

Minutes

Exploring and documenting diversity in nature

CETAF A.I.S.B.L MINUTES REFERENCE

CETAF 44th Governing Board Meeting, 14–15 November 2018 Plant Science and Biodiversity Centre, Slovak Academy of Sciences, Bratislava, Slovakia

⊠ EC Approved

Host

Plant Science and Biodiversity Centre, Slovak Academy of Sciences, Bratislava



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Notes: The course of the meeting was according to the approved agenda. *Annexes:* Annexes to the minutes (numbered 1 to 12)

Authors

Ana Casino (Executive Director), Karsten Gödderz (Project Assistant),

Michelle J. Price (CETAF Chair)

Participants (53 attendants from 29 members and 19 countries)

Wouter ADDINK (Naturalis Biodiversity Center, Leiden), Gergely BABOCSAY (Hungarian Natural History Museum, Budapest), Laurence BENICHOU (National Museum of Natural History, Paris), Anna BÉREŠOVÁ (Plant Science and Biodiversity Centre, Slovak Academy of Sciences, Bratislava), Frederik BERGER (Berlin Natural History Museum), Thomas BORSCH (Botanic Garden and Botanical Museum Berlin), Tamar DAYAN (Steinhardt Museum of Natural History, Israel National Center for Biodiversity Studies, Tel Aviv), René DEKKER (Naturalis Biodiversity Center, Leiden), Vanessa DEMANOFF (National Museum of Natural History, Paris), Steven DESSEIN (Meise Botanic Garden), Jiří FRANK (National Museum, Prague), Efrat GAVISH REGEV (The Hebrew University of Jerusalem, National Natural History Collections), Boyko GEORGIEV (Institute of Biodiversity and Ecosystem Research - Bulgarian Academy of Sciences, Sofia), Isabelle GERARD (Royal Museum for Central Africa, Tervuren), Falko GLÖCKLER (Berlin Natural History Museum), Quentin GROOM (Meise Botanic Garden), Michel GUIRAUD (National Museum of Natural History, Paris), Eva HÄFFNER (Botanic Garden and Botanical Museum Berlin), Elspeth HASTON (Royal Botanic Garden of Edinburgh), Gerhard HASZPRUNAR (Bavarian Natural History Museum, Munich), Joachim HOLSTEIN (Stuttgart State Museum of Natural History), Thomas HÖRNSCHEMEYER (Senckenberg Society for Nature Research, Frankfurt), Martin HUSEMANN (Centre of Natural History - University of Hamburg), Gila KAHILA BAR-GAL (The Hebrew University of Jerusalem, National Natural History Collections), Urmas KÕLJALG (University of Tartu), Jiří KVACEK (National Museum, Prague), Karol MARHOLD (Plant Science and Biodiversity Centre, Slovak Academy of Sciences, Bratislava), Patricia MERGEN (Royal Museum for Central Africa, Tervuren), Patrik MRÁZ (Charles University, Prague), Jesús MUÑOZ (Royal Botanic Garden, Madrid), Eva-Maria NATZER (Bavarian Natural History Museum, Munich), Carole PALECO (Royal Institute of Natural Sciences, Brussels), Franciso PANDO (Royal Botanic Garden, Madrid), Beáta PAPP (Hungarian Natural History Museum, Budapest), Claes PERSSON (Göteborg Natural History Museum), Michelle PRICE (Conservatory and Botanical Garden of the City of Geneva), Heimo RAINER (Natural History Museum Vienna), Isabel REY (National Museum of Natural Sciences, Madrid), Erik RINDAL (Natural History Museum - University of Oslo), Celia SANTOS (National Museum of Natural Sciences, Madrid), Alon SAPAN (Steinhardt Museum of Natural History, Israel National Center for Biodiversity Studies, Tel Aviv), Ole SEBERG (Natural History Museum of Denmark, Copenhagen), Livia SCHÄFFLER (Zoological Research Museum Alexander Koenig, Bonn), Leif SCHULMAN (Finnish Museum of Natural History-LUOMUS, Helsinki), Erik SMETS (Naturalis Biodiversity Center, Leiden), Vince SMITH (London Natural History Museum), Jian-Sheng SUN (National Museum of Natural History, Paris), Laura TILLEY (Stuttgart State Museum of Natural History), Jean-Denis VIGNE (National Museum of Natural History, Paris), Catherina VOREADOU (Natural History Museum of Crete, Heraklion), Wolfgang WÄGELE (Zoological Research Museum Alexander Koenig, Bonn), Karin WILTSCHKE-SCHROTTA (Natural History Museum Vienna), Katharina WÖLFEL (Natural History Museum Vienna)

From the General Secretariat: Ana CASINO, Karsten GÖDDERZ, Xavier VERMEERSCH

Observers and Guests: Jane SMITH (BHL)

Day 1: Wednesday 14th November (13.00–17.30) CETAF 44th Governing Board Meeting (CETAF44)

OPENING OF THE CETAF 44th GOVERNING BOARD MEETING (CETAF44)

The CETAF44 meeting was officially opened by Michelle J. Price (MP-Chair, Conservatory and Botanical Garden of the City of Geneva, CH), Chair of CETAF, at 13:00.

The director of the host institution, the Plant Science and Biodiversity Centre, Slovak Academy of Sciences, Anna Bérešová (AB-SAS, Plant Science and Biodiversity Centre, Slovak Academy of Sciences, SK) welcomed the guests and thanked them for making the trip to Bratislava. She gave a brief presentation on her institution which was founded in 1953 and holds collections of about 323,000 specimens of vascular plants, fungi and bryophytes.

MP-Chair thanked AB-SAS for her presentation and her welcoming words.

1. APPROVAL OF THE AGENDA

The Proposed Agenda was circulated along with the official invitation to the CETAF44 Governing Board meeting among the members on 3 October 2018. No changes to the **agenda** were proposed and it was approved unanimously (*Annex* 1).

2. APPROVAL OF THE RECORDS OF THE PREVIOUS MEETING

The minutes from the CETAF43 Governing Board meeting, held on 3-4 April 2018 at the London Natural History Museum, UK were made available to the members together with the associated annexes 1-15 in the private community area of the CETAF website on 4 October 2018. The CETAF43 Minutes (*Annex 2*) and its annexes were approved by all 28 members present.

3. FINANCIAL REPORT FROM THE SECOND AND THIRD TRIMESTERS OF 2018)

Erik Smets (ES-Treasurer, Naturalis Biodiversity Center, NL) presented the Financial Report from the Second and Third Trimesters of 2018.

Of the membership fees for 2018 that were requested from the members and were due on 1st May 2018, 89 % had been paid by the end of the third trimester. While this constitutes a deficit in the financial report up until now, the income of approved projects is larger than foreseen. This is in part because some EU funded projects have made their pay-outs earlier than anticipated. These funds, however, are dedicated to the projects and will have to be used over the course of several years.

The salary costs and part of the working budget of the CETAF General Secretariat (GS) are independent from the income from funded projects, meaning that the membership fees of the CETAF members sustain the core functioning of the GS. In total, despite some budget lines being slightly higher or lower than expected, the accounts were balanced and it was

not necessary to request the transfer of funds from the CETAF deposit account. Overall, ESTreasurer was able to state a positive net result for CETAF.

Subsequently, the **Financial Report from the Second and Third Trimesters of 2018** (*Annex* **3**) were voted on and approved by all 28 voting members present.

4. CETAF SECRETARIAT HUMAN RESOURCES

VS-NHM detailed the current team (Executive Director, Ana Casino; Projects Assistant, Karsten Gödderz and the new ICEDIG Project Assistant Xavier Vermeersch) and the new proposition for staffing in the CETAF Secretariat (*Annex 4*).

Core staff (core budget)

Projects Assistant upgrade to *Projects Coordinator*, with an increase in working time and an adjusted salary.

Hiring of a *Communications Assistant* – part-time position of 60% to ensure the maintenance of communication content and channels.

Project staff (projects budget)

Hiring of a *SYNTHESYS+* assistant – short-term contract for 2019 of 60% to undertake and implement specific developments and ensure completion of project milestones and deliverables.

Hiring of a *Dissco PPP Assistant* - short-term contract for 2020 to undertake and implement specific developments and ensure completion of project milestones and deliverables.

The staffing plan and associated budgetary implications were unanimously approved by the 28 voting members present.

5. CETAF BUDGET FOR 2019

For clarification, ES-Treasurer separated the budget lines from projects for project derived salaries and other incomes.

The new, adopted CETAF statues will need to be registered with the Belgian authorities, prompting higher legal fees in 2019 than 2018. Moreover, the previously mentioned restructuring of the GS will require the purchase of new computers. Also, the income from membership fees was €500 lower than 2018 due to the loss of RBG Kew as an associate member.

For the planned budget for 2019, no transfers from deposits are foreseen. A budget line "Contingencies" was newly created. If the sum from the contingency budget is not used during 2019 it will be transferred to the CETAF deposits. Thus, on an annual basis, funds that were spent on the CETAF40 celebration in Madrid can be reconstituted.

Elspeth Haston (EH-RBGE, Royal Botanic Garden Edinburgh, UK) asked for clarification as to which core activities are covered by the membership fees and which are not. ES-Treasurer

replied that the membership fees cover all the salaries plus the operational costs of the Secretariat. There is thus not much flexibility in the core budget for unexpected expenses. However, the projects are helpful as they provide overheads for the CETAF GS. MP-Chair added that these projects are vital for the GS as they allow it to go beyond the very basic core functions and vastly improve engagement. To that, Vince Smith (VS-NHM, London Natural History Museum, UK) added that generally, the revised budget is a more realistic reflection of likely expenditure, especially when it comes to smaller expenses or budgeting for one-time costs such as new PCs. Also, the contingency built into the budget gives CETAF a small buffer, even though the overall budget is tight.

