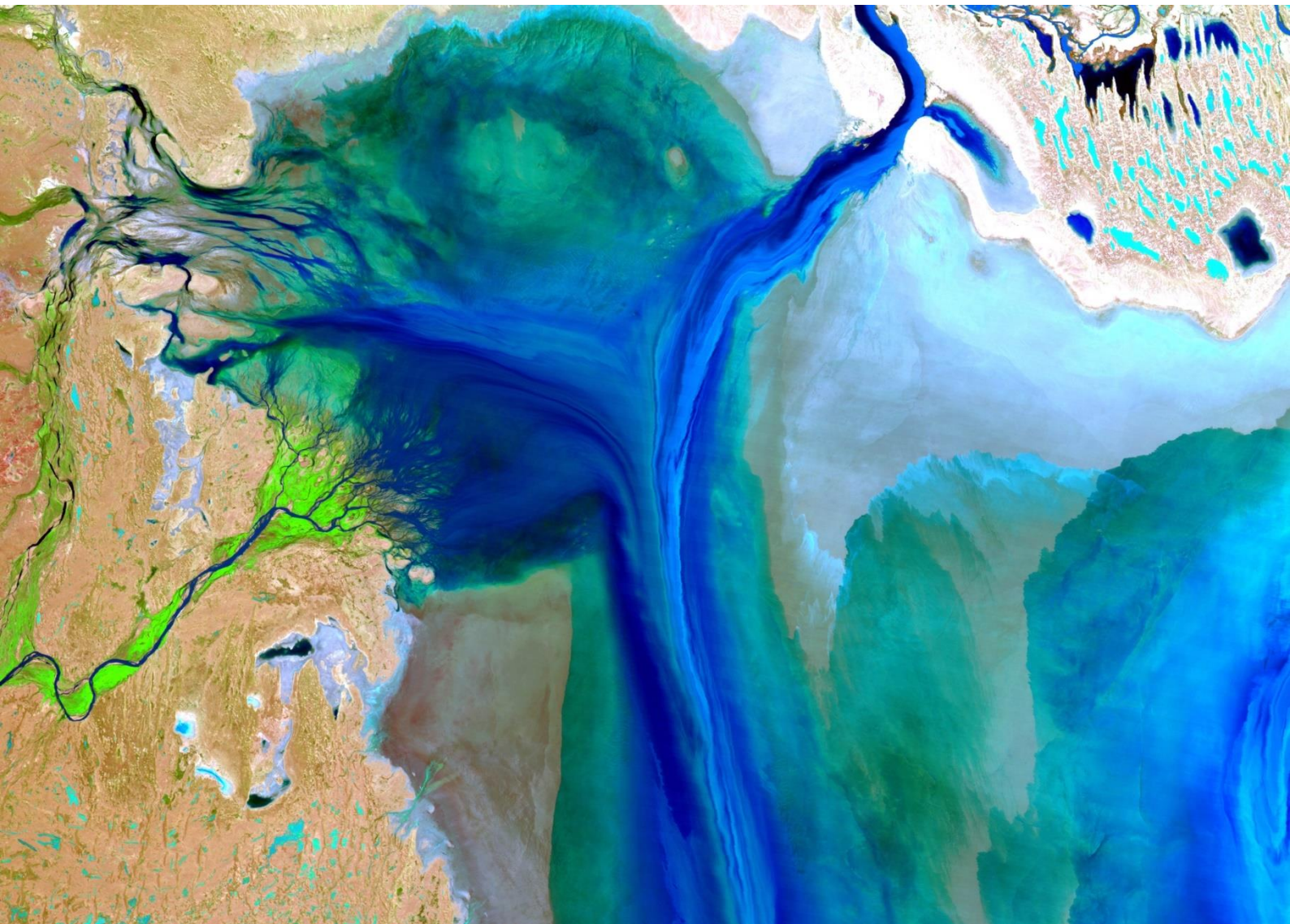


# 2019/20 Annual Report



Landsat 5 image of Lake Eyre, South Australia. Image provided by Geoscience Australia.

## Executive Summary

### About EOA

Earth Observation Australia Inc. (EOA) is a not-for-profit organisation whose members are individuals with an interest in Earth Observation (EO).

EOA is guided by five priority actions - Connection and Coordination, Securing Australia's Role in the International Earth Observation Community, Infrastructure and People, Access to Earth Observation Data and Services, and Generating Value – which were defined in the [Australian Earth Observation Community Plan 2026](#) (the Plan). That Plan is now directly linked to the Australian Space Agency's Civil Space Priority Roadmap for Earth observation.

### Governance and Membership

During the 2019/20 financial year, EOA was governed by an Executive Management Team of three, holding the positions of President, Vice President and Secretary/Treasurer. The Non-Executive Management Team was initially comprised of 13 members, with one member (Dr Adam Steer) resigning in February 2020.

Membership to EOA is free and open to anyone interested in Earth observation, irrespective of their affiliation, career stage, culture, application, or geographic location. As at June 2020, EOA had 524 members, who reflect the diversity and ubiquitous nature of EO information in Australia, with representatives from research, education, all levels of government, professional organisations, media and publications, non-government organisations (NGOs), not for profit organisations (NFPs), defence, interest groups, large business, start-ups, and small and medium enterprises.

