



Australian Government

Office of Spatial Data Management

Spatial Data Policy Executive

Annual Report

2002-03

The Hon Warren Entsch
Parliamentary Secretary
For Industry, Tourism and Resources
Parliament House
CANBERRA ACT 2600

Dear Parliamentary Secretary

Letter of Transmission

This is the second Annual Report of the Spatial Data Policy Executive since the introduction of the Australian Government's Spatial Data Access and Pricing Policy in September 2001. The Policy of making government spatial data available at marginal cost, effectively free online, has led to a dramatic increase in public interest. Agencies that formerly sold a couple of copies of a dataset per week are now seeing the same datasets being downloaded dozens of times a day from their websites.

Demand for online access to government spatial data is growing exponentially. Agencies are upgrading their IT infrastructures to meet the surging public demand. Agencies are also reviewing their data licensing procedures, seeking to minimise overheads for both data users and managers.

The growing public market for spatial data is placing a premium on improved data documentation (metadata). Metadata helps users discover the data they need and determine whether it is appropriate for their purpose. Agencies are currently planning for the implementation of a new international metadata standard.

Effective whole-of-government responses to national issues such as homeland security and natural resources management need a focus on lowering barriers to data access and use. Challenges include separate agency infrastructures, incomplete interoperability amongst datasets and competing proprietary software packages. Progressive adoption of emerging international 'open system' standards will assist, along with continued leadership from government encouraging agencies to work together to solve common problems.

Spatial data underpins many private sector industries, as well as delivering broad community benefits, particularly in the natural resource management, transport and emergency response sectors. The return on the public's investment in spatial data is increased by maximising access to the data managed by government agencies. The rapid growth in public access to spatial data we have seen over the last two years suggests that the Policy has been effective.

Yours sincerely

Dr Neil Williams
Chair
Spatial Data Policy Executive

March 2004

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Overview

The Spatial Data Policy Executive (SDPE) is a CEO-level committee established in 2001 to coordinate the implementation of the Australian Government's Spatial Data Access and Pricing Policy. The SDPE is required to report annually to the responsible Minister on the implementation of the Policy and its effectiveness. It commissioned a survey of spatial data management in Australian Government agencies to gather information for this report. The main findings of the survey are summarised below. The findings should be used with caution as not all agencies were able to respond in full to the survey.

Purpose and value

- Spatial data is produced by individual agencies for a wide variety of purposes relating to the fulfilment of their missions and the provision of services to the public. Spatial data is particularly important in the following fields:
 - Natural resource management and environmental monitoring;
 - Socioeconomic analysis and program delivery to regional Australia;
 - Defence, homeland security and emergency response.
- Agencies identified a number of gaps in the supply of fundamental data:
 - Postcode Boundaries;
 - Commonwealth land ownership and use;
 - Location of agency offices, health care facilities, and schools.

Costs, distribution and revenue

- In financial year 2002-03 Australian Government agencies reported:
 - spending \$78.3 million on spatial data production and maintenance;
 - distributing 90,438 copies of spatial datasets;
 - earning \$2.5 million from sales of spatial datasets;
- Geoscience Australia is the largest producer and distributor of spatial data, accounting for:
 - 77% of reported agency expenditure on spatial data management; and
 - 94% of datasets distributed.

Accessibility and metadata

- The Data Schedule was expanded by the addition of 40 spatial datasets.
- Agencies extended the provision of online access to:
 - A further 16 datasets on the Schedule
 - Another 12 datasets not listed on the Schedule
- Agencies provided online access to an average of 56 percent of their spatial datasets listed on the Schedule.
- Agencies supplied documentation (metadata) for an average of 80 percent of their spatial datasets.

Introduction

In September 2001, the Australian Government announced a new policy for spatial data access and pricing. Under the terms of the Policy, Australia Government agencies will provide fundamental spatial data under the following conditions:

- Free of charge over the internet;
- At no more than the marginal cost of transfer for packaged products;
- At the full cost of transfer for customised services; and
- Without any copyright license restrictions on commercial value-adding.

Spatial Data is defined as any data that can be referenced to a geographic location on, above or beneath the surface of the Earth. *Fundamental datasets* are those for which two or more Australian Government Agencies require consistent, national coverage in order to achieve their objectives.

The terms of the Policy apply to those datasets identified in the Data Schedule, which is maintained by the Office of Spatial Data Management (OSDM) and published on its website at <http://www.osdm.gov.au/>.

Each year, the Spatial Data Policy Executive (SDPE) is required to submit a report on the implementation of the Policy to the Responsible Minister (the Hon. Ian Macfarlane, Minister for Industry, Tourism and Resources). This report is structured to respond to each of the reporting requirements laid down in the Policy, which form the terms of reference for SDPE.

Terms of Reference of the SDPE

The role of the SDPE shall be to:

1. Report annually to the Responsible Minister on implementation of the policy including:
 - a) changes to the data schedule in the period;
 - b) changes to access and pricing arrangements in the period;
 - c) the cost of data management in the period;
 - d) for each dataset in schedule, and against the categories intra-Commonwealth, Commonwealth-State, Commonwealth-other transfers:
 - i. revenue;
 - ii. units;
 - iii. uses, benefits and value.
2. Review and evaluate the efficacy of:
 - e) the data schedule;
 - f) the access and pricing arrangements;
 - g) the arrangements for custodianship and sponsorship;
 - h) the annual workplan; and
 - i) the coordination arrangements
3. The Chair of the SDPE will represent the Commonwealth on ANZLIC and the Group will provide high-level input to the determination of the Commonwealth's position in that forum.

1. Report on Implementation of the Policy

In August and September of 2003, the Office of Spatial Data Management (OSDM) conducted a survey of spatial data management in Australian Government Agencies. The purpose of the Survey was to gather performance information to enable the Spatial Data Policy Executive (SDPE) to report on the implementation of the Policy. Data from the Survey underpins this report.

a) Changes to the Data Schedule

In October 2002, the Spatial Data Management Group (SDMG) approved the inclusion of 40 additional fundamental spatial datasets to the Schedule, increasing the number of datasets listed on the schedule by a third. Table 1 lists the new additions to the Data Schedule.

Table 1: Additions to the Data Schedule in 2002-03

THEME	DATASET TYPE	CUSTODIAN
<i>Terrestrial vegetation / flora</i>	Native forests and plantations of Australia	DAFF ¹
	Agricultural land cover change	DAFF
	Threatened plant species	DEH
	Advanced Very High Resolution Radiometer (AVHRR) vegetation index	DEH
<i>Terrestrial fauna/a</i>	Feral animals	DAFF, DEH
	Birds	DEH
	Threatened fauna	DEH
<i>Marine fauna/a</i>	Commercial fishery boundaries	DAFF
	Commercial fishing activity - catch	DAFF
	Fish distributions	DAFF
<i>Streamlines and inland water bodies</i>	Directory of important wetlands	DEH
	Water quality	DEH, NLWRA
<i>Built environment</i>	Pollutants	DEH
<i>Australian interests in land</i>	Heritage Sites	DEH
<i>Administrative boundaries</i>	Jurisdictional boundaries	GA
	Commonwealth electoral boundaries	AEC
	Boundaries of districts or divisions	ABS
	National Localities Index	ABS
<i>Socio-economic</i>	A spatially consistent sub-set of agricultural statistics data 1982/83 to 1996/1997	DAFF, NLWRA
	Agricultural profit at full equity (5 year average and financial year ending June 1997)	NLWRA, CSIRO
	Indicators of structural adjustment in agriculture	NLWRA
<i>Natural environment terrestrial (soils)</i>	Landscape balances of water, carbon and nutrients (1996 and pre-agriculture simulations)	CSIRO, NLWRA
<i>Amendment to schedule</i>	<i>(Delete)</i> Indices of ecosystem health	NLWRA
	<i>(Insert)</i> Indices of landscape health	NLWRA
<i>Marine environment</i>	Bathymetry	AHS
	Fish species distributions and known ranges	AFMA
	Fish catch statistics, spatially attributed	AFMA
	Fish bycatch statistics, spatially attributed	AFMA
	Marine threatened species distribution	AFMA
	Distributions of introduced marine pests	AFMA
	Ocean climatologies (currents, temperature, salinity, nutrients, oxygen)	AFMA
	Marine invertebrate distributions and ranges	AFMA
	Marine flora distributions and ranges	AFMA, CSIRO
	Marine fauna distributions and ranges	AFMA, CSIRO
	National bioregionalisation datasets (for coastal, shelf and offshore waters)	GA
	Management boundaries and zones (e.g. Petroleum and mining leases, fisheries, MPAs, reserves) and associated management attributes	GA
	Cultural sites of significance (eg. shipwrecks, indigenous sacred sites, sea claims)	ATSIC
	Offshore Tourism statistics, spatially attributed	BTR

¹ See the list of Acronyms at Appendix 5 for the full agency name.

b) Changes to Access and Pricing Arrangements

There was a significant improvement in public access to Australian Government spatial data in 2002-03, due to two main factors:

1. The expansion of the Data Schedule with the addition of the 40 datasets listed in Table 1, which involved the reduction in the prices for those datasets to the price points specified under the Policy (ie. the marginal cost of transfer).
2. The provision of online access to another 28 spatial datasets (shown in Table 2), including 16 datasets listed on the Data Schedule. Online availability greatly improves public access, due to the ease of downloading data and the requirement under the Policy that data delivered online be free of charge.

Table 2: Spatial Datasets Placed Online In 2003

SCHEDULE DATASETS PLACED ONLINE	AGENCY
Enhanced ocean thermal dataset	AODC
Detailed NVIS data	DEH
Water quality	DEH
National public & aboriginal land data	GA
Australian land tenure	GA
ATSIC boundaries	GA
Vegetation pre-European	GA
Vegetation present	GA
Geodata Topo 10m	GA
Harris greenstone belt map and GIS	GA
National mines atlas	GA
Gravity database (new version)	GA
Airborne surveys index database	GA
Australian diamond deposits, kimberlite and related rocks	GA
North Australia project GIS	GA
Landsat 7 picture mosaic of Australia	GA

NON-SCHEDULE DATASETS PLACED ONLINE	AGENCY
National localities index	ABS
Commonwealth fisheries	GA
Australian rivers basins	GA
Estuarine data through oracle	GA
Marine provinces data through oracle	GA
National bathymetric grid (250m resolution)	NOO
Bioregionalisation in the Australian south-east marine region	NOO
Draft broad areas of interest (BAOI) in the Australian south-east marine region	NOO
Vessel tracks in the south-east marine region (Australia) excluding Antarctic voyages	NOO
Vessel tracks of Australian national Antarctic research expeditions 1995-2001	NOO
Vessel tracks of CSIRO marine research RV Franklin and mooring data (southern Australia and southern ocean)	NOO
Approximately 40 maps in relation to regional marine planning in the south-east marine region	NOO

c) Cost of Data Management

Australian Government Agencies reported spending \$78.3 million on spatial data production, maintenance and delivery in 2002-03, including \$62 million (79%) on Schedule datasets and \$16 million (21%) on non-Schedule data. These figures were much lower than reported expenditure on spatial data in 2001-02, due to the reluctance of Defence agencies to provide information for security reasons. Of the responding agencies, Geoscience Australia was by far the largest producer of spatial data, with 77% of reported expenditure.

Table 3: Agency expenditure on Spatial Data Management

Agency	Expenditure \$	Percent of Total (%)
GA	60,600,000	77.40
BRS	5,100,000	6.51
AODC	4,500,000	5.75
DEH	2,900,000	3.70
ABS	1,769,000	2.26
NLWRA	1,220,000	1.56
NNTT	990,000	1.26
NOO	505,000	0.64
BOM	395,000	0.50
VA	150,000	0.19
HA	76,400	0.10
AEC	66,000	0.08
AHS	26,000	0.03
TOTAL	78,297,400	100.00

A breakdown of the total expenditure on spatial data production, maintenance and delivery (Table 4) shows that the largest component was staff (\$63.3 million), followed by IT hardware and software (\$11.5 million), web hosting for internet delivery (\$1.8 million). The smallest expenses were production and delivery of packaged products (\$0.9 million) and customer support (\$0.8 million).

Table 4: Spatial Datasets Production Costs in 2002-03

DATA MANAGEMENT	Schedule Datasets (\$)	Non-Schedule Datasets (\$)	Total Spatial Datasets (\$)
Production & Maintenance Costs:			
• IT Hardware & systems used for production and maintenance	10,245,000	1,251,000	11,496,000
• Other production & maintenance (including staff, administration)	48,892,000	14,390,400	63,282,400
Delivery Costs			
• Packaged products, customised services, (incl. staff costs)	395,000	505,000	900,000
• Web-hosting & on-line delivery (including hardware & systems)	1,740,000	105,000	1,845,000
Customer Support Costs	713,000	61,000	774,000
TOTAL COSTS	61,985,000	16,312,400	78,297,400

d) Transfers of Datasets on the Schedule

i. Revenue

Agencies reported earning \$2.5 million from sales of spatial data in 2002-03, including \$1.7 million from sales of Schedule dataset. The most likely explanation for this high figure is a combination of revenue from sales before the dataset was listed on the Schedule and sales of customised products, which under the terms of the Policy, may be charged at full cost.

ii. Units

Agencies reported delivering 90,438 spatial datasets in 2002-03 (Table 5), a 10% increase over 2001-02. Demand was highest for Schedule datasets which accounted for 92% of total spatial data deliveries. Online access was the most popular delivery mode for Schedule datasets (52% of deliveries), while packaged products (eg. CDs) were the most popular format for non-Schedule datasets (49% of deliveries).

