



**INTERGOVERNMENTAL COMMITTEE ON
SURVEYING & MAPPING**

ICSM Acronym, Initialism and Jargon ‘Buster’ May 2010

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ICSM Committees – Operational

ASIG	Review of Rural and Urban Addressing Standard (AS/NZS 4819) Special Interest Group
CGNA	Permanent Committee on Geographical Names in Australasia
DFTSA	Data Framework Technical Sub Committee Permanent Committee
ePLAN	Electronic Lodgement and Transfer of Survey Information Working Group
ESIG	National DEM Special Interest Group
GTSC	Permanent Geodetic Technical Sub-Committee
ISIG	Aerial Imagery Special Interest Group
PCCR	Permanent Committee on Cadastral Reform
PCTI	Permanent Committee on Topographic Information
PCTMSL	Permanent Committee on Tides and Mean Sea Level
RWG	Roads Working Group

ICSM Committees – Disbanded

AHS or AHS WG	All-Hazards Symbology Special Interest Group
ASDI WG	Australian Spatial Data Infrastructure Working Group
NTWG	Native Title Working Group
SAWG	Street Addressing Working Group
TIWG	Tidal Interface Working Group

ICSM Publications

SP1	Special Publication 1 – Standards & Practices for Control Surveys
SP9	Special Publication 9 – Australian Tides Manual

International Organisations / Associations

<p>AFAC</p>	<p>Australasian Fire and Emergency Service Authorities Council</p> <ul style="list-style-type: none"> ➤ The peak body for public sector fire, land management and emergency service organisations in Australia and New Zealand ➤ <u>Role</u>: to fosters and promotes an integrated approach to emergency service operations and business management by identifying opportunities to share knowledge, collaborate and optimise the use of resources
<p>ANZLIC</p>	<p>The Spatial Information Council [of Australia and New Zealand] <i>(full name is no longer used)</i></p> <ul style="list-style-type: none"> ➤ <u>Role</u>: A peak council on developing nationally-agreed policies, standards and guidelines aimed at achieving 'best practice' in spatial data management ➤ <u>Membership</u>: Heads of mapping and surveying agencies
<p>GITA</p>	<p>Geospatial Information and Technology Association</p> <ul style="list-style-type: none"> ➤ GITA is a worldwide not-for-profit organisation that provides education and information exchange on the use and benefits of geospatial information and location-aware technologies ➤ Membership includes institutions and individuals
<p>EuroRoadS</p>	<p>EuroRoadS Forum</p> <ul style="list-style-type: none"> ➤ Supports the implementation and exploitation of results from the EuroRoadS project which aimed to establish a European-wide public road data infrastructure delivering access, through a single portal, to harmonised and quality assured road information for multipurpose use
<p>FIG or FIG 2010</p>	<p>International Federation of Surveyors <i>(Federation Internationale des Geometres)</i></p> <ul style="list-style-type: none"> ➤ Membership includes organisations and individuals. ➤ Over 110 countries are represented on FIG ➤ FIGs technical work is led by 10 Commissions (Working Groups) ➤ in April 2010, FIG will be holding its XXIV international Congress in Sydney
<p>IAG</p>	<p>International Association of Geodesy</p>
<p>ICA</p>	<p>International Cartographic Association</p>
<p>IHO</p>	<p>International Hydrographic Organization</p>
<p>INSPIRE</p>	<p>Infrastructure for Spatial Information in the Europe</p> <ul style="list-style-type: none"> ➤ INSPIRE is an initiative intends to trigger the creation of a European spatial information infrastructure that delivers to the users integrated harmonised spatial information

<p>ISO AS/NZS or AS/NZ ISO</p>	<p>The International Organisation for Standards for Australia and New Zealand (Standards Australia and Standards New Zealand)</p>
<p>ISO</p>	<p>International Organization for Standardization</p> <ul style="list-style-type: none"> ➤ ISO comprises representative from 161 countries individual standards organisations, one representative per country, and a Secretariat which is based in Geneva, Switzerland.
<p>ISO/TC211</p>	<p>ISO Technical Committee for Geographic Information/Geomatics</p> <ul style="list-style-type: none"> ➤ Responsible for the ISO Geographic Information series of standards – known as the 19100 series
<p>OGC</p>	<p>Open Geospatial Consortium</p> <ul style="list-style-type: none"> ➤ OGC is an international industry consortium of companies, government agencies and universities participating in a consensus process to develop publicly available interface/harmonised specifications ➤ OGC developed the Web Feature Service (WFS)
<p>PCGIAP</p>	<p>[United Nations] Permanent Committee for GIS Infrastructure for Asia and the Pacific</p> <ul style="list-style-type: none"> ➤ PCGIAP aims to maximize the economic, social and environmental benefits of geographic information by providing a forum for nations from Asia and the Pacific ➤ It maintains a number of working groups, including Working Group Working Group 3 – <i>Spatially Enabled Government (WG3)</i>
<p>UN</p>	<p>United Nations</p> <ul style="list-style-type: none"> ➤ The UN is an international organisation which: <ul style="list-style-type: none"> • maintaining international peace and security • developing friendly relations among nations • promoting a safer world for this and future generations – including developing: <ul style="list-style-type: none"> • economic and social development • social progress • better living standards • human rights • sustainable development • environmental protection
<p>UNGEGN</p>	<p>United Nations Group of Experts on Geographical Names</p> <ul style="list-style-type: none"> ➤ a Working Group of the UN established to consider the technical problems of domestic standardisation of geographical names.

