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CONVENTION ON THE CONSERVATION OF EUROPEAN WILDLIFE
AND NATURAL HABITATS

Standing Committee

35th meeting
Strasbourg, 1-4 December 2015

**Meeting of the ad hoc Select Group of Experts on
Biodiversity and Climate Change**

Rome, 28 April 2015

- MEETING REPORT -

*Secretariat Memorandum
prepared by
the Directorate of Democratic Governance*

1. OPENING OF THE MEETING

The Chair of the Group of Experts on the Biodiversity and Climate Change, Ms Hasmik Ghalachyan, opened the meeting of the ad hoc Select Group on Biodiversity and Climate Change by welcoming the participants and thanking Italian authorities for their hospitality. She further expressed appreciation for the Parties having volunteered to contribute to the meeting, and thanked the speakers for accepting bringing their knowledge into the work of the Convention. She then passed the floor to the Secretariat for the introduction to the background and aims of the meeting.

Ms d'Alessandro joined the Chair in welcoming the Parties and the speakers for their commitment towards the work of the Convention, and particularly greeted Prof Brian Huntley for accepting to deliver a key-note speech as an introduction to further debates. She then recalled that the Group of Experts on Biodiversity and Climate Change was set-up in 2007 to address the effects of climate change on the biological diversity covered by the Convention, including impacts on species and habitats, on protected areas, and on ecological networks. Based on scientific reviews, the Group was tasked to propose to the Standing Committee advice and guidance for Parties on developing appropriate adaptation management policies and actions, to address the challenges of climate change in the implementation of the Convention.

At that time, the Group of Experts was the only one of its kind in Europe. Since its establishment, the Group has elaborated a series of science-based technical reports, leading to Recommendations that were subsequently adopted by the Committee. These documents also supported the work undertaken at both EU (regional) and UN/CBD (global) levels.

In 2012, the Group monitored the implementation of the adopted Recommendations. The conclusions of the assessment's report were not necessarily positive, as they identified important gaps in the implementation of some of the areas covered by the recommendations. However, the independent experts in charge of the evaluation noted that the information submitted by the Parties did not always reflect the multiple initiatives and efforts put in place at national level.

The Group held its last meeting in June 2014. On that occasion, the Secretariat prepared an overview of the results achieved, taking the Group's work-plan as a baseline. The overview concluded that the Group had fulfilled its mandate in terms of standard-setting, but enforcement of the recommended measures was again low, with still little or no progress on some crucial issues. Therefore, the Secretariat suggested that continuing the work on climate change under the Bern Convention be conditional on the renewed commitment of the Parties towards achieving tangible results.

At its last meeting (December 2014) the Standing Committee discussed the matter and expressed strong support for continuing to work on climate change, provided that a restricted group of volunteering Parties meets in 2015 to prepare a renewed work-plan.

Ms d'Alessandro further stressed that nine Parties volunteered to join the ad hoc Select Group of Experts (Armenia, Bosnia and Herzegovina, the European Union, France, Italy, Norway, Poland, the Slovak Republic and Switzerland). Soon after the Standing Committee meeting the RSPB, Natural England, and the CMS offered their contribution as Observers.

In conclusion, Ms d'Alessandro explained that a draft work-plan based on the proposals made at the present meeting will be examined by the Bureau (in September), prior to the submission to the Standing Committee for possible endorsement.

2. ADOPTION OF THE AGENDA

The Chair apologised for Ms Nertila Sadedini, who was scheduled to present Albanian policies on climate change but is absent due to last-minute, unforeseen circumstances. The Chair invited the participants to consider the draft agenda with this minor amendment.

The Agenda was adopted.

3. KEYNOTE SPEECH: CLIMATIC CHANGE AND BIODIVERSITY CONSERVATION

In his [keynote address](#), Prof Huntley reminded attendees that the threat posed by anthropogenic climatic change to global biodiversity has been a well-known issue for more than 25 years now. Throughout this time, many scientists and researchers have been advocating for the urgent need to take climatic change into account when formulating biodiversity conservation strategies and undertaking management of protected areas and of the wider landscape. This has been the case also under the Bern Convention. It is therefore both distressing and disappointing to note the lack of tangible progress in the implementation of practical actions to address this threat in many parts of the world.

Based on this preliminary consideration Prof Huntley gave an overview of the evidence relating to anthropogenic climatic change, highlighting the challenges that this poses to the conservation of biodiversity. He then showed the response of some species to past climatic changes and explained how they are responding to the current ongoing climatic change. Prof Huntley stressed that there is only medium confidence that some species have responded to recent changes in climate through genetic adaptations. On the contrary, as confirmed by the last IPCC report, a large fraction of terrestrial and freshwater species face increased extinction risk under projected climate change during and beyond the 21st century, especially as climate change interacts with other pressures, such as habitat modification, overexploitation, pollution, and invasive species.