Table 5: Units of Spatial Datasets delivered in 2002-03

Delivery formats	Schedule Datasets (Units delivered)	Non-Schedule Datasets (Units delivered)	All Spatial Datasets
Standard packages (eg. CDs)	8,227	3,645	11,872
Customised Products	31,388	2,433	33,821
Online Downloads	43,434	1,311	44,745
Total Units Delivered	83,049	7,389	90,438

Excluding defence agencies, the largest supplier was Geoscience Australia, which distributed 84,859 spatial datasets in 2002-03, 94% of total deliveries. The next largest was the National Land and Water Resources Audit, with 3,000 units delivered. Table 6 also shows that web delivery is now more important than packaged products for many of the larger spatial data producing agencies.

Table 6: Distribution of Datasets by Agency

Agency	Packaged	Custom	Online	All Formats	Percent (%)
GA	11,291	33,620	39,948	84,859	93.83
NLWRA	0	0	3,000	3,000	3.32
BRS	200	3	1,400	1,603	1.77
DEH	0	33	397	430	0.48
ABS	172	0	0	172	0.19
NNTT	160	0	0	160	0.18
BOM	10	100	0	110	0.12
AODC	20	65	0	85	0.09
NOO	10	0	0	10	0.01
AEC	9	0	0	9	0.01
Total	11,872	33,821	44,745	90,438	100.00

iii. Uses, Benefits and Value

The Spatial Data Survey invited agencies to provide detailed production and sales information for one of their spatial data products. The following case studies were drawn from the survey responses to provide a cross-sectional view of the uses benefits and value of the spatial data produced by Australian Government agencies.

Australian Standard Geographical Classification 2002 Digital Boundaries

The Australian Bureau of Statistics (ABS) spent \$495,000 on the production of the 2002 edition of the Australian Standard Geographical Classification (ASGC) digital boundaries dataset. ABS sold 20 copies of the dataset for \$1,555.

- The dataset was used for:
 - spatial visualisation and analysis of statistical data;
 - definition of statistical and administrative regions;
 - aggregation of statistics to geographical regions.
- The benefit/value of the dataset was:
 - it allowed the integration of statistical and geographical information and the spatial analysis of statistical data

Commonwealth Electoral Boundaries

The Australian Electoral Commission (AEC) spent \$66,000 on the Commonwealth Electoral Boundaries dataset. AEC distributed three copies of the dataset to Australian Government agencies, two copies to State Agencies and two copies to community groups.

- The dataset was used for:
 - Mapping Commonwealth/State Government service provision by electoral boundary;
 - Mapping national parks by electoral boundary; and
 - Determining actual and proposed electoral representation.
- The benefit/value of the dataset was:
 - it allowed the mapping of Commonwealth/State Government service provision by federal electoral boundaries.

Ocean Thermal Data

The Australian Oceanographic Data Centre (AODC) spent \$300,000 on the production of the Oceans Thermal dataset in 2002-03. AODC was unable to track the distribution of the datasets as they are available online free to all users with no need for registration. AODC earned no revenue from the distribution of the Oceans Thermal Dataset.

- The dataset was used for:
 - environmental research, education, fishing, tourism & defence applications.

Rainfall District Boundaries

The Bureau of Meteorology (BOM) distributed five copies of the Rainfall District Boundaries dataset in 2002-03.

- The dataset was used for:
 - fire-fighting, agriculture and insurance applications.
- The benefit/value of the dataset was:
 - it improved environmental and resource management.

Forests of Australia 2003

The Bureau of Rural Sciences (BRS) produces the Forests of Australia 2003 dataset at the salary cost of two staff and \$600 for printing. The dataset was publicly released in September 2003 to coincide with the release of the State of the Forests Report (SOFR).

- The dataset was used for:
 - providing national coverage of forest type, cover, extent and tenure.

- The benefit/value of the dataset was:
 - it improved understanding of forest management and promoted the development of sustainable forest based industries.

World Heritage Areas

The Department of Environment and Heritage (DEH) maintained the World Heritage Areas dataset at a cost of \$10,000 in 2002-03.

- The dataset was used for:
 - administration of the Environment Protection and Biodiversity Conservation (EPBC) Act
- The benefit/value of the dataset was:
 - it facilitated compliance with the Act by industry.

Global Map Australia 1M

Geoscience Australia (GA) provides Global Map Australia 1M online for a delivery cost of \$54,000 a year. There are no production costs, as it is an existing product. No revenue was earned, as the dataset is available free online. A total of 3,185 copies were downloaded in 2002-03. The major users were the general public - 1732 copies (54.4%), industry - 622 copies (19.5%), academia - 485 copies (15.2%), State agencies - 157 copies (4.9%), Australian Government agencies - 154 (4.8%), and local government - 53 copies (1.7%).

- Global Map Australia dataset was used by:
 - state agencies for graphics presentation and environmental monitoring
 - industry for map production, exploration and environmental monitoring;
 - the public for route planning, navigation and positioning.
- The main benefits of the dataset were:
 - it assisted state agencies with decision-making;
 - it provided industry the base data for the presentation of information
 - it facilitated safe travelling and trip planning by the general public.

Schedule of Native Title Applications (Federal Court)

In 2002-03, the National Native Title Tribunal (NNTT) spent \$250,000 on the production of a dataset of the Schedule of Native Title Applications before the Federal Court. It distributed 160 units of the dataset free of charge.

- The dataset was used for:
 - depicting the boundaries of applications recognised by the Federal Court;
 - determining the level of engagement in the native title process.
- The benefit/value of the dataset was:
 - it provided a common reference framework for stakeholder engagement.

National Bathymetric Grid

In 2002-03, the National Oceans Office (NOO) spent \$200,000 on the production of the National Bathymetric Grid. The dataset is provided free online at a cost to NOO of \$5,000 a year.

- The dataset was used for:
 - marine and natural resource management.
- The benefit/value of the dataset was:
 - it provided a common scale grid for national bathymetry.

Indicators of Catchment Condition in the Intensive Land Use Zone of Australia

The National Land and Water Resources Audit (NLWRA) provides the catchment indicators dataset online for free. The major customer groups are state agencies - 54 copies (36.5%), industry - 37 copies (25%), Commonwealth agencies - 24 copies (16.2%), the education sector- 18 copies (12.2%), the public - 14 copies (9.5%), and local government - 1 copy (0.7%).

- The dataset was used for:
 - land use research, strategic planning, project work, education, monitoring and stewardship.

Client Information

The Department of Veterans Affairs (DVA) maintains a private dataset on client locations. It is a dataset is a confidential.

- The dataset was used for:
 - strategic and operational planning;
 - meeting government requirements for location based client information.
- The benefit/value of the dataset was:
 - it provided a clients' profile for a range of government agencies, e.g. community nursing service providers.

Conclusions from Case Studies

The datasets highlighted in the above case studies are not necessarily a representative sample of the full range of spatial data products produced by Australian Government agencies. The choice of datasets for case studies was often dictated by the availability of sufficient information on the dataset. Nonetheless, the case studies illustrate that spatial datasets are used by Australian Government agencies and the community in a diverse range of applications, such as:

- the spatial analysis of socioeconomic data;
- regional policy development and program delivery;
- environmental monitoring;
- land administration;
- natural resource management; and
- national security planning

2. Review of the efficacy of the Policy

a) Data Schedule

To assess the adequacy of the Data Schedule, agencies were surveyed on gaps in the Schedule. Datasets nominated by agencies as gaps in the Schedule are shown in Table 7. The datasets most commonly mentioned were:

- postcode boundaries (9 agencies);
- Commonwealth owned land (7 agencies);
- location of health care facilities (6);
- location of Australian Government offices (6);
- location of schools (5).

These datasets would be regarded as fundamental datasets as they are required by multiple agencies for multiple purposes. In addition to the datasets above, there was a long list of datasets nominated by only one agency that could not be

considered to be fundamental datasets unless other agencies needed them as well. Where a dataset has no known custodian, it does not exist.

Table 7: Identified Gaps in the Data Schedule

DATASETS WANTED ON THE SCHEDULE	Number of Agencies	Custodian (existing or proposed)
Fundamental Data		
Postcode Boundaries	9	Australia Post
Commonwealth Owned Land	7	?
Geocoded Health Care facilities	6	DHAA
Geocoded Commonwealth Offices	6	?
Geocoded Schools	5	DEST
Non-Fundamental Data		
Geocoded Public Toilets	1	DHAA
Geocoded Post Offices	1	Australia Post
Gazetteer of Australia	1	GA
Fire Ban Districts	1	EMA
Hydrographic GeoTIFFs	1	AHS
Australian Government Electoral Boundaries	1	AEC
Indigenous localities/communities	1	ATSIC
Airborne geophysical datasets acquired under the Salt Mapping & Management Support Program	1	GA / BRS
Permits / Titles	1	GA / States
Marine sediment data	1	GA
State DEM	1	States
Shipping traffic in Australia	1	AMSA
Ports of Australia	1	APPMA
Oil and Gas wells	1	GA/ DITR
Petroleum acreage	1	GA/ DITR
Marine Mammal Extent, migration and aggregation	1	DEH
RAMSAR wetlands	1	DEH / States
Location of defence training areas	1	Defence
Shipwrecks	1	DEH / States
Submarine cables	1	AHS
Fish species distributions and known ranges	1	AFMA
Fish catch statistics, spatially attributed	1	AFMA
Fish by-catch statistics, spatially attributed	1	AFMA
Marine threatened species distribution	1	AFMA
Distributions of introduced marine pests	1	AFMA
World Area DEM	1	GA
Global Topography	1	GA
Natural Vegetation Information System	1	DEH and jurisdictions
National Dryland Salinity Program data	1	NDSP? DEH? NLWRA?
Australian Soil Resource Information System	1	CSIRO and Jurisdictions
Biodiversity data base	1	NLWRA? Jurisdictions?
All Australian Topographic Data	1	GA
Up-to-date Land Tenure	1	States
Oceanography	1	AODCS
Marine Cadastre	1	?

b) Access and pricing arrangements

The Policy requires agencies to provide online access to their spatial datasets as soon as practicable. This has stimulated measures by agencies to accelerate internet access to their spatial data to the extent where over half the datasets on the Schedule are now available online. Table 8 shows online availability by agency.

Table 8: Online Access to Schedule Datasets by Agency

Agency	Schedule Datasets	Accessible online	Proportion of Total Schedule Datasets (%)
GA	39	27	69
NLWRA	23	23	100
DEH	15	7	47
AFMA	10	0	0
DEFENCE	8	1	13
DAFF	5	2	40
ABS	5	1	20
NNTT	4	0	0
BOM	1	1	100
AEC	1	0	0
ATSIC	1	0	0
BTR	1	0	0
TOTAL SCHEDULE	113	63	56

Geoscience Australia upgraded its online infrastructure in 2002-03, enabling it to extend online access to another 13 Schedule datasets and 4 non-Schedule datasets. The National Oceans Office significantly improved accessibility by placing seven non-Schedule datasets online in 2002-03.

Metadata improves access to government spatial datasets for those who have access to metadata directories. Under the Policy, all Schedule datasets should have metadata that complies with ANZLIC Metadata Guidelines registered on the Australian Spatial Data Directory (ASDD). Responses to the spatial data survey suggest that 80% of agency spatial datasets have ANZLIC compliant metadata and that 69% of spatial datasets have metadata on the ASDD.

Table 9: Availability of Metadata

Metadata	Agency Datasets (%)
Compliant with the ANZLIC metadata standard	80
Available on the ASDD	69
Available online at agency website	51
Compliant or compatible with the ISO standard	32
Compliant with the AGLS standard	0 ²

c) Arrangements for custodianship and sponsorship

OSDM has updated the Australian Government's policy on the rights and responsibilities of data custodians. The revised custodianship policy at [Appendix 3](#) has been approved by the SDMG. Custodians of Schedule datasets should be aware

² Metadata for the Australian Government Locator Service (AGLS) standard can be derived from ANZLIC compliant metadata

of the need to provide appropriate levels of care and maintenance in order to build and retain public confidence in the quality of the datasets that contribute to the Australian Spatial Data Infrastructure.

d) Annual Workplan

OSDM's Workplan for 2002-03 was approved by the SDMG in its meeting in May 2002. The Workplan was substantially complete by end June 2003. Detailed comments against each of the Workplan items can be found in the Workplan Status Report at [Appendix 4](#).

e) Coordination Arrangements

i. Spatial Data Policy Executive

The Spatial Data Policy Executive (SDPE) is the peak body that supervises the implementation of the Government's Spatial Data Access and Pricing Policy. It reports to the Minister for Industry, Tourism and Resources. The SDPE met on 18 July 2002 to approve the addition of 40 datasets to the Data Schedule. The SDPE is chaired by Dr Neil Williams, CEO of Geoscience Australia.

ii. Spatial Data Management Group

The Spatial Data Management Group (SDMG) has an operational management role in Policy implementation. The SDMG is chaired by Mr Peter Holland, National Mapping Division of Geoscience Australia. It comprises 26 representatives from Australian Government agencies involved in the production and use of spatial data. It meets in May and November each year. The SDMG establishes working groups to advise it on difficult or complex issues. Current working group activities are outlined below.

iii. SDMG Working Groups

Fundamental Data Working Group

The SDMG asked that a working group be established to advise it on criteria for quality and standards compliance for scheduled datasets and on the adequacy of the Schedule. The Fundamental Data Working Group identified a common set of data set attributes: accessibility, quality, interoperability, integratability and governance that all datasets on the Schedule should meet. The working group considered that a number of datasets identified in the survey as gaps in the Schedule - postcodes, Commonwealth-owned land and locations of health care facilities, schools and government offices – were fundamental datasets. The high priority attributed to postcodes, and the practical difficulties that agencies were having using postcodes for socio-economic analysis and reporting, led to the establishment of a separate Postcodes Working Group.

