





STRATEGY 2025-2030

1.5 BILLION speciments

Consortium of European Taxonomic Facilities

EMPOWERING TAXONOMY AT THE HEART OF DECISION-MAKING PROCESS

The Consortium of European Taxonomic Facilities (CETAF) is an organisation representing institutions holding scientific collections, that is dedicated to promoting taxonomy and systematic biology throughout Europe.

CETAF was created to align positions, leverage each other's initiatives, foster collaboration, and unite efforts to advance taxonomy and systematic biology research based on the invaluable collections curated and preserved in these institutions. CETAF now comprises 81 institutions from 27 countries, forming a unique organisation in Europe. It collectively gathers nearly 1.5 billion specimens, representing approximately 80% of the biodiversity described in the world. Thanks to the work carried out by more than 5000 researchers at CETAF member organisations, CETAF serves as a fundamental pillar for advancing research not only in the field of biodiversity and geodiversity but also for other disciplines such as health, agroforestry, food security, land planning and use, provenance, and many others.



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PREAMBLE

By endorsing the CETAF Strategy, members commit to collective action toward shared goals, creating a positive impact for both CETAF as an organisation and its member institutions. This endorsement signifies commitment and active engagement with CETAF's objectives, providing a comprehensive operational framework with focused goals and pivotal areas that foster effective collaboration across CETAF members. The Strategy also outlines the key initiatives CETAF intends to prioritise. Moreover, by approving the CETAF Strategy for 2025-2030, members establish pathways to progress and define indicators of success.

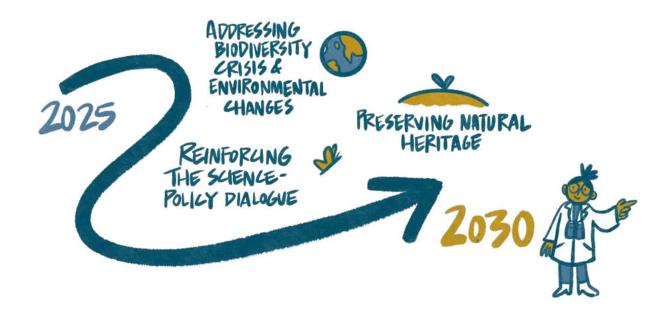
The Strategy is a core instrument for action and unlocks a series of strategic benefits for the community, which will increase awareness and visibility, enlarge impact, and solidify the effectiveness of the CETAF's endeavours. These advantages are reflected at the institutional level through a circular process where each party's commitment strengthens the whole, which, in turn, reinforces its individual components.

The endorsement of the CETAF Strategy 2025-2030 allows CETAF institutions and the CETAF community at large to:

- Enhance credibility and trust by ensuring quality assurance that fosters confidence among stakeholders, policymakers, and the general public.
- Ensure long-term sustainability and impact of CETAF by providing members with a strong platform to influence future biodiversity policies and initiatives, reinforcing CETAF's core values.
- Increase visibility and elevate institutional profiles within the multidisciplinary scientific community and among potential collaborators, reinforcing CETAF's presence as a leader in biodiversity and taxonomy.
- Diversify funding sources and secure financial commitments by demonstrating CETAF's commitment to quality, while leveraging efforts to attract broader financial support.
- Align with international initiatives to ensure compliance with regulatory frameworks and support global biodiversity conservation efforts, contributing to the effectiveness of national monitoring plans.

- Embed scientific knowledge in policy-making by providing reliable data and a rigorous scientific basis through shared protocols and standards, helping to shape evidence-based policies.
- **Promote standardised practices** for consistent data collection, aggregation, and analysis, which are essential for collaborative projects and for sharing findings within the broader scientific community.
- **Expand partnership opportunities** with taxonomic experts and institutions across Europe and internationally, encouraging the development of innovative research projects and initiatives.
- Accelerate access to resources and training to enhance skills, develop innovative methodologies and tools, and implement modern approaches that support taxonomic expertise.
- Broaden the reach of key biodiversity and geodiversity messages by showcasing CETAF's commitment to research, education, and public awareness.
- Engage citizens and societal actors through coordinated campaigns and activities that promote scientific knowledge and foster a unified approach to biodiversity conservation.

EXECUTIVE SUMMARY



The new strategy outlines CETAF's goals from 2025 to 2030. Though focused on a five-year term this CETAF Strategy is ambitious, reflecting the significant changes CETAF must implement to meet the rapidly evolving demands of its scientific community and the broader societal challenges.

It aims to align with European and global biodiversity and geodiversity frameworks, offering a solid yet impactful foundation for CETAF's efforts to address the biodiversity crisis and global environmental changes, which are crucial for preserving natural heritage and ensuring the sustainability of life on Earth.

It also seeks to strengthen CETAF's role as a key participant in the science-policy dialogue and as a vital player among various stakeholders.



OVERARCHING STRATEGIC Z



Vision, mission, and core values

Vision Statement

CETAF envisions a world where natural science collections and knowledge of biodiversity and geodiversity drive a **sustainable future for Nature and society.**

Mission Statement

CETAF promotes research in **taxonomy** and **systematics** in Europe by facilitating expert collaboration and knowledge sharing among its member institutions, advocating for the value of collection-based research, and enhancing the accessibility, use, and impact of **natural science collections**.

Core Values

Our core values are the foundation of CETAF's culture and serve as guidelines for every decision we make. They represent the **principles** we uphold and strive for in all our actions, fostering trust and collaboration. Living these values ensures alignment with our vision and mission, guiding us toward achieving our strategic goals.

Commitment to Biodiversity and Geodiversity

CETAF seeks to support and promote the exploration, understanding, preservation, and enhancement of biodiversity and geodiversity in Europe and globally. It recognizes their crucial role in maintaining environmental balance and supporting life on Earth.

Public Engagement on Biodiversity and Geodiversity

CETAF commits to actively involving and educating the public to recognize biological and geological diversity and understand its value and significance to the planet's health. CETAF fosters meaningful interactions with the public to promote awareness and appreciation of diverse ecosystems and geological features, and encourage collaborative efforts in conservation and sustainability.

Openness

CETAF reaffirms its commitment to provide complete accessibility and availability of its information and services. As a publicly funded association dedicated to biodiversity and geodiversity, CETAF strives to remove barriers and facilitate seamless access to our community's resources, including collections, research, and geodiversity and biodiversity data.

Collaboration

CETAF is rooted in a collaborative approach that emphasises working together to achieve common goals and/or complete shared tasks. It is based on the cooperative combination of skills, knowledge, and resources, where each participant contributes their expertise and perspectives for the joint benefit. Effective collaboration requires open communication, mutual respect, and coordination among all parties to achieve optimal outcomes.

Participation

CETAF encourages members and interested parties to actively engage and contribute to the collective goals through working groups, task forces, special interest groups, and/or commissions. The community sense of CETAF allows participatory representation where every voice matters and collaboration leads to better outcomes. By encouraging open dialogue and inclusive involvement, CETAF empowers everyone to take initiative and drive positive change together.

Responsible Research and Innovation

CETAF promotes research practices and academic research, and encourages innovation in an ethical, transparent, inclusive, and socially accountable manner.

Diversity

CETAF acknowledges, values, and respects its community's wide range of differences. Diversity enhances the richness of interactions, allows for an inclusive environment, and contributes to the overall strength and resilience of CETAF and the CETAF community.

