Australian Government

Defence Imagery and Geospatial Organisation

Geoscience Australia

Optical, Geospatial, Radar and Elevation Supplies and Services Panel (OGRE)

Annual Report 2011–2012

DEPARTMENT OF RESOURCES, ENERGY AND TOURISM

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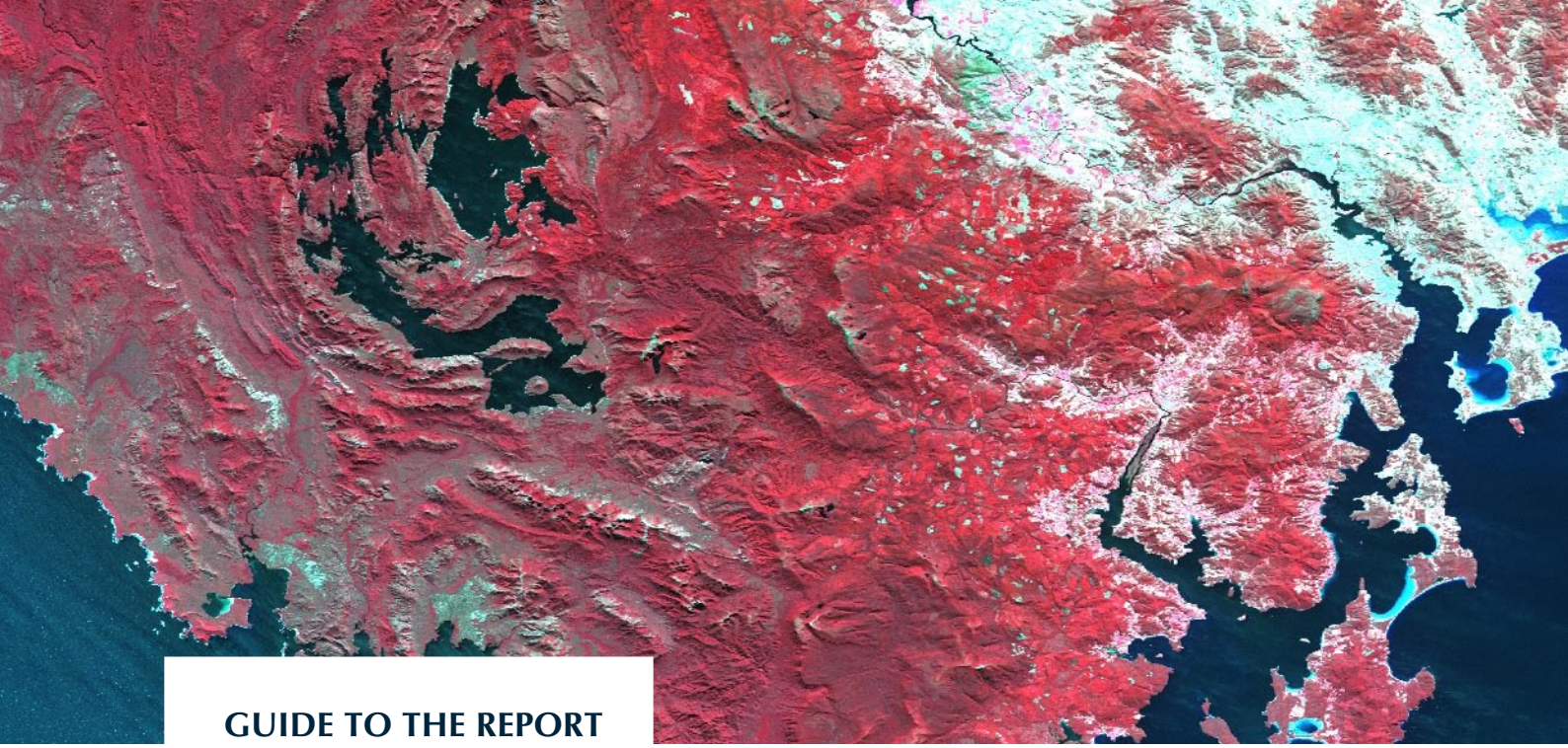
IMAGE CREDIT

Standard False Colour image of Tasmania, Australia from the SLIM-6-22 sensor on the UK DMC 2 satellite. Image date: 14 April 2012. Data supplied by DMC International Imaging Ltd. (DMCii) 2012 – Creative Commons Attribution 3.0 Australia (CC BY 3.0).



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ABOUT OGRE

The Optical, Geospatial, Radar, and Elevation Supplies and Services Panel (OGRE) is a cooperative procurement panel managed by Geoscience Australia. The OGRE was established to allow more efficient and effective acquisition and use of commercial data supplies and associated services, and to encourage greater coordination and cooperation within all levels of Australian Government.

OBJECTIVES OF THE OGRE

The objectives of the OGRE are to:

- provide a coordinated, efficient and effective approach to purchasing commercial optical, geospatial, radar and elevation data and services accessible to all levels of Australian Government
- provide access to data under more effective and consistent licence and copyright conditions, reducing barriers to sharing and re-use of data within government
- increase the coordination of archiving, discovery and dissemination of data and spatial information.

To facilitate these objectives Geoscience Australia manages the OGRE and a store of data acquired through the panel. Data stored by Geoscience Australia can be redistributed to OGRE Users subject to the Licensing Conditions under which it was acquired. Provision for uplifting licences to allow for additional users can also be facilitated by Geoscience Australia.

