not Enough*, more surveyors having their hats shot off in another.

Duke classic, paedofiles, sex and nude scenes, three surveyors killed off in grisly fashion, very coarse language, and even a voyeur surveyor chased away by Jack Nicholson in this very "Adults Only" collage of saucy silver screen surveying!!

SiteVisits

SV1 Canberra Reconstruction

Monday, 22 September 2003
1pm–4pm
\$44 per person

Bushfires struck the Canberra community with devastating and unprecedented force in January 2003, ranking it as one of Australia's worst single-day natural disasters. Tragically, this fire killed four people and injured many others, destroyed over 500 houses and other properties, and affected many thousands of Canberrans.

This field trip provides you with the opportunity to tour the areas that were affected by the bushfires and see how the Canberra community is rebuilding and restoring their physical environment. Discussion will focus on some of the planning challenges which were faced by the Canberra Community through the recovery process including:

- identifying how to deal with non urban lands destroyed by the fires;
- identifying key activities which could be undertaken to assist people in rebuilding; and
- identifying key issues for people whose homes were destroyed in the fires.

SV2 Geoscience Australia

Friday, 26 September 2003
1.30pm–5pm
\$44 per person

Geoscience Australia is the largest Commonwealth spatial information agency. It generates information and knowledge for the public benefit, which underpins decisions on the development of resources, management of the environment, and the safety and well being of the community. This knowledge provides the basis for a systemic understanding of the Australian continent, islands, and surrounding ocean floor, and is a fundamental component of Australia's spatial data infrastructure.

The technical tour of Geoscience Australia will include visits to key areas of the organisation engaged in the acquisition, manipulation, modelling, and visualisation of a wide range of spatial information. Guests will have the opportunity to:

- visit Australia's pre-eminent remote sensing facility, ACRES;
- explore the National Topographic Mapping group;
- see the application of GIS to Geohazards;
- learn how Geoscience Australia is mapping Australia's continental margins; and
- experience fantastic 3D geological models and movies of previously unseen areas of Australia's ocean floor.

As a bonus for those who have not yet visited Geoscience Australia's new headquarters, the technical tour will be followed by a tour of our unique, prize-winning Symonston building, which includes both a rainforest and a desert.

SV3 Kingston Foreshore Development Project

Friday, 26 September 2003
9am–12noon
\$44 per person

The Kingston Foreshore Development Authority (KFDA) has overall responsibility for the one billion dollar redevelopment of the Kingston Foreshore on the south bank of Lake Burley Griffin.

The project area of 37 hectares is Canberra's original industrial site. Approximately 18 hectares will be mixed-use residential and commercial space. The remaining 19 hectares will be public domain such as streetscapes, landscaped parklands, recreation areas and an area of cultural focus. The cultural area will be centred on the heritage listed Powerhouse. Contamination to the site caused by previous activities has required complex remediation work to be undertaken to make the area suitable for residential

development. Preparation of the site also required the demolition of large buildings such as the former Australian Government Publishing Service building. Other work required on the site is the construction of the eco-pond, associated parklands and a sewage pumping station.

At present (June 2003) infrastructure work is being carried out on residential sites and roads. The final design for the harbour re-configuration and lake reclamation, which needed geo-technical and environmental investigations, is being prepared. This will realign the foreshore creating a recreational and working boat harbour. Construction is progressing on the first residential development and the remediation and validation of contaminated soil under Mundaring Drive is near completion. Work completed includes the relocation underground of 132Kv electrical circuits.

In July 2002 the Organisation for Economic Co-operation and Development (OECD) wrote, "Kingston Foreshore is an important example of sustainable urban development in Canberra and merits recognition. It very much marks the new Canberra. The successful implementation of this proposal will contribute to establishing a new agenda in the city and will have widespread lessons of best practice".

Social Functions

Monday, 22 September 2003

Welcome Reception and Exhibition Opening

Sponsored by



6pm-7pm

National Convention Centre

The Welcome Reception will mark the official opening of the Conference and the Trade Exhibition on Monday, 22 September from 6pm to 7pm and will be held in the Exhibition Hall of the National Convention Centre. Delegates will be able to familiarise themselves with the venue and have the opportunity to catch up with familiar faces in an informal setting. This reception will also include the launch of the National Street Addressing Standard by ICSM.

