COUNCIL OF EUROPE

CONSEIL DE L'EUROPE

Strasbourg, 14 September 2018 **T-PVS/Inf(2018)4**
[Inf04e_2018.docx]

CONVENTION ON THE CONSERVATION OF EUROPEAN WILDLIFE
AND NATURAL HABITATS

Standing Committee

38th meeting
Strasbourg, 27-30 November 2018

Management of protected areas from climate change perspective

QUESTIONNAIRE FOR BERN CONVENTION CONTRACTING PARTIES AND PARTNERS

Document prepared by
Mr Otars Opermanis

QUESTIONNAIRE ON MANAGEMENT OF PROTECTED AREAS FROM CLIMATE CHANGE PERSPECTIVE

Addressed to Bern Convention Contracting Parties and Partners

Introduction

In the past decade the effects of Climate Change on biodiversity have been increasingly recognised by the Bern Convention. During this period, several recommendations[1] to Contracting Parties have been endorsed by the Standing Committee to the Bern Convention. Thousands of highly relevant scientific papers and many books have been published. Several of them cover the whole European territory (i.e. climatic atlases such as for birds and butterflies), thus this information is very informative for all European countries, including those outside the European Union. Based on this existing and constantly improving knowledge, many international and national guidelines have been prepared by various governmental and non-governmental institutions.

A special issue is the role of **protected areas** in adapting biodiversity ad its conservation to Climate Change. In the European context, the most relevant and up-to-date guidance to policy makers and site managers is given in the 2013 "Guidelines on Climate Change and Natura 2000"[2]. Although this guideline is primarily dedicated to European Union's Natura 2000 network of protected areas, all principles are also applicable to the Emerald Network of sites in the non-EU countries .

Yet, it has been observed that Climate Change adaptation/mitigation measures linked to the management of protected areas have been implemented at different scales with various success in different Contracting Parties to the Bern Convention[3]. Thus the aim of this questionnaire is to reveal and take stock of particular needs of Contracting Parties for tackling Climate Change in the context of the **management of protected areas**, particularly Emerald Network sites. Based on the answers received from the Contracting Parties to this questionnaire, the Bern Convention Secretariat will assess the needs of Contracting Parties and identify appropriate responses which will provide orientations on how to help countries integrate Climate Change in protected areas management frameworks in a more systematic way.

The questionnaire is addressed to Focal Points to the Bern Convention in all its 51 Contracting Parties. As a minimum one response (i.e. filled questionnaire, representing the institution of the Focal Point) from each country should be returned, but Focal Points are free to distribute this questionnaire further to other institutions if they may have an active position with regards to the subject of Climate Change and protected areas.

This questionnaire does not cover issues related to the constitution of Natura 2000 or the Emerald Network, where the elements of mitigation and adaptation to climate change are embedded in the methodology[4] of setting-up these networks, namely adressing site size and connectivity between sites (even across country borders) which is discussed in the Biogeographical evaluation seminars or bi-lateral meetings on network sufficiency for both EU and non-EU countries. But it is assumed that more sites, or adjustmetnts to site boundaries (both under the Natura 2000 or the Emerald networks) in future would be necessary to face Climate change challenges.

[1] https://www.coe.int/en/web/bern-convention/recommendations-on-climate-change
[2] http://ec.europa.eu/environment/nature/climatechange/pdf/Guidance%20document.pdf
[3] An analysis of the implementation of recommendations made by the Group of experts on Biodiversity and Climate change (2006-2011) https://rm.coe.int/1680746249
[4] https://rm.coe.int/168074669d (p 82)

CLIMATE CHANGE AND PROTECTED AREAS: QUESTIONNAIRE

Abbreviations: CC=Climate Change, PA=Protected Areas (i.e. Natura 2000 and Emerald Network)

GENERAL INFORMATION			
Country	Netherlands	**Compiler**	A.S.Adams
Date of submission	15-10-2018	**E-mail**	a.s.adams@minez.nl
		Telephone	
		Institution	Ministry of Agriculture, Nature and Food Quality

Part I. General indicative self-assessment of progress in the implementation of CC adaptation / mitigation measures linked with protected areas

1. Please provide score from 0 (no CC related issues were addressed) to 5 (ideal situation both in quantity and quality) in the grey area corresponding to each question.