Equality

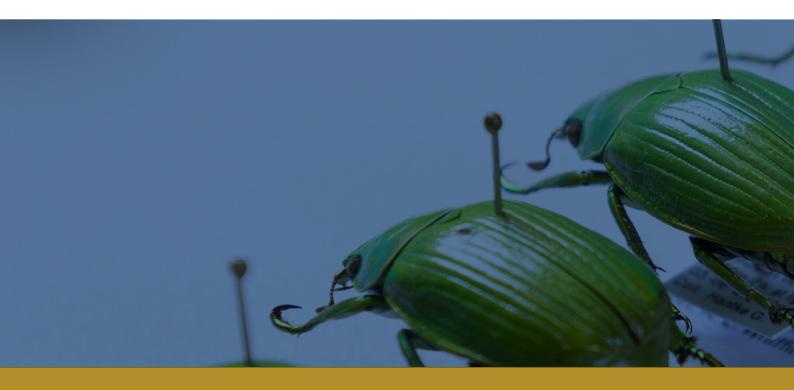
CETAF endorses the principle of treating all individuals with the same level of fairness, justice, and respect, regardless of their differences, such as race, gender, age, origin, political orientation, or socioeconomic status. It ensures that everyone has equal opportunities and rights and that no one is disadvantaged or discriminated against based on <u>inherent characteristics or personal circumstances</u>.

Symmetrical Knowledge Exchange

CETAF ensures symmetrical knowledge exchange by providing a secure space for sharing information, ideas, and expertise equally between parties, with each side contributing and benefiting in an equitable and balanced manner and where all participants are viewed as having valuable knowledge to offer, regardless of their status, background, or expertise leading to an individual and collective learning and improvement process through interaction.

Transparency

CETAF declares its complete openness and clarity in its operations, decisions, and communications. It ensures that accurate and timely information is shared with members and stakeholders. It takes accountability for its actions and outcomes, encouraging engagement and fostering trust through honesty and straightforward, transparent reporting.



Strategic objectives

From 2025 to 2030 CETAF will focus on four main strategic objectives to be accomplished and, through them, improve and boost the CETAF relevance in the European landscape and beyond:



I. CETAF strengthens its position as the leading voice for biodiversity and geodiversity in Europe;



II. CETAF catalyses integrative taxonomy;



III. CETAF drives cross-sector collaboration to address biodiversity and geodiversity challenges;



IV. CETAF brings together the support for biodiversity and geodiversity data space growth.



Key success factors

Several dimensions are critical to measuring the success of this CETAF Strategy. These are linked to the Key Areas identified under each of the four Objectives described in Section 5 below. For each annual work plan, a set of clear, measurable, and specific indicators will be established for the corresponding period.

These dimensions are:

- > The recognition of taxonomy and systematics
- > The policy-science dialogue and EU involvement
- > Knowledge exchange and training
- > Stakeholders engagement
- > Multidisciplinary partnerships and collaborations
- > The support for research and data Infrastructures

ORGANISATIONAL SETTING

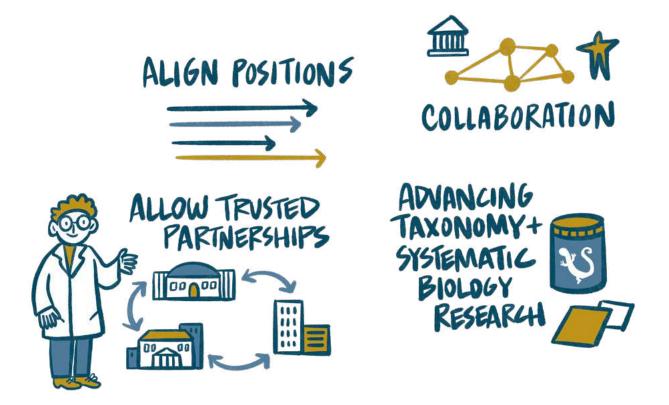
History and Background

CETAF was founded on the 1st of December 1996 by ten of Europe's largest natural history museums. The organisation was created to align positions, leverage each other's initiatives, foster collaboration, and unite efforts to advance taxonomy and systematic biology research based on the invaluable collections curated and preserved in these institutions.

As the network grew and cooperation strengthened, CETAF required a legal status to formalise its operations and expand its reach. A General Secretariat was established in 2013 in Brussels to support the network's functioning, activate engagement, and efficiently implement CETAF's goals. In March 2019, CETAF was officially registered as an international non-profit association under Belgian law (an AISBL, Association Internationale Sans But Lucratif in French)

Since its foundation, CETAF evolved to provide an operational framework for more significant and impactful initiatives benefiting the scientific community it represents. Key milestones include participation in flagship projects funded by the European Commission under the different Framework Programmes and COST Actions, such as European Distributed Infrastructure for Taxonomy (EDIT), Synthesis of Systematic Resources (SYNTHESYS), Mobilise data, policies and experts in Scientific Collections (MOBILISE), Talent in Biodiversity (BioTALENT), Innovation and Consolidation for Large-Scale Digitisation of Natural Heritage (ICEDIG), Biodiversity Community Integrated Knowledge Library (BiCIKL), Biodiversity Genomics Europe (BGE), and Transforming European Taxonomy through Training, Research and Innovation (TETTRIs). CETAF endorsed two fundamental achievements for scientists, namely the European Journal of Taxonomy (DEST) - CETAF's training and e-learning platform.





CETAF has continuously expanded its services to the scientific community by providing expert advice and training. It advocates and engages with a multi-actor approach to address a broad range of topics related to biodiversity and geodiversity, engaging with different stakeholders, ranging from government representatives to civil society and the industrial sector. As a result, CETAF has established a strong, solid strategic position and plays a crucial role in the science-policy interface.

Furthermore, CETAF has developed position papers and statements for external stakeholders' engagement and advocacy, and formulated codes of conduct officially recognised as best practices by legislators for the access and benefit-sharing related to the use of genetic resources (the CETAF Code of Conduct on ABS). It established principles for responsible research and innovation in the field (CETAF Framework for RRI) and developed standards (such as CETAF Stable Identifiers), guidelines, protocols, and models for the taxonomic community, all gathered as CETAF Resources, for advising and guiding the practice in a variety of aspects.

Moreover, CETAF has been a critical driving force behind the Distributed System of Scientific Collections (DiSSCo), a European Research Infrastructure (RI) initiative launched in 2018. DiSSCo is based on digital objects created on top of the data and metadata extracted from natural science collections. It will significantly enhance access to information following FAIR (Findable, Accessible, Interoperable, and Reusable) principles, standards, and agreed practices and advance research in biodiversity and geodiversity.

