

Portfolio or Agency mission/charter

The CSIRO vision is:

“By igniting the creative spirit of our people we deliver great science and innovative solutions for industry, society and the environment.”

Functions

CSIRO is an independent statutory authority constituted and operating under the provisions of the *Science and Industry Research Act 1949*, which designates functions that include to:

- conduct scientific research to assist contribute to industry, further the interests of the Australian community, and contribute to meeting the national and international obligation of the Australian Government;
- encourage and facilitate the application of the results of scientific research;
- manage and make available national facilities for scientific research;
- contribute to scientific collaboration between Australia and other countries; and
- contribute to training the next generation of Australian researchers.

Powers

Under the *Science and Industry Research Act 1949* CSIRO is granted powers to undertake a broad range of activities consistent with performing the above functions. These include arranging for scientific research to be undertaken on behalf of the organisation; forming partnerships, joint ventures and spin-off companies; deriving income from intellectual property through licensing and royalty arrangements.

Key objective/s with respect to space-related activity

CSIRO space activity is focussed on using space-based resources to perform research and deliver nationally significant outcomes, where space provides the most effective and efficient means for delivering this impact. CSIRO regards space research as a means to other ends, rather than as an end within itself. Consistent with this strategy, CSIRO has developed extensive capability in space-related areas that include earth observation; navigation and communication; advanced aerospace technologies; and radioastronomy.

Current space-related activities/responsibilities

- Demonstrate and communicate the benefits of the use of space-related services to Australian users (government, commercial and private);
- Develop applications of satellite imagery and other satellite data (e.g. global positioning);

- Cooperative science validation and satellite calibration projects with international space agencies (e.g. NASA EO-1; CBERS-2B);
- Maintain and use 20+ year moderate resolution satellite data archive through CSIRO Division of Marine and Atmospheric Research;
- Board Member and co-owner of Tasmanian Earth Resources Satellite Station (TERSS) X-band reception station (operated jointly with Geoscience Australia);
- Manage operations of the NASA Canberra Deep Space Communications Complex, Tidbinbilla;
- Responsible for operations in support of NASA scientific balloon flights from Australia;
- Regional focal point for United Nations Regional Space Applications Programme, and member of associated working groups;
- An Australian participant in the Group on Earth Observation (GEO) and the associated activity to establish the Global Earth Observation System of Systems (GEOSS);
- An Australian representative on the Committee on Earth Observation Satellites (CEOS);
- Participating in plenary meetings of the Asia-Pacific Regional Space Agency Forum (APSAF);
- Operate Australia Telescope National Facility
- Source of information and advice on national/international space projects, programs and policies.

Recent major achievements

- Transfer of demonstrator Sentinel Hotspot real-time fire detection service to Geoscience Australia for indefinite 24/7 operation;
- Establishment of new X-band reception station in Perth with WASTAC consortium partners;
- Initiating establishment of new X-band stations in Darwin and Townsville (in cooperation with Bureau of Meteorology and Geoscience Australia);
- Implementation and continuing support of satellite-based land-cover monitoring relied upon by the National Carbon Accounting System (NCAS) delivered by the Australian Greenhouse Office (AGO);
- A partner in the Australian Government Water Resources Observation Network (WRON), contributing remote sensing and geographic information systems (GIS) expertise;
- Provision of technical expertise used in the development of forestry monitoring platforms supported under the Australian Government Global Initiative on Forests and Climate; and
- One of fourteen agencies that contributed to the development of the Global Exploration Strategy (GES), which sets a framework for international collaboration on future human and robotic missions in space.

Publicly available information on portfolio/agency budgets and expenditure on space-related activity:

Refer to CSIRO Financial Statement in Annual Report:
www.csiro.au/org/AnnualReport.html

Relevant legislation

- *Science and Industry Research Act 1949*
- *Science and Industry Research Legislation Amendment Act 1986*
- *Commonwealth Authorities and Companies Act 1997*

International space-related agreements include:

Various Memoranda of Understanding, including with:

- National Aeronautics and Space Administration of the United States for cooperation in Deep Space Tracking.
- DLR of Germany for scientific and technological cooperation on the development of remote sensing applications.
- the Earth Remote Sensing Data Analysis Center (ERSDAC) of Japan on the development and application of earth observation.

Letter agreement or implementing arrangements with:

- National Aeronautics and Space Administration of the United States – “Cooperating agency arrangement for the establishment and operation of certain space vehicle tracking and communications facilities in Australia in support of NASA space projects.”
- National Aeronautics and Space Administration of the United States – “To establish an interoperability interface between NASA’s Earth Observing System (EOS) Data and Information System (EOSDIS) and CSIRO’s system for Earth observation data”.

Relevant Treaties/Exchanges of Notes applying to cooperative agreements:

- Exchange of Notes constituting an agreement between the Government of Australia and the Government of the United States of America concerning space vehicle tracking and communications facilities.
- Exchange of Notes constituting an agreement between the Government of Australia and the Government of the United States of America concerning the conduct of scientific balloon flights.
- An Agreement between the Australian Government and the European Space Agency (ESA) for a Cooperative Space Vehicle Tracking Program.

Portfolio/Agency involvement in other space-related agreement/arrangements

- Deed of Agreement with the Australian Communications and Media Authority for the coordination and radio interference management of a satellite network;
- Numerous interactions with portfolios and agencies in research, development, applications and exploitation of Earth observation, satellite communications and other aspects of space technology; and
- Numerous contracts or collaborative arrangements with the private sector in relation to various aspects of space technology.

Contact

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