Postcodes Working Group

Many agencies need to collect and analyse data and report to government on policy and program delivery by particular administrative regions, such as local government areas, statistical local areas or electorates. Often the only spatial reference available to them is postcodes, individual addresses being removed to meet privacy directives. There is no easy answer for those agencies, which have only postcodes to work with. They do not match reliably with any other geographic frameworks. Postcodes are progressively being aligned with suburb boundaries and, in the next decade, ABS

'meshblocks' will provide a common infrastructure that all agencies will be able to use. The Working Group identified a need to reform postcode and other administrative boundary datasets to reduce the complexity and cost of collecting, analysing and reporting socio-economic information.

Metadata Working Group

The SDMG requested advice on mechanisms, including metadata to ensure that users can obtain comprehensive and timely information about available Australian Government spatial data. A new international metadata standard (ISO 19115) is now available, but it has proved very difficult to implement. ISO is developing an implementation profile, but this may take another year or so. A number of agencies are upgrading metadata as part of ongoing system upgrades and are finding challenges in designing new metadata when the final shape of the ISO standard is still unclear. The Working Group provided a forum for information exchange amongst Australian Government agencies on key implementation issues with the new standard and for discussing on how they could best move forward in an uncertain environment.

Data Licences Working Group

Agencies are seeking to lower the barriers to access and use of spatial data. The SDMG requested that a working group be convened to advise it on: model licenses for transfer of spatial datasets listed on the Data Schedule; appropriate licences for internet delivery of datasets; and procedures for accessing data from the States & Territories. Existing internet data delivery services are generating a very large number of licence agreements that are becoming very difficult for individual agencies to manage using current procedures. The Working Group endorsed OSDM's 'clickwrap' licence as a model for a single licence for all Schedule datasets and developed a proposal for establishing a central user-registration facility that would validate the licence status of individuals seeking to download agency spatial data. The Working Group endorsed the ANZLIC initiative to develop an inter-governmental model licence, while recognising that interstate agreements might need to be accelerated for high-priority themes such as counter-terrorism and natural resource management.

Survey Working Group

Each year, OSDM conducts a survey of spatial data management in Australian Government Agencies to support the Spatial Data Policy Executive, which is required to report annually to the Responsible Minister on implementation of the Policy. The SDMG asked OSDM to convene the Survey Working Group to review the survey proforma and advise on ways of minimising agency compliance overheads. The Survey Working Group advice was incorporated into a revised survey proforma that was circulated to agencies in August 2003. Agencies reported that the 2003 survey took only half as much time to complete as the 2002 survey.

iv. Office of Spatial Data Management

Structure and Role

The Office of Spatial Data Management (OSDM) has three staff funded and hosted by Geoscience Australia. OSDM supports the Spatial Data Policy Executive, Spatial Data Management Group and working groups and implements the Workplan as agreed by SDMG. In addition, OSDM provided some other services for government agencies during the year, including:

- Development of an open-source web mapping tool to demonstrate the potential of new web GIS technologies to meet agency needs.
- Training of technical staff from agencies to build in-house capability in open-source GIS software;
- Hosting forums for Australian and ACT Government agencies on:
 - international standards applying to Spatial Data; and
 - the use of postcodes and other administrative frameworks for socio-economic data analysis and reporting.

Other Spatial Data Initiatives

OSDM keeps a watching brief on Spatial Data Infrastructure (SDI) developments within the Australian States & Territories, neighbouring countries such as New Zealand, and regional and global initiatives. Relevant initiatives include the Australian Spatial Information Business Association (ASIBA), the Cooperative Research Centre for Spatial Information, the Spatial Sciences Institute, international standards bodies such as the OpenGIS Consortium, and the Global Spatial Data Infrastructure (GSDI).

3. ANZLIC Representation

ANZLIC–The Spatial Information Council comprises senior representatives from the Australian, State & Territory and New Zealand Governments. The Chair of the SDPE, Dr Neil Williams, CEO of Geoscience Australia, is the Australian Government representative on ANZLIC. ANZLIC meets several times a year and is facilitating the development of the Australian Spatial Data Infrastructure (ASDI). Dr Williams currently chairs the ANZLIC SDI Standing Committee. The General Manager, OSDM, is the ANZLIC Contact Officer for the Australian Government and coordinates Australian Government agency involvement with ANZLIC and the ASDI and works closely with the ANZLIC National Office on SDI policies, protocols and standards.

4. Spatial Data Activities in Australian Government Agencies in 2002-03

a) Australian Bureau of Statistics

i. Charter

The Australian Bureau of Statistics is Australia's official statistical organisation. ABS assists and encourages informed decision-making, research and discussion within governments and the community, by providing a high quality, objective and responsive national statistical service.

ii. Spatial Data Activities

In 2002-03, the ABS:

- Published the Australian Standard Geographical Classification 2003 Edition;
- Finalised spatial products from the 2001 Census of Population and Housing; and
- Prepared technical and contractual arrangements for mapping for the 2006 Census of Population and Housing.

b) Australian Electoral Commission

i. Charter

The AEC's purpose is to maintain the electoral roll, conduct elections and referendums, and provide electoral information, education programs and related services.

ii. Spatial Data Activities

In 2002-03, the AEC:

- Finalised the Victorian redistribution;
- Commenced and finalised the Northern Territory redistribution;
- Commenced South Australian and Queensland redistributions;
- Converted South Australian, West Australian, Northern Territory and Queensland base data from 1996 CCD boundaries to 2001 CCD boundaries;
- Prepared two local government redistributions; and
- Demonstrated the use of spatial data in electoral redistricting to representatives from the Electoral Commission of Thailand.

c) Australian Hydrographic Service

i. Charter

The AHS provides official nautical charting and related products to Defence and the maritime community and manages and maintains Australia's hydrographic survey archive.

ii. Spatial Data Activities

In 2002-03, the AHS:

- developed and maintained Australia's navigational chart portfolio;
- published Electronic Navigational Charts (ENC) for the Great Barrier Reef; and
- continued development of "hydro" web-based services (E-Notices).

d) Australian Oceanographic Data Centre

i. Charter

The AODC operates as the National Oceanographic Data Centre for Australia within the Intergovernmental Oceanographic Commission (IOC) and participates in various national and international oceanographic data collection, management and exchange programs. Additionally, as the Defence Oceanographic Data Centre, the AODC is responsible for the management of marine environmental data collected by the Royal Australian Navy (RAN) and the development and dissemination of non real-time derived marine environmental products and information to support the planning and conduct of Australian Defence Force (ADF) activities.

ii. Spatial Data Activities – Defence Oceanographic Data Centre (DODC)

Objectives

- To ensure spatial data is utilised by Defence in their decision making across a number of Program outcomes.

Responsibilities

- quality control,
- management and archiving of Defence oceanographic data;
- management of Defence Marine Environmental Database; and tools;
- Provision of data, products and services to support ADF maritime activities.

Achievements

- DODC made new and improved marine data available to Defence through a range of delivery mechanisms.

iii. Spatial Data Activities – Australian Oceanographic Data Centre (AODC)

Objectives

- To contribute to the data related elements of the Commonwealth Oceans and Spatial Data policies; and
- to ensure Australia is both a participant and well represented in international oceanographic data collection and management programs.

Responsibilities

- Meeting international obligations under the IOC International Oceanographic Data and Information Exchange (IODE) system, including exchange of oceanographic data with other national and regional data centres and submission of data to the World Data Center for archiving and development of global products.
- Management and dissemination of the Ocean Thermal Data as a Commonwealth Fundamental spatial dataset.

Achievements

- AODC made fundamental ocean thermal data available over the world wide web and contributed to IODE activities through attachment of a staff member to IODE Headquarters in Paris and participation in specialist working groups.

e) Bureau of Meteorology

i. Charter

The purpose of the Bureau of Meteorology is to contribute to Australia's social, economic, environmental and cultural goals through the performance of the functions of a National Meteorological Service in the public interest generally and, in particular, for the purposes of assisting persons and authorities engaged in:

- primary production, industry, trade and commerce;
- civil aviation;
- navigation and shipping; and
- Defence.

The overall mission of the Bureau is to observe and understand Australian weather and climate and provide meteorological, hydrological and oceanographic services in support of Australia's national needs and international obligations.

ii. Spatial Data Activities

In 2002-03, the BoM:

- Developed a Placenames database

- Provided tailored climate related information

f) Bureau of Rural Sciences

i. Charter

The Bureau of Rural Sciences (BRS) is a scientific agency within the Department of Agriculture, Fisheries and Forestry (DAFF). At the interface between science and policy, BRS is an essential part of the Government's capacity for integrated evidence-based policy development. 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.

- Spatial Data Activities

Forests

- Completion of forests of Australia 2003 dataset to be the authoritative national source of information about Australia's forests
 - collation and attributing of State & territory land management agency datasets into a national coverage of forest cover, extent, type, tenure
 - Use of this database as the basis for the Montréal Process & State of the Forests Reporting.
- Design and test a national data collection and monitoring framework (Continental Forest Monitoring Framework) for monitoring trends in the condition and status of Australia's forests.

Fisheries

- Development of a GIS and database of Australian Offshore Constitutional Settlement arrangements between the States and NT and the Commonwealth.
- Development of a unified GIS and database of all Commonwealth fisheries activity (catch & effort), derived from logbook information, from 1985 to 2002.

Data Library

- Development of an ISO19115 and ANZLIC 2 compatible metadata profile for integration of metadata delivery, data visualisation and data access focusing on ASDD compatible processes.

Social Sciences

- Development of the "Country Matters: Social Atlas of Rural and Regional Australia, 2001" using ASGC spatial data
- Development the Access to Services II database, based on 2001 services data and 2001 ASGC spatial data

g) Department of Environment and Heritage

ii. Charter

The goal of the Australian Government Department of the Environment and Heritage (DEH) is a natural and cultural environment, valued, enhanced and protected in harmony with the nation's social and economic goals.

The Department's mission is national leadership in the protection and conservation of the environment.

iii. Spatial Data Activities

In 2002-03, DEH:

- Maintained and continually improved upon a high-quality spatial information base to provide comprehensive, accurate and accessible data for the Government's environmental decision making, including:
 - World Heritage Areas
 - Distributions of species and communities listed under the Environment Protection and Biodiversity Conservation (EPBC) Act 1999
 - Register of National Estate Spatial Database
 - Ramsar Wetlands
 - National Vegetation Information System (NVIS)
 - National Pollutant Inventory (NPI)
 - AVHRR image archive
- Provided community access to DEH's spatial data to enable delivery of regional and community environmental policies and programs.
 - This included access to detailed NVIS and Water Quality data in 2002-2003.
- Expanded the range of data made available via the Australian Natural Resource Atlas (ANRA).
- Developed a generic Environmental Reporting Tool (ERT) allowing DEH staff and the public to search and retrieve information from a diverse but integrated range of DEH databases.
Commenced collation and development of a national Commonwealth Lands dataset required to support the Environment Protection and Biodiversity Conservation Act 1999.
- Provided GIS, data support and training to staff in DEH administered National Parks.

h) Defence Imagery and Geospatial Organisation

i. Charter

The role of DIGO is to produce geospatial intelligence from imagery and other sources in support of Australia's Defence and other national interests.

ii. Spatial Data Activities

In 2002-03, DIGO supported the Australian Defence Force in its operations and exercises, including United Nations and other related activities.

i) Department of Family and community Services

i. Charter

FACS' vision is to achieve a fair and cohesive Australian society. FaCS takes the lead and works with others to help families, communities and individuals build their self-reliance and make choices through:

- Economic and social participation
- Prevention and early intervention
- A responsive and sustainable safety net

ii. Spatial Data Activities

FACS does not currently produce spatial data. As consumers of spatial data, some of FACS' key achievements in 2002-03 were:

- The development of concordances for:
 - Postcodes to Statistical Local Areas
 - Postcodes to Federal Electorates
 - Postcodes to Employment Service Areas.
- Production of 400 maps
- Geocoding of 6000 records using ABS spatial & statistical datasets, as well as other spatial datasets – eg: StreetWorks Pro, etc.

j) Geoscience Australia

i. Charter

Geoscience Australia is the national geoscience research and information agency. It was created on 1 October 2001 with the merger of AGSO and AUSLIG, the nation's national mapping agency. Geoscience Australia's work contributes to enhanced economic, social and environmental benefits for the Australian community by informing decisions which impact upon resource use, management of the environment, and the safety and wellbeing of Australians.

ii. Spatial Data Activities

Objectives

Geoscience Australia is both a spatial data provider and a spatial data user. In relation to spatial data provision, the objective is to provide quality spatial data in the public interest so that industry, government and the Australian community are aware of and able to access spatial information products that meet their evolving needs.