I-1_A	Is the awareness about CC and acceptance that it is unavoidable sufficient/appropriate in your institution?	5
I-1_B	Are conservation objectives for protected areas developed so as to take into account the species, habitat types and ecosystems which are most likely to be affected by CC?	2
I-1_C	Are there adequate pro-active conservation measures in place for PAs which take into account CC aspects?	2
I-1_D	Is the success of conservation measures monitored, and are monitoring results publicly available and taken into account in reviewing conservation objectives and management techniques?	3

Additional comments if appropriate:
The main current pressures in the Netherlands at the moment are (human induced) nitrogen-deposition (and other eutrophication) and insufficient ground water levels (desiccation). The conservation measures are mainly aimed at these pressures – decreasing nitrogen deposition and improving hydrological conditions. Further, since the 1990's we have been developing our National nature network (NNN), including ecological corridors to connect all nature sites, to make migration possible. These actions have not been initiated because of CC, but in the light of CC we consider these measures "as no regret" measures. The Dutch Environmental Assessment Bureau (PBL) concluded in 2010 that the current NNN was not sufficient; larger nature areas and larger corridors were necessary and objectives for the (Natura 2000-)sites should be more aimed at the functioning of ecosystems than on conserving the current nature values on the current spot (which is caused by EU legislation: Habitats Directive). Monitoring of actual developments may indicate that further measures are needed.

Additional questions

I-1_E	Please provide an indicative coverage of sites (in %) of PA network in your country which have operative management plans in place that are systematically reviewed based on monitoring data:	85%
I-1_F	Are there species and/or habitats or protected areas for which CC effects have been already documented in your country? Please provide a list with comments as appropriate. This is a free text. Where appropriate, please add also links to any relevant publication or web-resource (preferably in English):	yes

Additional comments if appropriate:

At the moment the Netherlands is already too warm for 100 indigenous plant species. They are on the southern border of their natural range and are in risk of disappearing when temperatures increase further (and many oher species will appear: https://www.naturetoday.com/intl/nl/nature-reports/message/?msg=24544
There are indications that (expected) warm-loving species are increasing and cold-loving species are decreasing: https://www.clo.nl/indicatoren/nl1429-klimaat-en-warmte--en-koudeminnende-soorten
Also for lichens a trend a visible to more warm-loving species:
https://www.blwg.nl/mossen/korstmossen/korstmossen_en_klimaat.aspx

More in common mismatches in food webs are found: predator and prey may react differently on climate change. The most studied example is of the great tit and the caterpillars they feed their young. The birds nest earlier in spring, but the peak of the caterpillars shifted even to an earlier time. This not only has effects on the young of the great tit, but also on the sparrow-hawk that hunts the tits and on the trees that are affected by the caterpillars.
https://nioo.knaw.nl/en/press/ecology-buys-time-evolution
Also in the North Sea and Waddensea mismatches between algae, zooplankton, fish larvae and possibly seabirds and changes in distribution of harbour porpoise.

Some more general effects of climate change on nature can be found in:
https://ruimtelijkeadaptatie.nl/publish/pages/121806/bollenschema_natuur_v7_a3.jpg

Part II. Specific account of problems and obstacles encountered in the implementation of Climate Change adaptation/mitigation measures linked with the management of protected areas

1. Please indicate (by ticking X in the corresponding box) the problems/obstacles in reaching sufficient awareness of CC in your institution. Select one or more of offered options, or describe in your own words:

II-1_A	None	☒
II-1_B	Lack of information supporting the importance of CC for your country, or lack of knowledge where such information can be found	☐
II-1_C	Information exists but there are difficulties in interpreting the evidence in a meaningful way for your country	☐
II-1_D	There are no documented observations of negative trends of wild species and habitats in your country which can be attributed to CC	☒
II-1_E	Other, please specify:	☐

Additional comments if appropriate:
Negative effects of climate change are hard to determine: in case of deterioration of habitat or decrease of species it is hard to pinpoint climate change as the (only) cause. In the Netherlands often other environmental factors also play a role, mostly a more important one (see I-1).