Prof Huntley further recalled the relevant CBD targets by 2020, and reviewed the ten composite recommended actions put forward by the Standing Committee, compared to what remains to be done. The conclusions are mitigated and reflect the findings of the first monitoring assessment (2012). Some of the Parties have already taken action with respect to most of the ten summary recommendations, particularly by putting in place legislative or other frameworks to facilitate or enable such actions, but there is much less progress in the practical implementation of key measures. On a more positive note, Prof Huntley said that there are excellent examples of good practices that can be transposed, and recalled important guidance and vulnerability assessment frameworks elaborated by other entities, including the IUCN.

Finally, Prof Huntley presented a list of suggested priorities for future work [see document [T-PVS/Inf \(2015\) 16](#)] explaining, for each of them, the rationale and the reasons why the Bern Convention should address them. As a top priority, he identified the urgent need to take steps toward a wider and more complete implementation of the Group's past recommendations, especially [Recommendation No. 159 \(2012\) on "the effective implementation of guidance for Parties on biodiversity and climate change"](#). He recognised that climatic change is a challenge but invited the Parties to consider it as an opportunity too. For instance, climatic change introduced a tendency to value ecosystems and the services they provide, and promoted the development of green infrastructures.

A debate followed the presentation, with questions on the projections about: i) other threats that may magnify climate change impact, including invasive alien species; ii) the need to reassess more frequently the conservation status of the most vulnerable species; iii) the benefits of sharing best practices, particularly from the countries which have already elaborated their own smart and specific matrix for action.

Participants also raised the need to assess and communicate on the impact that climate change has and will have on ecosystem services, as a good way to promote action at the political level.

4. IMPLEMENTATION OF RELEVANT STANDING COMMITTEE RECOMMENDATIONS

The Chair recalled that this session was intended to present some examples of concrete actions undertaken by Parties for the implementation of relevant recommendations, with a focus on the challenges and success.

➤ Mr Gian-Reto Walther, representing the Swiss Federal Office for the Environment, presented the [Experience of Switzerland in addressing climate change and biodiversity at national level](#). Mr Walther gave an overview of the main impacts affecting Switzerland as a result of climate change, primarily the progressive retreat of the glaciers and the increase in the recurrence of extreme events and natural hazards. He also detailed such other consequences as an extended vegetation period, the enhanced production conditions for crop cultivation, the destabilization of protection and production forests, and the migration of some plant and animal species.

To respond to these changes Switzerland adopted a national adaptation strategy that builds on the opportunities offered by climate change instead of focusing exclusively on its negative impact. The strategy aims to minimise the risks posed by climate change and to increase the adaptive capacity of natural resources by involving all affected sectors around the same scheme or matrix. The country identified and evaluated the different needs for action, classifying them according to the sensitivity to climate change and the importance of the impact per sector. This enabled them to establish a priority scale for intervention across the various levels from the gene pool to ecosystem services.

The strategy takes both species and habitats into account and also considers interrelated threats such as the further spread of invasive alien species in a climatic change context. The implementation of the Swiss climate change adaptation strategy is ensured through a dedicated Action Plan that identifies eight fields of action, synchronized with the work based on the Swiss Biodiversity Strategy.

As a conclusion to his presentation, Mr Walther emphasised the transboundary nature of climate change because it requires international collaboration and exchange of knowledge. The Group of Experts on Biodiversity and Climate Change offers an excellent opportunity to serve as a forum in this respect.

One of the questions raised during the discussion concerned the further development of biofuels as a response to climate change. Mr Walther explained that this issue may serve as an example that consequences of national adaptation measures need to be assessed not only upon the impact that they have at the national level but also at the global one.

➤ Mr Libor Ulrych, from the State Nature Conservancy of the Slovak Republic presented his country's experience in the ["Implementation of the National Strategy for climate change"](#), with a focus on the challenges ahead.

The national strategy for adaptation is largely based on technical and scientific reports and guidance elaborated by the EU and the Carpathian Convention Working Group on Adaptation to Climate Change. It was prepared by a dedicated interdepartmental working group established under the Ministry of Environment and was adopted by the government in 2014.

The national strategy focusses, for what concerns biodiversity, on three main issues: invasive alien species, forests, and wetlands and peatlands. The latter are particularly important habitats for their role in carbon sequestration and water treatment. EU Structural funds will be used for the implementation of some priority axes, listed and described in an operational programme.

In terms of implementation, the lack of a sectoral approach and the administrative distribution of the competencies between different ministries pose some difficulties. For instance, forests are under the governance of the Ministry of Agriculture while climate change is dealt with by the Ministry of Environment. The mechanisms for active inter-ministerial collaboration on matters of common interest have not been set yet.

On a more scientific level, the lack of knowledge on the potential impact of some energy sources is also problematic. This is the case for biomass energy plantations that, while considered to be a "green energy" and thus financially supported by the EU, may be a potential source of invasive plants. Small hydropower plants may also pose danger as they involve changes in hydrodynamics that may affect fish species. The photovoltaic power systems are another controversial source of energy as they may negatively impact grasslands. Mr Ulrych called for more efforts in the investigation of the impact of alternative energy sources.