The **CETAF Budget for 2019** (*Annex 5*) was then voted upon and unanimously approved by the 28 voting members present.

6. CETAF MEMBERSHIP FEES 2020-2023

ES-Treasurer first presented the old payment models which each covered a period of three years. With the new reporting period and the extended mandate of the Executive Committee (EC), the new model will cover the four years from 2020 to 2023.

This new proposal includes slight increases for each category since CETAF expenses are also subject to inflation and the price of its activities increases year by year. The EC thus proposes an updated fee structure of $10,800 ext{ } ext{€}$ for very large institutions, $6,450 ext{ } ext{€}$ for large institutions and $2,200 ext{ } ext{€}$ for medium institutions. The associate membership fee will rise from $500 ext{ } ext{€}$ to $800 ext{ } ext{€}$.

After a question by Leif Schulman (LS-LUOMUS, Finnish Museum of Natural History – Luomus, FI) regarding the raise in percentage points per category it was announced that very large members would have to pay 3.85% more. The raise for large and medium members would be 4.03% and 4.76%, respectively. After a question from Michel Guiraud (MG-MNHN, National Museum of Natural History, FR) on the effects on the budget in absolute terms of these figures, the EC announced that the difference would be of a net increase of 7,050 € per year.

Steven Dessein (SD-MBG, Meise Botanic Garden, BE) wondered whether it would be possible to have an even increase across all member categories, e.g. set at 4%. The answer to this question required some time to make the necessary calculations by the EC. Therefore, the Chair requested that this item be moved to after item 7 in the agenda where figures could be presented to the meeting, and a vote taken.

Continuation: The calculations resulted in a net increase of 6,896 € per year, a 154 € difference to the previous model. The new figures were: 10,816 € for very large institutions, 6,448 € for large institutions and 2,184 € for medium institutions. It was then proposed that these figures be rounded-up.

After a question from the audience proposing a reduction in the amounts of membership fees in general, ES-Treasurer clarified that this would mean that there might not be enough funds to cover the salaries of the newly voted budget or the running of the GS, and that the GS functioning, and thus CETAF successes, would be compromised.

A vote was then held between two options: A, the original proposal from the EC, and B, the proposal with a general increase of 4% across all categories, with the resulting figures rounded-up. 21 members voted for option A, zero members voted for option B, and seven members abstained.

The EC's proposal for the **CETAF Membership Fees for 2020-2023** (*Annex 6*) was adopted by the CETAF Governing Board.

7. CETAF EXECUTIVE COMMITTEE AND GENERAL SECRETARIAT ACTIVITIES UPDATE

MP-Chair presented the activities of the EC for the 6 months since the CETAF43 Governing Board meeting in London. Many of the activities were connected to follow-up on the discussions and decisions made during the previous CETAF meeting, e.g. the finalisation of the CETAF Statutes and CETAF Bylaws, summarising the results of the workshop on the development of a CETAF Joint Research Agenda, CETAF representation and collaboration with its strategic partners and the preparations for the current meeting. These included the preparation of the membership fee model and the CETAF 2019 budget as well as the workshop on taxonomy to be held during this meeting. In the time between meetings an intersessional vote was held and the CETAF Memorandum of Understanding (MoU) with the Society for the Preservation of Natural History Collections (SPNHC) which was approved by the CETAF membership. MP-Chair was also invited to attend several events, including the ECSITE Nature Group workshop in Geneva in June and the GBIF-Global Biodiversity Information Network conference in July.

Regarding the CETAF Statutes, MP-Chair thanked everybody who contributed to their finalisation. The approved document is available in the community area of the CETAF website and the Statutes will now be registered in Belgium. The Bylaws will undergo one small final change: the exact membership fees will be taken out of the Bylaws document and a reference will be added to an annex document ("CETAF Business Models") where the record of past and current fees can be found.

In the upcoming months, in addition to the activities that will be outlined under different agenda items, the EC will prepare a CETAF position paper on natural history collections. To facilitate this by collecting input from CETAF members, MP-Chair asked the audience to fill in a short survey that was distributed at the meeting on the importance of natural history collections. The results will be circulated and CETAF members who are interested in contributing to the drafting of the document were invited to contact the Chair.

Gerhard Haszprunar (GH-SNSB, Bavarian Natural History Collections, DE) took the opportunity to express his sincere gratitude for the outstanding work of the EC.

Ana Casino (AC-ED, CETAF General Secretariat) then presented the activities of the GS which can be split into three main categories: supporting members, raising awareness, and ensuring sustainability.

In the first category, the GS was active over the last months in different domains. It was involved in the publication of the CETAF Bratislava Declaration. Following the engagement and involvement role played by the Chair and the ED at different conferences and talks held with the Global Taxonomy Initiative (GTI), the GS committed to support and facilitate CETAF

involvement in the GTI to foster the research activities of the members. For collections, the GS accompanied the restructuring of the CETAF Collections Group and was heavily involved in preparing the DiSSCo proposal, which was accepted onto the ESFRI Roadmap in June 2018. To ensure a functioning taxonomy and collections management training environment, the GS played a key role in restructuring the Distributed European School of Taxonomy (DEST), organised a workshop on Access and Benefit-sharing (ABS), and was involved in the development of the BIOTALENT blended e-learning course. Last, but not least, the GS contributed to the successful proposals of SYNTHESYS+ and MOBILISE.

Concerning raising of awareness, the GS is active in global initiatives like SPNHC, GBIF, and BEERi and undertakes political lobbying, e.g., AC-ED met, supported by members of the European Initiatives Advisory Group, with a representative of the European Commission to discuss the upcoming framework programme "Horizon Europe". An important part of the GS activities in this domain are the preparation for publication of position statements and promoting CETAF products and services.

To be able to sustain the work of the CETAF GS and take it to the next level, obtaining additional funding is crucial as it happens via GS participation in projects. But this is not the only reason for its participation in EU research and innovation actions (RIA). In those projects, CETAF also acts as a representative of all its members and ensures that the voice of non-project partners is heard so that they can influence the direction of activities.

After the presentation of the GS activities, potential CETAF membership applications to join two consortia were discussed. Firstly, the Consortium of Scientific Partners on Biodiversity (CSP) to the Convention on Biological Diversity (CBD), which is a network of mostly national-level technical and scientific agencies with globally relevant contributions the CBD and relevant protocols (see https://www.cbd.int/cooperation/csp/). Its aim is to ensure effective mainstreaming of biodiversity and the 2020 targets into international programmes, projects, and initiatives. The CSP also plays a role in transmitting the CBD goals to national and regional governments. Members are scientifically and technically competent to address the Aichi Targets, have a proven track record of contributing to the CBD, providing technical support to their respective national governments.

Based on these characteristics, CETAF would be a valuable addition to the group. The CETAF Governing Board unanimously endorsed the CETAF EC pursuing CETAF application to join the CSP.

The second potential membership for CETAF is of the International Union of Biological Sciences (IUBS), see: http://www.iubs.org/. The IUBS provides a global platform for cooperation and interaction among scientists from all disciplines and nationalities with the aim of unifying biology through diversity. It aims to promote research, training, and education, seeking global solutions to scientific questions and facilitating collaboration across all disciplines.

CETAF was mentioned in the context of a previous IUBS meeting, which prompted the IUBS to contact the CETAF GS. The EC recommended that CETAF applies to the IUBS as a scientific member, which means no membership fee, a vote in the general assembly on scientific questions, the right to nominate candidates for their Executive Committee, and to send a representative – without a vote – to the meetings of the Executive Committee. The CETAF

Governing Board unanimously approved the application of CETAF to become a scientific member of the IUBS.

MP-Chair noted that CETAF representation in this body, or any of the other CETAF Strategic partners, does not necessarily have to come uniquely from the EC. If a motivated representative was willing to take on the role of focal point to ensure CETAF representation, in the IUBS, or any other body, this would be more than welcome.

8. CETAF ELECTIONS – PROCESS AND PROGRESS

The mandate of the current EC will end in May 2019 at the CETAF45 Governing Board meeting. Jesús Muñoz (JM-Secretary, Royal Botanic Garden Madrid, ES) presented the procedures for the nomination of candidates for the upcoming elections of the new CETAF EC.

CETAF directors and official representatives can nominate candidates – with their prior consent – for one or more of the four legal positions on the EC or as an ordinary member until the 31st of December 2018 by sending their nominations to JM-Secretary. On the 21st of January, a list of nominees will be circulated after which all nominees will supply a letter from their institution confirming their availability and a personal statement for circulation to the members 2 months in advance of the CETAF45 Governing Board meeting in May 2019.

The EC members then briefly described their respective roles and the time engagement needed to join the EC. JM-Secretary indicated that every EC member has specific tasks but is also involved in some way in all EC activities, with the CETAF Secretary handling the election process, but also the recent updating of the CETAF statutes and bylaws. For him, the work on the EC was very rewarding, especially the opportunity to give visibility to taxonomy, which is not on the agenda of most funding agencies.

For ES-Treasurer, the specific tasks are related to the overseeing of the quarterly reports, and preparation of the annual accounts and the budget. In addition, the treasurer also supports the auditors and AC-ED in the yearly audit of the CETAF finances. He highlighted the great chemistry this EC has had and stressed how this contributed to him very much enjoying his time on the EC. He admitted, that the work required a bit more time than anticipated, however the rewarding nature of the team-work made it very worthwhile.