Responsibilities

Geoscience Australia reduces exploration risk and encourages investment in Australia through targeted geo-scientific surveys and research to identify areas with potential economic mineralisation and petroleum resources. It advises government on mineral and petroleum potential, resources and mining and exploration trends. Geoscience Australia pursues part of research objectives in mineral and petroleum resources through participation in the Predictive Mineral Discovery CRC, the CRC for Landscape Environment and Mineral Exploration and the Australian Petroleum CRC.

Geoscience Australia provides technical data to define Australia's offshore boundaries and geoscience knowledge for regional marine planning and environmental management of Australia's oceans and coasts. Geoscience Australia pursues part of its research objectives in these areas through the CRC for Coastal Zone, Estuary and Waterway Management and the CRC for Antarctica and Southern Ocean Environment.

Geoscience Australia provides advice to government and industry on Australia's petroleum and mineral prospects, reserves and potential. Its work is used by the Australian Government to attract international exploration investment and to administer the offshore petroleum exploration and development industry.

Through its participation in the CRC for Landscape Environment and Mineral Exploration, Geoscience Australia is mapping salinity in the subsurface and developing salinity risk maps for river catchments.

One of Geoscience Australia's functions is to monitor and assess all Earth processes that pose a risk to Australia. It gathers data and develops tools that governments and others can use to make Australia as safe as possible from natural and human-induced hazards. Through AusAID, Geoscience Australia is also called upon to help neighbouring countries such as PNG to manage natural hazards.

Geoscience Australia monitors nuclear explosions and carries out research into nuclear explosion discrimination in order to fulfil Australia's commitment to world peace in the region as a signatory to the Comprehensive Nuclear Test Ban Treaty.

The agency is a major producer of national spatial data. Data includes national small and medium scale topographic mapping as both hard copy and digital products. The agency operates the Australian Centre for Remote Sensing (ACRES) that acquires, maintains and periodically refreshes a comprehensive archive of satellite remotely sensed data over Australia

Geoscience Australia uses space geodesy techniques to measure movement of the Australian landmass and provides the basis for all Australian spatial information. Through the Space Geodesy Analysis Centre, it contributes to the global geodetic infrastructure and to the understanding of global change processes.

Geoscience Australia is responsible for defining Australia's maritime boundaries which have strategic, economic and environmental implications for Australia.

Achievements

In 2002-03, Geoscience Australia's achievements were:

- The conversion of topographic and thematic data to standard GIS formats available on-line as ARCINFO export, ARCINFO shape and MAPINFO files.
- Continuation of the on-line initiative with the release of an enhanced selection of thematic data sets including:
 - National Public & Aboriginal Land Data,
 - Australian Land Tenure,
 - ATSIC Boundaries,
 - Vegetation Pre-European,
 - Vegetation Present and
 - Geodata Topo 10M.
- Release of Raster250k and Gazetteer 2002
- On-line delivery of ACRES satellite data previously only provided on CD.
- Provision of the Petroleum Data Repository with over 5 Terabytes of field and processed data to industry.
- Ensuring that Petroleum and Marine Division's spatial datasets on the Schedule meet the ANZLIC standards.
- Making geochemistry available over the Internet using a graphical interface.
- The ongoing population of the Petroleum Information Management System.
- Production of the National Mines Atlas an online atlas of Australia's mineral resources, mines and processing centres that:
 - Is a collaborative joint project between GA, DITR's Regional Minerals Program and the Minerals Council of Australia;

- draws on a range of datasets including mine and resource information directly from OZMIN and links to company web sites;
- Caters for a client base ranging from investors through to school students and including those with a particular interest in the minerals sector.

k) National Native Title Tribunal

i. Charter

The NNTT's objective is to assist people resolve native title issues.

ii. Spatial Data Activities

Objectives

The NNTT's objectives are to:

- Provide information to assist people to resolve native title issues;
- Conduct searches of and against our registers within agreed timeframes as per our Customer Service Charter; and
- Provide geospatial information to the Federal Court as requested or ordered.

Responsibilities

- To enable searches of and against the above registers, it is necessary to define and maintain a spatial definition of each application, agreement and determination.
- For efficiency and effectiveness of operations these records need to be spatially compatible with those matters associated with land administration and management practices, such as land parcels, tenements, and other land/water interests, that as part of due diligence processes, need to be considered in association with native title.

Achievements

- In 2002-03, NNTT maintained the geospatial view of:
 - the Register of Native Title Claims (s185 Native Title Act);
 - the National Native Tribunal Register (s192 NTA);
 - the Register of Indigenous Land Use Agreements (s199A NTA); and
 - the Schedule of Applications (Federal Court) (s98A NTA).

l) National Oceans Office

i. Charter

The National Oceans Office is the lead Commonwealth agency responsible for supporting the National Oceans Ministerial Board to further develop Australia's Oceans Policy and for implementation of the Policy through regional marine planning.

ii. Spatial Data Activities

In 2002-03, the NOO:

- Embraced the ASDI concept and participated in forums where standards, protocols, projects are being discussed and planned;
- Sponsored projects under the auspices of the ANMDG that will incrementally help to bring about the marine ASDI;
- Used our National Science Work Program to build national-scale, fundamental marine datasets and pilot aspects of the ASDI architecture;

- Produced its first fundamental marine dataset – the National Bathymetric Grid 250m resolution (completed by GA).

m) National Land and Water Resources Audit

i. Charter

The role of the NLWRA is to provide data, information and nationwide assessments of Australia's land, water and biological resources in support of sustainable development.

ii. Spatial Data Activities

In 2002-03, the NLWRA:

- Maintained and further developed natural resource information on-line tools:
 - the Australian Natural Resources Atlas and
 - the Australian Natural Resources Data Library.
- Coordinated the collection of natural resource information; and
- Collated national natural resource datasets.

n) Department of Veterans Affairs

i. Charter

The charter of the DVA is to serve members of Australia's veteran and defence force communities, war widows and widowers, widows and dependants, through programs of care, compensation, commemoration and defence support services

ii. Spatial Data Activities

In 2002-03, DVA spatially enabled the department's client database for use in demographic analysis and monitoring service delivery agents and agencies.

Appendix 1: The Data Schedule

CUSTODIAN AGENCY	THEME	DATASET NAME	METADATA AVAILABILITY		DATASET DELIVERY FORMATS		
			Agency Website	ASDD	Online	Packaged product	
						Standard	Custom
Aboriginal and Torres Strait Islander Commission (ATSIC)	<i>Socioeconomic</i>	Cultural sites of significance (e.g. shipwrecks, indigenous sacred sites, sea claims)					
Agriculture Fisheries and Forestry Australia (DAFF)	<i>Natural Environment</i>	Native forests and plantations of Australia	Yes	Yes	Yes	Yes	Yes
		Agricultural land cover change	Yes	Yes	Yes	Yes	No
		Commercial fishery boundaries	No	No	No	No	No
		Commercial fishing activity – catch	No	No	No	No	No
		Fish distributions	Yes	Yes	No	No	No
Australian Bureau of Statistics (ABS)	<i>Administration</i>	Australian Standard Geographical Classification, 2002 edition, digital boundaries	No	Yes	No	Yes	No
		Australian Standard Geographical Classification, 2001 edition, digital boundaries	No	Yes	No	Yes	No
		Historic Australian Standard Geographical Classification, 1996, 1998, 1999, 2000, editions, digital boundaries	No	Yes	No	Yes	No
		Historic ASGC boundaries (1981, 86, 91, 93, 94, 95)	No	Yes	No	Yes	No
		National Localities Index	Yes	No	Yes	No	Yes
Australian Electoral Commission (AEC)	<i>Administration</i>	Commonwealth electoral boundaries	No	No	No	Yes	Yes
Australian Fisheries Management Authority (AFMA)	<i>Natural Environment</i>	Fish species distributions and known ranges					
		Fish catch statistics, spatially attributed					
		Fish by-catch statistics, spatially attributed					
		Marine threatened species distribution					
		Distributions of introduced marine pests					
		Ocean climatologies (currents, temperature, salinity, nutrients, oxygen)					
		Marine invertebrate distributions and ranges					
		Marine flora distributions and ranges					
Marine fauna distributions and ranges							

CUSTODIAN AGENCY	THEME	DATASET NAME	METADATA AVAILABILITY			DATASET DELIVERY FORMATS	
			Agency Website	ASDD	Online	Packaged product	
						Standard	Custom
Bureau of Tourism Research (BTR)	<i>Socioeconomic</i>	Offshore Tourism statistics, spatially attributed					
DEFENCE – Australian Hydrographic Service (AHS)	<i>Natural Environment</i>	Bathymetry – unclassified, validated	No	No	No	No	No
DEFENCE - Australian Oceanographic Data Centre (AODC)	<i>Natural Environment</i>	Ocean Thermal Dataset for Australia	Yes	Yes	Yes	No	No
		Ocean outfalls dump sites.					
DEFENCE - Defence Imagery and Geospatial Organisation (DIGO)	<i>Earth's surface Elevation</i>	Defence 3 Second DEM	No	No	No	No	No
	<i>Topographic</i>	Digital topographic data at scales of 1:50k and 1:250k (raster format)	No	No	No	No	No
		Digital topographic data at scales of 1:50k and 1:250k (vector format)	No	No	No	No	No
DEFENCE - RAAF AIS	<i>Topographic</i>	Aeronautical charts over Australia at scales of 1:250k, 1:500k and 1:1m (vector format)					
		Aeronautical charts over Australia at scales of 1:250k, 1:500k and 1:1m (raster format)					

CUSTODIAN AGENCY	THEME	DATASET NAME	METADATA AVAILABILITY		DATASET DELIVERY FORMATS		
			Agency Website	ASDD	Online	Packaged product	
						Standard	Custom
Environment Australia (DEH)	Administration	Gazetteer of the Australian Antarctic Territory, Heard and McDonald Islands	Yes	Yes	Yes		
		Heritage Sites	Yes	Yes	Yes		
		World Heritage Areas	Yes	Yes	Yes		
		Register of National Estate Database	Yes	Yes	Yes		
		International Map Catalogue for the ICSU Scientific Committee on Scientific Research					
	Natural Environment	Threatened plant species					
		Advanced Very High Resolution Radiometer (AVHRR) vegetation index	Yes	Yes	Yes		
		Feral animals	Under review				
		Birds	Under review				
		Threatened fauna	Under review				
		Directory of important wetlands	Shared IP				
		Water quality	Yes	Yes	Yes		
		Pollutants	Yes	Yes	Yes		
		Interim Biogeographic Regionalisation of Australia	Yes	Yes	Yes		
		Interim Marine and Coasts Regionalisation of Australia	Yes	Yes	Yes		

CUSTODIAN AGENCY	THEME	DATASET NAME	METADATA AVAILABILITY		DATASET DELIVERY FORMATS		
			Agency Website	ASDD	Online	Packaged product	
						Standard	Custom
Geoscience Australia (GA)	Administration	Australia Land Tenure Data	Yes	Yes	Yes		Yes
		Aboriginal and Torres Strait Islander Commission (ATSIC) Boundaries	Yes	Yes	Yes		Yes
		Jurisdictional boundaries		No			
		National Public and Aboriginal Lands	Yes	Yes	Yes		Yes
		Management boundaries and zones (Petroleum and mining leases, fisheries, MPAs, reserves) and associated management attributes		No			
	Built Environment	Dams and Storages	Yes	Yes	Yes		Yes
	Earth's surface Elevation	GEODATA 9 Second DEM (DEM-9S)	Yes	Yes	No	Yes	
		Grid DEM – 18 Seconds of Arc	Yes	Yes	No	Yes	
		Grid DEM – 3 Seconds of Arc	Yes	Yes	No	Yes	
		Critical Aeronautical Heights	Yes	Yes	Yes		
	Geodetic Control	Geodetic Standards and Specifications	Yes	No	Yes	No	No
		Transformation parameters for Australian and global coordinate systems	Yes	No	Yes	No	No
		Australian Regional GPS Network (ARGN)	Yes	Yes	Yes	No	No
		AUSGEOID98 – geoid/ellipsoid separations (N values)	Yes	Yes	Yes	No	No
		Commonwealth Control from the National Geodetic Data Base (NGDB)	Yes	Yes	No		Yes
		Australian Maritime Boundaries (AMBIS)	Yes	Yes	Yes		Yes
		GEODATA COAST-100K Coastline and Borders	Yes	Yes	Yes		Yes

CUSTODIAN AGENCY	THEME	DATASET NAME	METADATA AVAILABILITY		DATASET DELIVERY FORMATS		
			Agency Website	ASDD	Online	Packaged product	
						Standard	Custom
GA (cont.)	<i>Natural Environment</i>	Geology, Regolith, images and related geo-thematic datasets	Yes	Yes	Partial	Yes	
		Magnetic, Radiometric, Gravity, Seismic and AEM Geophysics, Geochemistry & Geology Databases	Yes	Yes	Partial	Yes	
		Environmental & Geohazards Databases	Yes	No	Partial	Yes	
		Bathymetry	Yes	Yes	Yes	Yes	
		Vegetation Pre-European settlement (1788)	Yes	Yes	Yes		Yes
		Vegetation Present (1980s)	Yes	Yes	Yes		Yes
		Australian Water Resources Management Committee: Australian Drainage Basins	Yes	Yes	Yes		Yes
		Australian Surface Water Management Areas 2000	Yes	Yes	Yes		Yes
		Minerals	Yes	Yes	Yes	Yes	
	<i>Topographic</i>	GEODATA TOPO-10M Topographic Data	Yes	Yes	Yes		Yes
		GEODATA TOPO-250K (Series 1) Topographic Data	Yes	Yes	No		Yes
		GEODATA TOPO-250K (Series 2) Topographic Data	Yes	Yes	No		Yes
		MAPDATA TOPO-2.5M Topographic Data	Yes	Yes	Yes		Yes
		Topographic Base 1:1 Million Scale (to be replaced by Global Map)	Yes	Yes	Yes		Yes
		Topographic Base 1:100 000 Scale	Yes	Yes			Yes
		Digital Index maps (100K and 250K products)	Yes	Yes	Yes		
		LANDSAT Enhanced Thematic Mapper Plus (ETM+)	Yes	Yes	No		Yes
		LANDSAT Multispectral Scanner (MSS)	Yes	Yes	No		Yes
		LANDSAT Thematic Mapper™	Yes	Yes	No		Yes
		ACRES MODIS	Yes	Yes	Yes	No	Yes
		NOAA AVHRR	Yes	Yes	Yes	No	No

