



**“Science for Post 2020 Environmental Targets;  
Insights from Earth Observation of Protected Areas”**  
**27 September 2018 – European Parliament**  
**Summary Report**



This event was hosted by **MEP Ricardo Serrão Santos**, and brought together key policy-makers to engage in an informed debate on the topic of ‘Science for Post 2020 Environmental Targets’. This event further highlighted findings of the [ECOPOTENTIAL project](#), which supports the use of Earth Observation in Protected Areas across Europe and gather scientists, policy-makers, civil society and stakeholders to discuss perspectives on future biodiversity frameworks and targets. The panel also included:

- **MEP Sirpa Pietikäinen**, by video-message
- **MEP Guillaume Balas**, Co-rapporteur of the EP resolution on the CBD/COP14
- **Andrea Tilche**, Head of the Climate Action and Earth Observation Unit, DG Research and Innovation, European Commission
- **Fiona Danks**, Senior Programme Officer for Science, UN Environment/WCMC
- **Antonello Provenzale**, Project Coordinator, Italian National Research Council
- **Humberto Delgado Rosa**, Director, Natural Capital, DG ENV, European Commission
- **Grégoire Dubois**, Project Leader GCAD (Global Conservation and Development), Joint Research Centre (JRC)
- **Alberto Arroyo Schnell**, Senior Policy Manager, European Regional Office, IUCN

**MEP Serrão Santos** opened this conference highlighting the need to expand the use of Earth observation to monitor and manage ecosystems' services, which are essential both for our economy and society.

In her video-message, **MEP Sirpa Pietikäinen** stressed out the need for more and better science. While political support is fundamental, the advantage of such Intergroup meetings is that they can contribute to the development of new strategies at European level, according to the MEP. She also underlined that investment in the integration of remote sensing and in-situ measurements play a key role.

In his presentation, **Andrea Tilche** from **DG Research and Innovation** emphasized the need for political action as well. From his point of view, addressing the need for more science cannot be an excuse for the inaction on climate change. Mr. Tilche noted that we have to act urgently on the basis of already-existing knowledge. "There is a lot of evidence deriving from science. We have to decrease carbon emissions in the atmosphere, as required by the Paris Agreement, and for that we have to find solutions". Moreover, Mr. Tilche highlighted the progress achieved at European level through various projects; one of these being EUROGEOSS, which will allow Europe to position itself as a global force in Earth observation thanks to the vast knowledge gained through Copernicus. While observations' implementation is key to improving science, the urgency of climate change forces us to set clear objectives and proceed in taking action.

**Antonello Provenzale, Ecopotential Project Coordinator**, presented the project highlighting its key elements; study of protected areas, research on ongoing and future changes, and development of a set of narratives motivated by protected areas' needs. Mr. Provenzale noted that natural ecosystems and consequently our societies are facing plenty challenges, that require a multi-component approach for their solution. While collected data are useful drivers to observe changes in protected areas, their collection takes place from space (remote sensing), and is then completed with field data. These help analyze weather condition, as well as change in water surface and availability, extreme climate alterations, state of vegetation and invasive species' development. Another project's advantage, according to Mr. Provenzale, is the fact that it can be used to make estimations, and further predict ecosystem and environmental changes. Moreover, Mr. Provenzale stressed that open data are crucial to monitoring, understanding and predicting the effect of climate change. All in all, Mr. Provenzale identified the main problems in protected areas' management being the lack of resources and the need for new competences.

**Fiona Danks, Senior Programme Officer for Science at UN Environment World Conservation Monitoring Centre**, addressed the audience providing some recommendations for policy-makers. Ms. Danks highlighted the need to expand the use of Earth observation to monitor environmental changes and noted that policy-makers have to incorporate remote sensing indicators within their environmental strategies. Investments are of key importance, according to Ms. Danks, and should target both remote and in-situ measurements. Moreover, there is a need to increase experience sharing and information flow among stakeholders, while new technologies can play a significant role in environmental management, and therefore need to be encouraged.

Representing **DG ENV**, **Humberto Delgado Rosa** reminded the participants that Natura2000 is the largest network of protected areas in the world and its biodiversity is under pressure. During his intervention, Mr. Delgado Rosa stressed the plethora of scientific evidence about climate change and its actual impacts on environment and society. "Biodiversity loss or land and ocean degradation are widely demonstrated, but are perceived by policy-makers with less emphasis than climate change". From Mr. Delgado Rosa's point of view, although biodiversity targets are put in place, we need more verifiable indicators alongside progress on digital information. He suggested taking a set of better targets for communication, as it had been done for climate change. Summing up the above, Mr. Delgado Rosa underlined the need to improve new technologies, to enlarge knowledge on biodiversity, in order to ameliorate science as well as its role in developing biodiversity strategies post-2020.

**Grégoire Dubois** from the **European Commission Joint Research Centre** underlined the science-policy nexus with reference to environmental targets. He further stressed the importance of digital observation of protected areas and explained how the Digital Observatory for Protected Areas (DOPA) responds to the need for a global reference information system regarding protected areas. Via integrating global datasets managed by various actors to generate key indicators, the JRC is able to access data about ecosystems and species, rendering it possible to understand, compare and predict changes in protected areas. One of DOPA's main objectives is to make information available for policy-makers. There is the need for "ground truth and cooperation with local actors", thus, integrating local knowledge is one of their biggest challenges.

In addition to the above, **Alberto Arroyo Schnell** from **IUCN** [stressed the central role of science in the post-2020 conservation strategies](#), mentioning that science-based targets should be the basis for political decisions. Mr. Arroyo Schnell reiterated the previously-mentioned call for action, alongside the need for resources – including the future Horizon Europe, which should cover the future biodiversity knowledge needs –, in order to ensure we achieve our environmental targets. For Mr. Arroyo Schnell, "implementation" is one of the key words now and for the future, as biodiversity protection should have a prominent place at all levels.

During his intervention, **MEP Guillaume Balas** referred to the need for environmental protection mentioning that reforming governance and mainstreaming biodiversity loss are key elements, as "we cannot speak about biodiversity only in COPs". Biodiversity loss, just as climate change, has to be on the agenda of European and international fora. If the European Union wants to be a leading actor in nature conservation, it does not only need to respect the Paris Agreement, but come up with strong commitments, like tackling deforestation, as Mr. Balas underlined. Being a Co-rapporteur of the European Parliament's resolution on CBD COP 14, Mr. Balas highlighted that "the resolution addresses governance challenges, while its targets are already ambitious. Their implementation though needs to be properly monitored. It's the only way to make stakeholders accountable".

A key point outlined during the final discussion was the lack of integration and dialogue between the climate change and biodiversity community. In order to solve the actual environmental crises, we need transnational and transdisciplinary approaches, but also realize the importance of improving methodology, in order to have efficient monitoring of protected areas. Another key point expressed was the financial support for research; while Member States are not capable of contributing financially, the majority of research is financed by the private sector. As a result, public actors need to be involved more in research efforts alongside research funding, so public awareness as well as proper education of new generations are fundamental towards this direction.

[Documents of the meeting can be found here.](#)

This conference was co-organised with the ECOPOTENTIAL project partners, UN Environment and IUCN European Regional Office.

