

CEOS Communication Strategy

Version 1.0

November 2023

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1. Executive Summary

This document, prepared by the CEOS Communication Team, provides strategic communication guidance for CEOS. The Communication Team is led by the NASA-supported CEOS Systems Engineering Office (SEO).

CEOS communication serves to highlight and promote the services and tools developed by CEOS and its Agencies, to optimise societal benefit and inform decision making. The target audiences range from internally within CEOS (Principals and CEOS entities), to the broader community external to CEOS (decision makers, EO experts, candidate CEOS members or associates, and EO allies).

Content will be primarily in support of one of three campaigns to be run over various periods during 2024-2025: 40th Anniversary of CEOS, EO for Biodiversity and Greenhouse Gas Observations from Space. Content types include blog posts, the CEOS Newsletter, the Quarterly Revisit mailing list, social media, and video.

As a minimum, the CEOS Communication Team will strive to publish 2 blog posts per month, complete a series of articles each year in support of CEOS and/or SIT Chair Priorities, produce 1-2 videos on a topic of relevance, and publish the Quarterly Revisit four times per year.

The CEOS Communication Team takes its core membership from the SEO, and will be supported by members from across CEOS, including the CEOS Executive Officer, and those with interest or experience in science communication. CEOS entities are expected to provide at least one item of communication materials annually, which can include articles, videos, materials for exhibition booths, or social media content.

2. Introduction & Objectives

This document serves to guide internal communication between the CEOS Communication Team and the CEOS entities, permanent and temporary, that it supports, and also externally within the broader Earth observation (EO) community.

The Strategy covers the period of 2024-25.

2.1. CEOS Mission

The CEOS Mission is:

*CEOS ensures international coordination of civil space-based Earth observation programs and promotes exchange of data to **optimise societal benefit and inform decision making** for securing a prosperous and sustainable future for humankind.*

When applicable, the CEOS mission should be considered when developing communication products on behalf of CEOS. Content creators and communicators should build content that highlights our ability to 1) optimise societal benefits and 2) inform data-driven decision making.

2.2. Communication Objectives

The primary goal of CEOS communication is to increase awareness of access to, and applications of, EO data, as well as the tools and services needed to effectively use EO data for the greatest societal benefit. The impact of CEOS work should be shared, especially when applicable to other international organisations.

A secondary goal for CEOS communication should also enable information sharing and discussion with CEOS internally, between CEOS entities and across the CEOS membership.

3. Situation Analysis

CEOS is a global, best-efforts organisation aiming to coordinate EO missions, services and applications. As of 2023, CEOS has 34 Members and 29 Associates. The foundation of CEOS is ensuring multilateral coordination, to support collaborative missions and data systems, as well as global initiatives to benefit society. CEOS Members and Associates work together to identify and accomplish specific goals relevant to their own priorities.

CEOS primarily provides a platform to coordinate missions, data formats and calibration/validation. Since its establishment in 1984, the scope of CEOS work has expanded to include a variety of application areas and other related EO topics, and the reach of CEOS has also expanded. CEOS has developed a longstanding reputation as the international coordination body for space-based EO.

The recent rise of the commercial EO market, including New Space, offers new opportunities for CEOS in the global industry. CEOS has an important and active role to play in supporting both its membership and the commercial EO community by ensuring that any EO data and services are reliable, accurate and fit-for-purpose.

The strength of CEOS lie in its internal communication, which have been established over the past 40 years and which today facilitate an active and successful forum for coordination and discussion on spaced-based EO matters. However, there is an opportunity now to ensure CEOS reaches beyond its internal membership to the broader community, especially with the rise of the commercial EO market and more widespread availability of EO data products. CEOS should promote its work across the domain, and ensuring effective communication is the best way to do so.

The CEOS Work Plan identifies four key CEOS Priorities, as identified in the Kyoto Statement issued at the 29th CEOS Plenary Meeting held in Kyoto, Japan in 2015:

- Ensure that climate observation requirements identified by the Global Climate Observing System (GCOS) – and implications of the Paris Climate Agreement – are addressed.
- Ensure, in the context of the Sendai Framework for Disaster Risk Reduction 2015-2030, that CEOS Agency data are made available in support of disaster risk reduction and that CEOS continues engagement with UN agencies and authorities.

- Ensure that space-based Earth observations support the success of the next decade of the Group on Earth Observations (GEO), and that CEOS engagement in GEO governance and leadership is enhanced.
- Proactively engage in global discussions on the critical challenges that face society, including attaining the 2030 Agenda for Sustainable Development.

CEOS Communication should be anchored in these priorities, as well as support for the Triple Planetary Crisis identified by the United Nations, which includes climate change, air pollution & biodiversity loss.