Additional tickets \$35 per person

Dress: Smart Casual

Tuesday, 23 September 2003

Happy Hour

Sponsored by



6pm-7pm

National Convention Centre

Happy Hour drinks will be available in the Exhibition Hall of the National Convention Centre from 6pm to 7pm to celebrate the first day of the official Conference program.

Additional tickets \$ 35 per person

Dress: Smart Casual

Wednesday, 24 September 2003

Conference Gala Dinner

Sponsored by



7pm for 7.30pm

Australian Institute of Sport

The Spatial Family just got bigger and it's time to celebrate! The Gala Dinner will be the highlight of this historic Conference and will be held at the Australian Institute of Sport, offering a fun-filled night of music and entertainment. The night will be a celebration of the formation of our new

Spatial Sciences Institute with the opportunity to catch up with old friends and the chance to make new ones as the five professional associations are brought together for the first time. So dust off those party frocks and get out those dancing shoes cos it's going to be an *affair to remember!*

Transport will be provided to and from Conference hotels.

Additional tickets \$110 per person

Dress: Lounge suits

Friday, 26 September 2003

Spatial Sciences Institute Golf Day

Sponsored by



Tee off at 9am

Gunghalin Lakes Golf Club

The Spatial Sciences Institute Golf Day will be held at the Gunghalin Lakes Golf Club, Corner Gundaroo and Gungahlin Drives, Nicholls.

To make a booking, or to find out more about the Spatial Sciences Institute Golf Day, visit the OmniLink web site at www.omnilink.com.au.

Registration

Payment of Fees

Payment of fees should accompany all registration forms. Fees and accommodation deposit (if applicable) should be made payable to 'SSC2003'.

Please mail registration form and cheque (if applicable) to:

SSC2003 Secretariat
Conference Logistics*
PO Box 201
Deakin West ACT 2600

*acting as agent for AURISA on behalf of the Spatial Sciences Institute

Confirmation

Once your registration form has been received and processed, your booking will be acknowledged in writing.

Please note that registration forms received three working days prior to the Conference will be confirmed by email only.

Cancellation

Delegates who find themselves unable to attend the Conference after submitting a registration form are most welcome to nominate a substitute. All substitutions and cancellations must be made in writing to the SSC2003 Secretariat. Cancellations received until 22 August 2003 will be refunded, less an administration fee of \$88. Cancellations after 22 August are not refundable.

Registration

Please note: (i) all fees are inclusive of GST
(ii) the Australian Taxation Office allows tax deductions for self-education expenses

Registration Inclusions & Fees

Registration type	Welcome reception	Attendance at sessions	Attendance at Trade Exhibition	All lunches, morning & afternoon teas	Happy Hour	Gala Dinner	Conference satchel & materials	Fee before 8/8/03	Fee from 8/8/03
Member	✓	✓	✓	✓	✓	✓	✓	\$660	\$770
Non-Member	✓	✓	✓	✓	✓	✓	✓	\$770	\$880
Speaker*	✓	✓	✓	✓	✓	✓	✓	\$660	\$770
Young Professional**	✓	✓	✓	✓	✓	✓	✓	\$440	\$550
Day Member***		Limited	Limited	Limited			✓	\$330	\$330
Day Non-Member***		Limited	Limited	Limited			✓	\$385	\$385
Student****	✓	✓	✓	✓	✓		✓	\$330	\$330
Accompanying Person	✓		✓	Limited	✓	✓		\$220	\$220

NB An additional fee of \$50 applies to delegates registering on site at the Conference

* Speaker's fee applies to presenting author only. Limit to one per presentation.

** Association members 26 years or under, and not a full time student qualify, for the Young Professional registration fee.

*** Includes attendance at sessions, morning/afternoon teas and lunches on the nominated day/s of registration only.

**** To qualify for the student rate, a student must provide evidence of full-time student status.

UserGroupMeetings

MapInfo Australia User Group Forum

Monday, 22 September 2003
1.30pm–4pm

Share your questions and experiences with the local MapInfo User community. Also learn valuable technical tips; share knowledge about applications, data, and services; and meet other leading professionals from a wide range of fields.

To register, please contact Hanna Lundgren by phone on (02) 8925 7315 or by email at hanna.lundgren@mapinfo.com.

Intergraph Geospatial Users Community (IGUC) Forum

Wednesday, 24 September 2003
7am–8.15am

Intergraph, a proven industry leader of mapping and geospatial solutions, is hosting a User Group meeting at the Spatial Sciences Conference. The forum will feature company and user presentations on the latest applications of innovative Intergraph solutions and technology. Intergraph users, business partners and other interested parties are welcome to attend this forum.