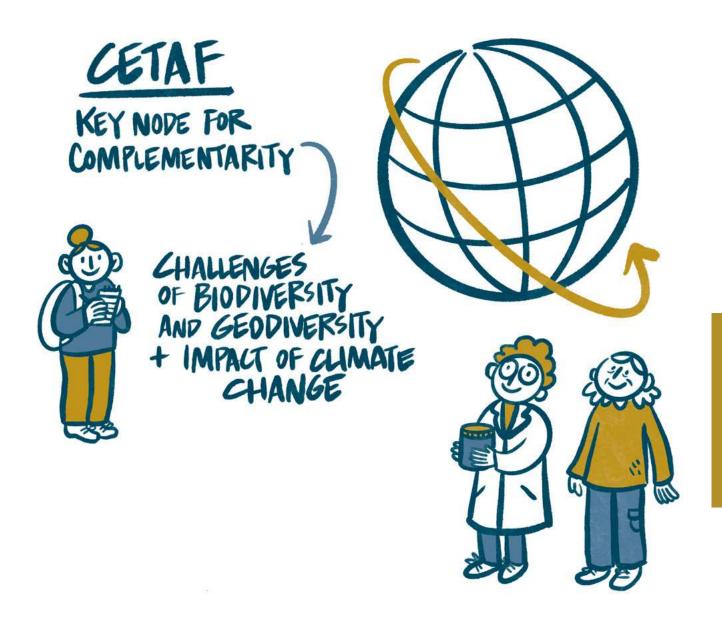
Governing and Operational Structure

CETAF **AISBL** is a Belgian association governed by its own Statutes and Bylaws. Its membership is open to European legal entities and includes a variety of non-profit institutions, public and private, that hold scientific collections with a significant capacity for research. The organisation is structured into three central bodies that govern and ensure the effective management and functioning of CETAF: the General Assembly, the Executive Committee, and the General Secretariat.

CETAF's ultimate governing body is the **General Assembly**, representing the members. The General Assembly meets twice yearly and is responsible for fundamental policy and operational matters. This includes appointing members of the Executive Committee, amending the Statutes, dissolving the organisation, admitting and excluding members, determining the membership fee, and overseeing the overall business model.

The **Executive Committee** is elected by the General Assembly every four years. It consists of four legal members (**President, Vice President, Secretary, and Treasurer**) and up to four additional **Ordinary Members**. The Executive Committee manages the association and prepares proposals to the General Assembly. It drafts the founding components of CETAF's operation, including the CETAF overarching strategy, the annual work plan, the yearly reports, the budget, and the organisation's annual accounts.





The **General Secretariat** carries out all tasks approved by the General Assembly and the Executive Committee. In addition, it provides support, manages the organisation, and runs daily operations while ensuring the effective implementation of CETAF objectives, work programme, and operative decisions. The General Secretariat is led by the **Executive Director**, who, by delegation of the President, represents CETAF and advocates for its positioning in the biodiversity- and geodiversity-related landscape in Europe and internationally. Thanks to its legal structure, the General Secretariat can also represent the CETAF community in projects and initiatives, thus coordinating activities in alignment with CETAF's strategic objectives.

Within the structure of the organisation, the participatory and cooperative work carried out by experts affiliated with CETAF member institutions is essential to achieve CETAF's strategic objectives. Additional **temporary bodies** such as working groups, task forces, special interest groups, or commissions can be created to address fundamental challenges and streamline the community's input. **CETAF Working Groups**, which serve as the think-tank and backbone of CETAF's community of practice, focus on specific areas to produce outcomes that support the CETAF community.

SURROUNDING LANDSCAPE

Collaborators and partners

CETAF has become a reliable partner for many actors and organisations in Europe and worldwide as we all face the challenges of biodiversity and geodiversity loss and the impact of climate change. At the international level, CETAF has developed collaborations with several associations, each contributing its expertise to the global understanding of biodiversity and geodiversity, fighting biodiversity and geodiversity loss, and mitigating the effects of damaged ecosystems.

At the European level, CETAF and CETAF member institutions have participated in many successful EU-funded collaborative projects, such as SYNTHESYS, EDIT, Virtual Biodiversity Research and Access Network for Taxonomy (ViBRANT), BioScan, the **European Biodiversity Observations Network** (EU-BON), ICEDIG, BioTALENT, BICIKL, MOBILISE and BGE. Further, CETAF has stepped up to coordinate TETTRIs, the flagship project transforming European Taxonomy through training, research, and innovations. CETAF member institutions have been instrumental in developing critical infrastructures, including LifeWatch ERIC, the Biodiversity Heritage Library (BHL), and the Integrated European Long-Term Ecosystem (e-LTER). DiSSCo is a CETAF initiative highlighting the consortium's pivotal role in advancing biodiversity research and infrastructure.

CETAF collaborates with complementary organisations, such as ECSA (the European Citizen Science Association), to involve the public and to educate society about the importance of understanding biodiversity, species identification, and conservation.

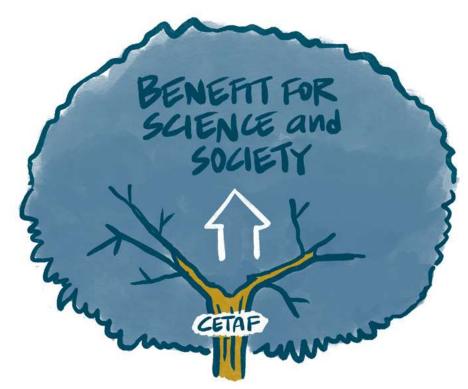
CETAF builds lasting partnerships with entities operating globally, such as the Biodiversity Information Standards (TDWG), the Society for Preservation of Natural History Collections (SPNHC), the International Union for Conservation of Nature (IUCN), and Botanic Gardens Conservation International (BGCI), supports scientific forums like Biosyst and the Global Science Forum, and actively participates as an observer in the Intergovernmental Science-Policy Platform for Biodiversity and Ecosystem Services (IPBES). CETAF is a trusted advisor for the European Commission institutions and agencies, including the Joint Research Centre (JRC), the Knowledge Centre for Biodiversity, and the Science Service for Biodiversity. CETAF closely collaborates with the European Commission through several prominent Directorates-General (DGs), primarily those working on Environment (ENV) and Research and Innovation (RTD). CETAF, through its Executive Director and expert advisors, participates in the Access and Benefit Sharing Information Forum and is a partner to the Science and Technology for Pollinating Insects (STING) initiative for implementing the Pollinators Directive in Europe, in the area of expertise and capacity building.

Regarding data collection, CETAF tightly partners with the Global Biodiversity Information Facility (GBIF), the Scientific Collections International (SciColl), the Botanic Gardens Conservation International (BGCI), and the Catalogue of Life (CoL). Through its community infrastructure, DiSSCo, CETAF promotes the digital unification of all European natural science collections under standard curation, access policies, and practices. As such, DiSSCo enables the transformation of a fragmented landscape of crucial natural science collections into an integrated knowledge base that provides interconnected hard evidence on the natural world.

CETAF at the Science Policy Interface

In the next decade, policymakers, such as the European Commission, need solid organisations supported by the research community to provide reliable and science-based knowledge. CETAF aligns perfectly with the European Commission's requirements, serving as an expert hub in the science-policy interface for integrative taxonomy and for biodiversity and geodiversity data. The European Commission has recognized biodiversity protection as a cornerstone of its European Green Deal, which has led to the ambitious European Union (EU) Biodiversity Strategy for 2030. In 2022, through the Kunming-Montreal Global Biodiversity Framework (GBF), all Parties committed to setting national targets. Additionally, the EU's Nature Restoration Law, passed in 2024, requires implementation across all member states. Such frameworks set the scene in Europe and worldwide for CETAF to interact with and position itself.