2. Please indicate (by ticking X in the corresponding box) any obstacles in setting appropriate conservation objectives for protected areas taking into account CC. Select one or more of offered options, or describe in your own words:

II-2_A	None	☐
II-2_B	Lack of analytical skills and experience in searching for relevant information and data interpretation	☐
II-2_C	Poor information on presence of species and habitats in protected areas Lack of up-to-date data	☐
II-2_D	The procedure for setting conservation objectives for individual species and habitats for each protected area is not established	☐
II-2_E	Other, please specify:	☒

	Other pressures are more important than (and related to) CC (see also I.1)	
Additional comments if appropriate: The main problem is that it is hard to determine what are the effects of climate change comparing to the other pressures, so it is also hard to set specific objectives. On the other hand: because of the strict interpretation of article 6 of the Habitats Directive it is hard to change objectives for Natura 2000 sites that take into account climate change, objectives the take into account that some habitat types/species will disappear and others will occur in the future.		

3. Please indicate (by ticking X in the corresponding box) why appropriate conservation measures for CC adaptation/mitigation are not either fully or partly implemented. Select one or more of offered options, or describe in your own words:		
II-3_A	None	☐
II-3_B	Lack of knowledge/experience about appropriate management techniques	☐
II-3_C	Difficulties to act in private land and to involve landowners	☐
II-3_D	Lack of cross-sectoral cooperation	☐
II-3_E	Lack of funding	☐
II-3_F	Other, please specify:	☒
Additional comments if appropriate:		

Measures for conservation of biodiversity may be contradictory with objectives for climate change mitigation: for example the cutting of trees may be necessary for decreasing the lowering of water tables (and/or for development of more open space for habitats that depend on that), but that is not good for CO2-fixation. The same applies for the restoration of peatlands: to keep all stages of peat development regularly peat has to be extracted at some places (digging of 'pet holes'), while the continued growing of the peat would be better to mitigate climate change.

4. Please indicate (by ticking X in the corresponding box) the obstacles/problems in monitoring management results and sharing such information at national and/or international level. Select one or more of offered options, or describe in your own words:

II-4_A	None	☐
II-4_B	Lack of general monitoring scheme for PAs	☐
II-4_C	Lack of sufficiently qualified staff	☐
II-4_D	Information exists but the importance of sharing it is not recognised	☐
II-4_E	Other, please specify: it is too early	☒

Additional comments if appropriate:
A coherent monitoring system for the National Nature Network is set up by national and provincial governments. This sheme started in ca. 2015 and is still under development, learning from experiences in the field. It is still too early to be able to say what developments were caused by which management.

A lot of information on (impacts of) conservation measures is to be found (in Dutch) on www.natuurkennis.nl ("nature knowledge").

Part III. Ideas and suggestions on how the Bern Convention Secretariat could assist Contracting Parties to improve the implementation of Climate Change adaptation/mitigation measures associated with management of protected areas

1. Please indicate (by ticking X in the corresponding box) possible suggestions for improving awareness of CC in your institution. Select one or more of offered options, or describe in your own words:

III-1_A	Demonstrate (through seminars and study visits) how the experience from Natura 2000 can be transferred to the Emerald Network	☐
III-1_B	Provide positive examples to show that many adaptation/mitigation measures "work in real life" and in some cases do not even require a lot of resources	☒
III-1_C	Showcase examples of working organisational structures at national level and strategic policy documents supporting the awareness of CC at institutional level	☐
III-1_D	Other, please specify:	☐

Additional comments if appropriate:

2. Please indicate (by ticking X in the corresponding box) suggestions which could support the setting up of conservation objectives for protected areas taking into account CC. Select one or more of offered options, or describe in your own words:		
III-2_A	Training seminars on practical setting of conservation objectives at site level	☐
III-2_B	Training on how to find, use and interpret data on the vulnerability of ecosystems / species / habitats to CC and how they relate to site- and country-specific contexts	☒
III-2_C	Other, please specify:	☐
Additional comments if appropriate:		

3. