





Core Theme for the 2026 Australian CEOS Chair Period

FOR CONSULTATION – 2025 SIT Technical Workshop

This paper communicates the planned headline theme of the 2026 CEOS Chair Term of Team Australia (CSIRO supported by Geoscience Australia and the Bureau of Meteorology) including key activities for which the Chair Team proposes to provide dedicated resourcing, support and agenda time.

Team Australia is working closely with the NASA SIT Chair Team to ensure complementarity with, and support for, SIT Chair priorities as they are defined. As 2026 CEOS Chair, Team Australia will ensure it fulfils the obligations of the Chair as defined in the CEOS Governing Documents, including supporting the progression of existing CEOS priorities, building on past efforts and minimising the resourcing implications of proposed activities.

Headline Theme: Positioning for Success in a Rapidly Changing Context

The only constant is change, and this is true for both the Earth itself and the Earth observation sector for which CEOS provides global leadership. As 2026 CEOS Chair, Team Australia will focus its efforts on helping position CEOS for sustained relevance into the future, highlighting and promoting the ongoing role for public Earth observing satellite programmes and their data in delivering for society.

Latest data¹ puts the world on course for significant environmental change – no matter what. These changes will create new opportunities for some, but they will also require governments, communities and businesses to adapt, and become more resilient, to this change.

Satellite Earth observations are absolutely fundamental to the generation of the facts and figures that support adaptation and underpin increased resilience. From alternate farming policies to improved water management practices and the development of more sustainable civil infrastructure, Earth observation can provide critical information to support decisions for a safer and more prosperous future.

Adaptation to environmental changes is a challenge across the globe. Action is required at national level, but is also particularly critical at regional and local scales - including at the level of individual businesses and communities - where the impacts are felt acutely. International collaboration through CEOS can be a powerful factor in ensuring satellite Earth observation data plays its part in tackling this challenge, by making the increasing volume of data easier to use, for more purposes, by more people at these scales.

The opportunity, and need, to support action in this area coincides with a rapid increase in the volume and variety of data that is available, from both government and commercial sectors, as well as new tools that make it easier to work with that data at scale. However, significant barriers still remain to realising the full potential of this data, particularly when considering the number and diversity of stakeholders that could benefit from better information to support them to adapt and become more resilient.

¹ UNEP Adaptation Gap Report 2024







Further consideration is required on how to make data generated by public, non-government, and commercial sector systems easier to use and integrate into decision support products that enable practical action on adaptation at all scales. Importantly, ongoing work is also required to ensure the data and information is generated and used in a way that builds trust and protects the reputation of the satellite Earth observation community in the eyes of stakeholders. Information that is not trusted will not inform decision making and will result in wasted investment.

Team Australia proposes to invest resources in two activities that support CEOS to engage with this theme, generating information that will ensure CEOS Principals have the information they need to make informed decisions about future CEOS activities and priorities in a strategically critical area.

Focus Activity #1: Progress CEOS Support to Environmental Adaptation and Resilience

CEOS and its Agencies invest in a vast body of missions, instruments, and activities that can support environmental adaptation and resilience – across agriculture and food security, biodiversity, coastal vulnerability, disasters (flooding, hurricanes, storm surges, wildfires), water quality, and more.

CEOS has historically not had an organisation-level strategic focus on its support for adaptation despite the need for this information becoming increasingly critical as environmental change accelerates and the great potential for CEOS support.² Past CEOS studies have highlighted how adaptation decision-making relies on access to, and the ability to integrate, multiple datasets on many spatial scales. For CEOS to make progress in this area, Principals need information that considers a fuller picture of how satellite Earth observations are being deployed, what is planned across CEOS agencies, and where stakeholder engagement is most critical and impactful.

Team Australia proposes to bring this area into focus in 2026 through the production of an information product (or products) to showcase the role and value of satellite Earth observation in supporting adaptation to, and resilience in the face of, environmental change – whatever the cause of that change, whether it be climate variations or other factors. The product(s) will draw on information about efforts already underway across CEOS, by CEOS members, and within the broader sector, for example in WG Disasters, the Global Stocktake Strategy team, the Biodiversity Study Team, and the CEOS ARD Strategy.

In developing the information product(s), case studies will be used to help highlight and communicate the current and potential impact of Earth observation in this area, as well as to draw out cross-cutting challenges and opportunities that CEOS and other stakeholders could address to translate isolated success into global results. A case study lens will provide the opportunity to examine the issue from particular perspectives, such as biodiversity, agriculture, small island state or polar lens. The opportunity for more creative communication and engagement options around the case studies will also be explored, such as online portals to improve accessibility, the creation of 'live' case studies in the form of demonstrators for particular applications, and the identification of example code (such as notebooks) that could be used to provide a 'head start' for those looking to tailor to meet local needs.

² https://ceos.org/document_management/Meetings/GST-Study-Team/SIT-GST-STUDY-TEAM-27-APR-2021.pptx







The Australian CEOS Chair Team proposes to lead, coordinate, and resource the development of this study activity and have it presented to Principals at the 2026 CEOS Plenary in Hobart, Australia. Given the holistic and strategic nature of the study, it would draw on insights from across the CEOS organisation, especially from those subject matter experts and agencies already engaged in the assessment of adaptation indicators and the role of EO. We shall also explore the possibility for a CEOS role in any events/workshops being considered in this area for 2026.

Focus Activity #2: FutureARD - Ensuring the CEOS-ARD Strategy is Fit for the Future

CEOS's Analysis Ready Data initiative (CEOS-ARD) is driven by a motivation to lower barriers to the full and successful utilisation of Earth observation data, particularly by communities where remote sensing science has not been their central focus, but which now seek to utilise the growing volume of space-based EO data for local, regional, and national decision-making. Interoperable, trusted, easy-to-use ARD is a key enabler of greater CEOS impact.

The goal of CEOS-ARD is no more relevant than in relation to adaptation – where information must be tailored to meet the needs of regions, communities, and businesses.

Consistent with the CEOS-ARD Framework, and based on consultation within and beyond the CEOS community, the CEOS-ARD Oversight Group has recognised the need for an evolution of the CEOS-ARD Strategy to ensure it remains consistent with the evolving user base and their expectations – noting the significant changes in the Earth observation sector since CEOS-ARD was first conceptualised. Major technological trends – particularly in AI/ML and cloud-native approaches – are shaping the expectations of users. Furthermore, as dataset offerings continue to grow, and the importance of resilient digital supply chains increases, demands for increased interoperability are necessitating renewed focus on the bounds of what can be called 'analysis-ready'.

The CEOS-ARD Oversight Group is currently preparing a Concept Note that will outline the key issues to be considered in this process, and will present this work at the 2025 CEOS Plenary to ensure Principals have the opportunity to provide strategic guidance to the Strategy update effort.

The Australian CEOS Chair Team proposes to support, and provide additional capacity to, the CEOS-ARD Oversight Group's effort to understand the opportunities to evolve CEOS-ARD and will support their development of an updated and ambitious CEOS-ARD Strategy that will maximise the societal benefits of satellite EO – including for adaptation and resilience to a changing environment.

Key Points

• Each of the two activities proposed will generate valuable information in their own right, but are also conceived to be complementary. Lowering the barriers to the use of satellite EO data through initiatives such as







CEOS-ARD will be key to supporting environmental adaptation and resilience activities where uptake by a wide range of users, often inexperienced in remote sensing, at regional and local scales is particularly important.

• Both of the proposed activities are conceived as finite activities to be concluded within the 2026 CEOS Chair term with no expectation of ongoing investment/resourcing from the CEOS organisation.