The Intergraph Geospatial Users Community (IGUC) is dedicated to serving the needs of users in the mapping and GIS industry. Our mission is to further your personal knowledge, product use and interaction with Intergraph and other users in Australia.

For further information, please contact Janice Lim by phone on (02) 9929 2888 or by email at janice.lim@intergraph.com or visit the Intergraph Web Site at www.intergraph.com/au/gis.

Apogee Imaging International & Intermap Technologies Inc

Friday, 26 September 2003
9am–11am

Apogee and Intermap invite you to attend a briefing on the unique capabilities of the Intermap X and P-band Interferometric Synthetic Aperture Radar (IFSAR), including applications for topographic mapping; precision DEMs; risk assessment applications for flood mapping, insurance and emergency management; precision flight simulation models; telecommunication modelling; forestry

UserGroupMeetings

analysis (eg canopy penetration and forest volume estimation); infrastructure and corridor analysis; and canopy penetration for "Bald-Earth" DTMs.

Presenters, including representatives from Intermap Technologies Inc, USA and Apogee Imaging International, Australia will talk about mapping the Solomon Islands and Vanuatu using IFSAR in 2003; P-band interferometry and canopy penetration; and NEXTMAP Australia.

To register for this User Group Meeting, please contact Jin Douglas by phone on (08) 8389 3303 or by email at jin@apogee.com.au.

Apogee Imaging International—ImageSat International

Friday, 26 September 2003
11am–1pm

Apogee and ImageSat invite you to attend a briefing on the affordable, flexible high resolution Eros A satellite imagery. You can view the quality and versatility of this data and question the satellite operators and Australasian Distributor. Presenters include representatives from ImageSat International, Israel and Apogee Imaging International Australia.

Special interest topics include capabilities of Eros B, way sub-metre + multispectral (to launched late-2004) and Australasian applications and case studies, including:

- Stereo-Pairs and DEM extraction
- Sub-metre EROS A Hypersampled and Vector-Strip imaging
- Long-Integration Time Imaging
- Ship detection and monitoring
- Agribusiness client uses
- Monitoring Land-Use and change

To register for this User Group Meeting, please contact Jin Douglas by phone on (08) 8389 3303 or by email at jin@apogee.com.au.

Trimble Survey User Group Meeting

Wednesday, 24 September 2003
7am–8.15am

An opportunity for Trimble users to mix with the Trimble representatives and their sales partners in an informal atmosphere to discuss the recent Survey GPS and Total Station hardware and software releases over breakfast. Presentations will include the 5600DR, 5700 and 5800 instruments together with the Trimble Survey Controller software—on what they are capable of doing and where the future is heading. Valuable hints and tips on the softwares and timesaving techniques will be provided. The session will be rounded out with an open forum inviting questions from the attendees on any topic from problem solving to enhancement requests.

Spaces are limited, so please contact Lin Lin Ho by phone on (07) 3216 0044 (Ext 6) or by email at lin_lin_ho@trimble.com to reserve your place.

Listech

Wednesday, 24 September 2003
7am–8.15am

LISCAD Surveying & Engineering Software User Group Meeting. Please take this opportunity to attend a live LISCAD presentation highlighting all of the latest LISCAD features. All interested parties welcome. LISCAD has released a CD containing a fully functional 30-day evaluation system which will be available. LISCAD End-User feedback welcome. Don't miss it!

To register please contact James Sharpe at Listech Pty Ltd by email at info@liscad.com, fax (03) 9762 0033 or phone (03) 9762 0022.

Research Systems, Inc

Friday, 26 September 2003
9.00am–11.00am

RSI (Research Systems, Inc) will be demonstrating the new features in IDL 6.0, highlighting:

IDL 6.0 Intelligent Tools (iTools). The iTools are a set of interactive utilities designed to help you get the most out of your data with minimal effort. Using the iTools, you can quickly and easily perform ad hoc data analysis and visualisation and produce stunning, presentation quality graphics. The iTools source is open, so that you can easily extend the pre-built tools or create your own custom tools.

IDL Virtual Machine. The IDL Virtual Machine allows you to freely distribute IDL code, applets, or entire applications using this new IDL runtime utility. Software developers can distribute IDL applications with the IDL Virtual Machine without additional licensing or runtime fees, while users worldwide can simply download the IDL Virtual Machine from RSI and run compiled IDL code.