National Government Departments & Agencies

(See Appendix A for a brief explanation of the structure/relationships of Australian Government organisations)

* indicates a Jurisdiction with representation on ICSM

ABSDO	<p>[Australian] Accreditation Board for Standards Development Organisations</p> <ul style="list-style-type: none"> ➤ Established in 2007 to accredit organisations which to develop Standards
AAD	<p>Australian Antarctic Division Department of the Environment, Heritage, Water and the Arts</p> <ul style="list-style-type: none"> ➤ <u>Role:</u> to lead Australia's Antarctic programmes and advancing Australia's Antarctic interests – including taking an active role in the Antarctic Treaty System, and undertaking and supporting Antarctic research of national and international significance
ABS	<p>Australian Bureau of Statistics</p> <ul style="list-style-type: none"> ➤ The central statistical authority for the Australian Government
AG or AGs	<p>Attorney-General's Department</p> <ul style="list-style-type: none"> ➤ <u>Role:</u> To provides support to the Australian Government in the maintenance and improvement of Australia's system of law and justice, national security, and emergency management
AGIMO	<p>Australian Government Information Management Office Department of Finance and Deregulation</p> <ul style="list-style-type: none"> ➤ <u>Role:</u> To actively promotes e-Government by the application of Information and Communication Technologies (ICT) to government administration information and services
AHO	<p>Australian Hydrographic Office Royal Australian Navy, Department of Defence</p> <ul style="list-style-type: none"> ➤ the facility operated by the Australian Hydrographic Service (AHS)
AHS *	<p>Australian Hydrographic Service Royal Australian Navy, Department of Defence (formerly referred to as the Australian Hydrographic Office – AHO)</p> <ul style="list-style-type: none"> ➤ <u>Role:</u> To produce and distribute nautical charts and other information required for the safety of ship navigating in Australian waters
ARC	<p>Australian Research Council</p> <ul style="list-style-type: none"> ➤ A statutory authority within the Australian Government's Innovation, Industry, Science and Research portfolio. ➤ <u>Role:</u> to deliver policy and programs that advance Australian research and innovation globally and benefit the community

BoM	<p>Bureau of Meteorology</p> <ul style="list-style-type: none"> ➤ Provides national strategic planning, management and coordination of the Bureau's integrated observations, plus weather, climate and hydrological services ➤ It includes the National Climate Centre, National Tidal Centre (NTC) and hazard warning centres (flood, storm, tsunami, ash etc)
BRS	<p>Bureau of Rural Sciences Department of Agriculture, Fisheries and Forestry</p> <ul style="list-style-type: none"> ➤ BRS provides scientific advice to government in support of more profitable, competitive and sustainable Australian agricultural, food, fisheries and forestry industries and enhancing the natural resource base to achieve greater national wealth and stronger rural and regional communities.
DCC	<p>Department of Climate Change and Energy Efficiency</p> <ul style="list-style-type: none"> ➤ Established on 3 December 2007, as part of the Australian Government's Prime Minister and Cabinet Portfolio ➤ <u>Role</u>: To manage Australia adaption to changed climatic situations. Namely, preparing human and natural systems for the impact of climate change, and reducing risk and vulnerability associated with a changing climate.
CSIRO	<p>Commonwealth Scientific and Industrial Research Organisation</p> <ul style="list-style-type: none"> ➤ CSIRO has six strategic goals: <ul style="list-style-type: none"> • focus on scientific investment • delivering world-class science • partnering for community impact • serving as a catalyst for industry innovation • building one-CSIRO capabilities and commitments • securing a financial foundation for growth
DEEWR	<p>Department of Education, Employment and Workplace Relations</p> <ul style="list-style-type: none"> ➤ DEEWR implements government policies and programs to provide: <ul style="list-style-type: none"> • education and training opportunities • increased employment participation • ensuring a fair and productive workplaces.
DEST	<p>Department of Education, Science and Training now named Department of Education, Employment and Workplace Relations</p>

<p>DIGO *</p>	<p>Defence Imagery and Geospatial Organisation Department of Defence</p> <ul style="list-style-type: none"> ➤ <u>Role:</u> To provide geospatial information (including maps and chart) in support of Australia's defence and national interests
<p>DOFA</p>	<p>Department of Finance and Administration now named Department of Finance and Deregulation</p>
<p>DOTARS</p>	<p>Department of Transport and Regional Services now named Department of Infrastructure, Transport, Regional Development and Local Government</p>
<p>EMA</p>	<p>Emergency Management Australia Attorney General's Department</p> <ul style="list-style-type: none"> ➤ <u>Role:</u> A senior agency responsible for providing policy advice and overseeing arrangements for providing recovery assistance to the States/Territories
<p>Environment</p>	<p>Department of Environment, Water, Heritage and the Arts</p> <ul style="list-style-type: none"> ➤ Environment develops and implements national policy, programs and legislation to protect and conserve Australia's environment and heritage and to promote Australian arts and culture.
<p>Finance</p>	<p>Department of Finance and Deregulation</p> <ul style="list-style-type: none"> ➤ <u>Role:</u> To advice and review government programmes; finances, and financial management frameworks; as well as fostering the efficient and effective use of Information and Communications Technologies by the Australian Government.
<p>GA *</p>	<p>Geoscience Australia, Department of Resources, Energy and Tourism</p> <ul style="list-style-type: none"> ➤ <u>Role:</u> To produce national geoscientific information (including topographic mapping and geodetic control) which enable the government and the community to make informed decisions about: <ul style="list-style-type: none"> • exploration of resources • management of the environment • safety of critical infrastructure