STRATEGIC OBJECTIVES



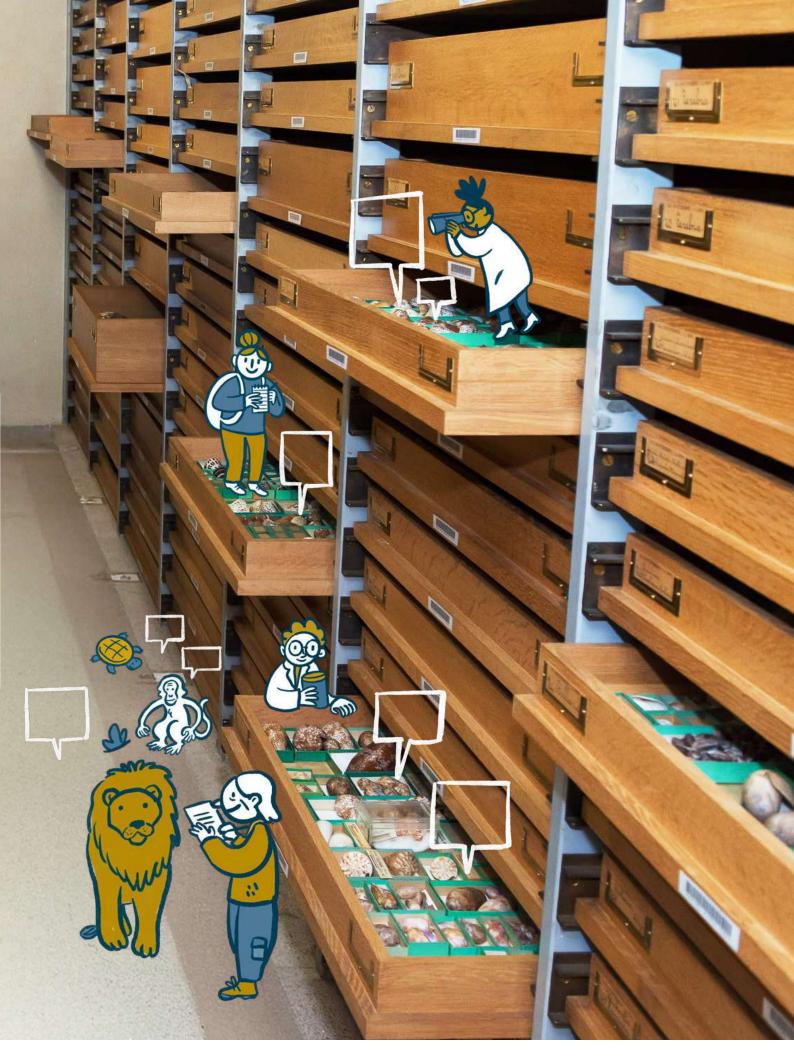
As a key organisation in biodiversity and geodiversity, CETAF aims to strengthen its position in debates around environmental issues in Europe and globally. The accumulated expertise, the scientific research conducted, and the outcomes produced, together with the vast and invaluable assets that the collections represent, jointly demonstrate the capacity of the CETAF community to facilitate groundbreaking results to advance and deliver large-scale services for the benefit of science and society. Four strategic objectives will guide and streamline the activity of CETAF during the 5-year term from 2025 to 2030 based on the fundamental assets the community jointly holds:



CETAF, the voice of biodiversity and geodiversity

Biodiversity and geodiversity are at the foundation of Earth's life support system. Essential ecosystem services—such as food production, clean water and air, and natural medicines— all crucial for human well-being and societal functioning—depend on this diversity. However, the species that form these ecosystems are increasingly threatened as extinctions occur at an unprecedented rate. This loss endangers the lives and livelihoods of billions of people, countless species, and the overall sustainability of our planet. In parallel, the degradation of geodiversity further jeopardises ecosystem resilience and the natural foundations upon which human society and biodiversity depend. The success of global and regional policy efforts to protect ecosystems and reverse species decline and geodiversity degradation depends on the consistent and reliable provision of actionable knowledge on biodiversity and geodiversity at larger scales and finer resolutions. Together, this knowledge is essential for positively affecting biodiversity and geodiversity and ensuring humanity thrives within the Earth's sustainable limits. CETAF and the CETAF members are best positioned to provide this expert's advice.

CETAF seeks to raise the voice of biodiversity and geodiversity and leverage the expertise of its members. CETAF aims to amplify its members' contributions to tackling the biodiversity crisis and geodiversity degradation by delivering timely, large-scale, actionable knowledge and insights.



II. CETAF, a catalyst for integrative taxonomic research

CETAF can support the EU, national governments, and other institutions in making informed decisions regarding protecting and enhancing the state of nature. The monitoring requirements of the Nature Restoration Law and the European Biodiversity Strategy 2030 call for greater engagement by stakeholders, such as EU Member States, the private sector, civil society, NGOs, local communities, scientific and academic institutions, and farmers and landowners. To date, science has described approximately two million species, representing less than 10% of the estimated total of organisms on Earth. To accelerate the discovery process, we must combine all available resources, technology, data, and expertise to expand our understanding of biodiversity rapidly. The scale of this mission requires leveraging human and machine intelligence to scale up species discovery and monitoring efforts.

Technology has entered a new era of biodiversity data generation. From automated field observations (e.g., camera traps, radar, DNA sampling stations) to large-scale citizen science networks, we generate more biodiversity-related data than ever. In this era of data-at-scale, our collective ability to capture species' presence across space and time can be made widely accessible and shared. However, this transformation depends on accurately identifying species based on collected evidence—whether physical specimens, images, sounds, tissues, or DNA. CETAF will promote training and knowledge exchange to advance integrative taxonomic research and practice.

CETAF seeks to drive advancements in taxonomy and systematics, ensuring its expertise is accessible to public and private organisations. It promotes the training and knowledge exchange of professionals and citizens to sustain and enhance taxonomic expertise, supporting innovation in biodiversity conservation.



CETAF, a driver for cross-sector collaboration to address biodiversity and geodiversity challenges

Engagement is critical to the GBF and the EU Biodiversity Strategy for 2030.

Governments must take action, and the private sector must play a decisive role by partnering with public institutions. In 2024, European Commission President Ursula Von der Leyen also emphasised this collaboration, shifting away from the outdated view that businesses only harm the environment. Today, the private sector is recognized as a key player in preventing climate crises and mass extinction in collaboration with public institutions.

CETAF members will need to partner with both public and private institutions. While collaboration with the public sector is familiar, engaging with the private sector may feel new. However, the private sector is essential in solving the biodiversity crisis and needs CETAF's expertise. Businesses face challenges in meeting Corporate Sustainability Reporting Directive (CSRD) requirements on biodiversity and making their operations biodiversity-inclusive. CETAF can provide valuable support, offer knowledge, and facilitate long-term partnerships. CETAF will share best practices and connect members to EU infrastructures and data-sharing projects. Crafting and implementing effective strategies in this area is a significant challenge. Key questions persist: (1) how to support businesses in gathering biodiversity and geodiversity data, (2) how to encourage the adoption of nature-positive practices, and (3) how to document contributions to biodiversity and geodiversity conservation. Progress has been made, but nature-positive actions are inconsistent across sectors and often disconnected from broader conservation efforts. Furthermore, the risk of greenwashing continues to be a concern.

Natural History Museums and Botanical Gardens are uniquely positioned to bridge the gap between businesses and the public sector. They are critical in helping organisations and companies develop effective sustainability strategies, promoting trust, and advocating for biodiversity-friendly products and solutions.

CETAF aims to build trusted relationships with public and private organisations and companies by aligning shared biodiversity and geodiversity protection goals without compromising scientific integrity.



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ALIGNING GOALS

N. CETAF, supporter of the growth of the biodiversity and geodiversity data space

Providing fair, reliable, and up-to-date data is crucial to effectively contribute to achieving global goals under the GBF and actively working towards completing the EU Biodiversity Strategy for 2030. This data is essential for assessing biodiversity status and trends. In turn, it drives evidence-based and scientifically grounded decisions in biodiversity governance. The biodiversity framework emphasises the crucial role of comprehensive biodiversity data, incorporating contributions from citizen science, traditional knowledge, and private sector contributions.

CETAF has been a driving force in building a research infrastructure that can be the technical component of community collections-based information. The Distributed System of Scientific Collections, DiSSCo Research Infrastructure, was initiated under the ESFRI program in 2018 and will soon become a legal entity following successful development with solid support from our members and numerous states. DiSSCo accelerates the digitization of collection objects, integrating them into a unified infrastructure to enhance taxonomic research and expedite species descriptions, among other needs. This will create a vast European digital collection accessible to scientists across disciplines and readily available to education, industry, and policy-making stakeholders.

CETAF and DiSSCo share aligned goals but have distinct roles and are mutually supportive and complementary. DiSSCo is the European infrastructure for FAIR and open biodiversity and geodiversity data, linking CETAF members' data with other datasets outside our disciplines. CETAF, meanwhile, represents the community, driving innovation, professionalising research, and advancing institutional knowledge. For that, CETAF builds strategic partnerships and creates collaborative pathways to promote access to biodiversity and geodiversity information and to improve data integration. In parallel, CETAF is also working on improving the GeoCAse portal, which is dedicated to geodiversity, by improving and streamlining the ways that institutions can provide data.

CETAF aims to strengthen all aspects of taxonomic research and collection-based knowledge production by promoting strategic interdisciplinary partnerships and collaborations with aggregators and research infrastructures across fields and data types, developing and adopting methods and techniques, and building solid multidisciplinary connections.



Key Areas and Priority Initiatives

The four **Strategic Objectives** are implemented through designated **Key Areas**, with one or two Key Areas per Objective. They cover a range of outcomes with clear responsibilities and assigned roles. Key Areas are divided into **Priority Initiatives**, which are defined as the prioritised actions.

Objective I: CETAF, the voice of biodiversity and geodiversity

CETAF seeks to raise the voice of biodiversity and geodiversity and leverage the expertise of its members. CETAF aims to amplify its members' contributions to tackling the biodiversity crisis and geodiversity degradation by delivering timely, large-scale, actionable knowledge and insights.

Key Area I.1: Elevate the relevance of biodiversity and geodiversity and leverage the expertise of CETAF members Keywords: information, literacy, and exploitation

Priority Initiatives:

I.1a) Raise public awareness of biodiversity and geodiversity challenges

Develop a clear and effective communication strategy to highlight the added value of taxonomy, the critical role of the collection-based research undertaken at CETAF member institutions, and increase public engagement.

I.1b) Promote the broader use of taxonomy across various sectors

Use media outlets and informational platforms to raise awareness of taxonomy's critical role across sectors, enhancing its recognition and application.

I.1c) Represent CETAF members in key forums

Advocate for biodiversity- and geodiversity-friendly policies by representing CETAF members in discussions with companies, professional associations, and public agencies.

I.1d) Foster recognition of the vital role of taxonomists in biodiversity monitoring

Highlight the essential role of taxonomists as crucial participants in biodiversity monitoring and implementing national biodiversity plans.

Key Area I.2: Deliver actionable knowledge and insights for tackling the biodiversity crisis and geodiversity degradation

Keywords: advocacy and engagement

Priority Initiatives:

I.2a) Support CETAF members in engaging with their audiences and stakeholders

Provide targeted messages and supporting arguments that emphasise the importance of taxonomy and collection-based research, empowering members to communicate effectively with their audiences.

I.2b) Engage with EU policy-making institutions and agencies

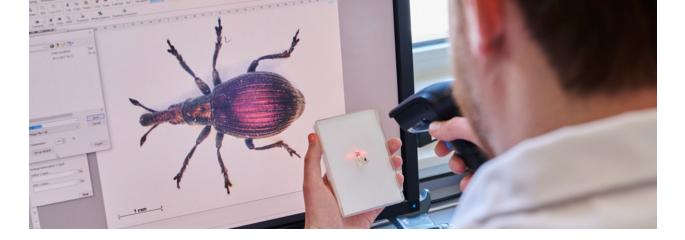
Engaging actively with EU institutions can influence policy development and implementation, particularly in the context of the EU Biodiversity Strategy 2030 and future EU Framework Programmes.

I.2c) Build strategic European and international nodes for biodiversity and geodiversity conservation

Participate in science-policy dialogues and help establish critical strategic nodes that foster collaboration in taxonomy, biodiversity, and geodiversity conservation efforts.

I.2d) Advocate for instrumental and structural funding opportunities

Shape policies and funding strategies by preparing policy briefs and statements that promote partnerships between industry, science, and the public. Align these efforts with EU needs to secure support for taxonomy and conservation initiatives.



Objective II: CETAF, a catalyst for taxonomic research

CETAF seeks to drive advancements in taxonomy and systematics, ensuring its expertise is accessible to public and private organisations. It promotes the training and knowledge exchange of professionals and citizens to sustain and enhance taxonomic expertise, supporting innovation in biodiversity conservation.

Key Area II.1: Drive advancements in taxonomy and systematics Keywords: advances in species identification and data linkage

Priority Initiatives:

II.1a) Promote integrative taxonomy

Accelerate species discovery and description through the adoption of integrative approaches.

II.1b) Support the adoption of advanced technologies

Encourage the use of cutting-edge species recognition and biodiversity monitoring tools, including next-generation DNA sequencing, information technology, data science, and artificial intelligence (AI).

II.1c) Leverage biodiversity data sources for enhanced data linkages

Develop comprehensive data linkages using diverse sources and applying open science principles, including FAIR and CARE, for a more holistic understanding of biodiversity.

II.1d) Foster collaboration among specialists and EU-funded projects

Strengthen collaboration between taxonomists and across EU-funded projects to advance current practices and create new tools and knowledge hubs, such as those focused on pollinators. Key Area II.2: Promote training and knowledge exchange and enhance taxonomic expertise *Keywords: training and capacity building*

Priority Initiatives:

II.2a) Expand CETAF-DEST as a learning hub

Develop CETAF-DEST into a premier platform for taxonomic training and intergenerational knowledge exchange, incorporating responsible research practices like Open Science, FAIR and CARE principles, best practices for Access and Benefit Sharing (ABS), and other critical topics, and symmetrical knowledge exchange with the Global South.

II.2b) Enhance taxonomic reference tools

Broaden access to and development of reference collections, species checklists, and other taxonomic information systems to improve species description, documentation, and identification and to support biodiversity monitoring.

II.2c) Promote young researchers as role models

Encourage the involvement of young researchers in inspiring the next generation of taxonomists through initiatives like the E-SCoRe Award, internships, and targeted media outreach.

II.2d) Ensure the continuity and growth of taxonomic expertise

Establish clear career pathways for university taxonomists, promote career development through certifications, and advocate for the inclusion of taxonomy in university curricula.

Objective III: CETAF, a driver for cross-sector collaboration to address biodiversity and geodiversity challenges

CETAF aims to build trusted relationships with public and private organisations and companies by aligning shared biodiversity and geodiversity protection goals without compromising scientific integrity.