MP-Chair reiterated that she has fulfilled two mandates as the CETAF Chair. She encouraged nominations for the position of Chair, saying that the responsibility of the Chair needs dedication and a non-negligible time commitment. The tasks of Chair go from defining the strategic directions of the organisation, leading the organisation and responding to the various requests, challenges or opportunities that may arise, to overseeing the daily running of the Consortium and GS. It also includes the preparation of CETAF EC and CETAF Governing Board meetings, CETAF representation, collaborating with CETAF strategic partners and ensuring CETAF positioning. Currently, CETAF is doing well with its successful working groups, initiatives, diverse range of products (guidelines and position papers), and projects. A lot of exciting opportunities await the new chair of CETAF.

VS-NHM and JK-NM then outlined the roles of the ordinary members of the EC. This includes filling gaps where the other EC members could not respond, e.g. representing the

geo-sciences in the case of JK-NM. VS-NHM added that for the future EC he would like to see a diverse group, with a good representation of gender, geographic region, and disciplines.

MP-Chair then thanked the current EC for their support during the current mandate, stating that the great team spirit of the EC team has facilitated CETAF's recent successes.

9. CETAF AISBL NEWS, ACTIVITIES AND OUTCOMES

9.1. DISTRIBUTED SYSTEMS FOR SCIENTIFIC COLLECTIONS (DISSCO) – PROGRESS AND THE CETAF STATEMENT ON DISSCO

VS-NHM took over the running of the following session on the various projects that the CETAF community currently is involved in. First up was the Distributed System for Scientific Collections (DiSSCo) that was approved to become part of the European Strategy Forum on Research Infrastructures in Europe (ESFRI) roadmap on 29th June 2018. The success was partly based on the maturity and longevity of CETAF and the success of collaborations within the CETAF community, which was a strong selling point for the ESFRI.

AC-ED informed on recent developments, including the presentation of the CETAF EC position paper "CETAF and DiSSCo, an unprecedented opportunity for Natural History Collections" at the DiSSCo Steering Committee (StC) meeting in Geneva on 10th October 2018. It covered the need for alignment between the two entities and outlined how each one contributes to the other's goals. The paper also clarified that CETAF deals with broader issues than DiSSCo, so there is complementarity through our collective work programme. The construction of DiSSCo will allow CETAF members to do research and work collaboratively in a way that has not been possible before. There is strong representation of CETAF within DiSSCo via AC-CETAF who is on the coordination team and the CETAF Chair who has a seat on the StC. Upcoming milestones are the submission of the DiSSCo Prepare project (for 20th March 2019), the inaugural DiSSCo General Assembly (April 2019) and the DiSSCo kick-off meeting to be held in the autumn of 2019.

On the national level, it is now important that the DiSSCo National Task Forces (NTF) step up and stay in contact with their national ministries and conduct a political prioritisation exercise. The coordination office will investigate the enlargement of country representation (Switzerland, Ireland, Israel, Serbia, FYR Macedonia, Croatia, Romania, and others).

While the DiSSCo vision already has proven to be attractive for funders, it will be important for our community to follow-up on projects to avoid duplication and ensure alignment among them. To that end the MOBILISE COST action organised an alignment meeting on the 16 November.

Dissco Prepare will now be the project that supports the preparatory phase of Dissco. Wouter Addink (WA-Naturalis, Naturalis Biodiversity Centre, NL) gave a presentation on the scope and the process involved in the Dissco prepare.

For new ESFRIs, the European Commission provides specifically allocated funds that aim to aid in the establishment of new research infrastructures (RIs) so they become mature enough for construction. It is still necessary to submit a high-quality proposal to receive

these funds. The DiSSCo prepare proposal, under Horizon 2020 topic INFRADEV-02-2019-2020, is the current focus of the DiSSCo Coordination Office. The requested budget will be 4 million Euro, bringing the total budget of the project via in-kind contributions to 4.5-5 million Euro. These funds will be allocated to achieve the maturity required for the DiSSCo construction phase, including: the implementation of a governance and organisational model for DiSSCo; an agreement for cooperation in DiSSCo; a financial cost book for DiSSCo, including national commitments; the continuous mobilization and management of scientific collection data; detailed construction plans; and the development of activity roadmaps that will ultimately support main DiSSCo services for the scientific community.

The work packages of the envisaged proposal are geared towards raising the implementation readiness level from the current one to the best-of-breed level in five dimensions: scientific, data, financial, organisational, and technical readiness. The work packages will mostly be led by the members of the StC, who have invested funds in the advancement of DiSSCo.

A call for the expression of interest from DiSSCo partners has been launched. 27 partners from 15 countries have submitted their interest, outlining which tasks they can undertake. The DiSSCo Coordination Office is currently reviewing these submissions and will communicate the choices for the consortium soon.

9.2. DISTRIBUTED EUROPEAN SCHOOL OF TAXONOMY - DEST

After the retirement of the DEST project leader, Isabella Van de Velde (Royal Belgian Institute of Natural Sciences) a number of CETAF members began discussions on forming a new consortium to take over the running of this initiative.

Catherina Voreadou (CV-Crete, Natural History Museum of Crete – University of Crete, GR), coordinator of the new DEST Consortium, outlined the new structure and agreement on how the initiative would be run. Since there is considerable overlap between the CETAF Training and e-Learning Working group (WG) and DEST, it was decided in September 2018 to merge both initiatives under the more established DEST initiative. Six partners have, so far, joined the consortium and have agreed to run the school (Royal Belgian Institute of Natural Sciences, Naturalis Biodiversity Center, Natural History Museum – University of Oslo, Hungarian Natural History Museum, and CETAF) under the coordination of the Natural History Museum of Crete, University of Crete.

Instead of having all responsibilities fall onto the shoulders of a single member, they are now distributed among the six partners. The consortium will now focus on establishing a smooth workflow. Once this is achieved, the DEST consortium will be very happy to welcome additional members into its midst.

DEST will also be a good showcase for synergies between CETAF initiatives and projects, as it will include blended courses based on the BIOTALENT platform (see agenda item 9.8). Additionally, DEST can be used for face-to-face, online or blended training modules for a new collections management programme, tailored to the needs of MOBILISE and DiSSCo.

9.3. EUROPEAN JOURNAL OF TAXONOMY - EJT

Laurence Bénichou (LB-MNHN, National Museum of Natural History, FR) gave the latest updates on the European Journal of taxonomy (EJT). Since its beginning, 475 articles have

been published, with a special highlight being vol. 445 which included species, described by Henrik Enghoff, named after the EJT and CETAF, *Eviulisoma ejti* Enghoff, 2018 and *Eviulisoma cetafi* Enghoff, 2018, respectively. A special printed version of this volume was distributed to the attendees of the governing board meeting.

To increase the accessibility of scientific content, EJT articles are converted to XML format as soon as they are published by Plazi. These coded files enable many useful functionalities, e.g. data interoperability for aggregators, extractability and re-use of scientific content or the easy conversion into other formats such as HTML. Here, using a persistent institution ID or at least a stable acronym would help to obtain institutional metrics about how collections are used. Linking to digital collections would also allow the reader a direct access to the official record of a digital specimen, which itself contains further links (e.g. to Citations, or databases like WORMS and GenBank).

LB-MNHN then went on to showcase what this type of treatment means in practice. The published PDF is processed on Golden Gate using the customised template developed by Plazi for EJT to tag the fine details of the scientific content, especially the material citations. The bibliographic data for the article and the treatments contained within are uploaded onto the Plazi website in their "Treatment Bank". Each treatment can be expanded and different elements, such as the relevant figures and abbreviations, are presented alongside the text. The tags added to the material citations are used to produce distribution maps (geographic coordinates) and other graphics. The treatments and material citations are converted into the format required by GBIF and submitted by Plazi. Each occurrence record is fully cited and linked back to the original article by the EJT DOI. The figures and their captions are submitted to BLR where they are indexed by the article metadata and each assigned a DOI. The individual figures can then be retrieved and downloaded by any interested parties.

To close the loop of data interconnectivity, occurrences, treatment and links to the digital record of a specimen, the community will have to work on citing the unique and persistent specimen IDs. This would make it possible to refer all related publications, occurrences, treatments etc. directly to digitized specimens.

MP-Chair congratulated the EJT for implementing a successful model of publishing in taxonomy with a high impact and diamond open access. She then added that new members are welcome to join this initiative and that any interested parties should contact LB-MNHN or Isabelle Gerard (IB-RMCA, Royal Museum for Central Africa, BE).

9.4. SYNTHESYS+

VS-NHM, updated on the most recent developments regarding SYNTHESYS+, the 4th iteration of the SYNTHESYS project, which is set to start in February 2019. The project will run for four years and has 32 partners − including international organisations such as CETAF, GBIF, TDWG, and GGBN − with an allocated budget of 10 million €. The London Natural History Museum (NHM) will coordinate the project. Within SYNTHESYS+ the three activity streams are: access, joint research activities, and networking activities.

The first call for physical access will start on the 1st of February 2019. The new virtual access activities will be developed during 2019 and two calls will be launched, beginning in 2020.

The joint research activities will provide the strongest connection to DiSSCo. SYNTHESYS+ is a critical step towards DiSSCo and already includes part of its construction by delivering key parts of the foreseen infrastructure, e.g. ELViS, the European Visits and Loans System. It also includes the so-called 'Specimen Data Refinery' which seeks to streamline challenges when extracting information from specimens and labels.