4. Stakeholders

4.1. Internal CEOS

4.1.1. CEOS Principals

Who: CEOS Principals are nominated individuals from each CEOS Member or Associate who are executive officials. These individuals are responsible for making all major decisions within CEOS, including on leadership, organisation structure, and work plan items.

What: It is vital that CEOS Principals are kept informed of all work across CEOS. Principals will likely support decisions that are directly related to their organisation's internal priorities, and hence the value of CEOS work in support of these items should be clearly communicated.

How: To communicate with CEOS Principals, they should be contacted via email. CEOS Principals have all been automatically subscribed to the mailing list for the CEOS Quarterly Revisit, ensuring they receive updates on recent and upcoming activities.

4.1.2. CEOS Entities

Who: The various entities from across CEOS (Working Groups, Virtual Constellations, Ad-hoc teams and others) each have their own leadership and members. These teams are formed of experts in their specific topic, and often include individuals who are leading programmes within their organisation.

What: Members of the various CEOS entities are usually most interested in topic-specific items. Cross-cutting work is especially important to communicate across the different entities, as this work might not otherwise be communicated in their regular internal meetings. Cross-cutting topics include CEOS Analysis Ready Data (CEOS-ARD), Interoperability, and Sustainable Development Goals (SDGs).

How: The chairs/leads for each entity should be contacted via email when a topic relevant to their group is under preparation, for their expert review. They should also be encouraged to share the piece within their community once published. Some groups have their own social media accounts and can be tagged in posts (see 9.4 below).

4.2. External CEOS

4.2.1. Decision Makers

Who: Decision Makers is a broad category, covering those from local and regional governments to international organisations under the United Nations (UN) framework. These organisations use EO data to make decisions regarding policies and need to be kept informed of the latest developments. They are not necessarily interested in the mission specifics, but rather the results following analysis of EO data.

For example, the UN Custodian Agencies for the SDG Indicators make decisions on the methodologies used to report on each indicator and should be aware of CEOS efforts to improve access to EO data (format, methodologies, standards, etc.). Local governments may also use EO data to understand local ecosystems, to make decisions on how to protect them.

What: Decision Makers often care more about the applications of satellite EO data rather than the data itself. CEOS communication should be targeted towards how satellite EO can be used for societal benefit, and reporting towards global agendas, such as the SDGs and the Paris Agreement. Language should be high level and not technical, and focus on the impact of EO to society. An example of such a piece would be the [Earth Observation Handbook](#).

How: CEOS entities often have connections to their policy counterparts in other international organisations such as UN Agencies or through other convening bodies, such as the Group on Earth Observations (GEO). These connections should be used to ensure any communication materials reach their targets. For example, the SDG Coordination Group works with the EO4SDG initiative of GEO and some UN Custodian Agencies, so materials related to the SDGs can be promoted through these connections.

4.2.2. EO Experts

Who: Academics, technicians and commercial EO industry are all classed as EO Experts. They are individuals with a vested interest in EO but are not necessarily involved with CEOS. Organisations who can complement or add value to CEOS activities are also included.

What: Technical communication pieces should be targeted towards EO Experts, with a high level of detail into the specifics of the EO data, its source, acquisition and processing, and the applications. Topics such as CEOS-ARD Product Family Specifications and the CEOS Visualisation Environment (COVE) are appropriate for EO Experts.

How: CEOS entities each have their own pool of relevant experts, who should be consulted in the preparation of any materials. International events such as IGARSS, VH-RODA, JACIE and Living Planet Symposium should be used to engage with the research community and EO industry broadly. CEOS Exhibition Booths at these events are an effective way to discuss relevant topics with experts.

4.2.3. Candidate CEOS Members/Associates

Who: These organisations are not CEOS Agencies, but are organisations who meet the criteria to become a Member or Associate. The detailed criteria for Members and

Associates can be found in the [CEOS Terms of Reference](#), but broadly, it includes any international or national organisations who have a stake in space-based EO.

What: Candidate organisations should be given a broad overview of CEOS as an organisation, and the benefits of being involved. CEOS accomplishments, priorities and support for global issues are topics of particular interest.

How: Connections are often made with these organisations at CEOS Exhibition Booths at various international events. Once identified, representatives from such organisations should be directed to the info@ceos.org email address for more information.

4.2.4. EO Allies

Who: The Allies are not necessarily experts in EO or space, but are potential data users or in geospatially-aligned fields (e.g., ecosystem experts, urban planners). They might not know about the capabilities of EO, and how it can be effectively used in their domain.

What: Specific publications regarding new applications of EO should be targeted to the Allies. Language should be non-specific regarding the data, and should instead focus on the results and applications of the data following the analysis.