CUSTODIAN AGENCY	THEME	DATASET NAME	METADATA AVAILABILITY		DATASET DELIVERY FORMATS		
			Agency Website	ASDD	Online	Packaged product	
						Standard	Custom
National Land and Water Resources Audit (NLWRA)	Natural Environment	Landscape balances of water, carbon and nutrients (1996 and pre-agriculture simulations)	Yes	Yes	Yes		
		Indices of landscape health	Yes	Yes	Yes		
		Soil properties mapping of intensive land use zone at a pixel resolution of 250m	Yes	Yes	Yes		
		Soil fertility status and nutrient balance in the intensive land use zone	Yes	Yes	Yes		
		Distribution of acidic soils for the intensive land use zone at 250m grid	Yes	Yes	Yes		
		Inventory of estuaries	Yes	Yes	Yes		
		Groundwater Provinces and Groundwater Management Units	Yes	Yes	Yes		
		Groundwater Flow Systems	Yes	Yes	Yes		
		Australian Water Resource Assessment 2000 – surface and ground water availability, allocation and use	Yes	Yes	Yes		
		Australian Water Resource Assessment 2000 – surface water quality	Yes	Yes	Yes		
		Australian Water Resource Assessment 1985	Yes	Yes	Yes		
		Monthly derived streamflow data from 1901-1998 for 286 catchments	Yes	Yes	Yes		
		Australian dryland salinity risk and hazard – 2000, 2020 and 2050	Yes	Yes	Yes		
		Regional maps of dryland salinity risk and hazard – WA, SA, Vic, Tas, NSW, Qld	Yes	Yes	Yes		
		Soil erosion modelled for the intensive land use zone at 250m grid	Yes	Yes	Yes		
		Assessment of waterway condition	Yes	Yes	Yes		

CUSTODIAN AGENCY	THEME	DATASET NAME	METADATA AVAILABILITY		DATASET DELIVERY FORMATS		
			Agency Website	ASDD	Online	Packaged product	
						Standard	Custom
NLWRA (cont.)	<i>Property</i>	Land tenure change in the rangelands from 1955 to 1999	Yes	Yes	Yes		
		Land use map of Australia at scale of 1:1m	Yes	Yes	Yes		
		Land use maps of selected areas at scales of 1:50k to 1:250k	Yes	Yes	Yes		
		Land use intensity in the rangelands since 1957	Yes	Yes	Yes		
	<i>Socioeconomic</i>	A spatially consistent sub-set of agricultural statistics data 1982/83 to 1996/1997	Yes	Yes	Yes		
		Agricultural profit at full equity (5 year average and financial year ending June 1997)	Yes	Yes	Yes		
		Indicators of structural adjustment in agriculture	Yes	Yes	Yes		
National Native Title Tribunal (NNTT)	<i>Property</i>	Schedule of Native Title Claims – federal court status ; boundaries and core attributes about application	No	Yes	No	Yes	No
		Register of Indigenous Land Use Agreements (ILUA) – agreement boundaries and core attributes about agreement	No	Yes	No	Yes	No
		Register of Native Title Claims –boundaries and core attributes about application	No	Yes	No	Yes	No
		National Native Title Register – boundaries of applications that have been determined and core attributes about application	No	Yes	No	Yes	No

Appendix 2: Coordination Arrangements

Spatial Data Policy Executive (SDPE)

Terms of Reference

The role of the SDPE shall be to:

1. Report annually to the Responsible Minister on implementation of the policy including:
 - changes to the data schedule in the period;
 - changes to access and pricing arrangements in the period;
 - the cost of data management in the period;
 - for each dataset in schedule, and against the categories intra-Commonwealth, Commonwealth-State, Commonwealth-other transfers:
 - revenue;
 - units;
 - uses, benefits and value.
2. Review and evaluate the efficacy of:
 - the data schedule;
 - the access and pricing arrangements;
 - the arrangements for custodianship and sponsorship;
 - the annual workplan; and
 - the coordination arrangements
3. The Chair of the SDPE will represent the Commonwealth on ANZLIC and the Group will provide high-level input to the determination of the Commonwealth's position in that forum.

Membership as at 30 June 2003

MEMBERS	AGENCY
Neil Williams (Chair)	Geoscience Australia
Don Banfield	Agriculture, Forestry and Fisheries
Ian Carnell	Attorney General's
Denis Trewin	Australian Bureau of Statistics
Don Bashford	Centrelink
Fay Holthuyzen	Communications, Information Technology and the Arts
Ron Bonighton	Defence
Wendy Jarvie	Education, Science and Technology
Bob Correll	Employment and Workplace Relations
David Anderson	Environment and Heritage
Wayne Jackson	Family and Community Services
Ian Robinson	Finance and Administration
Peter Holland	Geoscience Australia
Robert Wooding	Health and Aging
Christopher Doepel	National Native Title Tribunal
James Horne	Prime Minister and Cabinet
Lynelle Briggs	Transport and Regional Services
Ian Campbell	Veteran's Affairs
John Busby	Office of Spatial Data Management
John Rooney (Secretary)	Office of Spatial Data Management

Spatial Data Management Group (SDMG)

Terms of Reference

The role of the SDMG is to:

1. monitor and report to the SDPE on implementation of the policy;
2. prepare and submit to SDPE for approval an annual workplan;
3. act as a reference group for the OSDM in the implementation of that workplan;
4. consider and recommend to the SDPE for approval: changes to the data schedule; access and pricing; custodians and sponsors;
5. provide for representation of the Commonwealth on ANZLIC sub-committees and other appropriate spatial data coordination forums;
6. monitor and maintain linkages with major Commonwealth initiatives, such as Natural Resource Management and the Natural Heritage Trust for which spatial data is a key resource to ensure that appropriate measures are taken to provide for those resources;
7. monitor and advise the SDPE on the needs and expectations of the spatial data user community; and
8. other relevant activities currently undertaken by the CSDC.

Membership as at 30 June 2003

MEMBERS	AGENCY
Peter Holland (Chair)	Geoscience Australia
Paul Williams	Australian Bureau of Statistics
Ken Hunter	Australian Electoral Commission
Philip Crisp	Australian Government Solicitor
Tricia Kaye	Australian Greenhouse Office
Bruce Kafer	Australian Hydrographic Service
Andrew Dobson	Australian Maritime Safety Authority
Robert Woodham	Australian Navy
Mark Carpenter	Attorney General's
Bruce Stewart	Bureau of Meteorology
Michele Barson	Bureau of Rural Sciences
Greg Goodsell	Centrelink
Chris Malouf	Commonwealth Scientific and Industrial Research Organisation
John Maschke	Defence Imagery and Geospatial Organisation
Tony Slatyer	Department of Transport and Regional Services
Craig Roy	Directorate of Oceanography and Meteorology
Kim Fitzgerald	Emergency Management Australia
Ken Douglas	Employment and Workplace Relations
Peter Woods	Environment and Heritage
Virginia Ryan	Family and Community Services
Paul Trezise	Geoscience Australia
Garry Sutton	Health and Ageing
Mike Lawson	Industry, Tourism and Resources
Warwick McDonald	Murray Darling Basin Commission
Blair Wood	National Land & Water Resources Audit
Peter Bowen	National Native Title Tribunal
Kim Finney	National Oceans Office
Brian Stonebridge	National Office for the Information Economy
Carol Bates	Veterans' Affairs
John Busby	Office of Spatial Data Management
John Rooney (Secretary)	Office of Spatial Data Management

SDMG Working Groups

Metadata and the Australian Spatial Data Directory Working group (MWG)

Terms of Reference

The Role of the MWG is to advise the SDMG on:

- 1 Mechanisms to ensure users can obtain comprehensive and timely information (including metadata) about available Commonwealth data.
- 2 User access to Commonwealth metadata via the Australia Spatial Data Directory.

Participants during 2002-03

MEMBERS	AGENCY
John Busby (Chair)	Office of Spatial Data Management
Lee Belbin	Australian Antarctic Division
Evert Bleys	Agriculture Fisheries and Forestry Australia
Ian Batley	Australian Bureau of Statistics
Martin Rutherford	Australian Oceanographic Data Centre
Peter Golding	Bureau of Rural Science
Neil Freeman	Environment Australia
Kate Ord	Environment Australia
Paul Trezise	Geoscience Australia
John Hockaday	Geoscience Australia
Greg Ewers	Geoscience Australia
Paul Treloar	Office of Spatial Data Management
John Rooney (Secretary)	Office of Spatial Data Management

Privacy Working Group (PWG)

Terms of Reference

The Role of the PWG is to:

- Examine the privacy implications of remote sensing data, national security concerns of aggregating datasets and confidentiality issues arising from social welfare data.

Participants during 2002-03

MEMBERS	AGENCY
Judy Huxley (Chair)	Office of Spatial Data Management
Robert Ward	Australian Hydrographic Service
Alan Simakoff	Attorney General's
Shannon Kelson	Bureau of Rural Sciences
Pat Faget	Employment and Workplace Relations
Chris Derrick	Environment Australia
Mary Gorman	National Office of Information Economy
Tony Crivelli	Veterans Affairs
Paul Treloar	Office of Spatial Data Management
Philippe Lambert	Office of Spatial Data Management
John Rooney (Secretary)	Office of Spatial Data Management

Socioeconomic Data Working Group (SEDWG)

Terms of Reference

The role of the SEDWG is to:

- 1 examine the Commonwealth's requirements for the spatial analysis of socioeconomic data; and
- 2 advise the Spatial Data Management Group on what actions it should take to meet these requirements.

Participants during 2002-03

MEMBERS	AGENCY
John Busby (Chair)	Office of Spatial Data Management (Feb 03 to Jun 03)
Judy Huxley (Chair)	Office of Spatial Data Management (Jul 02 to Jan 02)
Geoff Dane	Aboriginal and Torres Strait Islander Commission
Stephen Beare	Australian Bureau of Agriculture and Rural Economics
Frank Blanchfield	Australian Bureau of Statistics
Claire Conroy	Australian Bureau of Statistics
Shannon Kelson	Bureau of Rural Sciences
Gerald Haberkorn	Bureau of Rural Sciences
Geoff Frost	Bureau of Transport and Regional Economics
Judy Winternitz	Bureau of Transport and Regional Economics
Leanne Johnson	Bureau of Transport and Regional Economics
Geoff Frost	Bureau of Transport and Regional Economics
Michael Stephens	Bureau of Transport and Regional Economics
Leanne Johnson	Bureau of Transport and Regional Economics
Bree Cook	Bureau of Transport and Regional Economics
Andrew Smailes	Centrelink
Terry Grosvenor-Jones	Communications, Information Technology and the Arts
David O'Brien	Education Science and Technology
Ed Black	Family and Community Services
Mark Carpenter	Family and Community Services
David Haycraft	Family and Community services
Stephanie Drew	Family and Community Services
Peter Holland	Geoscience Australia
Ian O'Donnell	Geoscience Australia
Sally Goodspeed	Health and Aging
Phil Morgan	Immigration and Multicultural Affairs
Jim Graham	Transport and Regional Services
Graham Flynn	Veteran's Affairs
John Rooney (Secretary)	Office of Spatial Data Management

Fundamental Data Working Group (FDWG)

Terms of Reference

The role of the FDWG is too:

- 1 Confirm the Commonwealth list of fundamental spatial datasets that would attract the highest level of custodial care.
- 2 Establish a set of criteria for quality and standards compliance, including provision for user input (using the ASDI scorecard as a starting point).
- 3 Identify gaps in the Data Schedule.
- 4 Identify instances where custodial agencies are unable or unwilling to bear the costs involved in maintaining a dataset to the required Standard."
- 5 Report to SDMG in November 2003 on :
 - the datasets comprising the list of fundamental spatial datasets;
 - The number complying with the Standard;
 - The number that will reach the Standard within a specified period;
 - The number that will not reach the Standard and the reasons why; and
 - Gaps in the Data Schedule.

Participants during 2002-03

MEMBERS	AGENCY
John Busby (Chair)	Office of Spatial Data Management
Graham de Hoedt	Bureau of Meteorology
Peter Golding	Bureau of Rural Sciences
Lee Hopson	Centrelink
Anthony Hogan	Defence Imagery and Geospatial Organisation
David Haycraft	Family and Community Services
Alistair Taylor	Industry, Tourism and Resources
Alister Nairn	National Mapping Division Geoscience Australia
Paul Treloar	Office of Spatial Data Management
John Rooney (Secretary)	Office of Spatial Data Management

Data Licences Working Group (DLWG)

Terms of Reference

The role of the DLWG is to advise the SDMG on:

1. the development of model licenses for transfers of datasets:
 - from State/territory/local government jurisdictions to the Commonwealth;
 - between Commonwealth agencies;
 - from Commonwealth agencies to businesses, community groups and individuals.
2. Options for resolving the issue of indemnities to third parties against any action for damages incurred as a result of inaccuracies in data supplied to the Commonwealth
3. Other issues as considered appropriate by the Working Group.