9.5. ENVRI-FAIR

The objective of this project, which was presented by AC-ED, is to implement the FAIR principles in the ENVRI community via an open access platform for interdisciplinary environmental research data in the European Research Area, utilizing the EOSC. It is specifically dedicated to the RIs in the environmental domain which, since June 2018, includes DiSSCo. However, during the submission of ENVRI-fair, DiSSCo was not yet an official ESFRI which is why the participation of DiSSCo in this project is achieved via CETAF and Naturalis. Nevertheless, it is important for the community to be represented in this project, which will start on the 1st of January 2019.

9.6. ICEDIG

LS-Luomus then presented progress on the ICEDIG project. The 12 partners in 10 work packages have, so far released 4 deliverables and achieved about one-third of the milestones. Due to ICEDIG being a rather short project, many of the deliverables are clustered towards the end of the project in March 2020. However, they will all be made publicly available on the ICEDIG website¹.

LS-Luomus also raised the question of whether, now that DiSSCo has been accepted on the ESFRI roadmap, it is crucial for ICEDIG to be a success. Arguably the direct pressure is reduced a little since the path towards DiSSCo will definitely continue. However, it might be even more important for ICEDIG to deliver since we now know that there will be a real DiSSCo infrastructure that depends on ICEDIG results.

MP-Chair added that ICEDIG is a great example of how the CETAF community is working together. The outcomes of the project represent important progress towards DiSSCo, the fulfilling of the CETAF strategy and in the development of the CETAF joint research agenda.

9.7. MOBILISE

MOBILISE is the name of the recently accepted COST action CA17106 that kicked-off with its first management committee meeting in Brussels on 2nd October 2018. Its aims are to assess, unite and facilitate the implementation of existing standards and protocols, link the complementary expertise of researchers, define a common research agenda for long-term preservation and re-use of biodiversity data, and raise awareness of bio- and geo-diversity information systems to both interdisciplinary research and to society in general.

COST actions fund networking and training exercises only. Therefore, its tools, namely conferences, workshops, training schools, events, and so-called short-term scientific missions, are to be used accordingly. A special target group are early career investigators. Therefore, one of the main goals of MOBILISE is to develop a generation of IT-literate researchers.

¹ https://icedig.eu/content/deliverables

The six working groups of MOBILISE will contribute to DiSSCo and complement the outcomes of other DiSSCo-linked projects. AC-ED will be the MOBILISE vice-Chair, while Dimitris Koureas (Naturalis Biodiversity Center) is the MOBILISE Chair. Karol Marhold (KM-SAS, Plant Science and Biodiversity Centre, Slovak Academy of Sciences, SK) will coordinate the short term scientific missions and CV-Crete the communication activities.

MOBILISE will hold an align meeting with representatives from other DiSSCo-linked projects and CETAF working groups after the CETAF44 meeting to ensure that all participants are aware of what is intended to be achieved in all these projects and initiatives, as well as better coordinate their work efforts.

A kick-off conference will be held in Sofia, BG on 12-13th March 2019, with a training school on the curation of geo and biodiversity collections to be held on 14-15th March.

The website of the action is currently under construction and will be online by 31st January 2019. A call for scientific missions is expected to be launched in short. These missions shall facilitate the exchange of good practices, benchmarking, and knowledge transfer on data mobilisation, digitisation of biodiversity collections, data practices and curation.

9.8. BIOTALENT

Gergely Babocsay (GB-HNHM, Hungarian Natural History Museum, HU) presented the main outcome of the ERASMUS+ BIOTALENT project, the blended e-learning course "Biodiversity in a changing climate – e-learn more" will start on 7th January 2019 with the general module on biodiversity and climate change. This will be followed by an optional module on either herpetology or medicinal plants. The highlight for 20 selected candidates will be the final module that will involve five days of field work and specimen collection in Crete, GR in May 2019.

Use of an inquiry-based learning model will ensure the active participation of all learners. So far, 490 people have registered for the class, making this endeavour an enormous success.

GB-HNHM added an appeal to the CETAF members to support the project by giving participating students access to collections, if they enquire about an opportunity to visit them. This would be a great opportunity for the students to visit collections of CETAF member institutions and would be a really beneficial contribution to their training.

MP-Chair congratulated GB-HNHM and the project team on this exciting and successful project.

10. OUTLINE OF OUTCOMES OF THE CETAF 'JOINT RESEARCH AGENDA' WORKSHOP

MP-Chair presented the outcomes from the workshop on the "Joint Research Agenda for Biodiversity and Geodiversity sciences" that was held at CETAF43 in London, UK. This workshop marked the beginning of the process where CETAF will create a common research agenda for natural history institutions across Europe.

During the previous workshop, the participants were tasked to identify the crucial aspects that the CETAF Research Agenda needs to tackle, detect communalities among CETAF

members regarding scientific research objectives, and create a long-term vision for collections-based research.

The EC analysed the workshop outcomes by collating the over 100 comments and classifying them into broad categories. In this manner, four pillars could be identified: 1) Taxonomy underpinning biodiversity discovery and understanding; 2) biodiversity information and the biodiversity knowledge network; 3) molecular genetics and genomics; and 4) capacity building, training and outreach. None of these are novel, but they remain fundamental to our science. CETAF members should also define their future collective scientific ambitions and outline key research directions that integrate current and emerging technologies into research activities. More importantly, the community needs to be clear on the important scientific questions that it aims to ask and on how it will answer them. .

MP-Chair and TB-vice-Chair worked on the **CETAF Executive Committee Summary Report** of the workshop (*Annex 7*), which included a list of the workshop participants. The results from the two surveys handed out by MP-Chair and the results of the CETAF44 taxonomy workshop will form the basis for the first draft of the CETAF research agenda. The CETAF Strategy group will produce this first outline in collaboration with the CETAF EC. MP-Chair invited everybody interested in contributing to this process to contact her, and to become a member of the CETAF Strategy group.

11. BRINGING TAXONOMY BACK INTO FOCUS: UPDATES AND INTRODUCTION TO THE WORKSHOP "CETAF VISION FOR TAXONOMY AND SYSTEMATICS IN 2030"

The title of this agenda item was chosen deliberately, as MP-Chair explained that after several years of building the secretariat, establishing the CETAF Strategy and putting mechanisms in place to support CETAF objectives, it is time for CETAF to put its focus back onto taxonomy. Taxonomy is the centre of CETAF's scientific strategy as well as its identity. CETAF should define a collective approach to identifying common research goals within taxonomy and define a clear vision of taxonomy and taxonomy research for the future.

To have a clear vision is especially important at the moment as the CBD is formulating its strategic plan for the 2050 vision. This vision is supported by five overall goals: to address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society; to reduce the direct pressures on biodiversity and promote sustainable use; to improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity; to enhance the benefits to all from biodiversity and ecosystem services; and to enhance implementation through participatory planning, knowledge management and capacity-building. This is an opportunity for CETAF to contribute to the CBD strategy after 2020 when the previous one expires.

As a response to this, Chris Lyal from the London Natural History Museum, in collaboration with the CETAF EC, drafted the **Bratislava Declaration on the 2050 Vision of the Convention on Biological Diversity** (*Annex 8*). Upon approval of the Declaration by the CETAF governing board it will be communicated for distribution at the GTI Forum of the Conference of the parties (COP) of the CDB, that will take place on Friday 15th May in Egypt. In the Declaration, CETAF pledges to support the implementation of the Convention on Biological Diversity, the

attainment of the 2050 vision, and the fostering of taxonomic contributions and expertise. It also lays out the CETAF contribution to the GTI initiative in the light of the 2050 vision, and the renewal of obligations after 2020. MP-Chair thanked the members for their unanimous approval of the declaration, indicating that it will be sent immediately to Cristiana Paşca Palmer, the Executive Secretary of the CBD so that it can be distributed at the COP.

MP-Chair was recently approached by Junko Shimura (GTI coordinator) to discuss CETAF involvement in the GTI Forum. A position paper was to be drafted by the GTI coordinator into which CETAF would be integrated. The GTI could benefit from a CETAF coordinated contribution from Europe. CETAF will be represented at the GTI Forum during the COP by Hendrik Segers (HS-RBINS, Royal Belgian Institute of Natural Sciences, BE). MP-Chair proposed that a CETAF position paper on the GTI and contributions to the implementation of the CBD could be timely. MP-Chair and AC-ED have drafted a preliminary version which needs to be reviewed by the CETAF EC before being opened for contributions from CETAF members. Of particular interest would be the compilation of case studies on how CETAF institutions contribute to the GTI and to CBD implementation. MP-Chair proposed that a template will be produced and circulated to CETAF members so that they can contribute their case-studies to this position paper.

A third document that has been prepared for the GTI forum is a common CETAF, Species2000 and GBIF statement on Taxonomy beyond 2020, incorporating a more global perspective on the GTI as opposed to the CETAF statement which focuses on the European one. The Executive Committees of both CETAF and GBIF have already approved the draft statement and are awaiting confirmation from Species2000. MP-Chair informed the Governing Board that the joint statement will be submitted to the Executive Secretary of the CBD for the 16 November. (*Annex 9*)

Overall, the CETAF EC believes that it should enter into discussions with the relevant bodies and GTI Country Focal Points on the potential coordinating role CETAF could play within Europe for the GTI. CETAF itself would also benefit from having a framework that it and its members can contribute to. MP-Chair then asked Governing Board if the CETAF EC should continue pursuing this subject and received a strong mandate for doing so.

MP-Chair then announced the objectives for the workshop of the second day of CETAF44. The workshop aims to focus the CETAF community on taxonomy within CETAF so that taxonomy is fully integrated into the CETAF Joint Research Agenda. The participants can also discuss what initiatives CETAF may develop to enhance taxonomy and explore community needs and priorities. By focusing on taxonomy and developing on a strong vision CETAF can better position itself as the voice for taxonomy within Europe and create cross-cutting actions through its members and working-groups. Furthermore, the outcomes of this workshop will influence the foreseen position paper on taxonomy, the position paper and contributions to the GTI, and the CETAF return to the CBD Secretariat on its taxonomy vision.

MP-Chair distributed a second survey to the Governing Board members, entitled "Why do we need taxonomy?" as a direct contribution to the taxonomy workshop and to provide individual contributions to the planned CETAF position paper on taxonomy.

17:30 Closure of the meeting – MP-Chair officially closed day one of the CETAF44 general meeting reminding the members to fill in the two short surveys which will be collected the following day.

18:00 Dinner offered by the hosts in the Hotel Matyšák

Day 2: Thursday 15th November (9.00 – 17.00) CETAF 44th Governing Board Meeting (CETAF44)

12. CETAF MOU'S AND FUTURE PARTNERSHIPS

12.1. NEWS ON A POTENTIAL CETAF - BHL - EBHL COLLABORATION

Jane Smith (JS-BHL, Biodiversity Heritage Library), updated the audience on the recent developments of the Biodiversity Heritage Library (BHL).

Recent technical improvements include a full text search which has been made available via the web portal since May 2018 as well as a transcription tool that is currently being tested and which would be very relevant for the inclusion of field notebooks, something which the CETAF community specifically had asked for. Progress has also been made towards the inclusion of the BHL Europe content. BHL is currently working on several future projects. These include the so-called taxonomy intelligence links for easy taxonomic discovery as well as exposing hidden or forgotten data and images.

Thanks to its various partnerships, one of which is the close collaboration with CETAF, BHL is not only a technical consortium but a network of natural history librarians and activists sharing standards and good practices as well as exchanging knowledge. BHL is marshalling access to content that dates back to the 15th century and earlier and making content available that is directly relevant to the work of CETAF scientists.

One potential future project is to speed-up gap filling and extending the coverage of European languages within BHL. A colleague, Pierre Boillat, from Geneva and the current Chair of the European Botanical and Horticultural Libraries (EBHL) is keen on developing a collaborative project with BHL to facilitate this. MP-Chair welcomed this initiative. She asked if there was support from the membership for a future collaboration on this and related topics between BHL, EBHL and CETAF which was answered with a resounding yes.

GH-SNSB brought up the topic of journals that are out of press, thus are no longer sold but are still protected by copyright. This particular case will have to be negotiated with publishers, if they can be made available. JS-BHL replied that negotiations in that regard are indeed ongoing and BHL is partnering with the Internet Archive here. It remains a challenging topic as some publishers are more open to making content available while other are less keen. One possible solution could be a digital lending library: to create a digital copy that is digitised and stored, and that can then be loaned and read for a limited period.

AC-ED, MP-Chair and the EC have been in discussions with SPNHC about signing the agreed MoU. The core activities of CETAF, the collections, along with the newly re-established CETAF Collections group provide much overlap and thus potential to collaborate much more

closely with SPNHC. The MoU has been approved by SPNHC and was recently approved by the CETAF Governing Board by intersessional vote.

12.2. NEWS FROM THE GBIF GBIC2 WORKSHOP IN COPENHAGEN (JULY 2018)

From 24-27th July 2018, the Global Biodiversity Conference 2 (GBIC2)² took place in Copenhagen, Denmark. The aim of this conference was to bring together different biodiversity information users and providers to work towards a coordination mechanism for connecting biodiversity information at the global scale. For CETAF, MP-Chair and AC-ED were invited to participate in this meeting.

The first day was dedicated to reflections on existing biodiversity information availability and networks as well as to identify what is working and what it not within the current system. During the second day, four breakout sessions were held, with the topics of each one aligned with the Global Biodiversity Informatics Outlook3 document. MP-Chair was invited to lead the workshop focusing on the Biodiversity knowledge network (community layer) with Dmitry Schigel of the GBIF secretariat.

A publication "GBIC2 – Towards a coordinated mechanism for biodiversity informatics" is forthcoming and will be communicated to CETAF members once it is published.

Furthermore, a call for an alliance for biodiversity knowledge will be published and translated into multiple languages. This alliance will seek to construct a shared roadmap for interoperable infrastructure components based on bottom-up community driven inputs. GBIF will take a coordinating role in the development of this global initiative, but does not want to lead it. This needs to be a global endeavor, including as many stakeholders as possible. All stakeholders with an interest in the production, management and use of data on the world's biodiversity should indicate their interest and support for collaborating via https://biodiversityinformatics.org. CETAF member institutions were informed that they could sign up for the alliance.

Jean-Denis Vigne (JV-MNHN, National Museum of natural History, FR) emphasized that one of the main challenges is to be able to merge collection data that is present in many different databases. Having a unified approach via GBIC could be a great opportunity. This could also open the door for historical records to become accessible. MP-Chair agreed and added that out of the many identified problems, getting the nomenclature backbone right was deemed very important. Another one was how to connect unique identifiers in a manner that renders them permanently human and machine readable.

GH-SNSB expressed concern that with these data projects, there is always a strategic weakness: if they assess their success purely by data output, this leads to the addition of many data lines without quality control. MP-Chair added that one of the next focus areas for GBIF will be data quality and data validation processes. This is necessary because people need to have confidence in the data they use. Also, with the network of data, corrections should only be necessary once, if possible, so as to not duplicate the work of others.

https://www.gbif.org/news/1XfnaCv0CQs4YmEC2qEGeE/partners-signal-new-alliance-for-biodiversity-knowledge

³https://assets.ctfassets.net/uo17ejk9rkwj/7Kj8EyXDwW2IUWKk2WYOaE/85947f585b9c6255c9b72b9325ba4 4b6/GBIO.pdf

13. CETAF PARTICIPATION IN BIODIVERSITY_NEXT

From the 21st to 25th October 2019, CETAF will – in collaboration with DiSSCo, GBIF, TDWG, iDigBio and hosted by Naturalis and NLBIF– organise the **Biodiversity_Next** conference in Leiden, NL. This huge event is expected to bring together over 600 delegates for the conference programme. The target audience are scientists working in data-intensive disciplines of biological and geological diversity sciences, data experts and managers, e-infrastructure operators as well as science policy makers. Discipline-wise this includes e-taxonomy, biodiversity and ecological informatics, biodiversity and geodiversity data standards, natural science collections information, citizen science etc.

The event is structured around four tracks: Science, Policy & International Coordination, Infrastructure, and Standards. A steering board, in which CETAF is represented by AC-ED, and a programme committee led by Arturo Ariño from the University of Navarra are handling the organizational and programming side, respectively. A call for symposia and workshops has recently been opened (deadline for proposals 9th December 2018). AC-ED encouraged the CETAF working groups to submit proposals and for the membership to contribute broadly, to show a strong representation of CETAF to embody the important role that our institutions play in shaping the future of biodiversity research!

In parallel to the conference, CETAF as well as other of the organising organisations, will hold its CETAF45 Governing Board meeting. However, as VS-NHM explained, the usual length of the CETAF meetings of 1.5 days would mean that it would run in parallel to key events. One option would be to condense the CETAF meeting into a single day and run it either exclusively on Monday or over the course of two afternoons (Monday / Tuesday). GH-SNSB endorsed the Monday option, even if it means travelling on a Sunday as this makes it easier for everyone to plan the programme and for attendees to participate in events. PM-Mergen added that Tuesday will likely be the date for the TDWG meeting with considerable overlap in the audience. Both options were put forward to a vote and the option to hold the entire meeting on Monday 21st October 2019 received the majority of votes.

MP-Chair reiterated that she would love to see some proposals from the CETAF community, especially the working groups and also proposed that the EC could put forward a proposal for a workshop on taxonomy.

Falko Glöckler (FG-MfN, Berlin Natural History Museum, DE) asked whether the programme committee will try and merge sessions that are similar. VS-NHM confirmed that this will likely happen with the programme committee putting the relevant people in touch with each other to facilitate this.

JK-NM wondered about pre- and post-conference activities which are common for some of the organisers, as they run training sessions etc. VS-NHM and ES-Naturalis said that there is some capacity for these types of events around the conference. CETAF WGs that would like to meet should contact AC-ED well in advance, so rooms can be booked.

LS-Luomus wondered how people that come from outside our community would be attracted to the conference. VS-NHM agreed that this would be beneficial, indicating that there had been an unprecedented effort to raise awareness for the event outside of the

usual audience. AC-ED added that the members need to act to diffuse information within in their own countries and communities. LS-Luomus also mentioned that it might make sense to go through different professional societies, as information coming through their channels might receive more attention than anything that comes from us.

14. CETAF POTENTIAL PARTICIPATION IN EXTERNAL PROJECTS (LIFE – COST ACTIONS)

René Dekker (RD-Naturalis, Naturalis Biodiversity Center, NL) introduced two projects that are currently underway and that rely on input or participation from the community.

The first one is the COST Action, the European Raptor Biomonitoring Facility (ERBFacility). Currently 26 European countries are involved, and RD-Naturalis is actively searching for representatives from other countries to join. Among the missing ones are three countries with CETAF representation: Bulgaria, the Czech Republic, and Switzerland. The project aims to reduce the costs of environmental contaminants on human and wildlife health. To this end it will build capacity in the domains of analysis, collections, and field work to produce more effective chemical regulations and a more reliable risk assessment.

CETAF members can specifically contribute by reviewing their raptor collections and building a meta-database, as well as creating a distributed European-wide raptor specimen bank. For CETAF members, this could mean an added value for their collections if they can provide information to support EU chemicals management. If any member wants to get involved, please set up a contact between your bird, mammal or vertebrate curator with Dr. Paola Movalli (paola.movalli@naturalis.nl).

The second project called LIFE APEX, funded by the LIFE programme, aims to investigate the systematic use of contaminant data from apex predators and their prey in chemicals management. Specimen banks, research labs, analytical labs have formed a consortium, coordinated by Naturalis. It is a so called demonstration project and shows how non-target screening and targeted analysis of contaminants in apex predators can be applied to enhance EU chemicals management. It involves making better and more cost-effective use of chemical monitoring data from the large but under-used resource of predator and prey samples in Europe's Environmental Specimen Banks (ESBs), Natural History Museums (NHM) and other collections.

Here RD-Naturalis is the contact person, so if CETAF members are interested in getting involved, please contact him at rene.dekker@naturalis.nl. Members could for example become a "replication and transfer partner" and share, through a central database which LIFE APEX will create, information on and availability of raptor, owl and mammalian predator specimens stored in freezers and make available, for contaminant analysis, samples (tissue) from these raptors.

A training event for this project will take place in Bratislava in two months' time. A questionnaire has been circulated and was a huge success. There is still one week to go until the deadline, and data will be used even if it is filled in afterwards. The results will be discussed in Bratislava in January but also in December in Brussels at an ERB Facility event. Hopefully, this COST action will form the basis for a more permanent network, potentially

endorsed by CETAF. It will make the network of collection holding natural history institutions even more important by linking them with EU environmental specimen banks, RI's, analytical labs, and EU chemicals agencies.

15. CETAF RESPONSE TO SBSTTA ON DSI AND PROPOSAL FOR A SIDE-EVENT AT COP14

The **CETAF Executive Statement on Digital Sequence Information** (DSI) (*Annex 10*) was drafted by MP-Chair and AC-ED in collaboration with the CETAF ABS core group and sent to CETAF representatives on 29th June 2018. It gathered support from most members and the approved statement was sent to the Subsidiary Body on Scientific, Technical and Technological Advice to the COP and to the Secretariat of CBD on 23rd July 2018.

In it, CETAF acknowledges the need for having all biodiversity-related information (including DSI) openly available and openly accessible to inform reliable decisions. CETAF does not support the inclusion of DSI under the Nagoya Protocol arguing that huge economic and scientific cost would be incurred if global scientists could no longer access sequence data to the world's recognized repositories and identifying the grave implications this would have for biodiversity sciences and CBD implementation The GS has prepared a printable version of the statement that can be downloaded from the CETAF website and used by the members in their communication efforts on this issue.

16. CETAF E-PUBLISHING GUIDELINES AND RECOMMENDATIONS

The CETAF E-Publishing Guidelines – Recommendations regarding authorship citation and Open Access (*Annex 11*) is the result of workshops held at the CETAF40 and CETAF42 CETAF meetings and the guideline were presented here by LB-MNHN and IG-RMCA in their final published state, after their adoption at CETAF43.

The short version was presented and distributed among the membership as an official CETAF product⁴ while the full version was recently published in the EJT, vol. 475⁵.

17. CETAF POSITION TOWARDS HORIZON EUROPE

Vanessa Demanoff (VD-MNHN, National Museum of Natural History, FR) and Carole Paleco (CP-RBINS, Royal Belgian Institute of Natural Sciences, BE) on behalf of the European Initiatives Advisory Group (EIAG) presented the latest information on the new research framework programme Horizon Europe.

In November 2018 the ITRE committee of the European Parliament (EP) is set to vote on the proposal of Horizon Europe (HE) which will make it more or less fixed. The time frame simply does not allow for any major changes after that since the European Commission would like a vote on the programme before the European elections in May 2019.

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⁴ https://cetaf.org/sites/default/files/16_cetaf44_e-publishing.pdf

⁵ https://doi.org/10.5852/ejt.2018.475

HE presents an evolution from Horizon 2020 and has been developed as its continuation. While pillar one on Open Science is very similar to the current funding model, the societal challenges from Horizon 2020 have been rebranded as global challenges under HE and are sorted into the following five clusters: 1, health; 2, inclusive, resilient and secure societies; 3, digitising and transforming industry and services; 4, climate, energy and mobility; and 5, natural resources.

Biodiversity falls mainly in cluster five. However, for now, biodiversity topics are very use oriented, e.g. in combination with food security or health etc. The concrete content of the clusters will be decided through strategic planning, which aims at delivering co-created work programmes with the different stakeholders in a true bottom-up approach.

This second pillar also includes a new instrument, the missions. These missions are non-prescriptive calls that are truly bottom-up. They can be submitted and might get taken up for funding if they address the global sustainable development goals, have a clear added value for the EU, are bold and inspirational, drive activity across disciplines, sectors and actors, are open to multiple partners, provide bottom up solutions, are ambitious but realistic and in alignment to the related domain(s) major research and innovation goals.

The CETAF European Initiatives Advisory Group met a representative of the European Commission along with representatives of other international organisations active on biodiversity (e.g. IUCN) on 31st of July. Multiple topics were discussed, including how to generate visibility for our community. A position paper on HE, an event in the EP geared towards MEPs or using Biodiversity_Next to tackle societal needs and bring biodiversity to the forefront of policy discussions were also mentioned.

Part of this meeting was also dedicated to discussing a potential mission on biodiversity. Such a mission could address biodiversity loss by linking to the recent WWF Living Planet Report⁶ – potentially with an emotional tag line "What wildlife will our grandchildren still get to see?" – and highlighting the role of CETAF members, their collections, their conservation driven activities and their research in halting Biodiversity loss. While it will be too late to have a mission on biodiversity at this stage, given the limited number of missions, there will be a mid-term evaluation and another call for mission proposals for which CETAF would need to be ready. To this end, the WG would like to collect key topics and central stakeholders by CETAF45. They will prepare a template with which CETAF members can submit their answers. The results will be used to prepare a mission that is ready when a new window of opportunity opens.

18. MID-TERM UPDATES AND OUTCOMES FORM THE CETAF WORKING GROUPS 18.1. EARTH SCIENCES

JK-NM and Laura Tilley (LT-SMNH, Stuttgart State Museum of Natural History, DE) presented the recent activities of the Earth Science Working Group. Regarding the hazard and disaster events survey, a publication has been submitted to the Journal of Research Ideas and Outcomes and is currently under review. The group continues to gather data and advancing its categorisation into local, regional, and global events. A virtual exhibition as a learning

⁶ https://c402277.ssl.cf1.rackcdn.com/publications/1187/files/original/LPR2018 Full Report Spreads.pdf

resource for this content is also under development. While still in its early stages, it will expand further on the publication on hazards. It aims to help to understand future hazards and disasters and use this as a learning resource for the public. The Earth Science Teacher Association in the UK deems this a very valuable resource and sent over school curricula for a possible alignment. To further nourish the virtual exhibition, additional contributions from other CETAF members are still very much appreciated. Especially pertinent are examples of disasters where biodiversity is affected. If any members are interested in contributing, please contact LT-SMNH.

Additional support is also needed for their work on the protection of cultural goods, where the WG is surveying legislation and authorities as a service to CETAF members.

Also on the verge of implementation on the CETAF website – but probably in the private area rather than on the public website – is an information service of the digital availability of type specimens.

Additional news was passed on relating to the registration of plant fossil names as a fully functional portal7 is now available.

VS-NHM congratulated the WG on its very impressive work and work plan. He also wondered if there was any work currently being done about a problem he often faces, the varying policies about the collection of fossil specimens and the disclosure of information about their localities. JK-NM responded that this is a very sensitive field. PM-RMCA added that some exchange should be done here with the Legislation and Regulations WG with the aim of harmonising policies.

18.2. LEGISLATION AND REGULATIONS

Ole Seberg (OS-NHMD, Natural History Museum of Denmark, DK) outlined the recent activities of the Legislation and Regulations WG, including the modification of the text for the CETAF Code of Conduct in relation to its submission as an EC recognized ABS guidance document. After multiple exchanges, the document is now very close to being approved by the European Commission.

CETAF continues to provide training for ABS representatives following its Code of Contact. After a training event in London in connection to CETAF43, the Swedish Museum of Natural History expressed interest in hosting a similar event in early 2019. Discussions are underway on whether a training course can be hosted in the summer of 2019 within the SYNTHESYS+ project.

The sectorial guidance documents are still under development. CETAF will provide its members with copies of the CETAF ABS guidance document once it is published. This is however not expected until late 2019. New information will become available at the ABS consultation forum that will take place in December 2018.

Another development within ABS regulations that warrants close monitoring is the discussion surrounding Digital Sequence Information (DSI). It is uncertain whether DSI falls under the Nagoya Protocol, with the current EU position being that this is not the case. There is also no clear definition of what DSI actually encompasses. It could be narrow

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⁷ https://www.plantfossilnames.org

definition, e.g. only including DNA data as in the CETAF Code of Conduct, or much broader. However, these uncertainties have not stopped certain countries from already legislating for controls on DSI. At the upcoming COP, OS-NHMD is not expecting resolutions of these questions.

VS-NHM asked what an alternative; broader understanding of DSI could mean. OS-NHMD explained that for some, DSI entails any kind of information tracked from species. This definition would include of course DNA data, but also a photograph, a bird song; or really anything that appears in a digital form. The L&R group will keep the CETAF membership informed of developments on this subject.

GH-SNSB insisted that every member get in contact with their responsible ministries with a unified message. A disjointed message might lead to our voice being drowned out by others.