How: Topic-specific conferences and social media networks are the best way to engage with this group. The CEOS topic experts should be provided with appropriate materials to share at in person events (e.g., URLs to blog posts, flyers). Universities are useful forums to demonstrate the capabilities of EO and should be targets for capacity building.

5. Campaigns

Campaigns are a series of communication materials and activities, which span across a period of usually 6-24 months. The topics are aligned with the CEOS Priorities, as well as broader global events.

The three campaigns below form the outline of CEOS Communication work over 2024-25. Note that an additional campaign may be added, once CEOS Chair Priorities for 2025 have been determined.

5.1. 40th Anniversary of CEOS

2024 marks the 40-year anniversary of CEOS. This will be a campaign that spans the 12 months from January 2024 - December 2024. The highlight of the campaign should occur on 24-25 September, as these were the dates of the first CEOS Plenary.

A special anniversary version of the CEOS logo could be created, incorporating '40' somewhere. This logo should be used throughout the year where applicable, and should be made into stickers for distribution at events.

CEOS Agencies should each be contacted for their thoughts and reflections on the last forty years, as well as what the future should bring. These could be posted as individual blog articles, as well as summarised in a video. Interviews with CEOS Principals would be nice to include where possible.

Materials could also be generated by passing all meeting minutes through Artificial Intelligence, to summarise the key themes of CEOS over the last forty years.

This campaign should also focus on looking to the future, including recent advancements in sensor technology through CEOS collaborations. Launches of technologically advanced and experimental satellites can be highlighted.

5.2. EO for Biodiversity

The 2024 CEOS Chair, the Canadian Space Agency (CSA), has chosen their priorities to focus on the topic of Biodiversity, and explore how CEOS can support this global priority. CEOS Communication should support this priority, by ensuring all work is effectively communicated to the broader community. This campaign should run from CEOS Plenary 2023 - CEOS Plenary 2024.

In 2023, the Ecosystem Extent Task Team will publish their white paper, which is also anticipated to become a scientific publication. This publication could be broken down into a series of blog articles online, as well as an animated video.

5.3. Greenhouse Gas Observations from Space

One of three priorities of the 2024-25 JAXA SIT Chair is Greenhouse Gas Observations. This campaign could occur over the duration of the JAXA SIT Chair term. The priority has five subsections, which can be used to align communication with:

- Observation continuity challenges and coordination
- Best practices for GHG emission estimates from space
- GHG Roadmap implementation
- Evolution of the CEOS-IMEO relationship and support for the Global Methane Pledge
- Active engagement in the WMO Global Greenhouse Gas Watch (GGGW)

There are a number of deliverables planned to support this priority, and the Communication Team should coordinate with the JAXA SIT Chair Team to support the publication of these deliverables.

6. Content Types

6.1. CEOS Blog

Blog articles are posted online at ceos.org/news by the CEOS Communication Team. The blog provides a place for recent news announcements and project updates, which is then shared through social media. The target audience for these materials can vary but a specific audience should always be considered prior to developing communication.

6.2. CEOS Newsletter

The CEOS Newsletter is published online by the Japanese Aerospace Exploration Agency (JAXA), with content developed for a primarily internal audience. The CEOS

Communication Team is responsible for promoting CEOS Newsletter articles on the website and social media.

6.3. CEOS Quarterly Revisit

The CEOS Quarterly Revisit provides a way for the CEOS community to receive updates about blog posts, newsletter articles, training events, upcoming meetings and other communication materials on a quarterly basis, in their email inbox. The mailing list should be promoted to the broader EO community, through exhibition booths and conferences.

6.4. Social Media

CEOS has accounts on Twitter, now X (@CEOSdotORG), Facebook (@socialceos), and LinkedIn (@ceosdotorg). Content across these platforms should be synchronised, and should promote all CEOS content, publications and achievements. Photos from meetings should be shared whenever possible.

6.5. Video

The CEOS YouTube Channel (@CEOSdotORG) provides a place to host video content. Content posted on the channel can vary, but should always be cross promoted from social media and blog posts.

Videos can cover a variety of topics and can be contributed by various CEOS entities. Videos are particularly useful for CEOS meetings or for use in exhibition booths. Where possible, content should be evergreen to ensure reusability for years to come.

6.6. Exhibition Booths

One of the most powerful ways CEOS can connect directly with the broader EO community is through exhibition booths at international conferences, such as IGARSS and GEO Week. Materials should be prepared for distribution, including flyers, stickers, and other promotional items.

7. Measuring Impact

7.1. Goals for Publication

As a minimum, the CEOS Communication Team should strive to achieve:

- 2 blog articles each month (total of 24 annually).
- Annual series of articles focusing on one Chair or SIT Chair priority.
- 1-2 videos published each year, focusing on topics of interest to Chair, SIT Chair or otherwise.
- Publication of Quarterly Revisit, 4 times per year.