Participants during 2002-03

MEMBERS	AGENCY
John Busby (Chair)	Office of Spatial Data Management
David Thomas	Bureau of Meteorology
Peter Golding	Bureau of Rural Sciences
Neil Freeman	Department of Environment & Heritage
Brian Burbidge	Geoscience Australia
Ian O'Donnell	Geoscience Australia
Paul Treloar	Office of Spatial Data Management
John Rooney (Secretary)	Office of Spatial Data Management

Office of Spatial Data Management (OSDM)

Terms of Reference

The role of the OSDM is to:

- 1 provide administrative support to SDPE and SDMG;
- 2 undertake day to day management of the workplan and working groups established by SDMG;
- 3 establish and maintain links with all Commonwealth agencies that collect, manage or use spatial data, for the purposes of sharing experience and expertise and to provide technical advice to the SDMG;
- 4 promote efficient use of Commonwealth spatial data assets;
- 5 represent the Commonwealth in the negotiation of whole-of-government spatial data access arrangements with the States and Territories; and
- 6 foster the development of a private sector spatial information industry.

OSDM Staffing during 2002-03

Name	Position	Period with OSDM
John Busby	General Manager	Feb 2003 to Jun 2003
Judy Huxley	A/G General Manager	Jul 2002 to Jan 2003
John Rooney	Manager	Jul 2002 to Jun 2003
Paul Treloar	Technical Advisor	Jul 2002 to Jun 2003
Philippe Lambert		Jul 2002 to Dec 2002
Andrew Bairnsfather		Jul 2002 to Sept 2002
Daniel Connolly		Oct 2002 to Dec 2002

Appendix 3: Custodianship Guidelines

AUSTRALIAN GOVERNMENT CUSTODIANSHIP GUIDELINES

The Rights and Responsibilities of Spatial Data Custodians

EXECUTIVE SUMMARY

Custodianship assigns, to an agency, certain rights and responsibilities for the acquisition of spatial information and the management of this information on behalf of the Commonwealth of Australia. The rights include the right to determine how the information will be managed and any access constraints, with accompanying responsibilities towards the maintenance, quality and enabling appropriate access to that information.

Australian Government custodian agencies manage spatial information as trustees in a partnership: to enable the use of that information for the benefit of the government and the nation.

The benefits of custodianship are that a custodian agency is most likely to become the preferred supplier for information under its custody. This is because it holds the most comprehensive, accurate and, ultimately, credible information.

The principle of custodianship should be applied within the Australian Government as a matter of good data-management practice. It is simply the only way of ensuring accountability for the care, maintenance and credibility of information.

Custodianship policies are being coordinated by the Australian Government – Office of Spatial Data Management (OSDM), building on earlier work by the Commonwealth Spatial Data Committee (CSDC) and policies developed by other jurisdictions. Custodianship is seen by the Spatial Data Policy Executive – portfolio representatives at Deputy Secretary / Chief Information Officer level – as being at the core of efficient and effective spatial information management.

Successful management of Australian Government spatial data depends on the identification of custodians and the effective operation of custodianship. The Australian Government's Policy on Spatial Data Access and Pricing relies heavily on the principle of custodianship, in particular of those datasets listed on the Schedule to the Policy.

OSDM, as the coordinating body for spatial data management in the Australian Government, has a role in identifying or confirming custodians of spatial data. It also works with custodians to clarify their rights and responsibilities, both to the government and to an increasing range of other spatial-data users.

These Guidelines do not seek to abrogate the rights and responsibilities of recognised data custodians. However, both the identification of custodians and their associated rights and responsibilities have not always been clearly articulated and are not necessarily clearly understood and acted upon.

The Guidelines are designed to assist data custodians improve practice in spatial data management. The extent to which these guidelines are adopted by any given agency or custodian may depend upon their particular circumstances, including portfolio resourcing priorities.

A **custodian** has various **rights and responsibilities** with respect to a particular dataset, including:

- determining priorities for data capture
- managing and operating data acquisition and integration processes
- complying with standards
- storing the data
- maintaining and revising the data
- ensuring data security
- providing metadata
- promoting data use
- facilitating data access
- administering data distribution
- charging for data or recovering costs associated with data supply, consistent with agency and jurisdictional policies
- consulting with users
- preserving the data over time
- complying with legislation, policies and guidelines

The day to day operation of these responsibilities may be delegated or contracted to other parties, but the ultimate responsibility rests with the nominated data custodian. The costs of custodianship are the responsibility of the custodian. In accordance with agency and jurisdictional policies, the custodian may charge for access to the data or recover costs directly associated with the supply of data.

The custodian has an obligation to periodically survey the present and future needs of user groups and to address issues affecting existing and potential users of the data.

OSDM will maintain a Register of spatial data custodians for datasets listed under the Australian Government's Policy. The Register will list, for each custodian, their contact details and the datasets for which they are the custodian.

INTRODUCTION

1. Various Australian Government agencies hold large amounts of spatial data, and will continue to collect more in the future. To achieve efficient and effective acquisition, management and use of spatial data, custodian agencies will be given policy guidelines setting out custodianship rights and responsibilities.

Custodianship

2. The Custodian of a dataset is "the nominated body, or person responsible for the development and/or the management of that dataset, and who has the right to determine the conditions on which those data may be used or released".
3. The Australian Government accepts that the principle of custodianship should be applied to all its datasets.

a. Principle of custodianship

4. All spatial data collected by the Australian Government, or its agencies, forms part of the Government's corporate spatial data resource. Individual agencies involved in the management of the spatial data act as custodians on behalf of the Government. The Government delegates operational responsibility for the data, and for implementing government policy with regard to it, but retains the ultimate ownership of and responsibility for the data. The custodian is expected

to exercise the delegated responsibility in a manner which maximises the benefit from the government's investment.

5. Custodianship is not necessarily synonymous with ownership of either the data nor the copyright of that data. (See Copyright, paras. 66–67).

b. Benefits arising from the application of custodianship

6. Custodianship reinforces the concept of one agency being ultimately responsible for a dataset which other agencies might use. This gives users of that data confidence in the level of integrity, timeliness, precision and completeness.
7. The coordination of custodianship, through mechanisms such as the OSDM, assists in avoiding duplication of effort and unnecessary cost to the government, thus achieving maximum benefit from investment.

c. Assignment of custodianship

8. The ultimate responsibility for custodianship lies with government. However, the delegated responsibility can be assigned to one or many agencies, or parts of agencies, government or non-government, for whole datasets, or different levels of detail, data items, or geographic coverage. The nomination of a custodian requires the agreement of the relevant agencies. It may be a complex process, requiring formal negotiation and documentation of the outcome. Any assignment to a non-government agency of the responsibility for custody and preservation of data records must have the approval of the Australian Archives. This is a requirement under s.24 of the Archives Act 1983.
9. The acceptance of custodianship does not, in itself, oblige the nominated custodian to make the identified datasets publicly accessible.
10. OSDM will facilitate the identification of custodians for government-held spatial data. Each case will be decided on its merits and the following issues will be considered:
 - the agency which has sole statutory responsibility for the capture and maintenance of the data item
 - the agency which has the greatest operational need for the data item
 - the agency which is the first to record changes to the base data item in the normal course of events
 - the agency which is the most competent and best equipped to capture and/or maintain the data item
 - the agency which has the confidence of users that it will continue to meet its responsibilities to data collection
 - the agency which is best able to collect data at its source
 - the agency requiring the highest integrity of the data item
11. OSDM will maintain a Register of spatial data custodians for datasets listed under the Schedule ("Schedule") to the Australian Government's Policy on Spatial Data Access and Pricing ("Policy"). The Register will list, for each

custodian, their contact details and the datasets for which they are the custodian.

d. Derived Datasets

12. There are two main issues:
 - (i) Copyright (the right to amend and market the derived data) and
 - (ii) Continuing custodianship responsibilities, including the maintenance of the original data.
13. When a dataset is modified, by enhancement or integration with other data, and especially through a series of progressively more derived information products (a 'value chain'), then the responsibility of the original custodians will be attenuated through each step in the chain. The rights and responsibilities of custodians of original data in relation to reporting, accounting, liability, copyright enforcement, acknowledgement, etc., with progressively derived data should be resolved on a case-by-case basis.
14. It is desirable that, regardless of any copyright/ownership/custodianship rules, agreements (or arrangements between agencies which form part of the Australian Government) relating to the modification of datasets define a clear point at which pedigree of copyright (and custodianship responsibility) will be deemed abandoned. It is also open to an agency, in licensing its datasets, to take the view that it will not allow any derivative works to be developed, except where specifically declared and agreed. There is a point, however, beyond which the value of any benefit that might be gained is outweighed by disadvantages such as the administrative inconvenience and cost.

RIGHTS AND RESPONSIBILITIES OF CUSTODIANS

Determining Priorities for Data Capture

15. The right to determine priorities for data capture generally resides with the data custodian, under its charter, although this may be over-ridden by government policy imperatives. However, the custodian also has a responsibility to consult with users and potential users of the data, and to balance objectively the needs of all users, including themselves. This is particularly important when other agencies come to rely on the dataset(s) to underpin their own corporate needs.

Management and Operation of Data Acquisition

16. The custodian is responsible for all aspects of the data acquisition. This includes the following:
 - definition of the specification for the initial data and any revision requirements
(in consultation with users)
 - definition of standards (in consultation with users)
 - quality management and assurance during acquisition
 - drawing up, letting and monitoring of acquisition contracts or agreements, if applicable

17. The custodian should also ensure that the government gets value for money in the acquisition of data. To avoid duplication, the custodian should ensure that the data to be captured is not already held by another agency in the format required.
18. If the acquisition is sub-contracted, the custodian must also ensure that the contract states that any copyright is maintained by the Commonwealth, if appropriate. If the data being acquired is a compilation of existing data over which others have copyright, the ownership of the copyright in the integrated data is a matter for negotiation and agreement between the custodian and the data providers.
19. The cost of the data acquisition is generally the responsibility of the custodian. However, cost contributions may be negotiated with the stakeholders (i.e. others with an interest in the data). Custodians are discouraged from seeking recovery of such costs from data sales, except where mandated by government policy.

Compliance with Agreed Standards

20. A prime objective of standards is to “lower the transaction costs of using data”.
21. Standards apply to most aspects of data collection and management, including feature and attribute selection, meanings and allowable values, quality assurance and data transfer/communication. The custodian has an obligation to keep abreast of current standards development and comply with those adopted by the Australian Government.

a. Feature and attribute selection, meanings and values

22. Standards for feature and attributes will vary from one data type to another. Work is proceeding in the definition of attribute standards in various fora. Responsibility for the development of standards increasingly rests with national coordination mechanisms currently being established for a range of spatial data themes. However, the custodian has a responsibility to keep informed of developments affecting their data, and to take an active role in developing and defining any standards.

b. Data quality

23. The custodian is responsible for ensuring the data adheres to quality standards, and to the specification. It is strongly recommended, in the interests of both the users and the custodian, that the custodian seeks accreditation with applicable government or other schemes, e.g. ISO 3901 Quality Systems for Design/Development, Production, Installation and Servicing.
24. Since quality is perhaps best defined as “fitness for use”, differing levels of quality may be acceptable for different applications. However, the custodian should endeavour to maintain a dataset to best-practicable standards. Consistency across a dataset is generally more important than absolute quality, providing the level of quality is appropriately documented, e.g. in metadata.

25. If the quality is not acceptable to a particular user, it may be improved under arrangements agreed between the data custodian and that user. Such an arrangement might well require resources to be provided to the custodian.

c. Data transfer

26. Transfer of data from the custodian to users will be in an appropriate standard format, on appropriate media, preferably by agreement.

Storage of Data

27. The custodian is responsible for adequate and appropriate storage of the data. This will include issues such as provision for suitably secure copies of the master dataset, while allowing appropriate access to the data, e.g. outside or through the firewall.

Maintenance and Revision of Data

28. Maintenance and revision of the data is the responsibility of the custodian, and the cost of this will normally be borne by the custodian. However, if, for example, a user wishes a revision to be done more promptly, or to a new specification, then the cost should be negotiated between the custodian and the user.
29. To preserve consistency and integrity, each dataset should only be updated under the supervision of the custodian. Users should be informed of any updates.
30. The custodian has an obligation to correct faulty data brought to its attention and should endeavour to notify affected parties.

Security of Data

31. The custodian has the delegated responsibility for the government's investment in spatial data. As a data steward, it has responsibility for the preservation of that investment. This can take the form of protecting the data from theft, loss or misuse. The custodian will put in place all reasonable mechanisms to protect the data, including storing back-up copies off-site, and report any compromise of its security and/or its integrity.

Provision of Metadata

32. A key part of any set of spatial data is the accompanying metadata. Metadata is 'information about data', and can include items such as source, accuracy, standards adhered to, completeness, currency, reliability, access conditions, available formats and, where relevant, price. The custodian of the data is normally the best placed to supply this information.
33. Metadata should conform with current national/international standards and, where appropriate, should be made available for discovery by users through mechanisms such as the Australian Spatial Data Directory.