Finally, Mr Ulrych presented concrete examples of plant species for which the response to climate change remains unclear. Even if the biology and ecology of some species is known, he highlighted the fact that for the majority of species these information are lacking.

He concluded by emphasising that while the adoption of national adaptation strategies is certainly an important step, their subsequent implementation may be a real challenge and should be addressed with increased efforts and resources.

➤ Ms Mirjana Milićev gave a presentation on “[The impact of climate Change in Bosnia and Herzegovina](#)”, providing the interesting perspective of a developing country having very recently faced the consequences of extraordinary floods. She stressed that the economy of Bosnia and Herzegovina relies very much on agriculture, forestry, energy and tourism. All of these sectors are severely affected by increasingly frequent natural disasters. The economic impact of these natural hazards is estimated to have reached 15 per cent of the country GDP in 2014.

To respond to this crisis, Bosnia and Herzegovina has taken some important steps on both the national and international level. In terms of immediate reaction to natural hazards, the country established a regional early warning system on forest fires, heat waves, storms, floods, droughts and other disasters. Furthermore, the authorities are preparing a project proposal for IPA grants to be devoted to flood protection. Cooperation with neighboring countries on sustainable development of underdeveloped areas has also been intensified.

In terms of strategic approach to climate change, Bosnia and Herzegovina has adopted a Climate Change Adaptation and Low-Emission Development Strategy, in compliance with the requirements of the UNFCCC. However, implementation is weak, mainly due to the lack of scientific knowledge on climate variability in the country. Another major obstacle to tangible results is the complex administrative structure, which splits the responsibilities between the Council of Ministers, the Federation, and the entity governments.

The overall discussion that followed the presentations of the three national experiences concluded that climate change needs to be considered an urgent matter and approached on a long-term and global basis. The complexity of the issue should not be an excuse for avoiding action. Climate change should be taken into account when formulating biodiversity conservation policies, but it is equally important to integrate biodiversity more prominently into the climate change debate and to promote intersectoral cooperation. Finally, international cooperation should promote investigation and research on the national and global impacts of climate change mitigation measures.

The Chair thanked the speakers for sharing their national experiences, which showed different approaches, challenges, and possible solutions.

5. CHALLENGES AND OPPORTUNITIES FOR FUTURE WORK

The Chair explained that this session was scheduled to present possible topics to be included in the next programme of work of the relevant Group of Experts.

➤ Prof Davide Pettenella, from Padova University (Italy), presented the links between [Ecosystem-based services and green economy](#). He stressed that people tend to believe that green economy now recognises the value of ecosystem services and that this has stimulated the “green growth”, with a positive circle where investments take environmental services into account. However, this is a too simplistic representation of the reality. It is still problematic to connect the needs of biodiversity conservation and the development of a really green economy. Prof Pettenella gave two different definitions of “bio-based economy”. The first one is based on the so-called adaptive strategy that uses conventional wisdom adapted to new technologies and contexts; the other one is based on a strategy for synergies that considers green economy not only as a tool for the protection of the natural capital but also as a way to ensure equity and social inclusion.

Based on these preliminary considerations, Prof Pettenella explained the consequences of associating biodiversity conservation to the market’s development. In fact, the fluctuation of the market may create instability not only in the demand but also in the supply. If the market is unstable, the biodiversity providing the services object of the market becomes more vulnerable, and the resources devoted to its management are progressively reduced as they represent costs and lose

monetary value. When ecosystem services are integrated into the financial market the risk is that they may be reduced to tradable offset, losing the necessary focus on the sustainable use of natural resources.

The development of the green economy has also brought some new policy tools, but this may be another risk linked to the “financialisation” of biodiversity conservation. The number of actors involved in the management of these services raises, so as the number of transactions, the standard setting authorities, the accreditation authorities and the financial institutions. The result is the consequent increase of the transactions’ costs and, in some cases, a speculative or illegal behavior.

In the views of Prof. Pettenella, some ecosystem services are associated to critical natural capital that cannot be traded and reproduced in reasonable time. In addition, many ecosystem services, in particular those related to the biodiversity offset, cannot be easily standardised and marketed like usual commodities (the loss of a rare species cannot be compared to the loss of other material goods). It is fundamental to take ethical motivations into account when managing public goods.

Participants appreciated to have a discussion on a topic that is not usually dealt with by the Bern Convention. They agreed with the view presented and emphasised on the right of nature to exist *per se*, without being necessarily considered as a simple service to human beings. The participants referred to the preamble of the Convention, which considers nature for its intrinsic value that must be preserved and passed on to future generations.

