



INTERGOVERNMENTAL COMMITTEE ON
SURVEYING & MAPPING

ICSM Acronym, Initialism and Jargon ‘Buster’ July 2009

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ICSM Committees – Operational

ASIG or Addressing-SIG	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 or Elevation-SIG	National DEM Special Interest Group
GTSC	Permanent Geodetic Technical Sub-Committee
ISIG or IMAGERY-SIG	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 or 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

GITA	<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
EuroRoadS	<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
FIG and FIG2010	<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
ICA	International Cartographic Association
IHO	International Hydrographic Organization
INSPIRE	<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
ISO AS/NZS and AS/NZ ISO	The International Organisation for Standards for Australia and New Zealand (<u>Standards Australia</u> and <u>Standards New Zealand</u>)

ISO	<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.
ISO/TC211	<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
OGC	<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)
PCGIAP	<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>
UN	<p>United Nations</p> <ul style="list-style-type: none"> ➤ The UN is an international organisation which is committed to: <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 • international health
UNGEGN	<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.

Australian 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

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

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.
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>
DIGO *	<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

DOFA	<p>Department of Finance and Administration</p> <p>now named</p> <p>Department of Finance and Deregulation</p>
DOTARS	<p>Department of Transport and Regional Services</p> <p>now named</p> <p>Department of Infrastructure, Transport, Regional Development and Local Government</p>
EMA	<p>Emergency Management Australia Attorney General's Department</p> <ul style="list-style-type: none"> ➤ Role: A senior agency responsible for providing policy advice and overseeing arrangements for providing recovery assistance to the States/Territories
Environment	<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.
Finance	<p>Department of Finance and Deregulation</p> <ul style="list-style-type: none"> ➤ Role: 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.
GA *	<p>Geoscience Australia, Department of Resources, Energy and Tourism</p> <ul style="list-style-type: none"> ➤ Role: 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
GBRMPA	<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>MDBA</p>	<p>Murray Darling Basin Authority</p> <ul style="list-style-type: none"> ➤ Responsible for planning the integrated management of water resources of the Murray-Darling Basin
<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
<p>OSDM</p>	<p>Office of Spatial Data Management</p> <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
<p>PMC or PM&C</p>	<p>Department of the Prime Minister and Cabinet</p> <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

New Zealand Government Departments & Agencies

* indicates a Jurisdiction with representation on ICSM

LINZ *	<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
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Australia – 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 (Australia and New Zealand)

<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>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>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

NSIM	<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
SA	<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
SCOLA	<p>[ANZLIC's] Standing Committee on Land Information</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>: ANZLIC representatives and individuals from the spatial industry
SDMG	<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
SEAC	<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
TASAM	<p>Transport Authorities Survey and Mapping Group</p> <ul style="list-style-type: none"> ➤ <u>Membership</u>: The chief road surveyors from each State/Territory

Industry/Education Organisations / Associations (Australia and New Zealand)

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
ASIBA	<p>Australian Spatial Information Business Association now called <u>Spatial Industry Business Association</u></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
BOSSI	<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.
CRC-SI or CRCSI or CRC.SI	<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 is due to complete its work in 2009 and a proposal for an extension of its work is currently being considered. If accepted the CSC-SI will change its name – possible to CRCSI-2.

<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>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</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

National Projects / Agreements

ASDD	<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
AURIS	<p>Australian Water Resources Information System</p> <ul style="list-style-type: none"> ➤ AURIS is currently being developed by BoM, GA and CSIRO.
AuScope	<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
AusDEM	<p>An Australian national DEM – see NEDE</p>
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. When complete this will be the spatial component of AURIS</p>
GeoNetwork	<p>A standards-based metadata tool and management environment developed by the United Nations.</p>
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.
NCIF	<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

NCRIS	<p>National Collaborative Research Infrastructure Strategy</p> <ul style="list-style-type: none"> ➤ a programme that was announced by the Australian Government's as part of <i>Backing Australia's Ability – Building our Future through Science and Innovation</i> – this generates funding to provide researchers with access to the infrastructure and networks necessary to undertake world-class research
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
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 development 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
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 squares) 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)

GIS	<p>Geographic Information Systems</p> <ul style="list-style-type: none"> ➤ Geographic Information Systems 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 – being a composite of information supplied by Australian Electoral Commission, Australia Post and Australia's government 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 it into GML
LYNX2	<p>The next development in PSMA Australia's Spatial Data Infrastructure management system. Its main objectives are to:</p> <ul style="list-style-type: none"> • increase the data quality; • shorten the update cycles • allow for services to be provided and shared • connect all PSMA and its jurisdictions in a network to facilitate continuous data updates and the sharing of web services
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

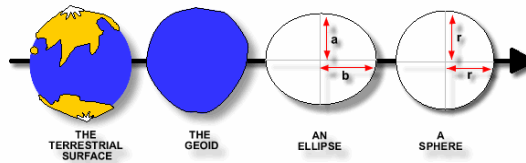
Space Technology

Galileo	A European based GNSS, being developed and a 'next generation' system
GNSS	<p>Global Navigation Satellite System</p> <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	<p>Global Positioning System</p> <ul style="list-style-type: none"> ➤ a United States of America based GNSS, the first to be publicly available
IRNSS	A Indian based GNSS, being developed and a 'next generation' system
LIDAR	<p>Light Detection and Ranging</p> <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 of a distant target. ➤ The prevalent method to determine distance to an object or surface is to use laser and radar technologies
SLR	<p>Satellite Laser Ranging</p> <ul style="list-style-type: none"> ➤ SLR is a global network of observation stations which measure the time it takes for pulses of light to return from a satellite. ➤ It is capable of measuring to millimetre accuracy and is used for measurement of the orbits of satellites and a host of important scientific data – including determining the geocentric position of an Earth satellite and variations over time of the Earth's gravity field.

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
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
WGS / WGS84	<p>World Geodetic System, 1984</p> <ul style="list-style-type: none"> ➤ GPS's reference ellipsoid for the whole Earth ➤ aligned with ITRF

Geodesy – Geometry



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
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 13	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	<p>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</p>
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