34. The custodian is expected to facilitate efficient and effective use of the government's data, so as to derive maximum benefit from the investment. Thus the metadata must always be readily available, not just for existing users, but for potential users. The custodian should maintain publicised points of contact for enquiries and be in a position to provide the appropriate metadata promptly.
35. The Freedom of Information Act requires an agency to publish, in its annual report, a list of categories of documents produced by it. 'Document' in the FOI Act includes maps, plans, and 'any article on which information which has been stored or recorded, either mechanically or electronically'.
36. Metadata for all data transferred is accepted best practise and should be considered as a mandatory requirement for all government custodians.

Provision of Data

37. Facilitating the transfer and sharing of government data, especially those datasets on the Schedule, is a requirement and responsibility of the custodian.

a. Promotion of use

38. If data has been collected or acquired by the government, then the custodian has the responsibility for promoting its proper use. Where appropriate, the dataset should be listed on the Schedule. The objective of this is to get value for money from the government's investment and prevent data duplication through ignorance.

b. Access to data

39. Access to the data should be made through the custodian, or their nominated distribution outlet, not from a secondary source.
40. As a general principle, access to the data would not be denied other than on grounds of privacy, national security, or confidentiality. However, the access may be subject to specified conditions.
41. The custodian may levy a charge for access to the data. The amount may depend on several factors including government charging directives, the costs of collection, storage and distribution, market rates, the intended use of the data, or the conditions of any negotiated arrangements. If the data is listed on the Schedule, then the provisions of the Policy apply.
42. The custodian should ensure that access to the data should generally be under the conditions of a licence or a memorandum of understanding, setting out terms and conditions for the right-to-use of that data, to protect copyright, to prevent the unauthorised onward transfer or sale of the data, and to provide for payment of any licence fee or royalties to the custodian or data owner, where appropriate. Guidelines for a model licence agreement are being developed by OSDM.
43. In general terms copyright (discussed further below) is the exclusive right given, to the "author", by the Copyright Act 1968 to reproduce, publish, perform, broadcast and adapt a work. This exclusive right may be assigned or licensed to

others. The Commonwealth is the owner of copyright in works (including spatial datasets) made, or first published, under its direction or control.

44. Within the Commonwealth proper, which is a single legal entity, particular portfolios and included agencies are said to exercise 'custodianship' of copyright in works produced under their direction or control. By convention, a transfer of data between government agencies is under a non-binding arrangement or memorandum of understanding, incorporating terms similar to those which might be contained in a binding licence agreement. The application of copyright ownership rules for statutory bodies is not straightforward - legal advice should be sought to clarify the position.
45. The situation with regard to the copyright of data supplied to external users is not the same in all cases. The custodian may have the right to charge fees on data if it owns the copyright, has had copyright given or sold to it, or if it administers copyright on behalf of the Commonwealth. The custodian should seek legal guidance if necessary.
46. Where the copyright of a dataset is owned by the Crown in right of the Commonwealth, the custodian of that dataset is responsible for ensuring that no part of the copyright is either infringed or inadvertently assigned to another party. When assigning rights to use the data, the assignment should take the form of a licence to use only. References to payment for the right to use should be framed as a licence fee and not as a royalty as the term 'royalty' carries connotations of a licence to copy.
47. Where practicable the custodian has a responsibility to keep records, and control, of who is accessing the data. There are several reasons for this:
 - copyright protection
 - national security
 - various commercial and privacy reasons
 - to facilitate audits of and reporting on data use
 - to enable the custodian to consult with data users

c. Distribution of data

48. Whether the custodian distributes the data directly, or via a third party, it is the custodian's responsibility to seek to ensure that the data are distributed in an appropriate standard form. This will apply to both the transfer format and the distribution media.

d. Data Quality Statements

49. Custodians should provide users with full and frank quality statements regarding the source, reliability, accuracy, completeness and currency of any spatial datasets supplied. This is normally included in the metadata.
50. Data users should be encouraged to take full account of any limitations of the data when applying it to their particular purpose. The data should not be used for purposes beyond their originally intended use.

51. Reporting mechanisms should be developed between the custodian and users :
(a) to alert users to subsequent modifications to the original data, and (b) to enable users to report any errors found.

e. Liability

52. The most likely grounds for liability in circumstances where incorrect spatial data is released by the Commonwealth to the public would be found in:
- s. 52 of the Trade Practices Act 1974 (Cth) dealing with misleading or deceptive conduct;
 - the general law dealing with negligent misstatements;
 - contractual liability (which would depend on the terms of each particular contract).
53. To limit the government's potential liability for the release of incorrect spatial data, a disclaimer should be included in the licence agreement. Advice on appropriate words should be sought from the Australian Government Solicitor, or other legal source.

Consultation with Users

54. The custodian has an obligation to notify known users, or their representative groups, of the data over actions which may affect the subsequent use of the data. This includes consultation over:
- priorities for data capture
 - definition of the data specification
 - definition of quality standards
 - development of data standards
 - transfer formats
 - data certification regarding reliability, quality and fitness for particular uses
 - errors found and changes to original data that make derived data out-of-date.
55. In circumstances where users require the custodian to collect data to a higher precision, to meet a specific standard or other refinement, the custodian may negotiate with the users over meeting the additional cost.

Compliance with Relevant Legislation

56. The custodian is the named agency which is responsible for ensuring that, in capturing, storing, using and supplying the data, any relevant legislation is complied with. Thus the custodian is obligated to keep abreast of all developments in legislation. Acts which are relevant include those on Freedom of Information, Privacy, Copyright and Archives. The following paragraphs deal with some of the aspects of such legislation. Detailed enquiries should be directed to the Australian Government Solicitor or other appropriate source.

a. Freedom of Information

57. Under the Freedom of Information Act (1982) the public may request access to government documents and, unless the document is subject to a specific exemption in the Act, the government agency must provide that access. 'Document' in the FOI Act includes maps, plans and 'any article on which information has been stored or recorded, either mechanically or electronically'. A special section of the Act refers to digital data.
58. A document that is open to public access and available for purchase in accordance with arrangements made by an agency, is not subject to the FOI Act. For this reason, use of the FOI Act should not be necessary to obtain data available commercially or under the Schedule.

b. Privacy

59. Privacy legislation applies not just to data with individual's names attached, but also to data to which an identity can be reasonably ascribed. Thus the cross-linking of datasets in geographic information systems creates a danger of contravening the legislation.
60. Section 14 of the Privacy Act 1988 lays down a series of eleven Information Privacy Principles (IPPs) for dealing with personal information (i.e. "information ... about an individual whose identity is apparent, or can reasonably be ascertained from the information"). A breach of these Principles is an interference with privacy. Under the legislation the collector of personal information must inform the individuals of what the data will be used for when it is collected. Records of personal information must be accurate, relevant, up-to-date, complete and not misleading.
61. Data collectors, custodians and users must not use or disclose personal information for any purpose other than that for which it was collected and provided. Data custodians are responsible for ensuring that users are aware of the implications of the Privacy Act and the restrictions on the use of personal information. Currently the mechanism for this is the licence/memorandum which authorises use of the data, subject to certain conditions, including provisions relating to privacy.
62. The custodian is obliged to provide a level of appropriate security to protect the privacy of an individual's data.
63. Individuals have the right to access data held about them. Thus the custodian must be in a position to supply this if necessary, without undue delay and in a form which is readily intelligible to the individual.
64. Each government department is recognised as a separate body for the purposes of the Privacy Act. The legislation therefore applies to data passed between individual agencies.
65. The Privacy Act does not apply to non-government agencies. Hence there is potential for the breaching of an IPP where data is captured by a private sector contractor or used by non-government individuals or organisations. The custodian must ensure that any such data remains secure, and include

provisions for compliance with the Privacy Act in the data collection contract or licence agreement.

c. Copyright

66. The custodian has a responsibility to use measures which ensure availability of data whilst protecting the Commonwealth from misuse of its information. The Copyright Act 1968 forms a large part of this protection. The Act details the works in which copyright subsists, and describes the exclusive rights of the copyright owner, the most important of these being the right to stop unauthorised reproduction of their work.
67. The following points may be of relevance to custodians:
- Copyright subsists in the format in which information is stored, rather than in the data. Accordingly, copyright does not subsist in source data when it is separated from the source document, or from those attributes and linkages added, as the source data is transformed into successively higher order forms.
 - Copyright will subsist in an 'original' database, i.e. in one that has not been copied and where the compilation of the data required sufficient skill and judgement by the author(s).
 - Where a work is made under the direction or control of a Commonwealth agency, the Crown is the owner of the copyright (subject to any agreement to the contrary).
 - Copyright can be claimed by the Crown in an original data base containing data either acquired directly by government agency employees or derived by them from documents prepared by 'non-government persons', including contractors.
 - Hard copy outputs are works in which copyright subsists under the Act.
 - Computer-based material is also protected by copyright.
 - It is considered that an acceptable level of control over the use of data cannot be readily achieved using the Copyright Act alone. Therefore it is recommended that conditions applying to the use of data are clearly set out in licensing or contractual documentation. Contract law will then be the vehicle for protection of the copyright owner's 'rights' under the Act.

Archives

68. The custodian of the data must comply with the Archives Act 1983.
69. Under s.24 of the Archives Act 1983, no data records may be destroyed or otherwise disposed of without permission of the Australian Archives. (Archives refers to 'records' which are 'documents' in various 'formats', including electronic). This prohibition does not include the transfer of copies of data.
70. Any records identified by Australian Archives in consultation with the relevant agency as having long-term or permanent value must be preserved, along with any relevant metadata.

Consumer protection

71. Licence to Use agreements drawn up between the custodian and the client will, under certain circumstances, come within the ambit of consumer protection laws.

Appendix 4: OSDM Workplan 2002-03

1. MAXIMISE THE BENEFITS	
1.1 <i>Finalise assessment of fundamental spatial data user needs by August 2002</i>	<ul style="list-style-type: none"> • The SMDG established a working Group to investigate the spatial data needs of Australian Government agencies. • The User Needs Working Group found that the greatest unmet need was for better spatially referenced socioeconomic data. • SDMG established a Socioeconomic Data Working Group (SEDWG) to investigate further. • In July 2002, SEDWG commissioned a survey of Australian Government requirements for spatially referenced socioeconomic data. • SDPE commissioned a follow up survey in August 2002. • The SEDWG met three times to analyse the results of the two surveys and develop its recommendations to the SDMG. • In March 2003, the SEDWG endorsed a report to the SDMG on ways to improve the supply of spatially referenced socioeconomic data • The SDMG considered the SEDWG report in May 2003 and accepted the recommendations. • The recommendations were substantially actioned by July 2003.
1.2 <i>Finalise assessment of costs and benefits of meeting spatial data needs by November 2002</i>	<ul style="list-style-type: none"> • Agencies were surveyed on their spatial data needs in August 2002. • A strategy paper assessing the costs and benefit of meeting spatial data needs was considered by the SDMG in October 2002. • SDMG decided the strategy paper should not be considered in the 2003-04 budget context and asked for it to be revised. • SDMG considered the revised strategy paper in May 2003 and asked for it to be refocussed on meeting agency needs on a whole of government basis. • The revised paper was ready in June 2003 for consideration by SDMG at its following meeting.
1.3 <i>Finalise options for whole-of-government spatial data management savings by November 2002</i>	<ul style="list-style-type: none"> • Agencies were surveyed on their spatial data management costs in August 2002. • The preliminary survey analysis and the strategy paper discussing options for whole

	<p>of government savings were considered by the SDMG in October 2002.</p> <ul style="list-style-type: none"> • The savings options were included in the costs and benefits paper by November 2002.
<p>1.4 Identifying areas of duplication in Government acquisition of spatial datasets and by August 2002.</p>	<ul style="list-style-type: none"> • Agencies were surveyed on their spatial dataset purchases in July and August 2002. • Options for reducing duplication were proposed in the strategy paper, considered by SDMG in October 2002 and again in May 2003.
<p>1.5 Identify opportunities for sharing data between agencies by August 2002.</p>	<ul style="list-style-type: none"> • Agencies were surveyed on their willingness to share spatial data in July and August 2002. • The survey results were considered by the SEDWG in August 2002 and March 2003. • The SEDWG concluded that the ABS national statistical initiatives such as the Rural and Regional Statistical Advisory Centre provided good opportunities for agencies to share data.
<p>1.6 Identify mechanisms to reduce whole-of-government expenses related to the acquisition, management of fundamental spatial datasets by October 2002.</p>	<ul style="list-style-type: none"> • Agencies were surveyed on their spatial data acquisition and management practices in July and August 2002. • A strategy paper discussing mechanisms for reducing spatial data expenses was considered by SDMG in October 2002 and May 2003. • SDMG called for the revision of the strategy paper to focus on whole of government IT infrastructural needs • The paper was revised by June 2003 and ready for consideration by SDMG at its next meeting
<p>1.7 finalise case for funding of fundamental data acquisition on a whole-of-government basis by December 2002</p>	<ul style="list-style-type: none"> • Agencies were surveyed on their interest in whole of govt data acquisition in July and August 2002. • The SEDWG considered analysis of the surveys in August 2 and March 2003. • Options for whole of govt purchasing were canvassed in the strategy paper considered by the SDMG in October 2002 and May 2003. • The SEDWG report on socioeconomic data needs, which also canvasses whole of Govt purchasing options, was also considered by the SDMG in May 2003. • SDMG called for the revision of the strategy paper to focus on whole of government IT infrastructural needs • The paper was revised by June 2003 and

	ready for consideration by SDMG at its next meeting.
2 DELIVER ADMINISTRATIVE SUPPORT TO THE SDPE/SDMG THROUGHOUT THE YEAR:	
2.1 Secretariat services.	<ul style="list-style-type: none"> • OSDM provided secretariat services to the SDPE, the SDMG and seven working groups investigating issues raised by the SDPE and the SDMG: <ul style="list-style-type: none"> ○ Data Schedule WG ○ Policy Review WG ○ Data Management Costs WG ○ User Needs WG ○ ASDI/Metadata WG ○ Socioeconomic Data WG ○ Privacy WG ○ Standards WG
2.2 Agenda papers to be delivered two weeks prior to meeting.	<ul style="list-style-type: none"> • SDMG agenda papers were sent out two weeks before meetings
2.3 Minutes to be delivered two weeks after the meeting.	<ul style="list-style-type: none"> • Draft minutes were sent out two weeks after meetings
2.4 Working group management services to be delivered as required.	<ul style="list-style-type: none"> • OSDM implemented all actions of the Working Groups by end of June 2003.
2.5 Annual Report (2001-02) layout in July 2002	<ul style="list-style-type: none"> • An initial report layout was established in July 2002 • This layout was substantially revised in November 2002
3 ANNUAL REPORT TO THE MINISTER ON POLICY IMPLEMENTATION, DATA SCHEDULE, ACCESS AND PRICING ARRANGEMENTS, THE COST OF DATA MANAGEMENT IN OCTOBER 2002:	
3.1 Collection of survey information required for report input in August	<ul style="list-style-type: none"> • OSDM sent out the spatial data survey in August 2002. • Responses from most agencies were received by November 2002 • A Draft Annual Report was prepared on the basis of the survey responses in December 2002
3.2 Circulate draft for comment in September	<ul style="list-style-type: none"> • The draft Annual Report was circulated to the SDMG & SDPE for comment in March 2003 • The final annual report of the SDPE was submitted to the Minister on 1 April 2003.

