



CETAF suggestions for Missions under Horizon Europe

At CETAF 44, Vanessa Demanoff and Carole Paleco as representatives of the CETAF European Initiatives Group introduced the latest developments on the new **Horizon Europe Framework Programme**, to which extent it modifies and/or evolves from existing H2020 programme and the new features that it brings in (see the Presentation [here](#)).

Based on three pillars (Open Science, Global Challenges and Industrial Competitiveness, Open Innovation), HORIZON EUROPE seeks to support the creation and diffusion of high-quality knowledge, strengthen the impact of R&I in supporting EU policies and foster all forms of innovation while intensifying market deployment. For more information and the latest developments up to its adoption, please click [here](#). Among other aspects, HORIZON EUROPE introduces a new funding mechanism, the so-called “Missions”.

The CETAF EIAG met with representatives of the EC on 31st July 2018 when the potential for a Mission specifically focused on “Biodiversity” was discussed. While the Missions for the first period of Horizon Europe have already been fixed, there will be a chance to submit proposals for new missions under later iterations of consultations open by the European Commission, which are not expected to take place before 2023. This is where **a great opportunity for CETAF and its membership** lies. This is our chance to make ourselves visible, highlight the role of bio and geodiversity collections, and emphasize the high-quality of the initiatives and actions developed by our members in conservation and halting biodiversity loss.

Proposals for missions must fulfill several criteria and be rooted at the forefront of scientific research while addressing major societal challenges (see checklist below). We need to think big and out-of-the-box, with a multidisciplinary approach and apply creative thinking to approach biodiversity-related critical issues and to bring innovative paths to overcome those, in the overall framework of the [Sustainable Development Goals](#). The proposals should additionally show a cohesive and wide collaborative work among different stakeholders for building and facilitating a “federating element” towards which different actors may work together on a complementary and reinforcing basis,.

As agreed during the last CETAF44 meeting in Bratislava, we now would like to gather your ideas on the topic around which we may jointly build a Mission for Biodiversity. All your suggestions will be compiled and presented at the next CETAF meeting in Tartu, 15-16 May 2019. The best ones will play an integral part of the workshop scheduled in October under the Biodiversity_next Conference in Leiden, NL. You may need to keep in mind that the deadline to submit an abstract is March 22nd <https://biodiversitynext.org/>.

Please have a look at the report on Mission-Oriented Research & Innovation in the European Union, and at the list of proposals that were submitted to the first round of consultations (annexe 2 p.36) :

https://ec.europa.eu/info/sites/info/files/mazzucato_report_2018.pdf

<https://publications.europa.eu/en/publication-detail/-/publication/b46756ae-f1f6-11e8-9982-01aa75ed71a1>

Be imaginative and bold! Suggest what you would otherwise think impossible!



Your suggestions: **Broad, DNA-based bioinventory of European Mountain regions**

Key topics with brief elaboration: Rationale

- Mountain regions always have a high alpha-diversity of species (hot-spots) because of highly diverse habitats (geological, climatic and altitude heterogeneity)
- Mountain regions always show a significantly higher genetic heterogeneity within species because of often narrow distribution limits.
- Mountain regions usually show a significantly higher percentage of areas without or minimal anthropogenic influence
- Terrestrial and aquatic/freshwater habitats in Mountain regions intergrade different climate change parameters
- In particular, the European Alps (other European mountain regions as well?) exhibited a large number of naturally fragmented habitats (nunataks) during the ice-ages. The development of species in these isolated refuges can be compared with anthropogenic insular effects of species.
- Landlocked freshwater communities are often natural refugial areas
- Mountain regions provide a „natural laboratory“ for the re-establishment of species, which can be studied. These results and patterns help to develop concrete recommendations for proactive protective measures.

Major challenge(s) addressed

- The biodiversity of mountain regions is particularly vulnerable to **climate change**. In particular, cold-adapted species are critically endangered by global warming effects.
- Migration routes through/over mountain regions are of particular interest concerning **invasive species** into European Mountain regions but also for general phylogeography.

Possible proposed mechanism(s) to tackle them

- Collections provide material to study and compare species distributions in **time and space**
- A pan-European initiative would enlarge the available data sources

Central stakeholders for each suggested topic

- Collections, Research Institutions (Biology, Geology)
- National parks and Nature reserves
- service providers of DNA analytics, Biodiversity informatics

- **Checklist. Does my suggestion fulfil these criteria?**

- ✓ Cross-disciplinary
- ✓ Clear EU added value
- ✓ Bold and inspirational
- ✓ Measurable goal
- ✓ Indicates a clear direction
- ✓ Ambitious but realistic
- ✓ Sparks activity across disciplines sectors and actors
- ✓ Be open to multiple, bottom up solutions
- ✓ Addressing the global sustainable development goals
- ✓ Demonstrates return to society

Please, return this filled form to: info@cetaf.org, by next **18th March 2019**

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