Most membership representation is from the research and education sectors (43.82%), followed by state, territory, and local governments (15.06%) and then SMEs<sup>1</sup> (12.58%). Geographically our membership is spread across all states and territories in Australia with most members residing in Queensland (27.64%), New South Wales (24.49%) and Victoria (16.63%).

### Financial and In-Kind Support

To-date all financial and in-kind support has been provided by

- The University of Queensland's Remote Sensing Research Centre for operational, secretariat, communications, and engagement support, and as host of the registered office of EOA,
- The Joint Remote Sensing Research Program for operations, secretariat, communications, and engagement support, and
- Geoscience Australia for support of EOGN and EOA activities.

In addition, all activities by the EOA Management Committee have been provided on a voluntary basis by its members.

EOA gratefully acknowledges and sincerely thanks the support provided by the groups listed above, as we would not have been able to function and indeed exist without it.

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<sup>1</sup> Small and medium enterprises (SMEs) are defined as commercial organisations with less than 200 employees and include micro businesses, sole traders, consultants, and start-ups.

## Primary Activities

EOA activities during this period included the delivery of 11 community events (six online Whole of Community webinars, four emailed newsletters, and one online technical webinar), three Earth Observation for Government Network (EOGN) workshops, planning of the inaugural Advancing Earth Observation Forum (AEO 2021), presentations and attendance at four national events, two submissions (to the Earth Observation Bushfire Taskforce and the Earth Observation Civil Space Priority Roadmap), and representation by a number of our Management Committee members on national and international boards and committees.

The activities that were most disrupted by the 2020 travel and public gathering restrictions imposed by the Australian and Queensland governments in response to the COVID-19 pandemic, were the EOGN workshops and AEO 2021:

- The first EOGN workshop was held face-to-face in Canberra in August 2019, however the second and third workshops were held online, and
- AEO 2021 was originally scheduled from 28 September to 2 October 2020 but was postponed until 23 to 27 August 2021.

## Future Directions

The future directions of EOA are driven by our vision to provide a venue for the inclusive collaboration, communication, cooperation, and engagement of Australia's diverse EO community. In support of this vision and our strategic direction as defined in the Australian Earth Observation Community Plan 2026, it is our intention to further develop or embark on the initiatives that:

- Represent our on-going commitment to diversity and equity in how we operate,
- Acknowledge the traditional owners of the lands and waters we work in across Australia and link indigenous approaches into our work,
- Continue to provide informative, relevant, and regular community activities,
- Host and deliver a successful, informative, entertaining, and collaborative inaugural forum,
- Establish working groups within the Management Committee and the wider member audience that promote and progress specific EO activities,
- Develop mutually beneficial relationships with professional associations and/or associated groups, and
- Collaborate and engage with Commonwealth and State and Territory government and research initiatives that benefit our members.

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## EARTH OBSERVATION AUSTRALIA INC.

Earth Observation Australia Inc. (EOA) is a not-for-profit organisation whose members are individuals with an interest in Earth Observation.

### Mission

'By 2026, the Australian Earth Observation sector will develop and deliver high-quality Earth Observation information, infrastructure, and services that are used widely by government, industry, research and the community in Australia and internationally.'

Early in our inception, our forward-looking [Australian Earth Observation Community Plan 2026](#) was developed (through community consultation) to progress this mission by way of five priority areas of action:

1. Connection and Coordination — establishing a consistent vision within the Australian Earth Observation community, and delivering processes for internal coordination to ensure effective collaboration, resource use, and advocacy for Earth Observation in Australia and internationally.
2. Securing Australia's Role in the International Earth Observation Community — Australia must be an essential component of the international Earth Observation capability, delivering benefits to the international community and securing our access to and involvement in international Earth Observation programmes.
3. Infrastructure and People — developing, supporting and sustaining a wealth of trained professionals and quality infrastructure to enable world-leading Earth Observation research, innovation and application development.
4. Access to Earth Observation Data and Services — ensuring all Australian Earth Observation producers and users can easily and reliably access the data and services they need.
5. Generating Value — strengthening end-user engagement to enable delivery of high quality Earth Observation products and services suited to user needs, and supporting commercial development of Earth Observation applications.

Australia's active Earth Observation (EO) community is distributed across defence, research and education, government, private industry, and non-government organisations. EOA enables these disparate organisations to impartially connect, learn, share and work to grow capability and improve essential EO activities and services for the future.

A coordinated and consistent approach is essential to:

- Strengthen Australia's competencies and growing capabilities in Earth observation,
- Support Australia's professional reputation and recognition in the international EO arena and to give back to the global EO community,
- Link civil and defence applications for dual use, public good, and sovereign capability to lower the risk to Australian industry and government, and
- Support the Australian Space Agency (ASA) whose responsibilities include the coordination of civil space matters.

### History

Earth observation - a suite of activities used to gather data about the earth from satellites, aircraft, remotely piloted systems and more - is ever increasingly underpinning decision-making. This need has driven rapid expansion in the number and variety of research, processing, innovation, and collection bodies who service it. The technology is also rapidly changing and developing.

Since its 2013 inception, from the common vision of colleagues who saw the need for a unifying focus within this developing and complex industry, EOA has grown significantly. We are a community of more than 500 members, we host whole-of-community events and webinars regularly and are hosting the inaugural Advancing Earth Observation Forum (AEO 2021) in August 2021, with the aims of connection, coordination, engagement, and capacity building.

During the 2019/20 financial year, EOA formalised its legal structure by becoming an Incorporated Association in Queensland and an Australian Registered Body.