<p>GBRMPA</p>	<p>Great Barrier Reef Marine Park Authority</p> <ul style="list-style-type: none"> ➤ The principal adviser to the Commonwealth Government on the care and development of the Great Barrier Reef Marine Park. The goal of the Authority is to provide for the long-term protection, ecologically sustainable use, understanding and enjoyment of the Great Barrier Reef.
<p>IA</p>	<p>Infrastructure Australia Department of Infrastructure, Transport, Regional Development and Local Government</p> <ul style="list-style-type: none"> ➤ <u>Role:</u> to advise governments, investors and owners of infrastructure concerning: <ul style="list-style-type: none"> • nationally significant infrastructure priorities; • policy and regulatory reforms desirable to improve the efficient utilisation of national infrastructure networks; • options to address impediments to the development and provision of efficient national infrastructure; • the needs of users; and • possible financing mechanisms.
<p>Infrastructure</p>	<p>Department of Infrastructure, Transport, Regional Development and Local Government</p> <ul style="list-style-type: none"> ➤ <u>Role:</u> To contribute to the well being of all Australians by fostering an efficient, sustainable, competitive, safe and secure transport system; and by assisting regions to manage their own futures
<p>LINZ *</p>	<p>Land Information New Zealand</p> <ul style="list-style-type: none"> ➤ holds authoritative information about 1) land surveys and ownership and 2) topographic maps and nautical charts ➤ ensures that the rating valuation system is fair and consistent ➤ oversees the buying and disposal of Crown land
<p>MDBC or MDBA</p>	<p>Murray Darling Basin Commission</p> <ul style="list-style-type: none"> ➤ Responsible for planning the integrated management of water resources of the Murray-Darling Basin ➤ <u>Originally Named:</u> the Murray Darling Basin Authority (MDBA)
<p>NTC</p>	<p>National Tidal Centre Bureau of Meteorology</p> <ul style="list-style-type: none"> ➤ <u>Role:</u> to monitor and analyses sea level for the purpose of deriving trends in absolute sea level and producing national tide predictions, tide streams and related information

OSDM	Office of Spatial Data Management <ul style="list-style-type: none"> ➤ <u>Role</u>: facilitating the implementation of the Australian government's Policy on Spatial Data Access and Pricing ➤ OSDM reports to SDMG ➤ <u>Membership</u>: individuals as appointed by SDMG
PMC or PM&C	Department of the Prime Minister and Cabinet <ul style="list-style-type: none"> ➤ <u>Role</u>: The coordination of government administration; assists the Cabinet and offers policy advice and administrative support to the Prime Minister

State/Territory Government Departments & Agencies

* indicates a Jurisdiction with representation on ICSM

These Jurisdictions have responsibilities for some or all of these functions (as well as a number of other different functions):

- administration of Crown Lands
- management of property titles
- land valuation
- cadastral surveying
- mapping

ACTPLA *	Australian Capital Territory Planning and Land Authority
DERM *	[Queensland] Department of Environment and Resource Management
DPI *	[Northern Territory] Department of Planning and Infrastructure
DPIW *	[Tasmania] Department of Primary Industries and Water
DSE *	[Victoria] Department of Sustainability and Environment
DTEI *	[South Australia] Department of Transport, Energy and Infrastructure
Landgate *	[Western Australia] Landgate
LPI *	[New South Wales] Land and Property Information, Department of Lands

Governmental Organisations / Associations

<p>AEMC</p>	<p>Australian [Government] Emergency Management Committee</p> <ul style="list-style-type: none"> ➤ <u>Role</u>: A peak council on emergency management in Australia ➤ <u>Membership</u>: senior representatives from Attorney General's (AG), State/Territory Emergency Management committees and Australian Local Government Association (ALGA) ➤ <u>Originally Named</u>: National Emergency Management Committee (NEMC)
<p>AGCC</p>	<p>Australian GNSS Coordination Committee (<i>now disbanded</i>)</p> <ul style="list-style-type: none"> ➤ Its role had been to monitor / coordinate the development of GNSS in Australia
<p>AGSC</p>	<p>AuScope GNSS Sub-Committee</p> <ul style="list-style-type: none"> ➤ Created under the AuScope Geospatial Steering Committee ➤ <u>Role</u>: to manage GNSS developments.
<p>ASC</p>	<p>Australian Spatial Consortium</p> <ul style="list-style-type: none"> ➤ <u>Role</u>: To foster innovation, product and service development, operational activities, infrastructure development, international activities and educational support to the spatial industry ➤ <u>Membership</u>: includes ANZLIC, SIBA, CRC-SI and PSMA and SSI
<p>Austrroads</p>	<p>Association of Australian and New Zealand Road Transport and Traffic Authorities</p> <ul style="list-style-type: none"> ➤ <u>Role</u>: To facilitate a cooperative, collaborative approach in roads related matters ➤ <u>Membership</u>: Senior representatives from State/Territory road transport and traffic authorities, Infrastructure, ALGA and Transit New Zealand
<p>COAG</p>	<p>Council of Australian Governments</p> <ul style="list-style-type: none"> ➤ <u>Role</u>: The peak Australian body which initiates, develops and monitors the implementation of policy reforms that are of national significance and which require cooperative action by Australian governments ➤ <u>Membership</u>: the Australia Prime Minister, state premiers, territory chief ministers and the Australian Local Government Association (ALGA) president