IDL Java Bridge. This built-in feature allows you to access external Java objects within your IDL code. Now you can take advantage of special Java I/O, networking and third-party functionality in your IDL applications.

RSI will also be introducing some of the new features in ENVI 4.0 due out in October 2003.

To register for this User Group Meeting, please send an email to conference@conlog.com.au indicating your intention attend.

Social Tours

In the tradition of past conferences a social program is included for the enjoyment of accompanying partners as well as those wishing to take a break from their hectic schedules.

All social tours include refreshments, entry fees, travel arrangements, a professional guide and specialist guides where indicated.

A minimum of six participants per tour is required for the tour to go ahead.

ST 1 Heart of the Nation

Tuesday, 23 September 2003
9am–1pm
\$68 per person

This day will introduce you to the nation's Capital, through its history since the arrival of Europeans and the changes that came with federation. The tour begins at Duntroon, to view the oldest house in Canberra (its history makes it of great significance to our city today) and to the top of Mt Ainslie. The view gives a wonderful insight to the landscaping and original planning of our city.

Then travel along the lake foreshores; see Anzac Parade and a church that was once a railway station. Specialist guides at the Australian War Memorial will take you through the multi-award winning museum to see relics, artworks and personal items.

This will be followed by a "behind the scenes tour" at Parliament House where specialist guides will highlight the art, architecture and Australia's politics. The symbolism and materials used by the architects make this tour extremely interesting.

ST 2 Delights in and around the Capital

Wednesday, 24 September 2003
9am–4pm
\$106 per person

The tour starts with a visit to Floriade, Canberra's Spring festival where one of the landscapers will talk about the

designs and plants. You will have free time to visit the many craft specialty stores clustered in a large tent.

At the National Museum of Australia explore Australia's social history of its people and their land following refreshments.

Then depart Canberra for the country village of Bungendore to explore and see the award winning Wood Works Gallery which has a wide variety of Australia's best woodwork.

Lunch will be specially prepared at an old stone house, built in 1860 and surrounded by beautiful gardens. Although recently developed the flower & vegetable gardens are inspirational.

The Lake George wineries are nearby with the tour finishing by savouring the flavours of one cool climate wine noted for winning many prestigious awards.

ST 3 Canberra's Best Kept Secrets

Thursday, 25 September 2003
9am–1.30pm
\$68 per person

At the National Portrait Gallery a curator will discuss the changes in portraiture and introduce the Australians who form the social fabric of our nation. The Gallery is one of four portrait galleries in the world.

Refreshments will be served at a private home where you will learn about the history of garden design. The owners will delight with stories of the development of their own gardens and the influence of many cultures on their classical designs. This garden is unique in Australia and brings many horticulturalists and landscape gardeners from around the world.

We will visit Calthorpes' House, a house museum built and furnished in 1927 when Parliament House was opened. It is in its original condition and gives a wonderful social history of life in the capital city renowned art works.

General Information

Registration Desk

The registration desk will be located in the foyer of the National Convention Centre, Constitution Avenue, Canberra City and will remain open for the duration of the Conference. The registration desk will act as your point of contact throughout the Conference.

Special Requirements

Every effort has been made to ensure people with special needs are catered for. Should you require any specific assistance, catering or arrangements to be made on your behalf, please include a notation on your registration form under the section "Special Requirements".

Insurance

Registration fees do not include personal travel insurance of any kind. It is strongly recommended that, when registering for the Conference and booking travel, a travel insurance policy be taken out to cover loss, cancellation, medical cover etc for any reason. The Conference Committee and Secretariat do not take responsibility for any delegate failing to insure.

AccommodationBookings

Block bookings have been secured for Conference delegates at special rates at the hotels listed below. A deposit of one night's accommodation is required to secure your booking. Early bookings are advisable. The deadline for bookings is 15 August 2003. Bookings made after this date need to be made directly with the hotel.

Delegates are responsible for paying the balance of their accounts on departure from the hotel. All alterations or cancellations of hotel accommodation should be made in writing to the Conference Secretariat. Please note that hotels may apply a cancellation fee of the first night's deposit for cancellations received after 15 August 2003. Accommodation deposits may also be forfeited if the room is not occupied on the 'check in' date.

Every effort is made to satisfy accommodation requests. However, accommodation is confirmed on a first come first served basis and is subject to availability. In case your first accommodation choice is fully booked, please indicate on the registration form your preferences in numerical order.