This model of a not-for-profit, incorporated body was chosen to minimise setup costs and provide a framework that would allow EOA to generate sufficient revenue to maintain a defined business premise and reduce reliance on in-kind and volunteer capacity.

The model accommodates EOA's need to:

- Operate nationally and through a formal governance structure,
- Operate with the appropriate tax and operational structures to allow revenue from a variety of streams including philanthropic and grant funding, corporate sponsorship, government grants, and paid community facilitation activities through contract projects, training, and events,
- Maintain free membership, which is seen as critical to maximise membership involvement from grass roots EO users, students, and non-government organisations through to large corporate organisations and government agencies,
- Directly employ staff, and
- Be formally recognised by Government agencies in Australia and internationally as representing Australia's Earth Observation Community.

This document represents the inaugural Annual Report of the formal entity: Earth Observation Australia Inc.

In creating this report, our intention is to:

- Gratefully acknowledge and thank the in-kind and financial support of the University of Queensland,
- Gratefully acknowledge and thank the financial support and cooperation of Geoscience Australia,
- Gratefully acknowledge and thank the voluntary activities of the 2019/20 Management Committee,
- Present a summary of our membership,
- Present an overview of the 2019/20 activities of EOA,
- Present the 2019/20 financial report, and
- Present an overview of EOA's planned future activities in 2021, aligned to the future strategic direction of EOA as defined in the Plan.

Contributors to this report are acknowledged on page 22.

## MESSAGE FROM THE PRESIDENT

2019-20 has been a huge year for all of us, and EOA has progressed through several major changes in this time.

EOA's ongoing functioning and impact is the result of a lot of work by a small group of key people, working with a highly cooperative, diverse and dispersed set of people and organisations that make up Australia's diverse EO communities. Our diversity in organisational types (local-state-national governments, research, education, non-government organisations, not for profit organisations, start-ups, small and medium enterprises, large companies, multi-national companies, and defence forces), gender, career stages and professional qualifications is our strength – by developing a way to listen, build understanding and communicate together we are beginning to achieve the support required to deliver on our short and long term goals. Those goals are set out in the [Advancing Australia's Earth Observation Community Plan 2026](#) and we have made several major steps sideways, backwards, but mainly forwards in achieving these.

The main progress activities are listed below, and expanded on in this report. As a community we should reflect on what we have achieved with so little resourcing, but a lot of cooperation – and focus on the next stage to ensure we can support the continued development and provision of EO capabilities for Australia, which are essential parts of our government, industry, research, defence, and overall society.

EOA's main achievements in 2019-2020 have been:

- Development and delivery of highly popular community webinars and associated resources,
- Development and funding of the inaugural [Advancing Earth Observation Forum 2021](#),
- Implementation of the [Earth Observation for Government Network](#) for Australia,
- Development and delivery of Australian EO-Government to Industry workshop at the GEO Plenary in Canberra 2019,
- Providing coordinated input to the Australian Space Agency's National Civil Space Strategy, and development of the EO Roadmap and Bushfire Taskforce Response,
- Providing coordinated input on EO into the various State and Territory Space Strategies,
- Expanding the communication resources provided to the Australian EO community through regular newsletter and on-line resources, and
- Enabling development of national scale EO research to government and industry programs.

In closing I would like to acknowledge the support of our inaugural management committee (Professor David Antoine, Professor Arnold Dekker, Ms Agnes Lane, Dr Amy Parker, Dr Stefan Maier, Professor Graciela Metternicht, Dr Cindy Ong, Professor Andrew Skidmore, Dr Adam Steer, Dr Wendy Thompson, Ms Joanne Edkins, and Ms Sylvia Michael) in enabling us to develop and steer in the most appropriate directions, and our broader membership for engaging with us. EOA has been set up and transitioned from discussions with the Joint Remote Sensing Research Program (JRSRP) in 2013-14 to form the Australian Earth Observation Community Coordinating Group (AEOCCG), and since that time several people and organisations have enabled us to develop by providing extensive in-kind operational support for staff and facilities – The University of Queensland, JRSRP, the Queensland and New South Wales governments and Geoscience Australia. Over the last two years Ms Sylvia Michael and Ms Larissa Mar Fan have enabled us to expand our operations considerably and become a professional organisation. Lastly, EOA has been able to operate, become an incorporated body, and actually work due to the amazing effort of Jo Edkins, and on behalf of the community I would like to formally thank Jo for helping us create something that has led to real change and will keep doing so in the future.

Thank you again everyone for your support and we look forward to working with you next year!

Professor Stuart Phinn  
President, Earth Observation Australia Inc.



## EOA People

### Operations and Management

EOA has been extremely fortunate in the support and commitment of The University of Queensland's Remote Sensing Research Centre (RSRC) and the EOA Management Committee. All work to-date has been on a voluntary basis by all parties and is gratefully acknowledged.

In addition to providing the physical office space for EOA, the RSRC provided operations, secretariat, communications, and engagement support as detailed in the EOA Supporters section of this document.