<p>EMSINA</p>	<p>Emergency Management Spatial Information Network of Australasia</p> <ul style="list-style-type: none"> ➤ <u>Role</u>: To provide a practitioners voice in national consultative processes, establishing common operating procedures, assisting in the development of standards ➤ <u>Membership</u>: State/Territory GIS User Groups and the Australian emergency management agencies (EMA, GA and BoM)
<p>ICSM</p>	<p>Intergovernmental Committee on Surveying & Mapping</p> <ul style="list-style-type: none"> ➤ <u>Role</u>: To implement policies, standards and guidelines developed by ANZLIC which are designed to achieve 'best practice' in spatial data management ➤ ICSM is a Standing Committee of ANZLIC ➤ <u>Membership</u>: Comprises senior representatives from Australian and New Zealand surveying and mapping/charting agencies
<p>IT-004</p>	<p>Information Technology Committee for Geographic Information</p> <ul style="list-style-type: none"> ➤ <u>Role</u>: Responsibility to manage the Australian/New Zealand geospatial community's standards activities
<p>NCCIP</p>	<p>National Committee on Critical Infrastructure Protection</p> <ul style="list-style-type: none"> ➤ <u>Role</u>: Coordination of Critical Infrastructure Protection policy development across all government ➤ <u>Membership</u>: Representatives State/Territory government and ALGA ➤ NCCIP is a standing committee of NCTC
<p>NCTC</p>	<p>National Counter-Terrorism Committee</p> <ul style="list-style-type: none"> ➤ <u>Role</u>: to contribute to the security of the Australian community through coordination of a nation-wide cooperative framework to counter terrorism and its consequences ➤ <u>Membership</u>: Senior representatives from Australian and State/Territory government departments associated with emergency management, defence and security
<p>NSIM</p>	<p>National Spatial and Information Management Working Group</p> <ul style="list-style-type: none"> ➤ <u>Role</u>: to facilitate the development of spatial information capabilities to enhance decision making through access to and use of spatial information ➤ <u>Membership</u>: a working group under the strategic direction of NCTC, AEMC and NCCIP
<p>RTA</p>	<p>Road Traffic Authority</p> <ul style="list-style-type: none"> ➤ The NSW State Government agency responsible for managing and maintaining the State road network and associated activities such as drivers licenses and vehicle registration

<p>SA</p>	<p>Standards Australia</p> <ul style="list-style-type: none"> ➤ <u>Role</u>: peak non-government Standards organisation. It is charged by the Commonwealth Government to meet Australia's need for contemporary, internationally aligned Standards and related services
<p>SCoLA</p>	<p>Standing Committee on Land Administration</p> <ul style="list-style-type: none"> ➤ <u>Role</u>: developing strategies and actions for discovering and accessing information about rights, obligations and interests in land, promoting e-government in land administration etc ➤ SCoLA is a Standing Committee of ANZLIC ➤ <u>Membership</u>: individuals from the spatial industry and delegates from ANZLIC
<p>SDMG</p>	<p>Spatial Data Management Group</p> <ul style="list-style-type: none"> ➤ <u>Role</u>: to develop nationally-agreed policies, standards and guidelines aimed at implementation of the Australian government's Policy on Spatial Data Access and Pricing ➤ <u>Membership</u>: Senior representatives from Commonwealth government agencies actively engaged in spatial data production ➤ OSDM facilitates the implementation of these policies, standards and guidelines
<p>SEAC</p>	<p>Spatial Education Advisory Committee</p> <ul style="list-style-type: none"> ➤ <u>Role</u>: promoting education and skills formation in the spatial information ➤ SEAC is a Standing Committee of ANZLIC ➤ <u>Membership</u>: ANZLIC representatives and organisations/individuals from the spatial industry
<p>TASAMM or TASAM</p>	<p>Transport Authorities Survey and Mapping Managers</p> <ul style="list-style-type: none"> ➤ <u>Membership</u>: The chief road surveyors from each State/Territory ➤ <u>Originally Named</u>: Transport Authorities Survey and Mapping Group (TASAM)

Industry / Education / Associations / Initiatives

ALGA	<p>Australian Local Government Association</p> <ul style="list-style-type: none"> ➤ <u>Role</u>: To voice and support the interests of local government – especially to government ➤ <u>Membership</u>: Local government associations
APSEA	<p>Asia-Pacific Spatial Excellence Awards</p> <ul style="list-style-type: none"> ➤ sponsored by SSSI these annual awards recognise achievements in the spatial information industry
ARSPC	<p>Australasian Remote Sensing and Photogrammetry Commission</p> <ul style="list-style-type: none"> ➤ part of the Surveying and Spatial Sciences Institute (SSSI) ➤ Holds regular conferences, usually biennially.
ASC	<p>Australian Spatial Consortium</p> <ul style="list-style-type: none"> ➤ Formed in 2007 to accelerate the unlocking of the potential of spatial information for economic, environmental and social benefit for Australia within key industries, and the development of tools, new technologies and capabilities relating to the fundamental future needs of the nation ➤ <u>Membership</u>: 43 Pty Ltd, ANZLIC, CRCSI2, GITA, SIBA and SSSI
ASIBA	<p>Australian Spatial Information Business Association now called Spatial Industry Business Association (SIBA)</p>
auCD	<p>Australian Community Domain Names Trust Pty Ltd</p> <ul style="list-style-type: none"> ➤ <u>Role</u>: established by auDA (.au Domain Administration Ltd) to facilitate the development of Community Geographic Domain Names ➤ auCD is a Pty Ltd, a not-for-profit company acting as trustee of the .au community domains trust which is funding from sales of commercial names by auDA
auDA	<p>Australian Domain Administration Limited</p> <ul style="list-style-type: none"> ➤ <u>Role</u>: To develop and administer policy relation to the .au (Australia) internet domain, including: <ul style="list-style-type: none"> • develop and implement domain name policy • license 2LD registry operators • accredit and license registrars • implement consumer safeguards • facilitate .au Dispute Resolution Policy