GST on Accommodation Bookings

All accommodation rates quoted are inclusive of GST. Deposits will be forwarded to the hotel.

Most hotels have a check in time of 2pm and a check out time of 11am. All rates, unless otherwise stated, are per night per room only.

Crowne Plaza Hotel ★★★★★☆

1 Binara Street, Canberra City

Superior room (single/twin/double) **\$175**

The Crowne Plaza is located adjacent to the National Convention Centre, on picturesque Glebe Park. The hotel offers guests undercover complimentary car parking, a choice of restaurants and a fully equipped and supervised health club with solar heated pool, sauna and spa.

Waldorf Apartments ★★★★★☆

2 Akuna Street, Canberra City

Studio apartment	\$143
1 Bedroom apartment	\$165
2 Bedroom apartment	\$199

The Waldorf is a 2-minute walk to the National Convention Centre and top restaurants. An excellent city location with two swimming pools, half-size tennis court, gym and apartment style accommodation.

Rydges Lakeside Canberra ★★★★★

London Circuit, Canberra

Standard room only (single/double/twin)	\$132
Standard room (inc. breakfast) (single/double/twin)	\$140

Rydges Lakeside is in a perfect city centre location on the shores of Lake Burley Griffin and a short walk to the National Convention Centre.

Novotel Canberra ★★★★★

65 Northbourne Avenue, Canberra City

Standard room (single/double/twin)	\$132
Suite (single/double)	\$177

Situated in one of the city's best locations, the Novotel offers easy access to restaurants, nightlife and cultural and historical attractions. It is located 12-minutes walk from the National Convention Centre.

Olims Canberra Hotel ★★★★★☆

Cnr Ainslie & Limestone Avenue, Braddon

Deluxe unit	\$132
Executive unit	\$144

The historic Olims Canberra Hotel is a Heritage listed property. The hotel surrounds a picturesque garden courtyard, and is conveniently located in relation to the airport and the main attractions of Canberra. The hotel is near the Australian War Memorial and only four blocks from the City Centre. The hotel facilities include restaurant, bar, bistro and ample parking.

Canberra City Accommodation (Previously Canberra City Backpackers—Budget)

7 Akuna Street, Canberra City

Single room (without facilities)	\$55
Double room (with ensuite)	\$90

Canberra's most affordable quality accommodation located in the heart of the city and a quick walk to the National Convention Centre.

TRAVEL

Domestic Flights



We are pleased to announce that QANTAS has been appointed the official airline for the Spatial Sciences Conference 2003.

A special discount rate of up to 40% (excluding taxes) off a full economy airfare has been negotiated for delegates attending this Conference. To take advantage of this offer you will need to make your reservation on the Qantas Association Sales telephone number **TOLL FREE 1800 684 880** and quote the Association Profile number, **3570459** together with destination and dates of the Conference. Please note that the applicable discount is available for domestic travel within Australia only and is subject to payment and ticketing conditions.

A discount of up to 40% off the full economy airfare (excluding taxes) at the time of booking. These discounts are valid on Qantas domestic scheduled services subject to group class availability at time of booking. Should the 40% discount economy class fare not be available on a required flight the airfare may be upgraded to the next available economy class conference fare, ie 30% and 10% discounts.

These airfares are FULLY REFUNDABLE; OFFER FLEXIBILITY AND CHANGES ARE PERMITTED SUBJECT TO SEAT AVAILABILITY.

Travel from Canberra Airport to Canberra City

Taxi services are available from Canberra Airport. A taxi fare from the Airport to Canberra City costs approximately \$20.

Coach Transport from Canberra Airport to Canberra City

If there are sufficient numbers of delegates on flights, coach transport will be provided to and from the Airport and National Convention Centre.

Please indicate your flight details on the registration form.

SSC2003 Registration Form/Tax Invoice (When completed)

ABN 29 045 840 410

Registrants are advised to read through the following information before completing the Registration Form. All those wishing to attend must complete the form and return it, with full payment, as indicated on the form. Please print clearly. Each registrant must complete a separate form (photocopies are acceptable). All prices are quoted in Australian dollars and include GST.

PERSONAL DETAILS

SURNAME _____

TITLE (Prof/Dr/Mr/Mrs/Ms/Other) _____

FIRST NAME _____

PREFERRED NAME ON BADGE _____

ORGANISATION _____

POSITION _____

DEPARTMENT _____

ADDRESS _____

SUBURB/CITY _____ STATE _____ POSTCODE _____

COUNTRY _____

PHONE (Office) _____ FAX (Office) _____

PHONE (Mobile) _____

EMAIL _____

ACCOMPANYING PERSON TITLE (Prof/Dr/Mr/Mrs/Ms/Other) _____

SURNAME _____

FIRST NAME _____

SPECIAL REQUIREMENTS (eg dietary, disability, etc) _____

Privacy I do not wish my personal details to be included in the Participant List to be distributed to delegates, exhibitors and sponsors at the Conference.

REGISTRATION (All fees are inclusive of GST)

Registration Type	Early Bird before 8/8/03	Standard from 8/8/03	Please indicate
Full Registration Member	\$660	\$770	\$
Full Registration Non-Member	\$770	\$880	\$
Full Registration Speaker	\$660	\$770	\$
Young Professional	\$440	\$550	\$
Day Member	\$330	\$330	\$
Day Non-Member	\$385	\$385	\$
nominate day/s of attendance <input type="checkbox"/> Tues <input type="checkbox"/> Wed <input type="checkbox"/> Thur			
Full Registration Student	\$330	\$330	\$
Accompanying Person	\$220	\$220	\$

NB An additional fee of \$50 will be applied to delegates registering on site at the Conference

WORKSHOPS

Monday, 22 September 2003

W1 Geospatial Standards in Action: the Australian Story <i>Delegate \$250 Non-delegate \$295</i>	\$
W2 Understanding Native Title from a Geospatial Perspective <i>Delegate \$250 Non-delegate \$295</i>	\$
W3 MapInfo 1: Real World Enterprise GIS <i>Delegate \$150 Non-delegate \$190</i>	\$
W4 MapInfo 2: Practical implementation of OpenGIS Standards & GIS in a .NET World <i>Delegate \$150 Non-delegate \$190</i>	\$

Friday, 26 September 2003

W5 The Uptake of GIS within Australian Schools <i>Delegate \$75 Non-delegate \$95</i>	\$
W6 Census For Schools <i>Delegate \$75 Non-delegate \$95</i>	\$
W7 Cinematographic Experience <i>Delegate \$75 Non-delegate \$95</i>	\$

SITE VISITS (cost is per person)

SV1 Canberra Reconstruction	\$44	\$
SV2 Geoscience Australia	\$44	\$
SV3 Kingston Foreshore Development Project	\$44	\$

USER GROUP MEETINGS

To register for User Group Meetings, please use the contact details noted on pages 17 and 18.

SOCIAL FUNCTIONS

Welcome Reception, Happy Hour and Gala Dinner are included in Full Registration fees. However, please indicate attendance so that catering requirements can be established.

	No.	Attending
Welcome Reception (Monday) Extra tickets @ \$35		<input type="checkbox"/> YES <input type="checkbox"/> NO
Happy Hour (Tuesday) Extra tickets @ \$35		<input type="checkbox"/> YES <input type="checkbox"/> NO
Gala Dinner (Wednesday) Extra tickets @ \$110		<input type="checkbox"/> YES <input type="checkbox"/> NO
Extra social tickets subtotal	\$	

SPATIAL SCIENCES INSTITUTE GOLF DAY

To register for the **Spatial Sciences Institute Golf Day**, go to the OmniLink Web Site at www.omnilink.com.au.

SOCIAL TOURS (cost is per person)

ST1 Heart of the Nation (Tuesday)	\$68	\$
ST2 Delights in and around the Capital (Wednesday)	\$106	\$
ST3 Canberra's Best Kept Secrets (Thursday)	\$68	\$

SSC2003 Registration Form/Tax Invoice (When completed)

ACCOMMODATION

Please indicate in order of preference (1-6). All rates are room only unless otherwise indicated

Crowne Plaza Hotel ★★★★★

Superior room **\$175**

Waldorf Apartments ★★★★★

Studio apartment **\$143**

1 Bedroom apartment **\$165**

2 Bedroom apartment **\$199**

Novotel Canberra ★★★★★

Standard room **\$132**

Suite **\$177**

Rydges Lakeside Canberra ★★★★★

Standard room only **\$132**

Standard room including breakfast **\$140**

Olims Canberra Hotel ★★★★★

Deluxe unit **\$132**

Executive unit **\$144**

Canberra City Accommodation (Budget)

Double with ensuite **\$90**

Single room without facilities **\$55**

ARRIVAL DATE: / / 2003 DEPARTURE DATE: / / 2003

NO. OF NIGHTS

Smoking Non-smoking

I WILL BE SHARING MY ROOM WITH

To guarantee your accommodation reservation by credit card, please provide credit card details. The hotel will debit the card once you check in or if you fail to arrive on the nominated check in date. The hotel will provide a tax invoice for the total amount payable on departure. Any deposit forwarded to the SSC2003 Secretariat will be included in this total.

FLIGHT DETAILS

Please provide details of your flights, if known. If there are sufficient numbers of delegates on flights, coach transport will be provided between Canberra Airport and the National Convention Centre.

AIRLINE:

FLIGHT NO:

ARRIVAL DATE AND TIME:

DEPARTURE DATE AND TIME:

FOR OFFICE USE ONLY

AUDIT BATCH

TOTAL PAYMENT DUE

Registration Fee	\$
Workshops	\$
Site Visits	\$
Social Program	\$
Social Tours	\$
Accommodation Deposit	\$
TOTAL AMOUNT DUE:	\$

PAYMENT DETAILS

All fees and costs quoted in the brochure are GST inclusive. Tax invoices will be issued to all registrants following receipt of the registration form.

Option A Register and pay on-line (preferred option)

Option B Please charge my Credit Card for (tick appropriate box):

Accommodation. Yes, I agree to my credit card details being forwarded to my chosen hotel to guarantee my reservation.

Registration Fee/Workshops/Site Visits/Social Functions/Tours

Credit Card details Please charge my credit card (tick appropriate box and complete details below):

Bankcard MasterCard Visa Diners American Express

NAME OF CARDHOLDER:

CREDIT CARD NUMBER:

EXPIRY DATE:

SIGNATURE:

DATE:

Option C I enclose a cheque

Cheques are to be made payable to "SSC2003".

Option D I am faxing my registration and cheque will follow.

Please mail or fax this form with payment as soon as possible (preferably no later than 15 August 2003) to:

SSC2003 Secretariat
Conference Logistics*
 PO Box 201
 Deakin West ACT 2600, Australia
 Phone: 02 6281 6624
 Fax: 02 6285 1336
 Email: conference@conlog.com.au

*Acting as agent for AURISA on behalf of the Spatial Sciences Institute

We suggest you make a copy of this form for your own records. If payment has to be processed through a large organisation and may be delayed, please forward a copy of the registration form to the Secretariat.

APPLICATION FOR NEW MEMBERSHIP

(this form is for the period
1 July 2003 to 30 June 2004 only)

Spatial Sciences Institute Ltd

ABN: 73 101 248 435

(All current members of ISA, IEMSA, MSIA AURISA and/or RSPAA will be sent a personalised invitation to accept Foundation Membership of the SSI)

PERSONAL DETAILS (Please print clearly)			
FAMILY NAME		TITLE (Prof/Dr/Rank/Mr/Mrs/Miss/Ms)	
GIVEN NAMES		PREFERRED NAME	
(1) ADDRESS			
		STATE	POSTCODE
		COUNTRY	
E-MAIL		TELEPHONE	
FACSIMILE		MOBILE	
DATE OF BIRTH	GENDER <input type="checkbox"/> Male <input type="checkbox"/> Female	NATIONALITY	

EMPLOYMENT/OCCUPATION			
JOB DESCRIPTION		EMPLOYER	
(2) ADDRESS			
		STATE	POSTCODE
		COUNTRY	
E-MAIL		TELEPHONE	
FACSIMILE		MOBILE	

Please indicate preferred mailing address for correspondence (1) (2)

EDUCATIONAL QUALIFICATIONS	
HIGHEST QUALIFICATION	INSTITUTION
DATE COMMENCED	DATE OF GRADUATION (or expected date)
OTHER QUALIFICATIONS (attach list if insufficient space)	

SSI COMMISSIONS Please indicate one Commission for administrative purposes with (A), and others: (B), (C) etc if required		
<input type="checkbox"/> LAND & HYDROGRAPHIC SURVEYING	<input type="checkbox"/> ENGINEERING & MINING SURVEYING	<input type="checkbox"/> CARTOGRAPHY
<input type="checkbox"/> SPATIAL INFORMATION	<input type="checkbox"/> REMOTE SENSING & PHOTOGRAMMETRY	
OR: If your interest in joining the SSI is more general in nature, you may choose to tick only the following box <input type="checkbox"/> GENERAL COMMISSION		