### Executive Management Committee (formerly Steering Committee)

Name	Position	Dates Active
<b>Professor Stuart Phinn</b>	President	December 2017 to June 2020
<b>Ms Sylvia Michael</b>	Vice President	April 2019 to June 2020
<b>Ms Joanne Edkins</b>	Secretary/Treasurer	December 2017 to June 2020

### Non-Executive Management Committee (formerly Steering Committee)

Name	Affiliation	Dates Active
<b>Professor David Antoine</b>	Curtin University	December 2017 to June 2020
<b>Professor Arnold Dekker</b>	SatDek	December 2017 to June 2020
<b>Ms Agnes Lane</b>	Bureau of Meteorology	December 2017 to June 2020
<b>Dr Stefan Maier</b>	Maitec	December 2017 to June 2020
<b>Professor Graciela Metternicht</b>	The University of New South Wales	December 2017 to June 2020
<b>Dr Cindy Ong</b>	CSIRO	December 2017 to June 2020
<b>Dr Amy Parker</b>	CSIRO Centre of Earth Observation	December 2017 to June 2020
<b>Professor Andrew Skidmore</b>	ITC, The University of Twente and the Department of Environmental Science, Macquarie University	December 2017 to June 2020
<b>Dr Adam Steer</b>	Spatialised	December 2017 to February 2020
<b>Dr Wendy Thompson</b>	Western Australian State Government	December 2017 to June 2020

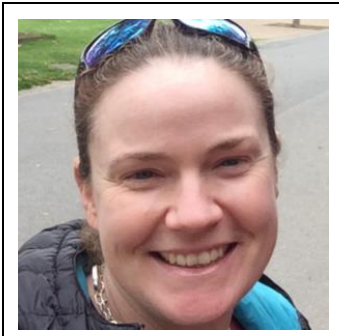
**Additional Support Provided By:**

Name	Affiliation	Dates Acted
<b>Ms Larissa Mar Fan</b> (National Earth Observation Partnerships Coordinator)	The University of Queensland	July 2019 to June 2020
<b>Ms Kerryn Molloy</b> (Science Communications)	The University of Queensland	July 2019 to February 2020

			
<p><b>Professor Stuart Phinn</b> President</p> <p>The University of Queensland Director of the Remote Sensing Research Centre at the School of Earth and Environmental Sciences, The University of Queensland</p> <p>Director of the Joint Remote Sensing Research Program</p> <p>Member of the Australian Aquawatch Project Management Team</p> <p>Program Director of Research Program 3, SmartSat CRC</p>	<p><b>Ms Sylvia Michael</b> Vice President</p> <p>Earth Observation Australia Inc.</p>	<p><b>Ms Joanne Edkins</b> Secretary/Treasurer</p> <p>The University of Queensland</p>	<p><b>Professor David Antoine</b></p> <p>Curtin University</p> <p>Senior Research Scientist at the Marine Optics and Remote Sensing Group of the Laboratoire d'Océanographie de Villefranche</p> <p>Member of the IOCCG</p> <p>Member of the ESA Sentinel 3 Validation Team</p> <p>Member of the Australian IMOS Science and Technology and Advisory Committee</p> <p>Member of the NASA GLIMR Science Team</p> <p>Member of the CEOS Cal/Val and IVOS Working Groups</p>

<p><b>Professor Arnold Dekker</b>                  Director, SatDek Pty. Ltd.                  Member of the Australian Aquawatch Project Management Team</p>	<p><b>Ms Agnes Lane</b>                  Bureau of Meteorology                  Lead of the World Meteorological Organisation (WMO) Team</p>	<p><b>Dr Stefan Maier</b>                  Director, Maitec</p>	<p><b>Ms Larissa Mar Fan</b>                  The University of Queensland</p>

<p><b>Professor Graciela Metternicht</b>                  University of New South Wales                  Deputy Chair of the Australian Academy of Sciences                  Committee of Geographical Sciences                  Member of Future Earth's Global Land Programme Scientific Steering Committee</p>	<p><b>Dr Cindy Ong</b>                  CSIRO                  Chair for Committee on Earth Observation Satellites Working Group on Calibration and Validation                  Co-chair of IEEE Geoscience Remote Sensing Society Geoscience Spaceborne Imaging Spectroscopy Technical Committee                  Member of Science Advisory Group for EnMAP                  Member of Mission Advisory Group for the European Space Agency Hyperspectral CHIME Satellite                  Member of the Cal/Val Working Group for NASA's SBG                  Member of the Cal/Val of GEO Energy and Mineral Resources Management Societal Benefit Area</p>	<p><b>Dr Amy Parker</b>                  CSIRO Centre for Earth Observation                  Lead of the Synthetic Aperture Radar (SAR) Science Initiative Project</p>	<p><b>Professor Andrew Skidmore</b>                  ITC, the University of Twente                  Professor in Spatial Information Science at the Department of Environmental Science, Macquarie University                  Lead of the Remote Sensing Task Force for GEOBON                  Member of the Science Advisory Committee for the European Space Agency Hyperspectral CHIME Satellite</p>



Dr Wendy Thompson  
West Australian State  
Government

## Members

From inception, EOA membership has been free and open to anyone interested in Earth observation, irrespective of their affiliation, career stage, culture, application, or geographic location. As of June 2020, we have 524 members, representing individuals belonging to the Australian and international EO community.