4 AUSTRALIAN GOVERNMENT POLICY REPRESENTATIONAL, PROMOTIONAL AND BRIEFING SERVICES, TO BE DELIVERED AS REQUIRED INCLUDING:	
4.1 Reports about Australian Government view on issues considered at ANZLIC	<ul style="list-style-type: none"> • OSDM has coordinated Australian Government responses to ANZLIC discussion papers and prepared briefing for the Australian Government representative (Dr Williams) to ANZLIC meetings that incorporate the views of other Australian Government agencies • Business processes for ANZLIC coordination were developed and agreed with the SDMG.
4.2 Negotiation services – including for whole-of-govt arrangements for the supply of data held by the States and Territories and a standard set of licences for access to the private sector spatial	<ul style="list-style-type: none"> • SDMG has considered the NLWRA and DEH model data licence agreements for Australian Government State transfers and the GA model agreement for Australian Government-Public transfers. • Model licence agreements for “shrink-wrapped” and “click-wrapped” data transfers are available for use by Australian Government agencies on the OSDM website (members only section). • OSDM has held discussions with the Australian Government Solicitors Office about develop additional model licence agreements
4.3 Online spatial data management best practice guidelines issued quarterly	<ul style="list-style-type: none"> • ANZLIC has an agreement with the NLWRA to issue best practice data management guidelines.
4.4 Spatial data management advice services, including presentations, as required.	<ul style="list-style-type: none"> • The OSDM General Manager delivered presentations on the spatial data policy to: <ul style="list-style-type: none"> ○ Geoscience Australia; ○ An Intellectual Property conference organised by the AGS; ○ A delegation from the Chinese Govt Bureau of Surveying and Mapping; ○ The Australian Local Government Association; ○ The Prime Minister’s Coordinating Committee on Science and Technology ○ The UN Mapping Conference in Okinawa, Japan.
4.5 Reports and input to reports regarding issues of relevance to the spatial data policy.	<ul style="list-style-type: none"> • OSDM made submissions to the following enquiries: <ul style="list-style-type: none"> ○ the Parliamentary Inquiry into Broadband Wireless Services ○ DITR’s response to the Productivity Commission’s report on Cost Recovery

5 AUSTRALIAN GOVERNMENT SPATIAL DATA ACCESS SYSTEM DEVELOPMENT SERVICES, TO BE DELIVERED THROUGHOUT THE YEAR, INCLUDING:	
5.1 OSDM website content supply and maintenance services.	<ul style="list-style-type: none"> • A prototype OSDM website was established and maintained as required.
5.2 Metadata strategy development and implementation services.	<ul style="list-style-type: none"> • The Metadata Working Group developed a Metadata Strategy that was endorsed by the SDMG in July 2002. • This strategy was put on hold due to the development of new metadata standards by the International Standards Organisation and ANZLIC.
5.3 Metadata alignment facilitation services	<ul style="list-style-type: none"> • Metadata alignment services are on hold pending the development of new metadata standards by ANZLIC
5.4 Data access facilitation services	<ul style="list-style-type: none"> • OSDM has raised awareness of spatial data access mechanisms through its presence at E-Government Week, an exhibition of Government online services held in Parliament House in November 2002 • OSDM published numerous flyers showcasing spatial data application across a range of industries for distribution at the E-Government week exhibition
6 Services related to spatial responses to portals	<ul style="list-style-type: none"> • OSDM reviewed OGC portals standards.
6.1 ASDI DN development/implementation services	<ul style="list-style-type: none"> • ANZLIC papers on the ASDI DN were reviewed, and a Australian Government response coordinated • Briefing was provided to Dr Williams who chairs the ANZLIC Spatial Data Infrastructure Standing Committee responsible for overseeing the development of the ASDI DN.
6.2 Standards and infrastructure development services	<ul style="list-style-type: none"> • Two workshop on Open GIS Consortium Standards were hosted by OSDM in 2002-03 in partnership with ANZLIC
6.3 Assessment of all Cabinet submission forwarded to OSDM by agencies at the coordinating comments stage to determine whether there are any underlying needs for spatial data	<ul style="list-style-type: none"> • The SDMG agreed that this role was inappropriate for OSDM and has been discontinued.
6.4 Assessment of other material	<ul style="list-style-type: none"> • OSDM has provided advice on web mapping

<i>forwarded to OSDM by agencies.</i>	options to the More Accessible Government Geographic Consortium, charged with mapping Australian Government regional networks.
6.5 <i>Assistance to Australian Government agencies with a perceived need for spatial data expertise.</i>	<ul style="list-style-type: none"> OSDM conducted training workshops on the use of Mapserve, an open GIS system, for 50 staff from a dozen Australian Government agencies in June 2003, using the prototype web map of Australian Government Regional Office locations (developed by OSDM) as a training tool.
6.6 <i>Assistance to Australian Government agencies willing to share that data with other agencies</i>	<ul style="list-style-type: none"> The Socioeconomic Working Group investigated options for sharing data between agencies and found that agencies were actively exchanging data, where appropriate.
7 SUPPORT INDUSTRY GROWTH	
7.1 <i>Assist the private sector gain access to Australian Government spatial data with value-add potential.</i>	<ul style="list-style-type: none"> OSDM's consultations with industry on data access indicated a demand for improvements in online data ordering and payment facilities.
7.2 <i>Provision of a whole-of-government point of contact for ASIBA.</i>	<ul style="list-style-type: none"> There is an ongoing dialogue between OSDM and ASIBA which does not preclude ASIBA making direct contact with agencies and Ministers, as required. OSDM endeavours to give agencies and Minister's Offices advance notice of ASIBA approaches, where possible.
7.3 <i>Assistance with development of a spatial information industry capability statement</i>	<ul style="list-style-type: none"> The OSDM GM participates on the Joint Steering Committee for the Spatial Information Industries Action Agenda, which is responsible for the industry capability statement
7.4 <i>Assistance identifying sources of government funding, such as R&D grants, and in preparing submissions.</i>	<ul style="list-style-type: none"> There is an ongoing dialogue between OSDM and ASIBA which does not preclude ASIBA making direct contact with agencies and Ministers, as required. <p>OSDM briefed the Parliamentary Secretary on ASIBA's request for funding to develop a Water Titling System.</p>
8 FACILITATE COMMUNITY ACCESS	
<i>Helpdesk - info@osdm.gov.au - support services as required throughout 2002/2003 to assist the community access Australian Government spatial data and services.</i>	<ul style="list-style-type: none"> OSDM provides help desk services as required to users of the OSDM website. There were 12 requests for assistance in 2002-2003.

Appendix 5: Acronyms

ABS	AUSTRALIAN BUREAU OF STATISTICS
ACRES	AUSTRALIAN CENTRE REMOTE SENSING
ACT	AUSTRALIAN CAPITAL TERRITORY
ADF	AUSTRALIAN DEFENCE FORCE
AEC	AUSTRALIAN ELECTORAL COMMISSION
AFMA	AUSTRALIAN FISHERIES MANAGEMENT AUTHORITY
AFMA	AUSTRALIAN FISHERIES MANAGEMENT AUTHORITY
AGLS	AUSTRALIAN GOVERNMENT LOCATOR SERVICE
AGSO	AUSTRALIAN GEOGRAPHIC SURVEY ORGANISATION
AHS	AUSTRALIAN HYDROGRAPHIC SERVICE
AMBIS	AUSTRALIAN MARINE BOUNDARIES INFORMATION SYSTEM
AMSA	AUSTRALIAN MARINE SAFETY AUTHORITY
ANZLIC	ANZLIC – THE SPATIAL INFORMATION COUNCIL
AODC	AUSTRALIAN OCEANOGRAPHIC DATA CENTRE
APMA	AUSTRALIAN PORTS MANAGEMENT AUTHORITY
ARGN	AUSTRALIAN REGIONAL GPS NETWORK
ASDD	AUSTRALIAN SPATIAL DATA DIRECTORY
ASDI	AUSTRALIAN SPATIAL DATA INFRASTRUCTURE
ASGC	AUSTRALIAN STANDARD GEOGRAPHIC CLASSIFICATION SYSTEM
ATSIC	ABORIGINAL AND TORRES STRAIT ISLANDER COMMISSION
AUSLIG	AUSTRALIAN LAND INFORMATION GROUP
AVHRR	ADVANCED VERY HIGH RESOLUTION RADIOMETER
BOM	BUREAU OF METEOROLOGY
BRS	BUREAU OF RURAL SCIENCE
BTR	BUREAU OF TOURISM RESOURCES
CCD	CENSUS COLLECTION DISTRICT
CEO	CHIEF EXECUTIVE OFFICER
CRC	COOPERATIVE RESEARCH CENTRE
CSDC	COMMONWEALTH SPATIAL DATA COMMITTEE
CSIRO	COMMONWEALTH SCIENTIFIC AND INDUSTRIAL ORGANISATION
DAFF	DEPARTMENT OF AGRICULTURE FORESTRY AND FISHERIES
DEH	DEPARTMENT OF ENVIRONMENT AND HERITAGE
DEM	DIGITAL ELEVATION MODEL
DIGO	DEFENCE IMAGERY AND GEOSPATIAL ORGANISATION

DITR	DEPARTMENT OF INDUSTRY TOURISM AND RESOURCES
DLWG	DATA LICENSES WORKING GROUP
DODC	DEFENCE OCEANOGRAPHIC DATA CENTRE
DVA	DEPARTMENT OF VETERANS AFFAIRS
EA	ENVIRONMENT AUSTRALIA
EMA	EMERGENCY MANAGEMENT AUSTRALIA
ENC	ELECTRONIC NAVIGATION CHARTS
EPBC	ENVIRONMENTAL PROTECTION AND BIODIVERSITY CONSERVATION ACT
FACS	FAMILY AND COMMUNITY SERVICES
FDWG	FUNDAMENTAL DATA WORKING GROUP
FOI	FREEDOM OF INFORMATION
GA	GEOSCIENCE AUSTRALIA
GIS	GEOGRAPHIC INFORMATION SYSTEM
GPS	GLOBAL POSITIONING SYSTEM
IOC	INTERGOVERNMENTAL OCEANOGRAPHIC COMMISSION
IODE	INTERNATIONAL OCEANOGRAPHIC DATA AND INFORMATION EXCHANGE
ISO	INTERNATIONAL STANDARDS ORGANISATION
MODIS	MODERATE RESOLUTION IMAGING SPECTRORADIOMETER
NDSP	NATIONAL DRYLAND SALINITY PROGRAM
NGDB	NATIONAL GEODETIC DATA BASE
NLWRA	NATIONAL LAND AND WATER RESOURCES AUDIT
NMD	NATIONAL MAPPING DIVISION
NNTT	NATIONAL NATIVE TITLE TRIBUNAL
NOAA	NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NOO	NATIONAL OCEANS OFFICE
NTA	NATIVE TITLE ACT
NVIS	NATIONAL VEGETATION INFORMATION SYSTEM
OSDM	OFFICE OF SPATIAL DATA MANAGEMENT
PWG	PRIVACY WORKING GROUP
RAN	ROYAL AUSTRALIAN NAVY
RV	RESEARCH VESSEL
SDI	SPATIAL DATA INFRASTRUCTURE
SDMG	SPATIAL DATA MANAGEMENT GROUP
SDPE	SPATIAL DATA POLICY EXECUTIVE
SEDWG	SOCIOECONOMIC DATA WORKING GROUP
SOFR	STATE OF THE FORESTS REPORT
WG	WORKING GROUP