Key Area III: Build trusted relationships with public and private organisations, as well as companies Keywords: partnership with private and public sector

Priority Initiatives:

IIIa) Establish partnerships for biodiversity and geodiversity-positive actions

Collaborate with public and private sector organisations and companies at national, European, and global levels to promote biodiversity – and geodiversity – positive strategies.

IIIb) Develop guidelines and share best practices

Create sector-specific guidelines and share best practices to help organisations and companies preserve biodiversity, adopt nature-positive strategies, and collaborate with scientific communities and the public.

IIIc) Engage citizen scientists and public groups

Collaborate with citizen science organisations and public groups to raise awareness and foster partnerships addressing biodiversity and geodiversity challenges. Involve non-professionals in data mobilisation, quality control, and knowledge co-creation, supporting and enhancing research.

IIId) Promote taxonomic expertise in the private sector

Encourage the inclusion of taxonomic expertise in the private sector through initiatives like co-funded projects and programs such as Taxonomists in Residence.

ENGAGING CITIZEN SLIENTISTS

Objective IV: CETAF, supporter of the growth of the biodiversity and geodiversity data space

CETAF aims to strengthen all taxonomic research and knowledge production aspects by promoting strategic interdisciplinary partnerships and collaborations with aggregators and research infrastructures across fields and data types, adopting modern methods and techniques, and building solid multidisciplinary connections.

Key Area IV.1: Strengthen all aspects of taxonomic research and collection-based knowledge production Keywords: data exposition

Priority Initiatives:

IV.1a) Support member institutions in managing and improving collection infrastructures

Assist member institutions in preserving and enhancing their physical and digital collections by promoting international standards and providing training and support within and beyond the CETAF community.

IV.1b) Facilitate collection digitization and DiSSCo data production

Promote good practices in collection digitization, following MIDS guidelines and other standards, and provide access to resources that strengthen the community of practice including platforms such as CETAF Registry of Collections and GeoCASE, for all types of collections.

IV.1c) Foster transdisciplinary collaboration

Encourage collaboration between CETAF members, researchers, curators, and infrastructure developers to advance shared research goals and drive technological innovation.

IV.1d) Ensure a smooth transition to DiSSCo Research Infrastructure (RI)

Facilitate the transfer of CETAF's infrastructural responsibilities to DiSSCo RI, promoting DiSSCo as the central research infrastructure for the CETAF community.

Key Area IV.2: Promote strategic interdisciplinary partnerships Keywords: global alignment and collaboration

Priority Initiatives:

IV.2a) Strengthen cooperation with global repositories and collections-driven organisations

Foster partnerships with global repositories (e.g., BHL, GBIF) and collections-driven organisations (e.g., SPNHC, iDigBio) to expand the development of joint products and services.

IV.2b) Collaborate with global assessment platforms and forums

Strengthen collaboration with platforms like IPBES, participate in international impactful forums (such as the Conference of the Parties to the United Nations Convention on Biological Diversity-COP to CBD), and mobilise contributions from communities of practice and other organisations to maximise collective impact on biodiversity and geodiversity objectives.

IV.2c) Contribute to the development of global standards

Participate in task forces and working groups (e.g., TDWG) to develop standards such as LatimerCore and the Minimum Information about a Digital Specimen (MIDS) and follow OpenDS specifications.

IV.2d) Promote global dissemination of biodiversity and geodiversity knowledge

Enhance the global reach of high-quality research through open-access journals like EJT and partnerships with other publishing platforms.

GLOBAL REACH OF HIGH QUALITY RESEARCH



PERFORMANCE MONITORING

Measurement and evaluation

The strategic pathway for 2025 to 2030 outlined in this document will be tracked and monitored to assess progress and ensure the achievement of expected results by the end of the 5-year period. The CETAF Strategy 2025-2030 will be further implemented through annual plans detailing specific tasks and expected outcomes each year, contributing to the strategy's overall success.

In that context, monitoring each of the seven key areas defined within the different four strategic objectives will include several key performance indicators (KPIs) to assess the work carried out and help to forecast remaining tasks. Based on this analysis, corrective measures may be applied alongside mechanisms to strengthen weak areas and bridge identified gaps.

Each area includes three indicators, some linked specifically to actions of the CETAF Secretariat, while others involve the activity of CETAF member institutions. Altogether, these indicators contribute to measuring the impact of the community at large within the scope of CETAF as an organisation.

INDICATORS

Key Area I.1:

Elevate the relevance of biodiversity and geodiversity and leverage the expertise of CETAF members

- I.1.1) Number of policy-briefs and position papers produced
- I.1.2) Number of events attended with active CETAF participation
- I.1.3) Number of presentations made on behalf of CETAF and/or in relation to initiatives in which CETAF is involved

Key Area I.2:

Deliver actionable knowledge and insights for tackling the biodiversity crisis and geodiversity degradation

- I.2.1) Number of formal consultations or meetings with representatives of European agencies I.2.2) Number of CETAF proposals submitted in response to EU FP calls
- I.2.3) Number of CETAF activities aimed at engaging the general public in biodiversity conservation

Key Area II.1:

Drive advancements in taxonomy and systematics

- II.1.1) Number of best practices and guidelines developed and published by CETAF and its community
- II.1.2) Number of new tools and mechanisms created and/or supported by CETAF for species description, identification, and monitoring II.1.3) Number of peer-reviewed publications in integrative taxonomy by CETAF member institutions

Key Area II.2:

Promote training and knowledge exchange and enhance taxonomic expertise

II.2.1) Number of training programs offered through DEST and CETAF-related platforms II.2.2) Number of professionals from CETAF members conducting and/or participating in CETAF-related training programs II.2.3) Number of European universities and/or professional schools offering certified taxonomy-related courses involving CETAF



Build trusted relationships with public and private organisations, as well as companies

III.1) Percentage of CETAF members involved in biodiversity-positive activities with external stakeholders

III.2) Number of biodiversity-positive collaborations with the public and/or private sector III.3) Percentage of CETAF members engaged in biodiversity-positive collaborations with the public and/or private sector

Key Area IV.1: Strengthen all aspects of taxonomic research and collection-based knowledge production

MONITORING

KP14

7 Key Areas

IV.1.1) Percentage of CETAF members actively contributing data to DiSSCo IV.1.2) Percentage of CETAF members implementing standards and best practices developed or recommended by CETAF IV.1.3) Number of contributions by CETAF and its members to dynamic, expert-curated online taxonomic resources

Key Area IV.2:

Promote strategic interdisciplinary partnerships

IV.2.1) Number of cross-disciplinary projects involving CETAF and its members IV.2.2) Number of strategic partnerships with organisations outside CETAF IV.2.3) Number of projects and activities with strategic partners

FINANCIAL SCHEME

Despite a challenging economic climate and high inflation, CETAF demonstrates strong and stable financial and programmatic results, including new projects. In recent years, the CETAF budget has increased significantly, aligning with successful participation in European projects and diversification of activities. The budget consists of (i) membership fees, (ii) funding obtained through successful participation in European-funded projects, particularly within the Horizon Europe ecosystem, and (iii) income from services developed for the scientific community, such as DEST training courses. The annual budget fluctuates according to the funding received from European projects, whose net balance ranges from 20% to 60% (depending on the year and the projects ongoing during that period), and allows for the hiring of new personnel (project-based personnel for specific periods) to address the planned activities in CETAF's various areas of focus. On an annual basis, most expenditures are related to personnel costs (80%), with additional expenses for project administration, missions, infrastructure maintenance, and communication materials or tools. From 2024 onwards, a new business model for the membership fees (approved for 2024-2027) resulted in increased member contributions to offset inflation and support the expansion of the Secretariat's staff.