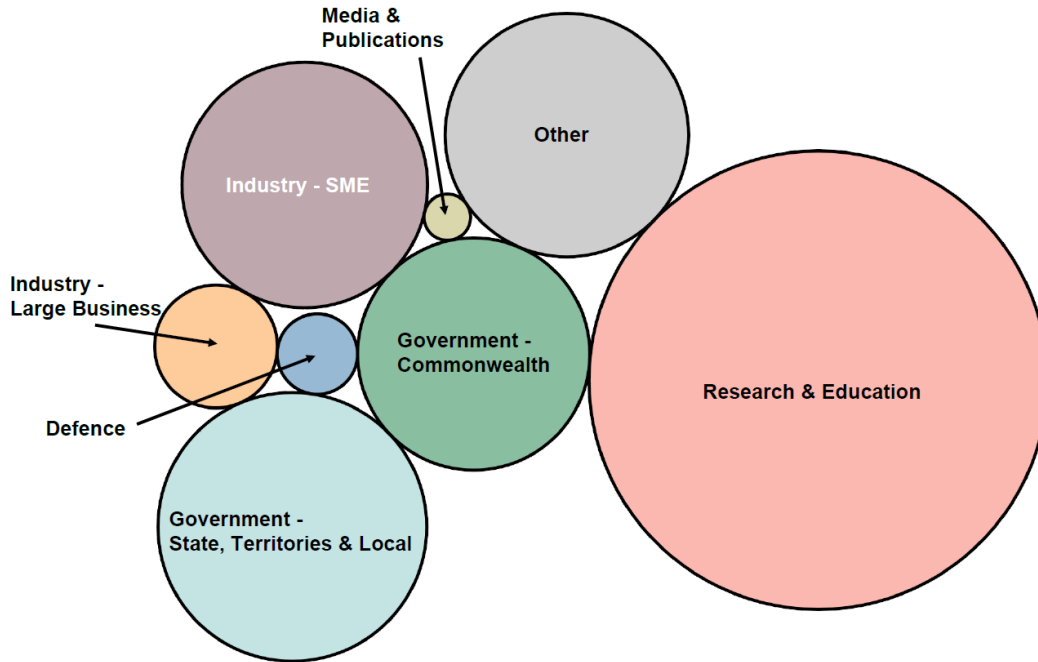
Our membership reflects the diversity and ubiquitous nature of EO information in Australia, with representatives from research, education, all levels of government, professional organisations, media and publications, non-government organisations (NGOs), not for profit organisations (NFPs), defence, interest groups, large business, start-ups, and small and medium enterprise.

Table and figure 1 show the spread of membership across each of the major sectors:

Table 1 – Australian EOA Membership by Sector

Sector	Count	Percentage
<b>Research &amp; Education</b>	195	43.82%
<b>Government - State, Territories &amp; Local</b>	67	15.06%
<b>Industry - SME</b>	56	12.58%
<b>Other</b>	55	12.36%
<b>Government - Commonwealth</b>	50	11.24%
<b>Industry - Large Business</b>	14	3.15%
<b>Defence</b>	6	1.35%
<b>Media &amp; Publications</b>	2	0.45%

Figure 1 – Australian EOA Membership by Sector



**Definitions:**

Sector OTHER includes Not-for-Profits (NFPs), Non-government Organisations (NGOs), Students, Professional Associations, and members that we could not identify as belonging to another sector.

Large Business includes commercial organisations with at least 200 staff.

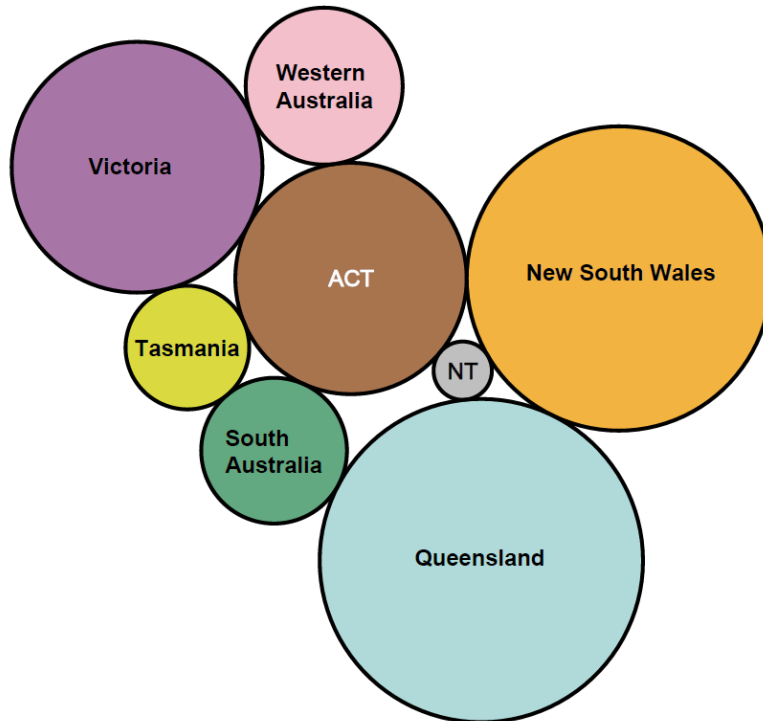
Small and medium enterprises (SMEs) include commercial organisations with less than 200 employees and include micro businesses, sole traders, consultants, and start-ups.

Table and figure 2 show the spread of membership across each of the states and territories:

Table 2 – Australian EOA Membership by State or Territory

State	Count	Percentage
<b>QLD</b>	123	27.64%
<b>NSW</b>	109	24.49%
<b>VIC</b>	74	16.63%
<b>ACT</b>	63	14.16%
<b>WA</b>	29	6.52%
<b>SA</b>	25	5.62%
<b>TAS</b>	18	4.04%
<b>NT</b>	4	0.90%

Figure 2 – Australian EOA Membership by State or Territory



### Supporters

EOA gratefully acknowledges the financial and in-kind support of the following groups:

Name	Description	Dates Active
<b>The University of Queensland’s Remote Sensing Research Centre (RSRC)</b>	Operations, secretariat, communications, and engagement support Hosts the registered office of EOA	Commenced 2013, on-going
<b>Joint Remote Sensing Research Program (JRSRP)</b>	Operations, secretariat, communications, and engagement support	Commenced 2013, on-going
<b>Geoscience Australia</b>	Earth Observation for Government Network (EOGN) – financial support	Commenced 2018, on-going
<b>Geoscience Australia</b>	EOA activities – financial support	Commenced 2018, on-going

## EOA ACTIVITIES

### Community events

Every two months, EOA hosts a Whole of Community (WoC) webinar to educate and engage the EO community. During the 2019/20 financial year (FY), the format of these webinars changed from an online meeting consisting of an update on the EOA community status and future plans by invited EO organisations, to a themed and informative webinar followed by interactive Q&A.

For the 2019/20 FY, the following WoC webinars were held:

- 12 August 2019 – Whole of Community Meeting followed by an interactive session on *Mapping Vegetation Structure with Earth Observation Data*, hosted by Professor Graciela Metternicht, The University of New South Wales and EOA Management Committee Member
- 10 October 2019 – Whole of Community Meeting followed by an industry profile and interactive session on the *SmartSat CRC programs*, hosted by Professor Arnold Dekker, SatDek Pty Ltd and EOA Management Committee Member
- 12 December 2019 – *Understanding fire in the Australian landscape*, hosted by Ms Sylvia Michael, EOA Vice President and Dr Andrew Edwards, Charles Darwin University
- 16 January 2020 - *Understanding biomass: the importance of satellite-derived products and global collaboration*, hosted by Dr Cindy Ong, CSIRO and EOA Management Committee Member
- 19 March 2020 – *Satellite data: a critical element of modern weather forecasting*, hosted by Agnes Lane, Bureau of Meteorology and EOA Management Committee Member
- 14 May 2020 - *Coral Reef Habitat Mapping - From the GBR to Reefs Globally*, hosted by Professor Stuart Phinn, The University of Queensland and EOA President and Dr Chris Roelfsema, The University of Queensland

At the end of each WoC webinar, attendees are encouraged to complete a short survey which is used to improve future webinars' presentation and content.

Slide presentations and video recordings of each webinar are available on the EOA website within 2-3 days of the webinar event.

### Newsletters

In December 2019, EOA commenced the regular distribution of electronic newsletters to subscribed members to replace ad hoc electronic communications.

The content of these newsletters and the previous ad hoc communications included updates and information on:

- Upcoming events of interest, including the Advancing Earth Observation Forum 2021
- Reference articles
- EO collaborations, including the Earth Observation for Government Network (EOGN)
- Upcoming and recent webinars, including the Whole of Community series and technical presentations
- Release of and links to government strategy and policy documents
- EO member profiles
- Research and industry grants

- Employment and study opportunities
- Other items of interest

For the 2019/20 FY, the following newsletters were distributed:

- December 2019
- January 2020
- February 2020
- May 2020

## Technical Webinars

Technical webinars are presented from time to time and in the 2019/20 FY we hosted the following:

- October 2019 - ***Accessing and Using the Copernicus Australasia Data Hub***, hosted by Earth Observation Australia in partnership with FrontierSI and on behalf of Geoscience Australia

## Earth Observation for Government (EOGN)

EOGN (<https://www.eoa.org.au/eogn>) is a targeted collaboration and priority-setting network that connects Commonwealth and state and territory government providers, developers and users of Earth observation data and its derived products to each other and to researchers.

Its aim is to transition products to national infrastructure and ensure that the products are fit-for-purpose and relevant.

EOGN is managed and coordinated by EOA and funded by Geoscience Australia (GA).

EOGN is steered by an Advisory Group who meet every 8 weeks and consist of representatives from:

- The University of Queensland,
- Geoscience Australia,
- Department of Agriculture, Water and Environment,
- Australian Bureau of Statistics,
- Department of Environment and Science (Queensland government),
- Department of Biodiversity, Conservation and Attractions (Western Australian government),
- Department of Planning, Industry and Environment (New South Wales government),
- Landgate (Western Australian government),
- Department of Environment and Water (South Australian government),
- Northern Territory Government,
- Department of Primary Industries, Water and Environment (Tasmanian government),
- Department of Environment, Land, Water and Planning (Victorian government),
- FrontierSI,

and observers from the Australian Space Agency.

In Canberra in August 2019, members of the Advisory Group convened at a workshop to determine the priorities and actions required to transition Australian EO research to operational products. At this workshop, participants from Commonwealth and state and territory agencies, industry, and the research sector established a framework that would link EO research from universities and research institutions, developed on closed research infrastructure, to operational products and services available to Commonwealth and state and territory governments on a more open and accessible infrastructure.



In addition, the workshop linked governments' policy needs to these operational EO products and services and informed the prioritisation of further EOGN workshops to take research-proven continental scale products to operational status.