OGRE FUNCTIONS

Geoscience Australia provides the following **management** functions:

- management of the OGRE Deeds, Licensing Conditions and Project Agreements
- management of the Earth Observation Data Store
- management of the OGRE Community of Practice.

Geoscience Australia provides the following **governance** functions:

- facilitation of the OGRE Steering Committee
- facilitation of the OGRE User Advisory Committee.

Geoscience Australia provides the following **procurement** functions:

- notification of approaches to market via AusTender
- notification of cooperative procurement opportunities
- Statement of Requirement and Request for Quotation assistance.

Geoscience Australia provides the following **procurement review** functions:

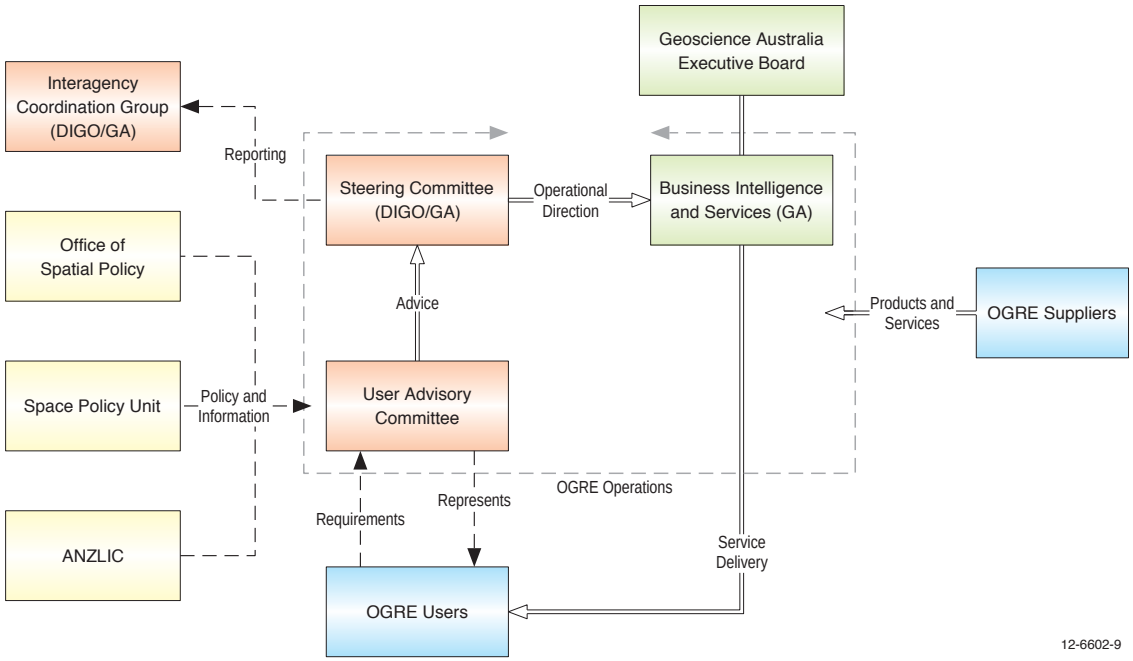
- evaluation of suppliers' eligibility to participate
- evaluation of suppliers' licensing conditions.

Geoscience Australia provides the following **data compliance** functions:

- virus check - all files are scanned with antivirus software
- data compliance check - all files are matched against the Supplier's dispatch note and the User's Statement of Requirement
- spatial extents check - all files are matched against the area of interest specified in the User's Statement of Requirement
- dispatch note – the dispatch note details the quality checks.

OGRE GOVERNANCE

The OGRE is a Geoscience Australia (GA) and Defence Imagery and Geospatial Organisation (DIGO) initiative. Operational support for the OGRE is provided by Business Intelligence and Services (BIS) staff within the Environmental Geoscience Division (EGD). The following diagram illustrates the governance structure of the OGRE panel.



STEERING COMMITTEE

The role of the Steering Committee is to:

- set the strategic direction for the operation of the OGRE
- ensure that the OGRE is operated in a manner that meets the relevant strategic objectives of the Australian Government, the Defence Imagery Geospatial Organisation and Geoscience Australia
- take responsibility for the feasibility, business plan and achievement of outcomes for the OGRE.

USER ADVISORY COMMITTEE

The role of the User Advisory Committee (UAC) is to:

- advise Geoscience Australia on the operation of the OGRE Panel
- ensure that the OGRE is operated in a manner that meets user expectations and requirements
- act as a Community of Practice for OGRE Users.

All OGRE Users are eligible for a seat on the UAC. However, it is expected that each Agency will be represented by a single committee member.

THE YEAR IN REVIEW

CONTRACTS AWARDED

During the 2011/12 Financial Year, the panel executed 31 contracts to the value of $3,261,306 and procured 15 terabyes of data. Of the procured data, 657.86GB at a value of $415,423 was redistributed to four agencies at cost of transfer.

SUPPLIER AND PROCUREMENT AGREEMENTS

During the 2011/12 Financial Year, the number of suppliers to the OGRE increased from 27 to 35 companies. The number of Australian government agencies with formal agreements to use the OGRE doubled, from 4 to 8. The current list of OGRE users includes:

- Geoscience Australia
- Defence Imagery and Geospatial Organisation (DIGO)
- ACT Planning and Land Authority
- Department of Human Services
- Murray Darling Basin Authority
- National Capital Authority
- Australian Federal Police
- Office of the Renewable Energy Regulator

DISASTER RESPONSE

During the February – April flood event Geoscience Australia's National Earth Observation (NEO) group coordinated the purchase of commercial satellite imagery for the NSW and Queensland (Qld) state governments using the OGRE. GA and DIGO contributed financially to some of the purchasing, helping to ensure the data was acquired at whole of government level.