<p>BOSSI</p>	<p>Board of Surveying and Spatial Information of New South Wales</p> <ul style="list-style-type: none"> ➤ <u>Role</u>: The registration of land and mining surveyors, the regulation of surveys and advises the Minister on spatial information ➤ <u>Membership</u>: Representatives from government and industry appointed by the Ministers.
<p>CeBIT</p>	<p>Centrum der Büro- und Informationstechnik (German for Centre of Office and Information technology)</p> <ul style="list-style-type: none"> ➤ In Australia this is a 3 day, technology trade fair which focuses on Information and Communications Technology (ICT) – especially ICT for spatial industries ➤ It is run by a company called Hanover Fairs
<p>CRCSI or CRC.SI CRCSI2 or CRC.SI2</p>	<p>Cooperative Research Centre for Spatial Information</p> <ul style="list-style-type: none"> ➤ <u>Role</u>: Research and development in the spatial industry and commercialisation of that research ➤ <u>Membership</u>: A unincorporated joint venture comprising organisations from the corporate, government and university sectors ➤ This CRC completed work in December 2009 and the next generation of this CRC was established called CRC.SI2. It is established for the period 2010 to 2018. ➤ It consists of There are 3 Colleges <ol style="list-style-type: none"> 1. ANZLIC – which handles relationships with government partners 2. 43pl-2 – a private company which handles relationships with companies 3. Research and Education – which handles relationships with research and education bodies
<p>CRSBANZ</p>	<p>Council of Reciprocating Surveyors Boards of Australia and New Zealand</p> <ul style="list-style-type: none"> ➤ <u>Role</u>: To ensure that the community has confidence in professional surveyors, by encouraging the adoption of standards for best practice and supports mutual recognition of registered /licensed surveyors ➤ <u>Membership</u>: Representatives from surveyors boards of Australian State's/Territory's and New Zealand
<p>MSIA</p>	<p>Mapping Sciences Institute, Australia</p> <ul style="list-style-type: none"> ➤ A non-government organisation which aims to assist in the professional development of individuals and organisation in the spatial community

<p>PSMA or PSMA Australia</p>	<p>PSMA Australia (Public Sector Mapping Agencies Australia – <i>full name is no longer used</i>)</p> <ul style="list-style-type: none"> ➤ <u>Role</u>: To combine reliable spatial data from Australia's governments to create national spatial datasets and supply spatial related services. ➤ <u>Membership</u>: A unlisted public company wholly owned by the State, Territory and Australian governments
<p>SIBA</p>	<p>Spatial Industry Business Association</p> <ul style="list-style-type: none"> ➤ <u>Role</u>: To voice and support the interests of the private sector of the spatial information industry – especially to government ➤ <u>Membership</u>: Representatives from spatial information industry private sector – individuals or companies
<p>SSI</p>	<p>Spatial Sciences Institute Now called Surveying and Spatial Sciences Institute (SSSI)</p>
<p>SSSI</p>	<p>Surveying and Spatial Sciences Institute</p> <ul style="list-style-type: none"> ➤ <u>Created</u> in 2009 as result of the amalgamation of Spatial Sciences Institute and Institution of Surveyors. ➤ <u>Role</u>: Promotion and inform the disciplines of surveying (cadastral, engineering & mining), mapping, remote sensing, photogrammetry and spatial information ➤ <u>Membership</u>: Spatial information industry individuals or companies

International / National Projects / Agreements

<p>APREF</p>	<p>Asia [south western] Pacific Reference Frame Project</p> <ul style="list-style-type: none"> ➤ <u>Role</u>: to create and maintain an accurate and dense geodetic framework which will generate continuous observation and analysis of GNSS data. ➤ APREF will cover about one third of the planet – from Kazakhstan in the north-west to French Polynesia in the south-east. Other regions are Europe, North American, South American, Antarctic and Africa. ➤ Data will be suitable for use by all geospatial disciplines. ➤ See also PCGIAP and IAG
<p>ASDD</p>	<p>Australian Spatial Data Directory</p> <ul style="list-style-type: none"> ➤ a web based search interfaces for discovery of Australian geospatial dataset descriptions (metadata) ➤ ASDD is hosted by GA and is an ANZLIC initiative
<p>ATWS</p>	<p>Australian Tsunami Warning System</p> <ul style="list-style-type: none"> ➤ A regional system involving BoM, GA and EMA ➤ It provides a warning system capable of delivering timely and effective tsunami warnings to the Australian. ➤ It also contributes to tsunami warnings for the South West Pacific.
<p>AuScope</p>	<p>An organisation for a National Earth Science Research Program covering Capability 5.13 (Structure and Evolution of the Australian Continent), under National Collaborative Research Infrastructure Strategy (NCRIS)</p> <ul style="list-style-type: none"> ➤ For ICSM this equates to improving/densifying the GNSS / CORS networks ➤ See also AGSC
<p>AusDEM</p>	<p>An Australian national DEM – see NEDF</p>
<p>AWRIS</p>	<p>Australian Water Resources Information System</p> <ul style="list-style-type: none"> ➤ AWRIS is currently being developed by BoM, GA and CSIRO ➤ It will be a web enabled set of tools that will allow access to water related information, which will allow users to: <ul style="list-style-type: none"> • review and investigate the data • understand the data in its context • analyse the bigger picture details about Australia's water resources ➤ see also Geofabric