The August 2019 workshop defined five actionable and/or required priority topics:

- Vegetation / Biomass
- Land Cover / Land Use
- Water
- Topography
- Fire

To address the first two of these, a national survey was conducted to determine how improvements could be made to EO products for vegetation and other land use mapping, monitoring, and modelling in Australia. The results from this survey led to the call for a series of workshops: Understanding the Research to Authoritative Product Continuum Workshop Series.

In the 2019/20 FY, EOGN successfully convened the first two workshops in the series: Vegetation / Biomass and Land Cover / Land Uses. Each workshop was split into three sessions:

- Session 1 – Products for Transition
- Session 2 – Process for Transition and Optimising Delivery
- Session 3 – Update of the Australian EO Capability Database

The first two sessions were by invitation to people working in the area of the workshop focus at a strategic level, and the third session was open to a wider, interested audience.

All sessions were conducted online to adhere to Australian safety precautions in response to the global Coronavirus (COVID-19) pandemic.

The remaining three priority topics will be addressed during the 2020/21 and 2021/22 financial years.

## Advancing Earth Observation Forum

The inaugural Advancing Earth Observation Forum 2021 (AEO 2021) will be held in Brisbane at the Brisbane Convention & Exhibition Centre (BCEC) from Monday 23 August to Friday 27 August 2021. AEO 2021 was originally scheduled to run from Monday 28 September to Friday 2 October 2020 but was postponed due to the global Coronavirus (COVID-19) pandemic.

AEO 2021 will be a unique, engaging, and interactive event with a focus very much on learning, contributing, and connecting. This will be achieved through a variety of activities encompassing audience participation, multiple forms of collaboration and learning, and opportunities to build networks.

AEO 2021's program reflects the intended interactive focus with a range of presentation types including PechaKucha Sessions, Interactive Posters, Technical Sessions, an Un-Conference, and Workshops.

Sponsorship opportunities range from \$50,000 as the Forum Founder / Launch Sponsor to \$1,800 as a refreshment break sponsor and as of June 2020 we had procured the following financial support:

Sponsorship Package	Company	Value
<b>Forum Founder / Launch Sponsor</b>	Geoscience Australia	\$50,000
<b>Tailored Sponsorship</b>	Queensland Government	\$25,000
<b>Tailored Sponsorship</b>	Queensland Government	\$10,000
<b>Bronze Sponsor</b>	Curtin University	\$6,000
<b>Lanyard Sponsor</b>	CSIRO	\$3,000
<b>In Program Session Sponsor</b>	SmartSat CRC	\$2,800

These funds and support are received with much appreciation and thanks and reflect the sponsors’ acknowledgement of the importance of investing in Australia’s Earth observation future.

The Forum Steering Committee (SC) showcases EOA’s commitment to diversity and inclusion with representatives from government, research, education, SMEs and large industry. The SC is led by four directors, all nationally- and internationally-recognised leaders in EO:

- Professor Stuart Phinn - Earth Observation Australia Inc. and The University of Queensland
- Dr Renee Bartolo - Department of Agriculture, Water and the Environment
- Dr Glenn Campbell – The University of Southern Queensland
- Dr Karen Joyce - James Cook University and She Maps

and is supported by Arinex Pty Ltd as the Forum’s Professional Conference Organisers (PCO).

### Presentations on Australian Earth Observation Capability

During the 2019/20 FY our president, Professor Stuart Phinn, was an invited keynote speaker at the following events:

- The 2019 Australian Space Research Conference,
- The 2019 Environment Institute of Australia and New Zealand Annual Conference, and
- The 2020 South Australian Space Forum

### Submissions to Government Activities

The Australian Space Agency’s (ASA’s) Civil Space Strategy 2019-2028 has identified seven National Civil Space Priority Areas, one of which is Earth Observation:

‘Earth observation (EO) has untapped potential to grow Australia’s economy, for example, by improving agricultural monitoring, water management, and monitoring shipping routes. Through Geoscience Australia’s Digital Earth Australia (DEA) initiative, Australia is world-leading in this field. Australia will continue to focus on and develop this priority area to grow Australia’s broader economy.’<sup>2</sup>

<sup>2</sup> Ref: National Civil Space Priority Areas <https://www.industry.gov.au/data-and-publications/australian-civil-space-strategy-2019-2028/national-civil-space-priority-areas>

In 2020, EOA actively supported the ASA's Civil Space Strategy 2019-2028 through submissions by members of our Management Committee to the:

- The Earth Observation Bushfire Taskforce 2020, and
- The Earth Observation Civil Space Priority Roadmap 2020.

## Other Activities

Members of the EOA Management Committee were instrumental in the development and delivery of the Australian EO-Government to Industry workshop at the Group on Earth Observations (GEO) Plenary in Canberra in November 2019.

## Future Directions

The future directions of EOA are driven by our vision to provide a venue for the inclusive collaboration, communication, and cooperation of Australia's diverse EO community.