AREAS OF INTEREST (Irrespective of Commission chosen) Please tick all areas in which you have an interest				
<input type="checkbox"/> Location-Based Svcs	<input type="checkbox"/> Military	<input type="checkbox"/> Environmental Mngt	<input type="checkbox"/> Information Systems	<input type="checkbox"/> Emergency Management
<input type="checkbox"/> Town Planning	<input type="checkbox"/> GIS	<input type="checkbox"/> Multi Media	<input type="checkbox"/> Socio-economic Analysis	<input type="checkbox"/> 3D Modelling
<input type="checkbox"/> Subdivision/Develop	<input type="checkbox"/> Photogrammetry	<input type="checkbox"/> Community Development	<input type="checkbox"/> Utilities	<input type="checkbox"/> Standards/OpenGIS
<input type="checkbox"/> Cadastral	<input type="checkbox"/> Mining	<input type="checkbox"/> Transportation	<input type="checkbox"/> Information Technology	<input type="checkbox"/> Other (please specify)
<input type="checkbox"/> Young Professionals	<input type="checkbox"/> Forestry	<input type="checkbox"/> Systems Integration	<input type="checkbox"/> Decision Support Systems	
<input type="checkbox"/> Geodetic/GPS	<input type="checkbox"/> Engineering	<input type="checkbox"/> Land Administration	<input type="checkbox"/> Intelligent Transport Systems	
<input type="checkbox"/> Hydrographic	<input type="checkbox"/> Cartography	<input type="checkbox"/> Data Standards	<input type="checkbox"/> Remote Sensing	
<input type="checkbox"/> History Group	<input type="checkbox"/> Public Safety	<input type="checkbox"/> Urban/Regional Planning	<input type="checkbox"/> Natural Resource Mngt	

APPLICANT'S DECLARATION	
I agree that if this application is accepted by The Spatial Sciences Institute, I will conform to the Constitution, By-Laws and Code of Ethics of the Institute.	
SIGNATURE	DATE

APPLICATION FOR NEW MEMBERSHIP

NOTES:

1. All prices are in Australian dollars and include GST where applicable.
2. Membership rates for Period 1 July 2003 to 30 June 2004 are Interim Rates only.
3. Membership rates for Periods beyond 1 July 2004 will be at the Full Rates to be published at <http://www.spatialscience.org>

Individual (Resident in Australia): **A\$198.00 (incl. GST) for Period 1 July 2003–30 June 2004**

Individual (Resident Overseas): **A\$120.00 (GST free) for Period 1 July 2003–30 June 2004**

Student (Resident in Australia): **A\$ 55.00 (incl. GST) for Period 1 July 2003–30 June 2004***

Student (Resident Overseas): **A\$ 50.00 (GST free) for Period 1 July 2003–30 June 2004***

STATEMENT BY EDUCATIONAL INSTITUTION* (Must be completed for student applications)

I CERTIFY THAT (Name)	IS A FULL-TIME STUDENT IN (Course Title)
SIGNED	
POSITION	DATE

1. PLEASE DEBIT MY

<input type="checkbox"/> Mastercard	<input type="checkbox"/> Bankcard	<input type="checkbox"/> Diners Club	<input type="checkbox"/> American Express	<input type="checkbox"/> Visa
NAME ON CARD		SIGNATURE		
CARD NUMBER				
CARD EXPIRY		AMOUNT A\$		

OR

2. CHEQUE ATTACHED

Cheque payable to Spatial Sciences Institute, Ltd	AMOUNT A\$
--	------------

Submission: Please post or fax your completed **SSI Membership Application Form** together with payment authorisation or cheque to:

The Membership Officer
Spatial Sciences Institute
PO Box 251
CURTIN
ACT 2605
AUSTRALIA

Phone (in Australia) (02) 6282 2282
 Phone (International) +61 2 6282 2282
 Fax (in Australia) (02) 6282 2576
 Fax (International) +61 2 6282 2576
 Email admin@spatialscience.org
 Web www.spatialscience.org

OFFICE USE ONLY

NAME	NUMBER
ADMISSION APPROVED/NOT APPROVED	AT
MEETING	DATE
ENTERED ON DATABASE BY	DATE
PAYMENT PROCESS BY	DATE
CREATE AND MAIL OUT CERTIFICATE & RECEIPT ON	