In conclusions, participants agreed that this matter is too technical to be considered by the experts appointed under the Bern Convention in the frame of a work-plan, but there is scope for inviting speakers to update the Group of experts on this topic from time to time.

➤ Mr Colin Galbraith, Councillor for Climate Change for the CMS, presented the “[CMS Programme of Work on Climate Change and Migratory Species](#)”, including the role and opportunities for the Bern Convention.

Mr Galbraith explained the reasons why the CMS decided to devote special attention to climate change, and detailed the steps which led to the adoption – by the CMS Conference of the Parties - of Resolution 11.26 (2014). The latter identifies the priorities for CMS future work and details the tasks to be carried out by its specific working group, mandated to assess the situation in a rapidly changing context. The working group will of course rely on available science, but will also deal with emerging issues regarding migratory species and their vulnerability to climate change. It will further have to identify and prioritise options for future research, changing the focus from mitigation to adaptation so to increase species’ resilience. The working group should serve as a platform for knowledge exchange, as well as stimulate cooperation among parties and implementation of concrete actions.

One of the main challenges that the working group will have to face is the lack of effective evidence-base on long term trends of biodiversity. There is a need for new science and research to better understand the interactions between physical, biological and chemical processes.

Other challenges for delivery are:

- Improving the communication channels between science and policy levels;
- Achieving species’ prioritisation, after careful vulnerability assessments;
- Building the necessary capacity, also at national level;
- Ensuring synchronisation of CMS work with the work of other Conventions, developing a common set of priorities.

Mr Galbraith concluded his presentation highlighting the complementarity between the Bern Convention and the CMS, the first taking habitats and non-migratory species into account, the second having a much larger geographical scope and undiscussed leadership and expertise on migratory species. Delivering in partnership could be a successful option.

The discussions which followed mainly focused on priority setting: this is undoubtedly a need, and, at the same time, a very difficult task both in terms of resources and of approaches. Prof Huntley expressed the view that the priority should be supporting the processes that ensures ecosystem services, rather than the species. In fact, if the ecosystems are well preserved, they will also ensure the long-term conservation of the species. Other participants were more in favour of a balanced approach, taking into account the vulnerability of some very important species. Participants agreed that cooperation between the CMS and the Bern Convention on climate change related issues should intensify.

➤ Ms Karin Zaunberger, Policy Officer at the Directorate-General of Environment, European Commission, gave a presentation on "[The biodiversity-climate change link and opportunities for convergence in implementation of different policies](#)". Ms Zaunberger presented the vicious circle according to which climate change provokes a decrease of biodiversity that results in turn into an additional increase of its negative impacts. She then suggested taking a different, more positive approach, and working on increasing resilience to decrease vulnerability.

Ms Zaunberger further presented the whole range of tools and concepts elaborated or used by the European Union (including the Green Infrastructure and ecosystem-based approaches to climate change) as examples of best practices that make use of the adaptive forces of nature, involve people in its management, and build a common sense of responsibility.

Ms Zaunberger presented the Policy framework for work at the EU level, and recalled that EU grants are available for projects aiming at adaptation or at ecosystem-based adaptation. Moreover, the EU 2020 Strategy sets the target of devoting at least 20 per cent of the multi-annual financial framework for the period 2014-2020 to climate change objectives and climate mainstreaming into a range of EU policies.

In terms of suggestions for future Ms Zaunberger advocated for approaches that convert challenges into opportunities. She stressed the need to divest from measures which have negative impacts on biodiversity and invest on actions capable to restore and conserve biodiversity. She concluded by encouraging multisectoral partnership and convergence in implementation so to have a stronger impact in terms of results.

Participants discussed about the suggestion, put forward by the Secretariat, of aligning forces at both national and international levels in order to achieve greater impact through coordinated messages and actions. A possibility could be to facilitate joint working group(s) on biodiversity and climate change, or even to establish a Partnership for Climate Change among international Organisations and/or Conventions.

➤ Mr Simon Duffield (Natural England), with the contribution of Mr Olly Watts (RSPB), gave a presentation on the "[Integration of climate change adaptation into the management of ecological networks: site and landscape response](#)".

Mr Duffield explained that the aim of the presentation was to highlight that the impacts climate change are already being felt on the natural environment, demonstrate the importance of the protected site network to adaptation, and pose the question as to whether the current suite of protected sites and their management are sufficient to deliver the aspirations of the Bern Convention for species and habitats in the face of a changing climate

Evidence was presented from the UK on observed changes in the distribution of species, the timing of phenological events, the composition and interactions of communities consistent with a changing climate. Importantly it was stated that, alongside the harmful impacts on many species, many other species will benefit from climate change, illustrated with the example of Hymenoptera in the UK. This highlights that attention should be focused on those species and habitats most vulnerable to climate change. He emphasised the importance of implementing existing guidance on adaptation and described how climate change adaptation was being embedded into the management of protected sites in the UK.