In support of this vision, it is our intention to further develop or embark on the following initiatives:

- Grow our membership base in terms of both numbers and diversity, whether that diversity be with respect to culture, geographic location, career stage or application,
- Continue to provide informative, relevant, and regular Whole of Community meetings, technical presentations, and newsletters,
- Host and deliver a successful, informative, entertaining, and collaborative inaugural forum,
- Develop models for diverse groups in the EO sector to effectively and efficiently engage and collaborate with each other - for example, collaboration between research, government, and private industry,
- Establish an SME working group within the Management Committee and the wider membership with the purposes of raising the profile of SMEs and highlighting the roles they play and will play in Australia's EO activities,
- Establish a calibration and validation (Cal/Val) working group within the Management Committee and other stakeholders from across the EO sector, to propose a mechanism for high calibre and coordinated Cal/Val activities,
- Develop mutually beneficial relationships with professional associations and/or associated groups,
- Investigate the option of organisation membership; currently membership is available to individuals only,
- Collaborate with the Queensland Government and the University of Queensland to establish and operate an EO analytics hub in Brisbane; this hub will also provide the Queensland EO node for the SmartSat CRC, and
- Acknowledge and recognise the traditional owners of the lands and waters we work in across Australia, and commit to furthering this recognition and jointly linking indigenous approaches into our work in the future.

## EOA FINANCES

### Treasurer's Report for the 2019/20 Financial Year

As at end of the 2019/20 financial year EOA had not achieved financial independence.

Prior to, and since incorporation in July 2019 EOA has been funded partially by funding provided by Geoscience Australia to The University of Queensland (UQ).

The majority of resourcing for personnel time and operational costs in setting up and running EOA has been in-kind contributions from UQ, along with Queensland and New South Wales state governments' funding of the Joint Remote Sensing Research Program (JRSRP). These resources have supported substantive contributions by Ms Joanne Edkins and Professor Stuart Phinn.

In addition, significant volunteer contribution has been provided by Ms Sylvia Michael, and members of the EOA Management Committee.

As at the time of this report EOA does not maintain a bank account and therefore does not manage income and expenditure. This means that there are no finances to report on for the 2019/20 financial year and as EOA is currently a Level 3 Incorporated Association<sup>3</sup>, an auditor is not required to be engaged for an audit.

All of the following funds and associated contracts are managed by UQ.

#### In-Kind contributions to support Operations

UQ continues to support EOA by in-kind funding for operational personnel and operating costs (office space, web-sites, and webinars, etc.). The operational staff support and complement the efforts of the volunteer Management Committee. These contributions are inclusive of indirect costs to cover the infrastructure requirements for each position.

We also acknowledge the continued support of UQ's Remote Sensing Research Centre and the School of Earth and Environmental Sciences who accommodate EOA's registered office and its operations.

#### Staff costs (including indirect costs):

Name	Position	Cost per unit	Number of Units	UQ Contribution
<b>Stuart Phinn</b>	Director	\$380,403	0.1	\$38,040
<b>Joanne Edkins</b>	Operations Manager	\$194,664	0.5	\$97,332
<b>Kerryn Molloy</b>	Communications	\$170,505	0.5	\$85,253
<b>Larissa Mar Fan</b>	National EO Partnerships Manager	\$139,694	0.2	\$27,939
<b>Sylvia Michael</b>	Business Manager	\$194,664	0.5	*\$97,332
<b>Total (GST exclusive)</b>				<b>\$345,895</b>

\* Sylvia Michael's contribution is personal in-kind based on UQ salary values.

<sup>3</sup> Level 3 Incorporated Association in Queensland is defined as having both the value of assets and revenue less than \$20,000. Ref: <https://www.qld.gov.au/law/laws-regulated-industries-and-accountability/queensland-laws-and-regulations/associations-charities-and-non-for-profits/incorporated-associations/financial-responsibilities-for-incorporated-associations/making-your-association-annual-report>

## Funding

Geoscience Australia are currently funding two projects that operate under EOA, with contracts and finance managed via The University of Queensland (all figures are GST exclusive):

### 1. Earth Observation for Government Network

Project duration	2017/18	2018/19	2019/20	2020/21
<b>10 October 2017 Founding agreement</b>	\$61,443	\$61,443		
<b>30 May 2020 Extended to 31 June 2021</b>			\$28,860	\$61,806

### 2. Earth Observation Australia

This funding enables EOA to:

- Set up and run AEOCP-2026 working groups,
- Set up and manage the Advancing Earth Observation Forum as EOA’s primary community engagement event,
- Deliver special topic/area webinars and quarterly whole of community webinars,
- To modify EOA processes to work within the Australian Space Agency, and
- Maintain and run the EOA website.

Project duration	2018/19	2019/20
<b>1 April 2018—30 October 2019*</b>	\$20,962	\$20,962

\* At time of this report, we are seeking an extension to this project.

## Incorporation Costs

Initial set up costs for incorporation totalled \$660. These costs were met by Professor Stuart Phinn (President) and Ms Joanne Edkins (Secretary/Treasurer). Payments were made to:

- Queensland Office of Fair Trading for an application of Incorporated Association and certificates,
- ASIC for application of an Australian Registered Body, and
- Stamp Store for the Earth Observation Australia Inc. common seal.

## Verification of Financial Statement:

The association's financial records show the association keeps adequate financial records to correctly record and explain transactions, and to enable a true and fair financial statement to be prepared.

Ms Joanne Edkins  
 Secretary/Treasurer  
 Earth Observation Australia Inc.  
 1 September 2020

## ACKNOWLEDGEMENTS

This report was prepared for Earth Observation Australia Inc. by the following contributors:

- Professor Stuart Phinn – Earth Observation Australia Inc. and The University of Queensland
- Ms Joanne Edkins – Earth Observation Australia Inc. and The University of Queensland
- Ms Larissa Mar Fan - Earth Observation Australia Inc. and The University of Queensland
- Ms Sylvia Michael - Earth Observation Australia Inc.