EARTH SCIENCE
Working Group Charta

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CETAF
CONSORTIUM OF EUROPEAN TAXONOMIC FACILITIES

1. Purpose and Vision of the Working Group

Purpose: To support and advance the understanding of Earth systems by improving access to, and the quality of, Earth Science collections and data. We foster collaboration, promote the use of best practices and standards, and empower the community to address pressing global challenges through earth scientific research.

Vision: A future where Earth Science collections can be used at their maximum potential to address cutting-edge scientific research, with their data made fully interoperable and FAIR— supporting global efforts to address a better understanding of Earth History and Processes, with more specifically important societal challenges such as climate change, environmental challenges, biodiversity loss, and a sustainable management of natural resources.

2. Strategic Relevance to CETAF

The CETAF ESG plays a vital role in advancing the CETAF Strategy 2025–2030 by promoting the visibility, accessibility, and scientific utility of Earth Science collections across Europe. The group aligns with CETAF's vision of leveraging biodiversity and geodiversity knowledge to drive a sustainable future by supporting the integration of Earth Science collections into cutting-edge research addressing societal challenges such as climate change, environmental degradation, biodiversity loss, and sustainable resource management.

More specifically the ESG contributes to the following CETAF Strategy 2025 – 2030 objectives:

- **Objective I:** CETAF as the voice of biodiversity and geodiversity
  - Raises awareness of the scientific and societal value of geodiversity through research integration and public engagement.
- **Objective II:** Catalyst for taxonomic research and training
  - Develops and promotes the use of consistent taxonomic vocabularies and geological terminology.
  - Provides training and guidance on data standards and FAIR practices to build community capacity and technical competence.
- **Objective IV:** Supporter of the biodiversity and geodiversity data space
  - Improves visibility and accessibility of Earth Science collections via the GeoCASe platform.
  - Enhances data interoperability by strengthening data pipelines, refining data models, and applying community-agreed standards (Key Areas IV.1 and IV.2).
  - Contributes to the digitisation of geological collections and supports the transition to DiSSCo RI.

3. Main Themes and Objectives

- **Promote the Utilisation of Earth Science Collections in Research and addressing global challenges.** Increase the awareness of the value and critical role Earth Science Collections and the data that they hold in approaching current global issues such as climate change, environmental and biological degradation, and sustainable resource management. Also to support cutting-edge research across scientific disciplines e.g. ecology, geological and biological processes.

- **Enhance Visibility and Accessibility through GeoCASe.** Enhance the discoverability and accessibility of Earth Science collections through GeoCASe by strengthening data provision pipelines, adopting community data standards, and refining the underlying data model.

- **Advance Data Standards and Taxonomic Vocabularies.** Contribute to the development and refinement of data standards, controlled vocabularies, to ensure consistency, interoperability, and quality across Earth Science collections.

- **Build Community Capacity and Improve Data FAIRness.** Strengthen the capacity of the Earth Science community to enhance data FAIRness and how to use GeoCASe. Also training and/or workshops on topics that may affect the use of Earth Science Collections like Field collecting regulations, Cultural Goods, etc,.

4. Work Plan and Deliverables

TASK NAME	DESCRIPTION	TIMEFRAME	SUCCESS INDICATORS
Field collections regulation database	Air table database made publicly available via the CETAF website – with an automated mechanism for members to update information and flag inaccuracies.	April - November 2025	- Database made public of CETAF website. - Kept up to date by members (inputs by members) - Number of usage - possibly indicated by page visits
Ethics guidelines on the buying and selling of minerals, and fossils for and in museum shops.	Guidelines to check if the minerals and fossils purchased at wholesale are from sustainable sources and not illegally from protected areas.	February - July 2026	- Draft guidelines reviewed by at least CETAF institutions or ethics experts. - Final version published and shared on the CETAF website - Endorsed and adopted by CETAF institutions - Positive Feedback from museum retail managers via a short evaluation survey. - Referenced in internal procurement or acquisition policies.

TASK NAME	DESCRIPTION	TIMEFRAME	SUCCESS INDICATORS
Collections regulation database	Update previous collection regulations database and create an Air table and linked form for providing updates.	April - November 2025	- Database made public of CETAF website. - Kept up to date by members (inputs by members) - Number of usage - possibly indicated by page visits
Develop publication on Enhancing Earth Science Specimen data	This paper will explore how to improve the quality, discoverability, and interoperability of Earth Science collection data through FAIR principles, case studies, metadata analysis, and recommendations for standards, workflows, and vocabularies.	April 2025 – March 2026	- Published in a peer reviewed journal. - Cited by the community, and used as a best practice. - Presentation at one relevant conference or workshop
Increase utilisation of Earth Science Collections in Funded research projects	Look for funded research projects that are relevant for Earth Science Collections based research.	January 2026 – December 2026	- collections are used by the members in proposals - collections are more often the subject of research papers - At least 2 relevant project opportunities identified - Engagement with researchers and project consortia (internal and external)
Workshops on improving data standards	A workshop on using and improving data standards	September 2025 - February 2026	At least one workshop delivered with 20+ participants - Workshop materials shared online - Post-workshop survey with 80% positive feedback - Follow-up interest or collaboration initiated by attendees
Workshops on destructive sampling	A workshop on destructive sampling	Mid-2026	At least one workshop delivered with 20+ participants - Workshop materials shared online - Post-workshop survey with 80% positive feedback - Follow-up interest or collaboration initiated by attendees
Engagement with Geological Surveys	Meet EuroGeosurveys to discuss potential collaboration, particularly for adding drill cores and minerals into GeoCASe - and how they could use the portal as a service.	January - April 2026	-Initial meeting with EuroGeoSurveys -Agreement on areas of mutual interest or pilot collaboration - At least one Geological Survey expresses interest in contribution -Follow-up actions collaboration roadmap established.
P2F outreach activities.	CETAF is apart of the CETAF research	March 2025 ongoing for the next 4 years.	- More awareness of CETAF - Use of collection data in Paleoclimate modelling research - Improved organisation of Earth Science Specimen data relevant to climate science - so that it can be easily used in climate modelling research.

TASK NAME	DESCRIPTION	TIMEFRAME	SUCCESS INDICATORS
Webinar series	Bi-monthly webinars inviting members and external researchers external PhD students to showcase their work - particularly collection based research. The aim of the webinars is to increase knowledge exchange and collaboration as well awareness of what earth science research. Potential out of the CETAF youtube channel.	September 2025 - ongoing through to 2026.	At least one workshop delivered with 20+ participants - Workshop materials shared online - Post-workshop survey with 80% positive feedback - Follow-up interest or collaboration initiated by attendees
GeoCASE improvements	Ongoing to investigate ways to streamline data provision to the portal.	Ongoing continue to 2026.	- reliable service for discovering Earth Science Specimen metadata, - At least all ESG member institutions providing data to GeoCASe - Used by external stakeholders.

5. Evaluation and Success Metrics

See table above

6. Timeline and Lifetime

The group is ongoing.

7. Roles and Responsibilities

Chair: Laura Tilley. The chair organises meetings (incl. preparing the agenda, setting up invites, convening the minutes); planning work activities and engaging the working group members to contribute.

8. Governance and Decision-Making Structure

The governance structure is loose, for decision-making voting is done one person per member institution. Chairs have a term of 3 years. Here is the chair description of duties (LINK).

9. Communication and Collaboration Tools

- Google drive for documents,
- Air table for public databases,
- Cognito forms or Tally forms – for collecting feedback/questionnaire
- Zoom for virtual meetings.
- Simplelist Earth Science mailing list

10. Stakeholder Engagement (Internal & External)

- The working group has monthly meetings.
- Encourage new members by asking existing partners to disseminate information about the group to their colleagues and promote the products/results from the group.
- Workshops like those outlined in the work plan.
- Webinars, which will be publicly available through the CETAF youtube channel.
- Outreach through the P2F project.

11. Resource Planning – Human, Technical, Financial

Participants have limited time to contribute and appear to not be able to significantly contribute technically to GeoCASe, thus technical support comes from the CETAF GS from one Full stack developer.


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