Continuing with the presentation, Mr Olly Watts described a qualitative adaptation assessment framework tool developed by the RSPB, which enables climate change adaptation to be considered and embedded into site and landscape management programmes. He showed some practical outcomes of using this approach in the UK and beyond, including the development of partnership working at the landscape scale. .

Mr Duffield then presented evidence demonstrating the importance of protected sites both for “leading edge” and “trailing edge” species.

Through the slides that followed, Mr Duffield introduced a case study from the UK on how to learn lessons from the implementation of best practice. He reported on a review done in 2011 in the UK by Professor John Lawton, whom investigated whether the existing “site based” interventions were sufficient to build resilience of designated species and habitats to climate change, and whether there were sufficient protected sites in the correct place to adequately respond to climate change. The conclusions of this assessment were: i) that many of the sites were too small; ii) that historic habitat loss would certainly lead to the decline of many species; iii) that natural processes were going to be lost; iv) and that many sites were therefore not adequately protected.

Based on these considerations, the UK identified a series of priority actions that were likely to build the resilience of protected areas and ecological networks. These consist of increasing the size of biodiversity areas, restoring existing habitats, creating new habitat patches, and linking existing patches through ecological corridors and stepping stones in the wider countryside.

As a conclusion, Mr Duffield stressed the need to build resilience at both a site and landscape scale as a way to promote adaptation, which should also encompass facilitating change. He suggested that the Bern Convention gives particular emphasis to the role that protected areas, ecological networks and landscapes play in this process and that the new work programme should review whether the existing provision was sufficient.

Prof Huntley supported Mr Duffield’s final statement and illustrated this by an evaluation of the capacity of IBAs in Africa that showed their ability to provide adequate and suitable habitat to species affected by climate change. However, he stressed that these positive results were only possible because the species used the whole IBA network, not only the national ones, highlighting the increasing importance of setting-up functionally connected ecological networks.

➤ Ms Linda Dalen, from the Norwegian Environment Agency, presented [Climate Change: challenges in the Arctic](#), as one of the issues that the Convention might wish to address in its future work-plan on climate change.

Ms Dalen, presented IPCC’s projections according to which warming is expected to be stronger in the Arctic region, with negative consequences on the sea ice cover, on the permafrost, on the volume of the glaciers, on the river flows and lake water temperature, among others. She further presented the observed impact of climate change on Arctic terrestrial and marine ecosystems, as well as on the food production and livelihoods. Among the consequences of climate change she mentioned the decreased survival of some polar bears, declines in populations of muskoxen and caribou, and the raising conflicts (for food competition for instance) among species that are moving from a region to another.

According to the working group of the Arctic Council on the Conservation of arctic flora and fauna (CAFF), climate change is the most serious threat to Arctic biodiversity, exacerbating all other threats, including invasive alien species. The latter are nowadays low in numbers and types but are expected to increase in the near future.

The CAFF put forward a number of recommendations following the Arctic Biodiversity Assessment carried out in 2013. The time-frame for their implementation is 2013-2021. Ms Dalen considered that the Bern Convention could efficiently support CAFF’s work by involving parties outside the Arctic region. However, she raised a number of questions for the participants. These concerned:

- the fact that the Russian Federation – which is exploiting Arctic natural resources – is not Party to the Convention;

- The exclusion of Jan Mayen and Svalbard from the application of the Convention;
- The fact that the Convention doesn't protect some key Arctic species such as the polar bear;
- The fact that many arctic species have not been evaluated for threat status according to IUCN criteria.

Participants agreed that other institutions, like the Arctic Council should remain the main reference bodies for issues related to Arctic biodiversity and climate change. They also recalled that the Convention covers the whole European continent and thus has a wider geographical scope. Still, the situation in the Arctic will affect other European countries and it will probably worth asking the Standing Committee to address some specific recommendations to its 51 Parties.

Concerning the Russian Federation the Secretariat recalled that this country is a Council of Europe's member state and an Observer to the Bern Convention. The Recommendations of the Standing Committee may also address, although with less intensity, its Observers. Moreover, the Parliamentary Assembly of the Council of Europe (PACE) has already addressed the issue of the conservation of the environment in the Arctic, through a [Resolution](#) adopted in 2008. In this document the PACE emphasises the high risk of warming of the Arctic region, underlining that exploitation of the region's mineral resources, especially in the Russian Federation, involves highly polluting activities. In this context the PACE calls on member and observer states of the Council of Europe in the Arctic region to:

- ensure the sustainability of the Arctic ecosystems;
- endorse the efforts to follow up within the Arctic Council and other international forums the findings of the Arctic Climate Impact Assessment (ACIA);
- develop international co-operation, enhance the effectiveness of environmental protection measures in view of the foreseeable more intense exploitation of the Arctic's natural resources;
- develop appropriate management schemes;
- develop sustainable natural resource management strategies, aimed at safeguarding the Arctic region from any form of uncontrolled development and non-sustainable exploitation of its natural resources, preventing the increased risks of pollution arising from the economic exploitation of the region and its natural resources, and managing growth in regional tourism in a sustainable, environmentally friendly manner.

Regarding the inclusion of Arctic species in the Appendices of the Convention, the Secretariat recalled that the Standing Committee has the duty of keeping under review the provisions of the Convention, including its appendices, and examine any modifications necessary to ensure that all species of European interest in need of protection are contemplated (Article 14). The Secretariat recalled that Appendix II of the Convention grants strict protection to the bear, including the polar bear. However, the challenge concerning the limitations of where the Convention applies requires also other considerations.

Based on these considerations the participants agreed that the Convention should address climate change impact in the Arctic region within its work-plan on climate change.

➤ Mr Piotr Tryjanowski, from the Poznan University of Life Sciences of Poland, gave a presentation on the "[Impact of extreme weather events on local communities and possible response from the local level](#)".

Mr Tryjanowski explained that "extreme events" are very complex scientific issues that have concrete impacts on human health, socio-economic development, and of course on nature. They should be addressed through long-term approaches and projects, something which is not very much favoured by the political level.

Mr Tryjanowski explained the links between changes in climate and the increase in the frequency and intensity of extreme weather events. He then presented some examples of consequences related to increase of extreme temperature, extreme precipitation, drought and floods. The evidence shows that climate impacts on human beings are determined by their level of exposure and vulnerability to extreme events.

Moreover, Mr Tryjanowski presented some of the approaches in place to secure a more sustainable and resilient future. The priority should be the promotion of climate adaptation so to reduce the risks of extreme weather events. As for prevention, Mr Tryjanowski said that even if investigation and research are improving, it remains very difficult to predict models applicable to disaster risk prevention strategies.

In conclusions, more efforts should be devoted to developing early warning systems and to reducing vulnerability and exposure.

Participants appreciated the interesting presentation but considered that this issue would not really fit under the mandate and resources of the Bern Convention. They decided to rely on more specialized bodies (for instance the UN Office for Disaster Risk Reduction, or the Council of Europe European and Mediterranean Major Hazards Agreement).

➤ Prof Carlo Rondinini, Research Scientist at Sapienza University of Rome and Coordinator of IUCN Global Mammal Assessment program, gave a presentation on "[Mammal species' resilience to climate change and tools for conservation priority setting](#)".

Prof Rondinini recalled that, once confronted to climate change, mammals have four main options: resilience, changing behavior and adapting to climate change, moving away, or getting extinct, locally or globally.

Prof Rondinini then presented the outcomes of researches, carried out mainly by the IUCN-SSC Climate Change Specialist Group, aimed at identifying which species are likely to be more resilient and which one would shift ranges instead, and where. He explained the methodology followed, the three main models used for assessing the species' vulnerability to climate change, and the categories of species targeted by the research. He further informed that the IUCN is publishing some Guidance on Climate Change vulnerability assessment which can be then used by Parties to carry out their own assessments.

Although research has very much advanced in the past years, and work is still ongoing, there are areas in need of immediate further investigation. In Prof Rondinini's views, it worths expanding the present analysis beyond birds, mammals and plants, and to address also all other vertebrates. Qualitatively it could be interesting to investigate how the Natura 2000 and the Emerald Networks would contribute to species' adaptation, as also raised by previous speakers. Finally, forthcoming work and research would certainly benefit from partnership or cooperation among different institutions.

Participants supported the suggestions made and recalled another example of successful cooperation with the IUCN, when the Standing Committee endorsed – under the form of a Recommendation – the guidance prepared by the IUCN on "Conservation translocations under changing climatic conditions".

➤ Mr Fernando Spina, Research Director at ISPRA, gave a presentation on "Migratory birds as indicators of environmental effects of climate change and tools for conservation priority setting". He based his talk on data collected and analysed in Italy, a country that has very much investigated migration across ecological barriers.

Mr Spina recalled that birds are among the best indicators of environmental effects of climate change, mainly because they offer the best time series of data across vast geographical areas, for large numbers of taxa in many different habitats. He also explained that one of the particularities of migratory species is that they are very sensitive to seasonal ecological conditions and may suffer from changes in seasonality. Some species may try to adapt but will not all necessarily succeed. Mr Spina presented different model scenarios, comparing the natural situation with the changes which are occurring at present because of climate change.

Mr Spina presented, in a very detailed manner, the results of specific monitoring projects targeting a number of species, the Barn swallow and the Garden warbler in particular. He explained what are the challenges that these species face during their migration, and how these challenges are increasing in changing climatic and weather conditions.

In his conclusions, Mr Spina considered that the relation between migratory birds and climate change is perhaps the most relevant conservation issue at the global level and, as such, the Bern Convention should definitely include this topic in its future programme of work. Moreover, the Convention counts also with a Group of Experts on the conservation of birds and has the necessary tools for promoting implementation. The Parties to the Convention would probably support such a work also because migratory birds can help providing for indicators to be used as proxy for problems affecting human beings. In terms of delivery, Parties may count on already available monitoring schemes and analysis to anticipate critical scenarios. Finally, Mr Spina recalled the Memorandum of Cooperation between the Bern Convention and the UNEP/Convention on Migratory Species, and invited the Convention to join CMS work in this field.

Participants agreed with the views expressed.

➤ Mr Olly Watts, from the RSPB, gave a talk on the need to “[Communicate efficiently on climate change challenges and opportunities](#)”, stressing that even during the present meeting it has been already recognised that communication on climate change and on wildlife adaptation is so far failing. Mr Watts recalled that societies are far from winning on climate change: we have twenty years left of current greenhouse emissions to stay within 2°C average global temperature rise. Current extinctions are beyond time’s natural rate; we have massive economic problems to stay within climate change, and this is exacerbating social divides. He then made a critical analysis of the way in which we have so far communicated on climate change: using statistics, appealing to individuals as actors of change, relying on eco-friendly products, all of this to avoid an overall catastrophic scenario. The result is that people are probably aware of some of the impacts of climate change, they care about it and feel concerned, but prefer to keep the problem back on their mind as they are scared and do not feel empowered.

Mr Watts suggested that the messages conveyed on climate change should change and give people some reasons for hope, as shown by the good results of a new developing climate narrative. Communication on climate change is moving from the abstracts (the planet) to more direct concerns that affect individuals (food, water supplies, etc.). This new narrative builds on stories about climate change because stories can connect and empower people. Mr Watts presented some examples of positive communication that is achieving to shift the climate change topic from anxiety to action.

To conclude his presentation, Mr Watts explained why Parties should develop action on communication under the Bern Convention. Among the main reasons, he highlighted the fact that the nature conservation community has a lot of examples of success in adaptation which may become excellent, positive stories. Moreover, nature is a climate change issue. In terms of results, a good communication strategy on climate change will help people understanding in a more tangible way the impact of climate change and make climate change mitigation more acceptable. It will help further support the urgency for action, expand biodiversity conservation beyond the community of a few scientists, help raising money for implementation, encourage ecosystem services development, and promote intersectoral cooperation.

The question remains how to develop a communication strategy under the frame of the treaty, and who could deliver training for delegates from contracting parties. Another question raised during the discussion was how to ensure that those who receive the training are able to become trainers of their colleagues once back home. The proposal which got the support of the participants consisted in mandating the Group of Experts to entrust the preparation of guidance on communication, as well as of communication toolkits for delegates of contracting parties.

6. PROPOSALS TO THE STANDING COMMITTEE TO THE BERN CONVENTION

The Secretariat summarised the main conclusions of the meeting, which will be forwarded to the Standing Committee for endorsement under the form of a new Work-Plan for the Group of Experts on Biodiversity and climate change.

According to the ad hoc Select Group of Experts, the first priority for Contracting Parties should be to boost, as a matter of urgency, the implementation of existing guidance at national level but with a global perspective. In particular, efforts should concentrate on the implementation of Standing Committee [Recommendation No. 159 \(2012\)](#), through practical actions that will facilitate the ability of

species to respond to climatic change. As explained by Prof Huntley, especially important are *“those actions that are necessary to enable species to achieve the range shifts that are expected to be of fundamental importance and that are well-documented already to be taking place, although not at a sufficient rate to match the rate of climate change, and often severely hindered by habitat loss and/or by the impermeability of the wider landscape”*.

As it is likely that some Parties will already have developed tools and implemented successful actions, sharing of best practice is strongly recommended.

Effective and fast implementation will also certainly require the assessment or re-assessment of species vulnerability, so to ensure that the species at higher risk are prioritised. The situation of seasonally migrant species should be also carefully assessed, in cooperation with the CMS. Moreover, the Group should assess the importance of European biodiversity in relation to the capacity of European ecosystems to adapt to climatic change.

Alongside, it is recommended to complete assessments of the vulnerability to climate change of all Bern Conventions species, since species that are at present widespread might be threatened in a near future. These assessments should be done taking into account the overall range and population of each species. The development of a common monitoring scheme for the monitoring of targeted species to assess the effectiveness of conservation measures should also be included within the tasks for the Group of Experts on Biodiversity and Climate Change under its new work-plan.

Another goal to achieve would be to ensure the adaptive management of protected areas. The management plans for such areas should take into account, and respond to, the expected consequences of climate change, and the need to facilitate the responses of species. The Group of Experts on Protected Areas and Ecological Networks is looking into this issue with regards to the Emerald Network, for which some management guidance are under preparation. Alongside the assessment of climate vulnerability of species, a review of the adequacy of Emerald network of protected sites to cater for the challenges of climate change for their species, ecological function and ecosystem services is recommended. It is further recommended to include climate change among the factors to be assessed during the on-the-spot appraisals carried out prior to the award or the renewal of the European Diploma for Protected Areas (EDPA), and to make the necessary recommendations to the managers of EDPA sites.