CSDI	<p>Commonwealth Spatial Data Integration</p> <ul style="list-style-type: none"> ➤ A joint project between the Department of Human Services, the ABS, AGIMO and GA. ➤ It will facilitate the integration and sharing of spatially enabled information within the Australian government – to support social inclusion initiatives.
GeoFabric	<p>GeoFabric is a database of the draining network for the whole of Australia. It is being jointly developed by BoM, GA and CSIRO.</p> <p>When complete this will be the spatial component of AWRIS</p>
GeoNetwork	<p>A standards-based metadata tool and management environment developed by the United Nations.</p>
Heads Agreement	<p>Collaborative Head Agreement</p> <ul style="list-style-type: none"> ➤ see NCF
NAMF	<p>National Address Management Framework</p> <ul style="list-style-type: none"> ➤ A system developed by the AGIMO to manage the creation of addresses across Australia. ➤ This has a relationship with PSMA's G-NAF database.
NCF	<p>National Collaboration Framework</p> <ul style="list-style-type: none"> ➤ NCF was established to assist government (national, State and Territory) agencies to work collaboratively to provide the processes and tools that will increase the ability of agencies to deliver improved services to customers. ➤ It is essentially a 'framework' for collaboration ➤ Its primary tool is a Collaborative Head Agreement which is a non-binding agreement for a group of agencies to cooperate on joint projects ➤ Individual projects are agreed under the Collaborative Head Agreement between all or some of the agencies which are signatory to the Head Agreement. ➤ In 2010 all ICSM jurisdictions (with the exception of DIGO and LINZ) signed a Collaborative Head Agreement.
NCRIS	<p>National Collaborative Research Infrastructure Strategy</p> <ul style="list-style-type: none"> ➤ A programme that was announced in 2005 by the Australian Government's as part of <i>Backing Australia's Ability – Building our Future through Science and Innovation</i> ➤ It providing \$542 million to provide researchers with major research facilities, supporting infrastructure and networks necessary for world-class research ➤ It is expected to be completed in 2011.

NEDF	<p>National Elevation Data Framework</p> <ul style="list-style-type: none"> ➤ An Australia wide nested DEM. (A nested DEM is one where DEMs of different resolutions are combined together.) ➤ sponsored by ANZLIC, GA, Department of Climate Change and CRC-SI
NSIF	<p>National Service Improvement Framework</p> <ul style="list-style-type: none"> ➤ A cross agency framework that has been developed under the auspices of the Australian Online and Communications Council of Ministers ➤ It sets a set of principles and standard legal clauses to manage inter-agency cooperative agreements
NTICI	<p>National Topographic Information Coordination Initiative</p> <ul style="list-style-type: none"> ➤ An ICSM initiative to encourage cooperative topographic map and data revision projects.
STiS	<p>Spatial Technology in Schools</p> <ul style="list-style-type: none"> ➤ STiS is a project which is working towards engaging with students in late-primary / early-high school age group in order to promote greater awareness of the spatial industry.

Concepts / Data Products

ANZsi	<p>Australia New Zealand Spatial Infrastructure</p> <ul style="list-style-type: none"> ➤ A replacement structure for ASDI which is under review by ANZLIC. ➤ Currently it has an overarching vision of developing a thriving spatial market place by 2011.
ASDI	<p>Australian Spatial Data Infrastructure</p> <ul style="list-style-type: none"> ➤ ASDI comprises the people, policies, guidelines and technologies necessary to enable the use of spatially referenced data through all levels of government, the private sector, non-profit organisations and academia. ➤ This is being replaced by ANZsi
DCDB	<p>Digital Cadastral Database</p> <ul style="list-style-type: none"> ➤ Acomputerised map of property boundaries and the related property description of land parcels. ➤ It is an excellent base for searching, planning and analysing land related information and is used by most local governments for these purposes.

DEM	<p>Digital Elevation Model</p> <ul style="list-style-type: none"> ➤ A DEM is a digital representation of grounds surface. It raster (a grid of rectangles) database. It can be either: <ul style="list-style-type: none"> • regular (eg squares of the same size); or • irregular (eg squares of the different sizes) ➤ See also UDEM
GIS	<p>Geographic Information Systems</p> <ul style="list-style-type: none"> ➤ GIS captures, stores, analyses, manages, and presents digital spatial data.
G-NAF	<p>Geocoded National Address File</p> <ul style="list-style-type: none"> ➤ A database produced by PSMA –it is a composite of information supplied by the Australian Electoral Commission, Australia Post and Australia's government State/Territory mapping agencies and land registries
HDF	<p>Harmonised Data Framework</p> <ul style="list-style-type: none"> ➤ An overarching system which is designed to assist in the development of standard for the capture and dissemination of spatial data
HDM	<p>Harmonised Data Model</p> <ul style="list-style-type: none"> ➤ a model for the definition of key spatial features and their attributes this is the key component of the HDF ➤ It has been developed as UML with a method to convert into GML
LYNX2	<p>The next development in PSMA's Australia's Spatial Data Infrastructure management system.</p> <ul style="list-style-type: none"> ➤ Its main objectives are to: <ul style="list-style-type: none"> • increase the data quality • shorten the update cycles • allow for services to be provided and shared • connect PSMA and its jurisdictions in a network to allow continuous data updates and sharing of web services
UDEM	<p>Urban Digital Elevation Model</p> <ul style="list-style-type: none"> ➤ This is series of high resolution DEMs in selected urban areas – Perth, Gold Coast, Melbourne, Sydney and Newcastle-Hunter ➤ It is part of the National Elevation Data Framework (NEDF)
WFS	<p>Web Feature Service</p> <ul style="list-style-type: none"> ➤ WFS provides an interface which allows access to spatial information across the web which is independent of technology ➤ It was developed by OGC which defined and maintains its specification. ➤ There are numerous commercial and open source implementations of the WFS interface standard

Hydrography

HAT	Highest Astronomical Tide <ul style="list-style-type: none"> ➤ The highest tide level of water which can be predicted to occur under any combination of astronomical conditions.
LAT	Lowest Astronomical Tide <ul style="list-style-type: none"> ➤ The lowest tide which can be predicted to occur under average meteorological conditions and under any combination of astronomical conditions
MHW	Mean High Water <ul style="list-style-type: none"> ➤ The average of all recorded high waters
MLW	Mean Low Water <ul style="list-style-type: none"> ➤ The average of all low waters observed over a long period
MSL	Mean Sea Level <ul style="list-style-type: none"> ➤ The average sea heights measured at tidal stations

Space Technology

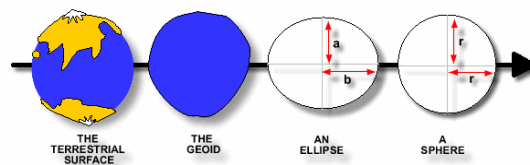
Galileo	A European based GNSS, being developed and a 'next generation' positioning system
GNSS	Global Navigation Satellite System <ul style="list-style-type: none"> ➤ satellite navigation systems that provide independent geospatial positioning with global coverage ➤ the system relies on CORS Network hardware ➤ see Galileo, GPS & IRNSS
GPS	Global Positioning System <ul style="list-style-type: none"> ➤ a United States of America based GNSS, the first to be publicly available
IRNSS	A Indian based GNSS which is being developed as a 'next generation' positioning system
LiDAR	Light Detection and Ranging <ul style="list-style-type: none"> ➤ LiDAR is an optical remote sensing technology that measures properties of scattered light to find distances and/or other information about distant objects
SLR	Satellite Laser Ranging <ul style="list-style-type: none"> ➤ SLR is a global network of stations which measure the time it takes for pluses of light to return from a satellite ➤ It is capable of measuring to millimetre accuracy ➤ It is used for measurement of the orbits of satellites

Geodesy – Reference Systems

AGD / AGD84	<p>Australian Geodetic Datum, 1984</p> <ul style="list-style-type: none"> ➤ replaced AGD66 in some agencies and replaced by GDA94
AHD / AHD71	<p>Australian Height Datum, 1971</p> <ul style="list-style-type: none"> ➤ the datum used for the measuring heights in Australia ➤ it is a surface of equal gravity potential which closely approximates mean sea level ➤ used a national network of bench marks and tide gauges and set mean sea level as zero elevation
AUSGeoid98	<p>Australian Geoid, 1998</p> <ul style="list-style-type: none"> ➤ the geoid currently used in Australian ➤ suitable for use with GPS ➤ replaces AUSGeoid93
AUSGeoid2009	<p>Australian Geoid, 2009</p> <ul style="list-style-type: none"> ➤ the geoid to be used in Australian once it is released in mid-2010 ➤ Will replace AUSGeoid98
GDA / GDA94	<p>Geocentric Datum of Australia, 1994</p> <ul style="list-style-type: none"> ➤ the current Australian coordinate system ➤ an Earth-centred datum ➤ uses AUSGeoid98 ➤ part of a ITRF and is directly compatible to GPS ➤ replaces AGD84 which is not Earth-centred (approx 200 metres difference)
ICRF	<p>International Celestial Reference Frame</p> <ul style="list-style-type: none"> ➤ Adopted by the International Astronomical Union in January 1998 as the fundamental celestial reference frame
ITRF / ITRF2005	<p>International Terrestrial Reference Frame, 2005</p> <ul style="list-style-type: none"> ➤ is directly compatible to GPS ➤ replaces ITRF2000, 1997, 1996 and 1994
NGRS	<p>National Geospatial Reference System</p> <ul style="list-style-type: none"> ➤ potentially the next datum for Australia

NPI	National Positioning Infrastructure <ul style="list-style-type: none"> ➢ In Australia this equates to building the capacity for mobile, hand-held GPS devices to locate one another extremely accurately, within a few centimetres ➢ It consists of a network of ground based infrastructures
WGS / WGS84	World Geodetic System, 1984 <ul style="list-style-type: none"> ➢ GPS's reference ellipsoid for the whole Earth ➢ aligned with ITRF

Geodesy – Geometry / Concepts



Datum	A mathematical surface on which a mapping and coordinate system is based
Ellipsoid	A mathematical surface obtained by rotating an ellipse about its axis <ul style="list-style-type: none"> ➢ the ellipsoid is a regular surface ➢ an ellipsoid is chosen 'best fit' the geoid over a given area or the geoid for the whole Earth
Epoch	In Geodetic terms an epoch is the base date for datum.
Geoid	The shape of the earth as defined by an equipotential surface (gravity) <ul style="list-style-type: none"> ➢ it approximates mean sea level if it were extended under continents ➢ the geoid is an irregular surface because the mass distribution of the Earth is not uniform and the direction of gravity changes accordingly
Height (Vertical) Datum	The datum used to define heights on the surface of the Earth. It approximates mean sea level around a coastline
Spheroid	A spheroid is an ellipsoid with two of its three radii the same – ie shaped more closely to a sphere