Thomas Borsch (TB-BGBM, Botanic Garden and Botanical Museum Berlin, DE) asked whether there is any movement towards ending the simple categorization into the provider and user country, and for the EC's view on this. OS-NHMD and VS-NHM answered for the WG and the EC; respectively, that this is not a topic currently being discussed and is also not something that the EC is pursuing. Our focus is science and one thing everybody generally agrees, no matter the personal or institutional position on the Nagoya Protocol, that reproducibility and data availability is fundamental for science. Hampering the ability to conduct research for developing countries goes against this, as it would be a serious setback for them if they had to pay for obtaining sequence data, as well as the contravening the FAIR principles.

18.3. DIGITIZATION

EH-RBGE presented the progress of the Digitisation WG towards finding an answer to the question "What is digitalisation?" / "What is a digitised specimen?" Discussions have taken place within the WG but also with project partners from ICEDIG. A Minimum Information Standard for Digital Specimens (MIDS) proposal is under development. The MIDS currently has three levels, a minimal record, a partial record, and a complete record. Work on this will continue with the aim of providing a better definition of digitisation for the 10% digitisation goal from the CETAF Strategy and Strategic Development Plan 2015-2025, but also one that can be used by current and subsequent projects as a standard.

EH-RBGE also presented a mapping exercise that was undertaken between the three projects ICEDIG, MOBILISE, and SYNTHESYS+ which showed the relationships between the work packages (WP) and WGs within projects. It will be important to establish a functioning communication channel between projects and the digitisation group can facilitate this task.

18.4. BIODIVERSITY MONITORING

Livia Schäffler (LS-ZFMK, Zoological Research Museum alexander Koenig, DE) reported on the activities of the CETAF European Biodiversity Monitoring Group which met for an extended brainstorming session the day before CETAF44.

LS-ZFMK had compiled a list of relevant agencies, initiatives, and projects on the European and the global scale. To complete the list for the national level, contributions from CETAF members were requested. She also met with Bill McShea from the Smithsonian

Conservation Ecology Center to study his eMammal platform for camera trapping studies and who would be very happy to cooperate on future monitoring endeavour. She has also investigated innovative modelling approaches by John Halley⁸ or Caspar Hallman⁹.

During the meeting, a business model canvas methodology was used to gather ideas, express our value proposition, define target groups etc. It was agreed to build-up a network of networks, to use expertise that already exists and to focus on terrestrial biodiversity, including freshwater. Monitoring should also start at Natura2000 sites as the EU will be much more eager to fund new activities if they happen at recognized sites. As a result, the generated data will serve the knowledge gathering for decision makers at the science-policy interface and the data provisioning for the scientific community.

As next steps, a COST action application is planned for spring 2019. For this, but also the general WG activities, more members are needed. In parallel, the Zoological Research Museum Alexander Koenig is leading a proposal for the Horizon 2020 call SwafS-15-2018-2019 "Exploring and supporting citizen science" with the title Citizen-science support for innovative biodiversity monitoring in Europe. The project would generate knowledge and innovative services for automated biodiversity monitoring technologies by engaging citizen scientists in the annotation and analysis of animal recordings.

18.5. E-PUBLISHING

The recently formed working group on e-Publishing – which was approved at the CETAF45 meeting in London – will focus on five key topics in its inaugural work plan. Each of the four topics will be led by a team of two co-leaders.

The first one is an inventory of all institutional journals published within CETAF institutions with information on how they contribute to taxonomy and taxonomic descriptions. The second investigates the impact of e-publishing on the journal exchange programmes within CETAF institutions. The third will look at the different sorts of identifiers and how they relate to taxonomy publications and data accessibility e.g. institutions acronyms, collections IDs, stable identifiers for specimens. The fourth will explore the new idea of developing a publishing platform where journals from CETAF institutions could find expertise and tools to publish under diamond open access, and thus disseminate their data into relevant databases. And the fifth one?

The group will also take on a support role in case of publishing troubles and looks for more members to support its wide-ranging work, from heads of publication services, editors of journals, librarians, interoperability experts, and officers in charge of institutional policies regarding Open Access.

19. CETAF WORKSHOP "CETAF VISION FOR TAXONOMY AND SYSTEMATICS RESEARCH IN 2030"

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⁸ Department of Biological Applications and Technology, Faculty of Health Sciences, University of Ioannina, Greece

⁹ Department of Experimental Plant Ecology, Radboud University, Nijmegen, The Netherlands.

An introduction to scope and aims of the workshop was given by MP-Chair under agenda item 11. Similar to the workshop held in CETAF43, the current one was centred around four questions, with the meeting participants invited to join one of the breakout groups.

- 1. What are the issues / challenges for taxonomy both now and in the next 10 years? What are the opportunities for taxonomy both now and in the next 10 years? Convenor: Wolfgang Wägele (Bonn, DE)
- 2. What is the role of taxonomy in society? How can the importance of taxonomy be promoted within society? Convenor: Patrik Mráz (Prague, CZ)
- 3. What are the scientific directions we should take in taxonomy? What scientific questions should we be answering? Convenor: Gergely Babocsay (Budapest, HU)
- 4. What actions or initiatives do we already have that promote and support taxonomy? What actions or initiatives would we like to have to promote and support taxonomy in the future? Convenor: Leif Schulman (Helsinki, FI).

For **Question 1** "What are the issues / challenges for taxonomy both now and in the next 10 years? What are the opportunities for taxonomy both now and in the next 10 years?", WW-ZFMK reported that there is the need to talk about the role of taxonomy in society. This should start early in schools, and later take on two different paths, addressing amateurs and experts respectively. This should help making taxonomy more attractive and re-introduce it into universities, where it is slowly being removed from curricula. To foster taxonomy, it will be important to develop taxonomy as a discipline, to combine pure taxonomy with hypothesis driven research in other fields. This would be the way to attract funding which could allow more people to complete a PhD in taxonomy as these opportunities are currently limited by funding only, and not the number of interested people.

Data was another important topic: CETAF should focus on making it clear that species data is valuable beyond natural history institutions. To get interest from other disciplines, e.g. ecology, the data must be trustworthy.

Furthermore, WW-ZFMK mentioned that capacity building in developing countries, improving persistent identifiers for better visibility in publications or speeding up species description with technology as examples that could be used to better position taxonomy. The EJT was named as a great example of making life better for taxonomists as it provides a way to publish single species descriptions, something which other journals usually do not want to print.

For **Question 2** "What is the role of taxonomy in society? How can the importance of taxonomy be promoted within society?", PM-CU indicated that while we know that taxonomy is essential, the need for promotion of taxonomy is real and ongoing. The participants in question two came up with a list of possible measures or topics to focus on:

- a) Taxonomy in schools: at every educational level, taxonomy needs to be re-integrated. This starts with using the name of the discipline. Today's school children learn about taxonomy (with common names) but are not actually informed on taxonomy itself.
- b) It will be important to fascinate people on nature, telling stories about specific taxa, using modern technologies in species discovery. This can be done by taking children to museums and showing them collections. Insects especially have a high potential for fascinating children.

c) It is imperative to get away from the simple image that taxonomy is only descriptive and only morphology. The discipline is much more modern and no longer purely descriptive.

d) It is important to show how taxonomy is involved in everyday life. "Taxonomy on your plate" or "taxonomy in your house" are possible stories we could tell during a campaign to show the relevance of the science.

GB-HNHM presented the results the group came up with after discussion of **Question 3** "What are the scientific directions we should take in taxonomy? What scientific questions should we be answering?".

The future of taxonomy lies in the integration of its general approach of discovering the unknown, with morphology, genetics, and all other available traits, the definition of which could also entail all ecological data and biological features. To support this integrative approach, both in the field and in the laboratory, new methodology will have to be developed. Similarly, physical and online resources for taxonomic work need to be integrated to make life easier for scientists.

Regarding the specific scientific questions, the group listed a few open questions:

- What determines biodiversity?
- What are the processes leading to speciation?
- How is a phenotype determined by the genotype?
- What are the interactions between genetics and environmental factors?

He finished with an indication that taxonomy has a strong societal impact, for example "Bad taxonomy kills," that we should also use to promote taxonomy to a broad public.

LS-Luomus gave a resume of the outcomes for **Question 4** "What actions or initiatives do we already have that promote and support taxonomy? What actions or initiatives would we like to have to promote and support taxonomy in the future?" in 2 parts.

For the first part, the group stated that there are plenty of initiatives that could be used to promote taxonomy (e.g. CETAF, GBIF, EURO+MED). However, these initiatives are mostly done by taxonomists for taxonomists. What is needed are some that originate and are active outside of the discipline.

He also conceded that the group mostly talked about the second part of the question where they identified a few problems that should be tackled by promoting taxonomy. Taxonomy is clearly underfunded, with too little money available for both research and jobs that require taxonomic expertise. This leads to less young people taking up taxonomy as a career choice as it does not offer many or very optimistic career prospects which in turn leads to taxonomists becoming an endangered species themselves. To change this, general awareness-raising is as important as the specific targeting of decision makers and universities, as well as sister disciplines and journals on the way they treat taxonomy. The group subsequently listed examples that could work to some degree to promote taxonomy:

 CETAF supporting projects with actual content: now lot of policy related activities are underway and more concrete taxonomic research activities (inventories etc.) are now possible

2. Citation of taxonomists: Cite taxonomic expertise in public outreach, e.g. in Botanic Gardens along with the name tag on trees to give credit to people who named the object (author(s)) and identified the species.