In addition, the Group should address the threats that Arctic biodiversity faces in a changing climatic context, among other by following and supporting the work of the Arctic Council and transpose, under the framework of the Convention, the necessary recommendations for its Contracting Parties. The Group might also wish to evaluate Arctic species of European interest to be suggested to the Standing Committee for inclusion in the Appendices of the Convention, where relevant.

Aware of the importance of an effective communication on climate change challenges and opportunities, the Group should prepare communication guidance and toolkits to help delegates of Contracting Parties promoting their national policies on climate change with particular focus on biodiversity and the issues, opportunities and benefits afforded with Emerald network sites.

Pending the availability of resources, the Convention should also promote research to underpin the development of more permeable landscapes, thus facilitating species' range shifts. Another field for promoting research would be the analysis of the impact of climate change adaptation and mitigation measures on biodiversity.

Regarding the methodology, the Group should refer to its mandate as contained in [Recommendation No. 159 \(2012\)](#) but also work on processes and dynamics, including in relation to the potential convergence of implementation of the recommendations by different sectors. The possibility of creating a joint working group for biodiversity and climate change for MEAs and other institutions (the EU for instance) should be further explored.

A draft meeting report will be circulated to the participants to this meeting for comments and amendments prior to the submission to the Bureau of the Standing Committee to the Bern Convention in September 2015. After the pre-validation of the Bureau, the final draft work-plan will be submitted to the Standing Committee, meeting in Strasbourg on 1-4 December. In case of endorsement, the

Group of Experts on Biodiversity and Climate Change will have its first meeting under the new work-plan in 2016.

7. OTHER BUSINESS

None were raised

8. CLOSURE

The Chair thanked the participants and the speakers for the interesting discussions, presentations and conclusions. She further thanked the Secretariat for the preparation of the meeting and the Italian authorities for the warm hospitality.

Annex 1



Strasbourg, 21 April 2015

Bern Convention Select Group of Experts on Biodiversity and Climate Change

Rome, Italy
28 April 2015

AGENDA

09H30 – 09H45

1. Opening of the meeting

Mr Lorenzo Ciccarese, Member of the Scientific Committee, ISPRA

Ms Ivana d'Alessandro, Head of the Biodiversity Unit, Council of Europe

2. Adoption of the agenda

09H45 – 10H30

3. Keynote speech

Professor Brian Huntley

Discussion

10H30 – 11H15

4. Implementation of relevant Standing Committee Recommendations

- **Addressing climate change and biodiversity at national level: the experience of Switzerland**

Mr Gian-Reto WALTHER, Scientific Officer, Federal Office for the Environment FOEN

- **Implementing a National Strategy for climate change: the Slovak Republic**

Mr Libor Ulrych, State Nature Conservancy, Slovak Republic

- **The consequences Climate Changes in Bosnia and Herzegovina**

Ms Mirjana Milićev, PhD, University of Mostar

Discussion

11H15 – 11H30 - COFFEE BREAK

5. Challenges and opportunities for future work

➤ **Ecosystem-based services and the transition to a greener economy**

Prof Davide Pettenella, Università di Padova, Italy

Discussion

➤ **The CMS Programme of Work on Climate Change and Migratory Species: role and opportunities for the Bern Convention**

Mr Colin Galbraith, Councillor for Climate Change, CMS

Discussion

➤ **The biodiversity-climate change link and opportunities for convergence in implementation of different policies**

Ms Karin Zaunberger, Policy Officer, Directorate-General Environment, European Commission

Discussion

➤ **Integration of climate change adaptation into the management of ecological networks: site and landscape response**

Mr Simon Duffield (Natural England) and Olly Watts (RSPB)

Discussion

14H15 – 16H30

➤ **Climate Change: challenges in the Arctic**

Ms Linda Dalen, Section for Climate Science and Adaptation, Climate Department, Norwegian Environment Agency

Discussion

➤ **Impact of extreme weather events on local communities and possible response from the local level**

Mr Piotr Tryjanowski, Poznan University of Life Sciences, Poland

Discussion

➤ **Mammal species' resilience to climate change and tools for conservation priority setting**

Prof Carlo Rondinini, Research Scientist at Sapienza University of Rome and Coordinator of IUCN Global Mammal Assessment program

Discussion

➤ **Migratory birds as indicators of environmental effects of climate change and tools for conservation priority setting**

Mr Fernando Spina, Dirigente di Ricerca, Responsabile Area Avifauna Migratrice, ISPRA

Discussion

➤ **Communicating efficiently on climate change challenges and opportunities**

Mr Olly Watts, RSPB

Discussion

16H30 – 17H00

- 6. Proposals to the Standing Committee to the Bern Convention**
- 7. Other Business**
- 8. Closure**

Annex 2

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