Geodesy – Software

AUSPOS	Online GPS Processing Service hosted by Geoscience Australia
DynaNet	Geodetic network adjustment software package developed by Dr P Collier, and hosted by Geoscience Australia
NEWGAN	Geodetic network adjustment software package developed by Dr J Allman and hosted by Geoscience Australia
NZPOS	Online GPS Processing Service hosted by Land Information New Zealand – it is a software packages which converts raw GPS data into ITRF coordinates
SNAP	Geodetic network adjustment software package developed by LINZ

Geodesy – Hardware

AFN	<p>Australian Fiducial Network</p> <ul style="list-style-type: none"> ➢ Consists of eight permanent, continuously operating, Geodetic quality GPS receivers – all within Australia ➢ AFN is a CORS network
ARGN	<p>Australian Regional GPS Network</p> <ul style="list-style-type: none"> ➢ AFN plus some receivers outside of Australia ➢ ARGN is a CORS network
CORS / CORS Network	<p>Continuous Operating Reference Stations Network</p> <ul style="list-style-type: none"> ➢ used to receive GPS data ➢ includes: AFN, ARGN and VLBI ➢ this hardware supports GNSS systems
VLBI	<p>Very Long Baseline Interferometry</p> <ul style="list-style-type: none"> ➢ A global system with about 50 base stations work world wide ➢ In Australia there are 5: <ul style="list-style-type: none"> • Hobart (Tas) • Katherine (NT) – under construction • Parkes (NSW) • Yarragadee (WA) – under construction ➢ In New Zealand there is 1: <ul style="list-style-type: none"> • Christchurch ➢ VLBI is part of the CORS network

Geodesy – Administration

Reg 1	A certificate under the National Measurement Act, 1906 issued by Geoscience Australia, for legal traceability of GPS position
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Computing Languages

GML	<p>Geography Markup Language</p> <ul style="list-style-type: none"> ➤ an open specification for representation of geographic (spatial and location) information ➤ It defines XML encoding for the transport and storage of geographic information, including both the geometry and properties of geographic features
HTML	<p>HyperText Markup Language</p> <ul style="list-style-type: none"> ➤ one of the foundations of the World Wide Web
LandXML	<p>Land Extensible Markup Language</p> <ul style="list-style-type: none"> ➤ an industry-driven, open XML data exchange standard that provides interoperability for software applications serving the surveying, civil engineering and transportation industries – it broadly supports online cadastral applications – generally referred to as a <u>LandXML schema</u>
Markup Language	Any computer language which combines text and extra information about the text (eg font size) – the best-known markup language in modern use is HTML
UML	<p>Unified Modelling Language</p> <ul style="list-style-type: none"> ➤ a standardised specification language for object modelling ➤ It is a general-purpose modelling language that includes a graphical notation to create an abstract model of a system – generally referred to as a <u>UML model</u>
XML	<p>Extensible Markup Language</p> <ul style="list-style-type: none"> ➤ a general-purpose markup language which allows users to define their own information tags ➤ Its primary purpose is to facilitate the sharing of structured data across different information systems, particularly via the Internet

Appendix A

Australian Government Administration Structure

The relationship between Australian Government bodies can be confusing. This Appendix is designed to explain some of these relationships, without elaboration about specific relationships.

The Australian Government (also called the Commonwealth Government or Federal Government), is made of elected representatives from Australia. From these representatives a number of people are chosen to form the 'Executive'. Members of the Executive are given titles which describe their responsibilities. Examples include:

- Special titles such as Prime Minister of Australia, Attorney General, Special Minister of State;
- Minister for ...; and
- Parliamentary Secretary

These are responsible for managing Portfolios – these are areas of activity for the Australian Government.

A Portfolio may have only one Minister or it may have several Ministers and Parliamentary Secretaries.

In June 2009 there were 20 Portfolios within the Australian Government. Approximately 46 people were appointed to Executive to administer these Portfolios (6 with specific titles, 27 Ministers and 13 Parliamentary Secretaries). These numbers vary from time-to-time as governments review their work priorities and programs.

Under Portfolios, 3 basic types of organisations are created:

- Government Departments which report directly to its member of the Executive (often generally referred to as its' Minister).

Within these Departments separate organisations may exist. As a general rule, these report to the Executive via the Department.

- Separate organisations, which may be semi-autonomous and which report directly to its member of the Executive
- Affiliated organisations which are largely autonomous. These may report directly to the Executive and/or via the Department. These are often referred to as Qangos (quasi autonomous non-government organisations)

An example:

Portfolio:	Environment, Water, Heritage and the Arts
Minister(s)	<ul style="list-style-type: none"> • Minister for Environment, Heritage and the Arts • Minister for Climate Change and Water
Department(s)	Department of the Environment, Water, Heritage and the Arts
Departmental Organisation(s)	<ul style="list-style-type: none"> • Australia Antarctic Division • National Portrait Gallery etc
Portfolio Organisation(s)	<ul style="list-style-type: none"> • Bureau of Meteorology • Great Barrier Reef Marine Park Authority • Murray Darling Basin Authority etc
Portfolio/Departmental affiliated Organisation(s)	<ul style="list-style-type: none"> • Australian Business Arts Foundation Ltd etc