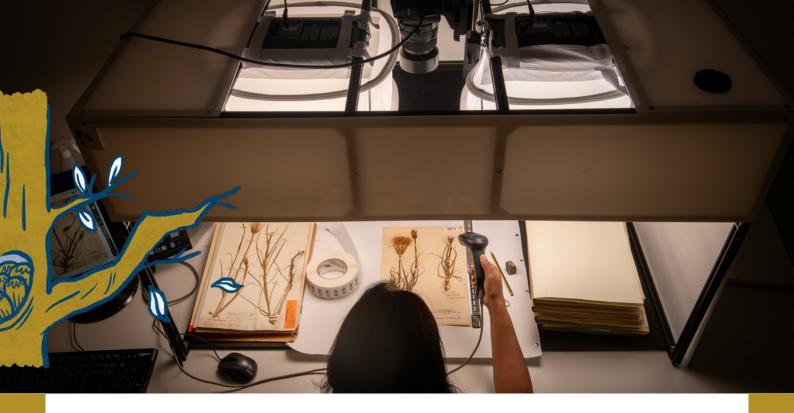
The economic model examines the various sources of financial income that enable the implementation of the strategy plan.

Membership fees

The growing number of CETAF members reflects CETAF's dynamism and the need to unite as a strong voice for taxonomy and biodiversity research. Member contributions are based on each member's budget, collection size, and staff. Although this contribution is crucial for the engagement and participation of its members, it does not provide sufficient funds to cover all CETAF's activities, as contributions represent only a portion of the overall budget necessary to support approximately 3 FTE employees and the organisation's operational costs. Consequently, the overall budget would not change significantly if the number of members increases. However, such an expansion would have a significant impact in other areas, including comprehensiveness, inclusion, and representativeness.

The current model for membership contributions was approved during CETAF54 in November 2023.

Membership Category	Membership Fee (in €) for 2024-2027	Number of Members	
Full Members			
Category I	15,000	8	
Category II	8,950	13	
Category III	3,050	22	
Category IV	1,500	1	
Associated Members	1,000	1	



Projects

CETAF fosters innovation and facilitates institutional engagement in European projects. The success of CETAF as a pilot or partner in European programmes has been inspiring for institutions and facilities. enabling it to collaborate with numerous scientific bodies and play its role as a catalyst. European projects make up a significant portion of the total annual budget. However, this figure fluctuates every year depending on the number of projects in which CETAF is involved and the budget allocated to each project's beneficiaries. Following fixed projects timeframes, funding for CETAF remain temporary. European priorities will significantly shape the opportunities available to CETAF and, thus, the organisation's capacity to keep this funding source stable and recurrent over time. Recently, the Green Deal and the Biodiversity Strategy were considered a critical pillar for the European Commission's action while the new programme may instead be focused on topics such as defence, migration, or competitiveness. As a result, the overall resources dedicated to biodiversity-related issues may decrease. This shift highlights the need for CETAF to diversify its financial resources to prevent potential impacts on the Secretariat team, which primarily depends on this income source.

Structural Commitment & Partnership

CETAF provides a continuous link between European public policies—particularly those of the European Commission—on taxonomy and biodiversity, and its member institutions and their staff. In this role, CETAF serves as a vital bridge and facilitator in addressing biodiversity-related environmental and societal challenges. Positioned at the centre of these relationships, CETAF serves as a hub between experts and public policy in this area, having previously proposed a guide on Access and Benefit Sharing (ABS), which remains the only code of conduct recognised by the European Commission as Best Practice.

A structural agreement with the European Commission under this strategic plan presents an opportunity for formalisation and successful implementation. The agreement would offer support, advice, training, and connections among experts in our community, while monitoring and assessing specific regulations and public policies related to biodiversity knowledge. Such an agreement would strengthen CETAF's role at the European level and secure funding to ensure the implementation of these services.

Services

Private sector

CETAF promotes training and knowledge exchange to sustain and enhance taxonomic expertise in support of biodiversity conservation and innovation. As a knowledge hub for biodiversity and geodiversity. CETAF offers services such as training through the Distributed European School of Taxonomy (DEST), project engineering, and the implementation of standards and best practices (e.g., policies, EJT) for professionals in research, environmental, and cultural fields. In essence, CETAF functions as a hub for collating and distributing information, facilitating networking, and promoting best practices for the community. The Strategy aims to broaden CETAF's service reach to a wider audience and secure additional financial support, such as through the expansion of CETAF-DEST as a learning hub.

Expanding the services would diversify revenue sources and strengthen CETAF's strategic position in the European and international landscape.

As CETAF aims to build trusted relationships with private companies and their representative bodies, providing and developing services in this area is essential. CETAF could adopt a multi-stakeholder approach to implementing biodiversity policies, sharing expertise and knowledge, and conducting environment-related assessments. Although this approach requires further investigation, it may offer new stability for implementing the CETAF Strategy.

Lastly, risk management and income diversification are crucial components of the CETAF financial strategy for the next 5-year period. By diversifying its financial dependencies, CETAF can develop contingency plans for potential financial crises or fluctuations related to unexpected projects. Maintaining a balanced portfolio that supports both short-term liquidity and long-term growth is essential. Regular financial reporting and advocating for taxonomy in alignment with the Strategy 2025-2030 will allow CETAF to continue achieving its goals and make informed adjustments to the plan as needed.

ANNEXES

Annex 1: List of acronyms

ABS: Access and Benefit-sharing under the Nagoya Protocol **BGCI** Botanic Gardens Conservation International **BHL**: Biodiversity Heritage Library **BiCIKL**: Biodiversity Community Integrated Knowledge Library BioScan: iBOL (International Barcode of Life) node for Europe **Biosyst:** network of societies on taxonomy and systematics **Biotalent:** Talent in Biodiversity BGE: Biodiversity Genomics Europe **CBD**: Convention on Biological Diversity **CETAF:** Consortium of European Taxonomic Facilities COP: Conference of the Parties to the CBD **CSRD**: Corporate Sustainability Reporting Directive CoL: the Catalogue of Life **DEST:** Distributed European School of Taxonomy DG ENV: Directorate General for Environment DG RTD: Directorate General for Research and Innovation. DiSSCo RI: Distributed System of Scientific Collections, Research Infrastructure. **ECSA**: the European Citizen Science Association **EDIT**: European Distributed Infrastructure for Taxonomy **EJT**: European Journal of Taxonomy e-LTER: Integrated European Long-term Ecosystem, critical zone and socio-ecological Research **EU**: European Union **EU-BON:** the European Biodiversity Observations Network **GBIF:** Global Biodiversity Information Facility **GBF**: Kunming-Montreal Global Biodiversity Framework **GSF**: Global Science Forum ICEDIG: Innovation and consolidation for large scale digitisation of natural heritage IPBES: Intergovernmental Science-Policy Platform for Biodiversity and Ecosystem Services IUCN: the International Union for Conservation of Nature JRC: Joint Research Centre KCB: Knowledge Centre for Biodiversity LifeWatch ERIC: European Research Infrastructure Consortium providing e-Science research facilities to scientists investigating biodiversity and ecosystem functions and services **MIDS**: Minimum Information about a Digital Specimen **MOBILISE:** COST action: Mobilise data, policies and experts in Scientific Collections SciColl: the Scientific Collections International **Science Service for Biodiversity SPNHC** the Society for Preservation of Natural History Collections **STING** the Science and Technology for Pollinating Insects **SYNTHESYS**: Synthesis of Systematic Resources **TDWG**: Biodiversity Information Standards TETTRIS: Transforming European Taxonomy through Training, Research and Innovation WSF: World Science Forum

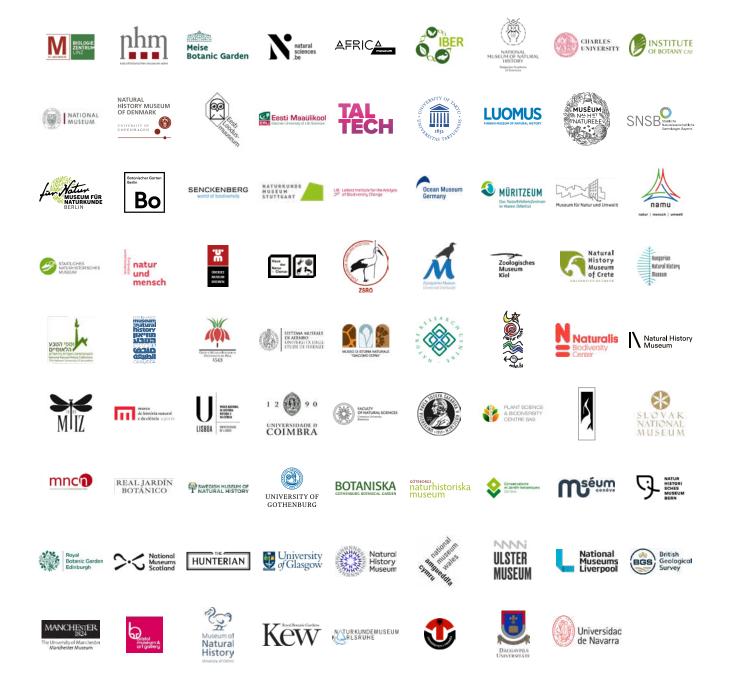
Annex 2: Glossary

- Biological diversity (Biodiversity): The diversity and variability of life on Earth.
- **CETAF:** it refers to the organisation named Consortium of European Taxonomic Facilities AISBL (i.e. the legal entity)
- **CETAF Community:** it refers to the experts network in our member institutions and associated organisations.
- **CETAF Executive Committee:** as per CETAF Statutes, the body administering CETAF, consisting of four Legal Members (President, Vice President, Secretary and Treasurer), and up to four Ordinary Members, elected by the General Assembly.
- **CETAF Founders:** the 10 institutions that back in 1996 became organised under a sole organisation named CETAF and set the basis of the CETAF community, namely: Muséum national d'Histoire naturelle, Paris, FR; Museo Nacional de Ciencias Naturales, Madrid, ES; Museo Civico di Storia Naturale di Milano, Milan, IT; Museum für Naturkunde, Berlin, DE; Naturhistoriska riksmuseet, Stockholm, SE; Royal Botanical Gardens, Kew, UK; Senckenberg Forschungsinstitut und Naturmuseum, Frankfurt am Main, DE; Natural History Museum, London, UK; Zoölogisch Museum of University of Amsterdam, Amsterdam NL; and Zoologisk Museum of University of Copenhagen, Copenhagen, DK.
- CETAF General Assembly: The ultimate decisionmaking body of CETAF, consisting of all member institutions.
- **CETAF General Secretariat:** Professional facility established within CETAF to manage the daily operations of the association, headed by the Executive Director.

- CETAF stable identifiers: globally unique, consistent and reliable identifiers for collection specimens.
- CETAF Registry of Collections: CETAF platform providing access to the collections of the community's facilities.
- **CETAF Working Groups:** bodies of CETAF established to achieve the CETAF objectives by bringing experts from the community together around questions of key relevance, and to drive progress on the topics that make a difference to the community and its broader impact.
- **Collection-based Research**: research based on the utilisation of both existing and newly gathered collections of specimens, data, or artefacts to explore and address scientific and/ or scholarly questions across various fields (biodiversity, geodiversity, ecology, evolution, agriculture, conservation etc.) to generate and disseminate new knowledge based on insights derived from studying these collections.
- Cross-sector collaboration: defined as alliances of individuals and organisations from the nonprofit, government, philanthropic, and business sectors that use their diverse perspectives and resources to jointly solve a societal problem and achieve a shared goal.
- Data Space: in the CETAF Strategy 2025-2030, this term is used in the sense of a growing ecosystem of data integration as driven by DiSSCo, not strictly in the sense of the EU data strategy (which specifically tackles the creation of a single market for data will allow it to flow freely within the EU and across sectors).
- **GeoCASE:** CETAF platform for allocating geological collections at the specimen level.

- **Geological diversity (Geodiversity)**: The diversity of geological, geomorphological, pedological and hydrological features and processes on Earth.
- Traditional Knowledge: in the sense of the Convention on Biological Diversity (CBD) and as defined by UNESCO: "knowledge, innovations and practices of indigenous and local communities around the world"¹³.
- Integrative taxonomy: scientific approach of delimiting species or organismal units based on phylogenetic relationships using a combination of different perspectives and methodologies (alpha taxonomy, comparative morphology, phylogeography, genetic and genomic characteristics, population genetics, ecology, development, behaviour, etc.).
- Kunming-Montreal Global Biodiversity
 Framework (GBF): a framework adopted at the 15th Conference of the Parties (COP) of CBD.
 The GBF sets out an ambitious pathway to reach the global vision of a world living in harmony with nature by 2050. Among the Framework's key elements are 4 goals for 2050 and 23 targets for 2030, to safeguard and ensure sustainable use of biodiversity.
- MIDS (Minimum Information about a Digital Specimen): is a standard being developed by the community and then transferred to Biodiversity Information Standards (TDWG). It provides a framework for organisations, communities and infrastructures to define, measure, monitor and prioritise the digitisation of specimen data to achieve increased accessibility.

- Natural science collections: documented and curated collections of objects from nature, like biological organisms (living and dead), fossils, minerals or other, as conserved and maintained in natural history museums, botanical gardens, science centres, universities or other public or private institutions or owners.
- Research Infrastructure (in the ESFRI framework): Research Infrastructures (RI) are facilities that provide resources and services for research communities to conduct research and foster innovation.
- **Symmetrical knowledge exchange:** synonym for capacity building, more accurate description for knowledge exchange (in terms of direction).
- **Systematics/Systematic biology:** The science studying the diversification of organisms and the phylogenetic relationships among them.
- **Taxonomy:** The science of the classification of organisms based on shared characteristics (see also: Integrative Taxonomy).



Credits:

- Pp. 6, 16-17, 18-19, 26, 29 Royal Belgian Institute of Natural Sciences
- Pp. 8-9 National Museum Scotland
- P. 12 JFF / Museum of Natural History and Science of the University of Porto MHNC-UP
- Pp. 20-21, 25 Naturalis Biodiversity Center
- Pp. 22-23 Berlin Natural History Museum
- P. 31 Royal Botanic Gardens, Kew

Authors: CETAF Executive Committee, CETAF Executive Director Contributions by: 55th CETAF General Assembly in Oslo, NO, May 2024 (SWOT Exercise, World Café CETAF Working Groups) Design: Fermento studio - hello@fermento.studio

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