- 3. Our expertise is often taken for granted and people who fund projects are not prepared to pay for taxonomic expertise. We should start charging for our knowledge-based services.
- 4. Create and promote career prospects.
- 5. European inventory of taxonomy in schools teaching. We need to know how much taxonomy is present at different levels in schools within and across Europe.
- 6. The same is true for taxonomy in university teaching. Has it vanished or is it integrated under other titles (e.g. evolution)?
- 7. Create a list of examples of cases of misidentification that causes economic damage or health hazards to show our worth.
- 8. Prominently display taxonomy in social media. Scientific content with nature pictures.
- 9. Show, to attract young people, that our institutions are using cutting edge technologies: AI, robotics, etc. and that there is a future for people working in these domains
- 10. Promoting taxonomic research, why it is still needed?

MP-Chair added that very recently a COST action has been accepted that looks at evolution teaching in schools from an education sciences standpoint. Maybe we can contribute to that effort to add taxonomy to their list of activities. She highlighted a few items that were brought up like the ever-present funding issues, the importance of education but also the worth of taxonomy in its own right as a hypothesis driven science.

She then promised to gather the results of the workshop and provide the membership with a first return before CETAF45. This will also feed directly into the development of the CETAF research agenda. Anyone who would like to get involved in the process (CETAF taxonomy position paper / CETAF Research Agenda) should contact MP-Chair directly after the meeting to express their interest.

EH-RBGE already indicated that a few people from her institution are keen on getting involved.

20. UPCOMING CETAF MEETINGS

The upcoming CETAF45 Governing Board Meeting¹⁰ will be held in Tartu on the 15-16th May 2019 and will be hosted by the University of Tartu, Natural History Museum and Botanical Garden, Estonia. Urmas Kõljalg (UK-UTARTU, University of Tartu, Natural History Museum and Botanical Garden, EE) gave a short presentation, introducing the host institution and

¹⁰ A document on hosting a CETAF Governing Board meeting, detailing the tasks involved and outlining several guidelines to help potential hosts assess if hosting a future CETAF meeting is possible for download from the CETAF community space.

the facilities. The Natural History Museum is Estonia's oldest museum and manages and preserves zoological, geological, botanical, mycological and biological collections.

The following meeting, CETAF46, will be held in October 2019 in Leiden, NL as part of the Biodiversity_Next event hosted by Naturalis and jointly organized by CETAF, DiSSCo, TDWG and GBIF. CETAF47 will be hosted by the Royal Museum for Central Africa, BE, CETAF48 will be hosted by the National Museum of Natural History in Paris, FR and CETAF49 will take place in Frankfurt, DE at the Senckenberg Society for Nature Research.

For CETAF50, The Hebrew University of Jerusalem, National Natural History Collections, IL stepped forward as a volunteer. They will consult with The Steinhardt Museum of Natural History, Israel National Center for Biodiversity Studies in Tel Aviv, IL to develop a common bid for the joint hosting of the event.

21. ANY OTHER BUSINESS

21.1. LINKING BIODIVERSITY AND CULTURE INFORMATION

PM-RMCA presented a new project called LinBi – Linking Biodiversity and Culture Information. The project is coordinated by the radio and TV station RBB in Berlin and includes four CETAF members in its consortium. Running under the CEF Telecom Europeana 2018 call, the 18 months long project will follow up on the OpenUp! project and add a new enrichment component to the existing natural history aggregator. With this component biodiversity data can be linked to other cultural heritage information, thus putting natural history data in context and enhancing visibility as well as re-use within many user groups.

The project will deliver films, music, books, illustrations, images, and photographs with a focus on specifically curated "amazing content".

PM-RMCA finished by indicating that a similar proposal, one focusing on other taxa or Earth sciences, integrating 3D and able to provide 1 million items would have good chance of being funded under the 2019 call. Interested parties should contact Gerda Koch at kochg@ait.co.at.

21.2. PLEA FOR SUPPORT FROM BRAZIL

The National Museum of Brazil was heavily damaged by a fire in September 2018. In the aftermath of this disaster, CETAF received a letter from Prof. Eduardo Hajdu from the department of invertebrates which suffered the complete loss of several laboratories and collections. The letter was a general plea for help but also listed three specific ways in which CETAF members could help:

- **Donation of literature** on arachnology, echinodermatology, and malacology to rebuild the specialised libraries of the laboratories that were destroyed.
- Second hand equipment for microscopy and histology to replace the instruments lost.
- **Short term fellowships** for graduate students and the departmental staff to visit European taxonomic facilities as a part of their thesis or ongoing projects (supporting students who lost their material, as well as to make sure that the graduate programme may continue).

MP-Chair indicated that options one and two are simple, albeit costly in shipping. One suggestion from the floor was that the potential problem of shipping costs could be addressed through enquiries at embassies to see if diplomatic mails could be used.

The third request is a more delicate issue since in Europe itself there is already a shortage of such fellowships. Maybe SYNTHESYS+ could offer some places for Brazilian candidates? VS-NHM replied that it is not necessary for an applicant for one of the physical access calls to be from a European institution. Of course, there are some restrictions but generally this could be a way for Brazilian colleagues and students to obtain access to SYNTHESYS+ partner's collections. The virtual access component of SYNTHESYS+ could also be of interest as a cross-institutional digitisation effort for specimens of Brazilian origin could be a something to focus on.

A proposal to connect any help for Brazil to political concessions over the export of material from Brazil in the context of ABS provoked lengthy discussion. The meeting concluded that although new legislation in Brazil was extremely restrictive, CETAF did not wish to punish any individual museum because of a government's ABS policies. SD-MBG suggested that this issue could be brought up in an accompanying letter, but that there should be no conditions attached to our help. VS-NHM seconded this, saying that we have a set of principles of openness and willingness to lend support that we should adhere to regardless of who that support is directed at.

JS-BHL reported that BHL was in contact with the museum and proposed to investigate a potential collaboration between CETAF and BHL on this matter. MP-Chair suggested that the first step should be to find out which literature is important for the institution, rather than sending a random selection of material.

It was also agreed that the GS would take on a coordinating role for this endeavour. Every member that could send anything to Brazil should contact the GS about it so that overlap is avoided. The same should be done for any fellowships that CETAF members are aware of so that the GS can compile a list of institutions who potentially have resources they can dedicate in support of the National Museum of Brazil.

21.3. TASKGROUP COLLECTIONS DIGITISATION DASHBOARD

AC-ED presented the activities of a task group that has been formed to work on coordinated and harmonised collection description standards, with the aim of being able to visualise the progress of natural history collection digitisation. Indirectly, this will also contribute to the TDWG CD data standards at the collection level. The goal of this exercise is to reduce the workload on the institutions that are involved in multiple schemes.

To this end, the task group undertook a cross-walk across several classification schemes like the CETAF passports, the One World Collection or the Collection Self-Assessment Tool (CSAT), looking for a common, high-level classification scheme.

Currently, the team consists of 14 people from eight institutions and is led by Niels Raes from Naturalis. The group will soon circulate a first draft of a classification scheme and will need the input of the community to verify it: For example, is it detailed enough to classify our collections, yet broad enough to allow all institutions to answer it in a similar manner? What is missing? etc.

KM-SAS added that *Index Herbariorum* should be added to the list of collection description standards. AC-ED finished this item by asking specifically for input from representatives of Earth Sciences as this expertise is currently not represented in the task group.

CONCLUDING REMARKS AND FORMAL CLOSURE OF THE CETAF 44TH GOVERNING BOARD MEETING

To finish the CETAF44 meeting MP-Chair gave a big thank you to the hosts, namely KM-SAS and AB-SAS and their team for the warm welcome and excellent organisation of the meeting, meeting events and for the facilities.

She also thanked the convenors of the workshop for their engagement and for facilitating the discussions. She also thanked the WGs coordinators and members for their hard work over recent years, something which is now paying off as they are all active and productive, with lots of cross-group collaborations being developed. MP-Chair commended the community spirit that CETAF members demonstrate by exchanging information, collaborating in numerous projects, contributing to the different working groups and developing products together. She then thanked the CETAF Governing Board for their engagement and support of CETAF activities and objectives, acknowledging the contributions that individual members make to CETAF via the dedication of staff time commitments for meetings or working group participations.

She finished by thanking the EC members for their time investment, for their contributions to CETAF, and for the wonderful team spirit that has developed during the course of this mandate, as well as the GS for its ongoing support of CETAF and its members and their dedication to the CETAF community.

The CETAF 44th Governing Board Meeting was officially closed at 17:03

The Executive Report of the CETAF 44th Governing Board Meeting (Annex 12) detailing decisions and outcomes was circulated to the membership on the 12th December 2018.

LIST OF ANNEXES

https://cetaf.org/filedepot/cetaf45-may-2019-tartu

Allica i Agellaa di Celai 4-	Annex 1 –	Agenda of CETAF44
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- Annex 2 CETAF43 Minutes (and associated annexes)
- Annex 3 Financial Report from the Second and Third Trimesters of 2018
- Annex 4 CETAF GS Human Resources
- Annex 5 CETAF Budget for 2019
- Annex 6 CETAF Membership Fees 2020-2023
- Annex 7 CETAF Executive Committee Summary Report of the CETAF43 Workshop on "Joint Research Agenda for Biodiversity and Geodiversity sciences"
- Annex 8 Bratislava Declaration on the 2050 Vision of the Convention on Biological Diversity
- Annex 9 Joint statement from the Consortium of European Taxonomic Facilities (CETAF), Species 2000 and Global Biodiversity Information Facility (GBIF):

 Taxonomy in the post-2020 Framework for Biodiversity: underpinning the 2050 Vision for Living in Harmony with Nature
- Annex 10 CETAF Executive Statement on Digital Sequence Information
- Annex 11 CETAF E-Publishing Guidelines–Recommendations regarding authorship citation and Open Access
- Annex 12 Executive Report of the CETAF44 Governing Board Meeting