Data was acquired from:

- Astrium (SPOT4, SPOT5 and Deimos-1)
- Fugro (Cosmo Skymed)
- Geospatial Intelligence (Radarsat-2)

The data were used to:

- map changes in floodplain behaviour in both Qld and NSW
- detect illegal levies in floodplain systems
- map the extent of flooding to help determine its immediate impact and to help prepare for future impacts on major projects
- map the extent of flooding to help determine the extent of floodplains for environmental work (this was mainly for NSW Office of Environment and Heritage)
- map the Warragamba catchment to help determine sediment loads and update the Sydney Catchment Area mapping in general.

Data has since been requested by NSW Office of Water to help with water compliance mapping.

COMMERCIAL MEDIUM RESOLUTION IMAGERY

The procurement of commercial medium resolution imagery and its release under a Creative Commons Licence BY 3.0 was successfully arranged through the OGRE Panel. The acquisition of this data will provide continuation of medium resolution imagery over Australia to help 'gap-fill' for Landsat 5, which is no longer observing over Australia. DMC International Imaging Ltd, the supplier agreed to release this imagery under the same conditions as Landsat imagery. For all enquiries contact earth.observation@ga.gov.au.

METADATA DICTIONARY

In March 2012, Geoscience Australia and the OGRE User Advisory Committee invited suppliers to comment on the OGRE Metadata Dictionary.

The OGRE Metadata Dictionary describes a standardised XML schema for remote sensing metadata. Geoscience Australia and the Australian Government Agencies that compose the OGRE User Advisory Committee hope that suppliers will adopt the standard for the provision of metadata to the OGRE Panel.

As Geoscience Australia works to establish a national archive of remote sensing data procured through the Panel it is essential that it take a systematic approach to capturing metadata to ensure the data is easily discovered and obtained by users of the archive. In practice, metadata for remote sensing data is supplied in a variety of file formats and schemas. While this reflects the idiosyncratic nature of the industry it does mean that the organised archiving, discovery and delivery of remote sensing data is made difficult. The OGRE Metadata Dictionary, together with XML generation tools being developed by GA will provide suppliers with a simple and practical way of providing metadata in a standardised format.

DATA DISTRIBUTION MAP

In April 2012, Geoscience Australia released the OGRE Data Distribution map which shows the spatial extent of the data procured via the Panel. The Data Distribution map uses Google Maps and Google Fusion Tables technology, and is accessible via the Geoscience Australia website at http://www.ga.gov.au/earth-observation/ogre/data-distribution.html. Government agencies can contact Geoscience Australia at OGRE@ga.gov.au to discuss the redistribution of this data.

REFRESH MODEL

In February 2012, Geoscience Australia altered the OGRE refresh model, the process by which new suppliers are invited to submit expressions of interest in joining the Panel. The practical implication of this change is that suppliers can apply to join the OGRE at any time throughout the year.

OGRE OPEN DAY

The inaugural OGRE Open Day was held on 30 November 2011 at the Manuka Oval, Manuka, Canberra ACT. The Open Day was attended by over 70 representatives from 29 Government agencies and organisations. The day was opened by Dr Adam Lewis, Group Leader, National Earth Observation Group (GA) with the welcome address presented by Drew Clarke, Secretary, Department of Resources Energy and Tourism and the (then) Director of the Defence Imagery Geospatial Organisation, Steve Meekin.

BUSINESS PROCESS REVIEW

Also in February 2012, GA conducted a review of BIS operational processes. The goal of this review was assess GA's delivery of Public Good data (data downlinked from international satellite operators) and the use of the OGRE Panel and identify areas for improvement.

PROPOSED REVISION OF SERVICES

During the Business Process Review several key areas of OGRE operations were identified as being in need of review and development to deliver improved services to users of the Panel. The recommended changes to OGRE operations will be considered by GA during the 2012–13 financial year as part of a proposed revision of OGRE services.

CLIENT AGREEMENTS

Under the current arrangements, any client who wishes to purchase information and/or services through the OGRE panel must first sign a client agreement. The preparation of these agreements (and their subsequent management) is generally seen as quite onerous and adding little value to the process of using the panel. The recommendation from the review is that these 'up-front' agreements be retired in favour of project agreements for complex procurements only.

OGRE DEEDS

The Deed signed by OGRE Panel suppliers has evolved over the course of the panel's operation. The deed in place today consists of the base deed in addition to a number of variations. The recommendation from the review is that the current Deed be revised to ensure it has correct legal standing, is structured so that it allows for the retirement of the up-front client agreements and includes clear and concise information about the supplies and services each supplier will provide to the panel.

DEVELOPMENT OF THE COMMUNITY FORUM

Users of the OGRE Panel are currently provided with a seat on the User Advisory Committee and access to the OGRE Govdex workspace. OGRE users are encouraged to use these forums to engage with GA and other OGRE users as part of the OGRE Community of Practice. The function of the Community of Practice is to develop specifications for cooperative procurements, discuss open licensing arrangements and advise GA on the operation of the Panel. The recommendation from the review is that the Community of Practice be broadened to include discussion with suppliers and other Government agencies who do not currently use the OGRE.