It is expected that CEOS entities (Working Groups, Virtual Constellations, and other groups) should contribute at least one blog article per year, focusing on the progress of specific programmes or activities.

7.2. Measuring Success

Website and social media analytics provide a powerful way to measure the impact of CEOS communication. The key items to consider are:

- Views per blog post
- Social media followers
- Average engagements on social media posts

In addition, the CEOS Communication Team can consider periodically running web surveys to gather insights into the content and usability of the website. Use case scenarios can also be run to identify weak points in the website's functions.

As a benchmark, the analytics for September 2023, and the 12 months prior, are included in Table 1 below. The averages are calculated over October 1, 2022 - September 30, 2023.

Average views per Blog post	125.08
Twitter Followers	5196
Average Twitter impressions (engagement rate) per tweet	741.89 (4.28%)
Facebook Followers	2015
Average Facebook impressions (engagement rate) per post	125.86 (6.65%)
LinkedIn Followers*	29

*Table 1: Benchmark analytics for CEOS Communication. *Note that the LinkedIn page was only created in August 2023.*

Analytics should not be the only metric used to measure success, the impact of CEOS communication to support and drive initiatives should be also noted. In particular, the effectiveness against each target audience should be considered.

7.3. Reporting

The CEOS Communication Team will provide a 1-2 page annual report detailing the progress of CEOS communication throughout the previous 12 months. The report should highlight progress against the above reporting measures, including analytics and publication goals. This report would be submitted by the SEO prior to the annual SIT meeting (usually March-April), to be raised at SIT if the SEO deems appropriate.

8. Implementation & Execution

The CEOS Communication Team is made up of a core team from the SEO, CEOS Community Liaisons and CEOS Agency Communication Staff.

8.1. Core Comms Team

CEOS communication is the responsibility of the Systems Engineering Office (supported by NASA), publishing all content (apart from the CEOS Newsletter) and ensuring CEOS communication is progressing.

8.2. CEOS Community Liaisons

CEOS Community Liaisons are members of the CEOS community with past experience or interest in science communication. The CEOS Executive Officer (CEO) is automatically included in this group.

These members are not expected to contribute a large amount of effort, but rather to be a 'brains trust' for the core team to discuss ideas with. Their assistance may be called upon to:

- Provide feedback on a communication campaign concept.
- Suggest ideas for new content.
- Review the Communication Strategy.
- Review annual CEOS Communication Progress Reports.

Any member of the CEOS community (from within Working Groups, Virtual Constellations or other) are invited to nominate themselves to support the communication team, via the SEO.

8.3. CEOS Agency Communication Staff

Most CEOS Agencies have dedicated communication staff, with a much greater depth of experience and expertise in this area. CEOS should utilize these contacts to further promote CEOS activities. Their assistance may be called upon to:

- Share CEOS content via their own (often much larger) channels.
- Provide advice to the core team on how best to promote CEOS.

8.4. CEOS Entities

Chairs/Leads of all CEOS entities are expected to support CEOS communication, by providing content where applicable. At least one item should be provided annually, which can include articles, videos, materials for exhibition booths, or social media content. Photos from events should also be shared for promotion across CEOS social media.

8.5. Contacts & Connections

A number of related organisations have their own social media accounts, and below are a few which may be useful to the CEOS Communication Team for promoting related content.

- [Group on Earth Observations \(GEO\)](#): The GEO Secretariat manages the @GEOSEC2025 X channel, as well as the News & Blog items posted on their website.

- [EO4SDGs](#) is a GEO programme, managed by NASA. Through the CEOS SDG Coordination Group, the connection to EO4SDGs is strong, and all SDG related content should be shared with the EO4SDGs Executive Director. Their handle on X is @EO4SDG, and they also regularly post blog articles.
- The [CalVal Portal](#) is the website for all CEOS Working Group on Calibration and Validation information. The website is managed by ESA, and they have the X account @WGCV_CEOS.
- [EOTEC DevNet](#) is a joint initiative of the CEOS Working Group on Capacity Development, Education and Training (WGCapD), and the equivalent working groups of other intergovernmental EO-related organisations. CEOS should promote the work of EOTEC DevNet where possible, and their X account is @EOTECDevNet.
- The [CEOS-ARD](#) initiative is promoted through the @CEOSARD X account, which is managed by the LSI-VC Secretariat. Cross promotion of relevant materials should be ensured.

9. Conclusion

CEOS communication serves to highlight and promote the work of CEOS and its membership, to optimise societal benefit and inform decision making. The CEOS Communication Team will use a variety of content types to target the broad categories of related audiences, including both internally within CEOS and externally to the broader EO community.

Reporting will be facilitated annually through the SEO, with a summary of publications and other key statistics over the previous period.