DEVELOPMENT OF A SHARED KNOWLEDGE BASE

Given the variety of projects making use of the OGRE there is an excellent opportunity to gather procurement and technical information. The recommendation from the review is to develop a shared knowledge base to capture this information so that it can inform future procurements.

DEVELOPMENT OF AN IMAGERY REGISTRY

A key benefit of the OGRE project is the reduction in the number of duplicate imagery purchases across the Australian government. This is achieved through the sharing of information about current and forthcoming procurements within the Community of Practice and the redistribution of procured data to Australian government agencies. The review noted that a registry of purchases, that could be accessed without the need to engage the procurement panel would further expand the awareness of the Australian government with respect to imagery holdings.

DEVELOPMENT OF A SERVICE CATALOGUE

During the business process review both users and staff highlighted the need for a clearer understanding of the services provided by GA to users of the panel. The recommendation from the review is to develop a catalogue comprising services provided by GA to panel users and also the supplies and services available from the panel suppliers.

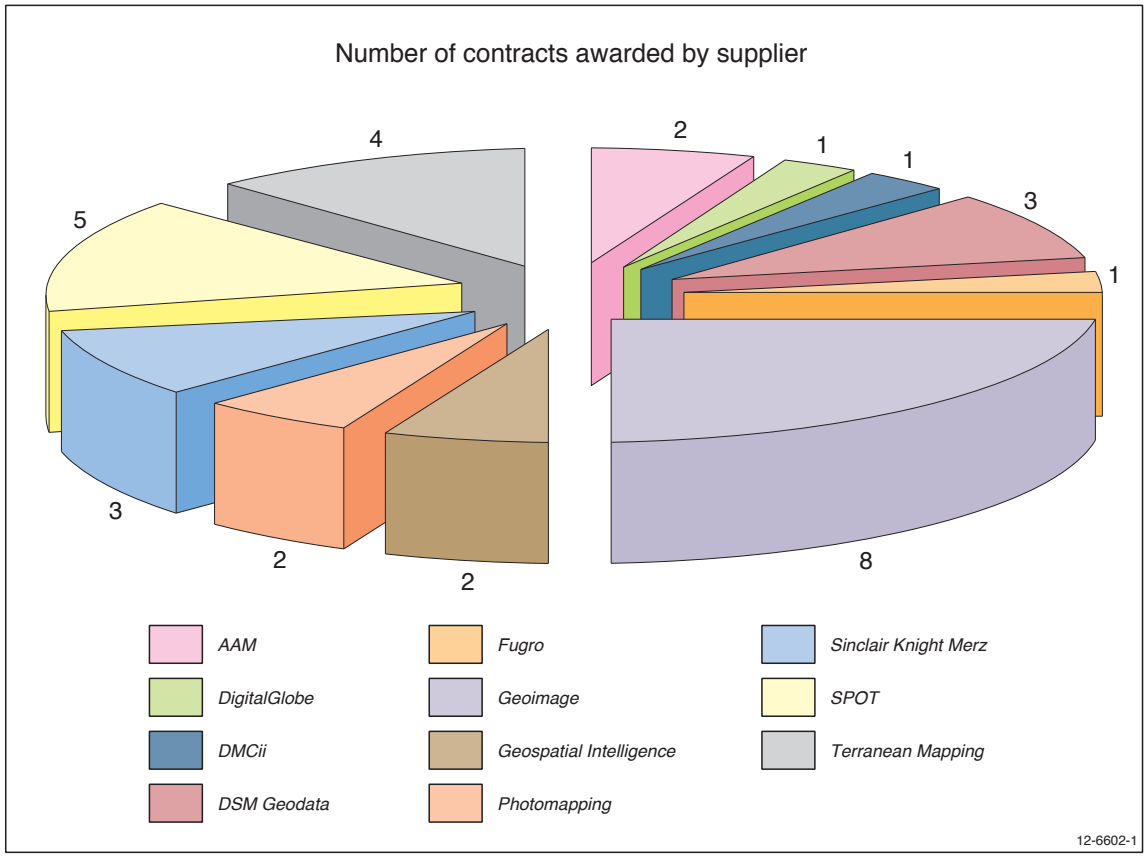
PERFORMANCE OVERVIEW

During the 2011/12 Financial Year, the panel executed 32 contracts to the value of $3,261,306 and procured 15 terabytes of data. Of the procured data, 657.86GB at a value of $415,423 was redistributed to four agencies at cost of transfer.

The 2011/12 performance compares favourably to the previous financial year in which the OGRE made 16 approaches to market and awarded 20 contracts to 11 suppliers for a total value of $3,356,363. The procurements made totalled over 4 terabytes of data.

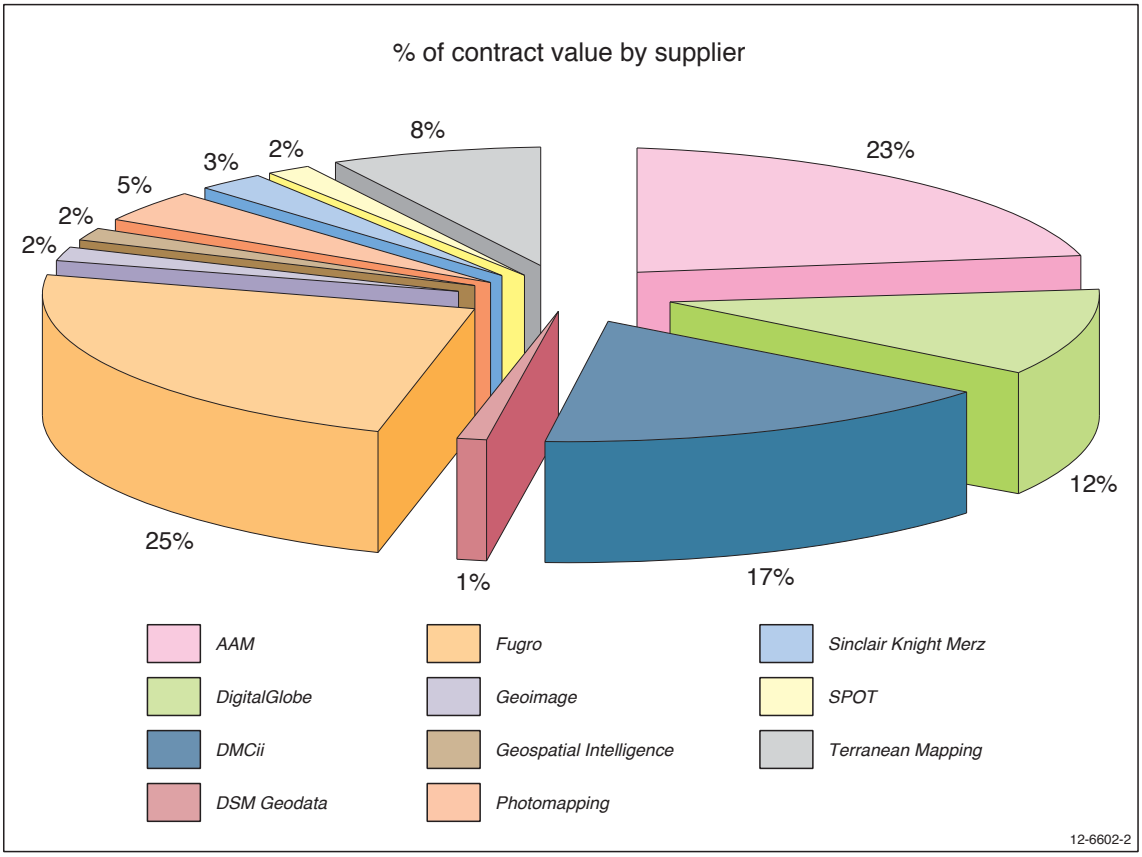
CONTRACTS AWARDED BY SUPPLIER

In 2011–12, the OGRE executed 32 contracts distributed across 11 suppliers.



CONTRACTS AWARDED BY PERCENTAGE OF TOTAL VALUE

The value of the contracts awarded during 2011/12 totalled $3,261,306.



DATA VOLUMES AND REDISTRIBUTION

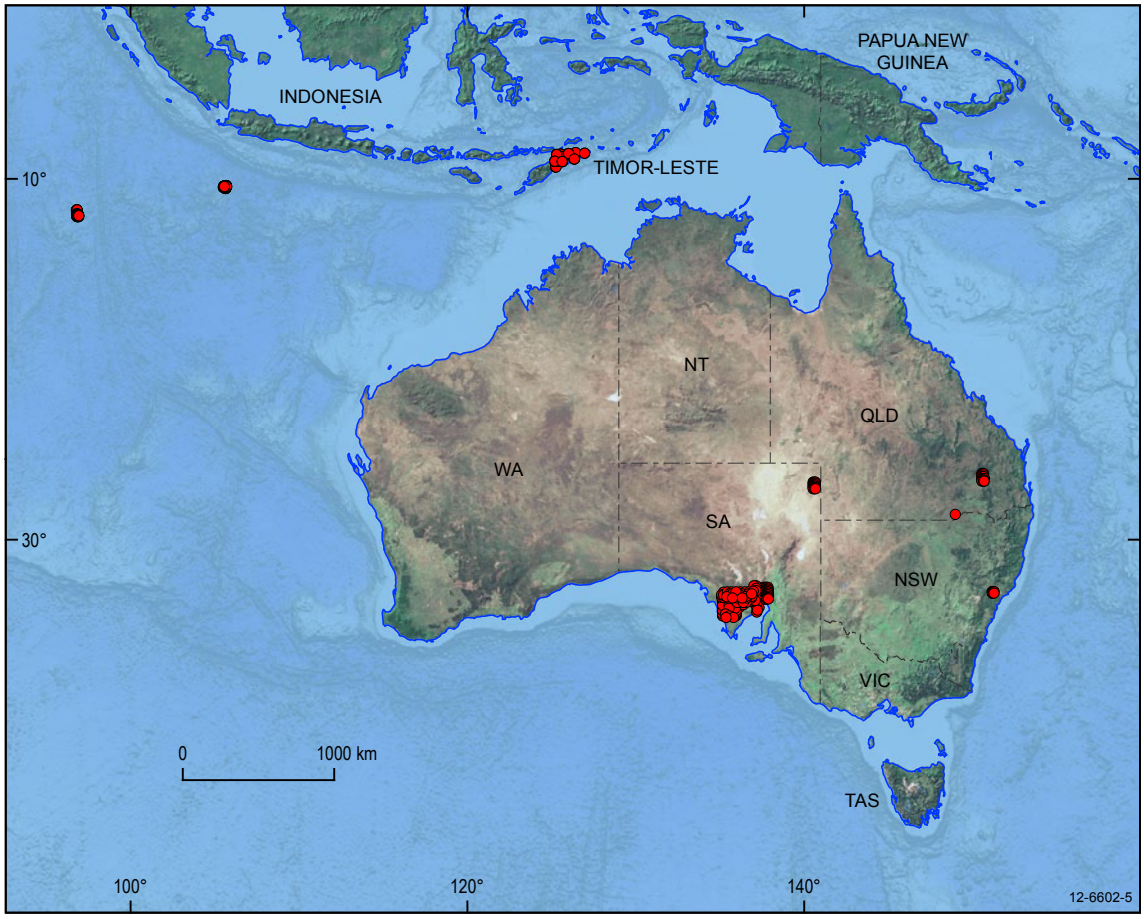
During the 2011/12 Financial Year, over 15 terabytes of data was procured using the OGRE. Of the procured data, 657.86GB at a value of $415,423 was redistributed to four agencies at cost of transfer. Of the received data, 355.25 gigabytes have been archived in the Earth Observation Data Store (EODS) and is available for redistribution to OGRE users.

REDISTRIBUTION

Data can be redistributed to OGRE Users subject to the licensing conditions under which it was acquired. Provision for uplifting licences to allow for additional users can also be facilitated by Geoscience Australia. The 657.86GB of data that has been redistributed to date represents only a small proportion of the available data and was supplied to two Agencies with a common project requirement. Agencies interested in exploring the range of data available for redistribution should visit www.ga.gov.au/earth-observation/ogre/data-distribution.html (search: OGRE GA distribution) and contact OGRE@ga.gov.au for information about licensing and availability.

VERY HIGH RESOLUTION COVERAGE (UP TO 1 METRE RESOLUTION)

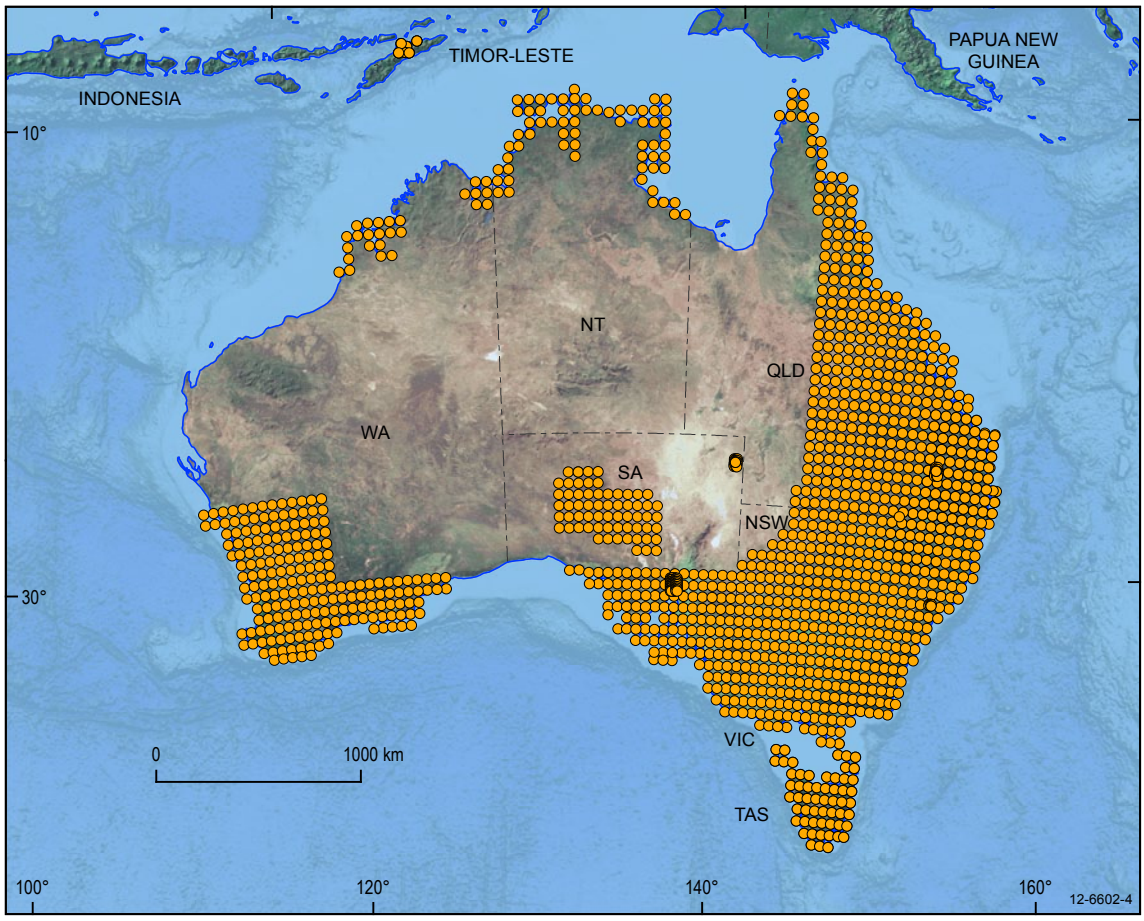
The Earth Observation Data Store (EODS) contains over 20,000 square kilometres of imagery (satellite and aerial) at sub-metre resolution acquired using the OGRE.



● *Very high resolution (<1 metre)*

HIGH RESOLUTION COVERAGE (1 TO 5 METRE RESOLUTION)

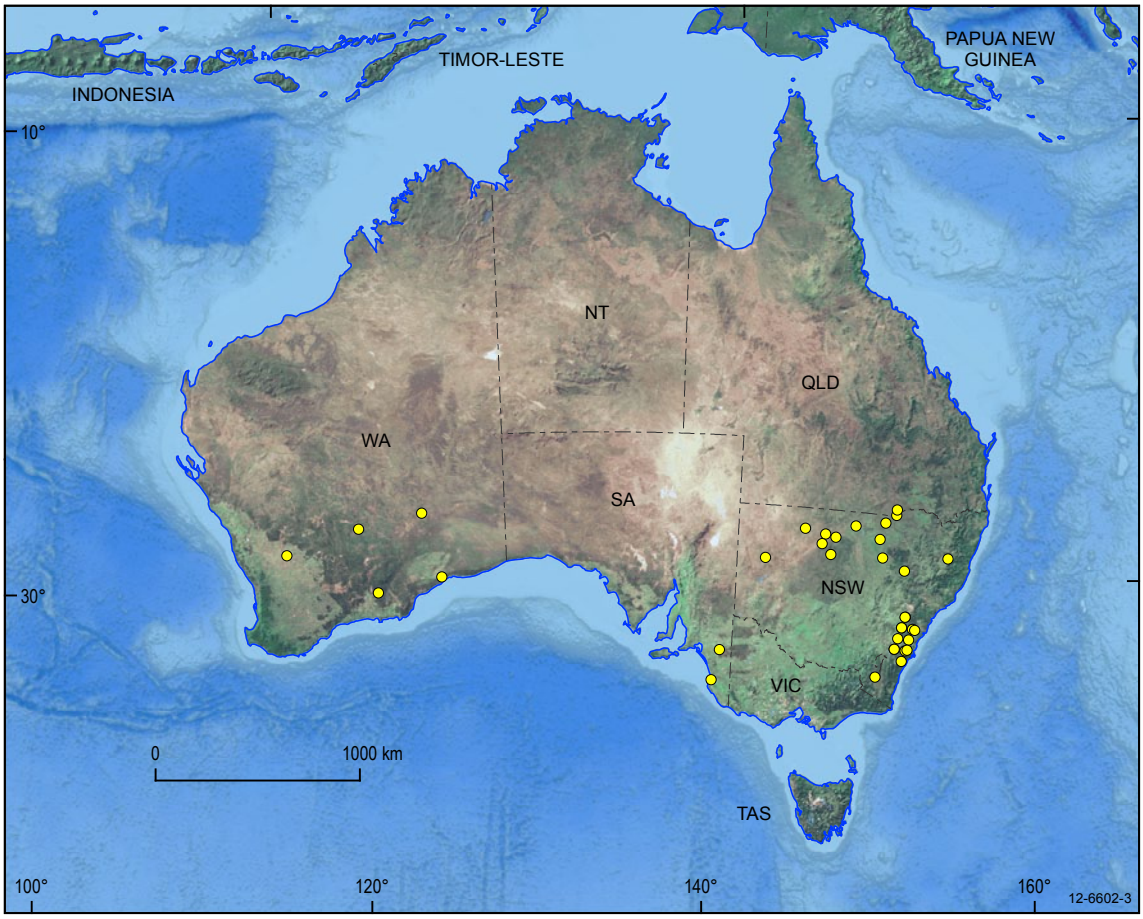
EODS contains over 3.5 million square kilometres of satellite imagery at one to five metre resolution which is available under an all of Australian government licence.



High resolution (1–5 metres)

MEDIUM RESOLUTION COVERAGE (5 TO 25 METRE RESOLUTION)

EODS currently contains a small amount of satellite imagery at 5 to 25 metre resolution acquired using the OGRE. The amount of imagery at this resolution is expected to increase greatly over the next 6–12 months with the addition of 3-band (green, red, near infrared) multi-spectral DMCii data covering most of Australia. The DMCii data will be available under a Creative Commons Attribution licence (CC-BY).



Medium resolution (5–25 metres)

ACCESSING THE OGRE

All levels of Australian Government are eligible to become Users of the OGRE, including:

- federal government departments, agencies, authorities and companies (including the Australian Defence Force)
- state and territory government departments, agencies, authorities and companies
- local and municipal government departments, agencies, authorities and companies
- other entities with responsibility for managing natural resource management regions.

In general, non-government organisations are not eligible to use OGRE and should procure imagery/geospatial data through other channels.

USING THE OGRE

To become a User of the OGRE eligible government agencies are required to have a Project Agreement under the National Collaborative Framework (NCF) in place with Geoscience Australia. Copies of the NCF Collaborative Head Agreement and the OGRE Project Agreement are available from Geoscience Australia and can be requested by contacting OGRE@ga.gov.au.

Agencies must ensure that use of the OGRE complies with their own internal policies and legislative requirements.

OGRE SUPPLIES AND SERVICES

Australian Government agencies can procure a range of commercial optical, geospatial, radar and elevation supplies and services through the OGRE.

Examples of supplies and services currently available through the OGRE are:

- High resolution orthorectified imagery
- Medium resolution national mosaic imagery
- Colour balancing
- Change detection
- Road centre line dataset
- Topographic data
- Map interface development
- Spatial metadata development
- Persistent regional surveillance
- Deformation studies
- Oil slick detection services
- High resolution elevation data
- Digital Elevation Model (DEM)
- Contour generation
- Flight path analysis
- Geospatial consultancies

The supplies and services available through the OGRE will change as suppliers are added to the panel. For up-to-date information on the current range of supplies and services available contact OGRE@ga.gov.au.

OGRE DATA DISTRIBUTION

Geoscience Australia maintains a store of data procured using the OGRE. This data can be redistributed to OGRE Users subject to the Licensing Conditions under which it was acquired. Uplifting licences to allow for additional users can also be facilitated by Geoscience Australia.

Information on the type and coverage of the data procured using the OGRE is available from Geoscience Australia. Contact OGRE@ga.gov.au for details.

OGRE SUPPLIERS

OGRE suppliers are listed on AusTender under the Standing Offer Notice SON355807.

JOINING OGRE AS A SUPPLIER

Companies can apply to become OGRE suppliers at any time. Prospective suppliers must complete the documentation in the OGRE Supplier Information Pack and submit it to Geoscience Australia (GA). Questions about the OGRE Supplier Information Pack and completed documentation can be directed to OGRE@ga.gov.au.

OGRE SUPPLIER INFORMATION PACK

The OGRE Supplier Information Pack includes the following documents that must be reviewed and completed before an empanelment application can be processed:

- Conditions of Response
- DRAFT Deed
- Deed Obligations Information
- Metadata Requirement
- Overseas Respondent's Information
- Quality Assurance Information
- Respondent's Corporate Details
- Respondent's Declaration
- Respondent's Experience Response
- Respondent's Insurance Details
- Respondent's Referees
- Technical Information

EMPANELMENT APPLICATION PROCESS

Once the completed documentation has been submitted it will be considered by GA.

Providing the documentation has been completed and submitted correctly and GA has no concerns about a prospective supplier's suitability or ability to meet stated technical and delivery capabilities the company will be empanelled as an OGRE Supplier.

REFERRAL TO THE USER ADVISORY COMMITTEE

In the event that GA has reservations about the empanelment of a prospective supplier the application will be referred to the OGRE User Advisory Committee (UAC) for review. The UAC will be asked to make a recommendation on the empanelment.

If the UAC recommends that the supplier be empanelled GA will review the Committee's recommendation and reconsider the supplier's application. If Geoscience Australia considers the UAC has addressed its concerns regarding the application then the supplier will be empanelled.

If the UAC does not recommend empanelment or has not fully addressed GA's concerns, GA will ask the company to respond to reservations about the application. Providing the supplier is able to adequately address GA's concerns it will be empanelled as an OGRE Supplier.

OGRE LICENSING CONDITIONS

Four licensing levels apply to imagery purchased through the Optical, Geospatial, Radar and Elevation (OGRE) data and services panel. The following table summarise the licensing conditions. For details of the full text of the licensing terms and conditions please contact OGRE@ga.gov.au.

Table 1. OGRE Licence Levels

Licence	Description
CC-BY **Creative Commons Attribution 3.0 Australia** 	This license lets others distribute, remix and build upon a work, even commercially, as long as they credit the original creator/s (and any other nominated parties). This is the most accommodating of the licenses in terms of what others can do with the work. http://creativecommons.org/licenses/by/3.0/au/ http://creativecommons.org/licenses/by/3.0/au/legalcode
Level A	Ownership of Foreground IP vests in Geoscience Australia or the Agency submitting the Official Order (Agency). No limits as to use, exploitation, reproduction, adaptation or sublicensing of Foreground IP.
Level B	Ownership of Foreground IP vests in the Contractor. The Contractor grants a perpetual, irrevocable, royalty-free, worldwide, non-exclusive licence (including a right of sub-license) for the Foreground IP to be used, reproduced (including by displaying on a secure network at full resolution and on a public website, for viewing only), adapted and exploited, except for commercial purposes, by the licensees and persons and companies undertaking services for, on behalf of, or in collaboration with the licensees. The licence is granted to all of the following: • Australian government departments, agencies, authorities and companies (including the Australian defence force); • state and territory government departments, agencies, authorities and companies; • local/municipal government departments, agencies, authorities and companies; and • other entities with responsibility for managing natural resource management regions.
Level C	Ownership of Foreground IP vests in the Contractor. The Contractor grants a perpetual, irrevocable, royalty-free, worldwide, non-exclusive licence (including a right of sublicense) for the Foreground IP to be used, reproduced (including by displaying on a secure network at full resolution and on a public website, for viewing only), adapted and exploited, except for commercial purposes, by the licensees and persons and companies undertaking services for, on behalf of, or in collaboration with the licensees. The licence is granted to Australian government departments, agencies, authorities and companies (including the Australian defence force).
Level D	Ownership of Foreground IP vests in the Contractor. The Contractor grants a perpetual, irrevocable, royalty-free, worldwide, non-exclusive licence (including a right of sublicense) for the Foreground IP to be used, reproduced (including by displaying on secure network at full resolution and on a public website, for viewing only), adapted and exploited, except for commercial purposes, by the licensees and persons and companies undertaking services for, on behalf of, or in collaboration with the licensees.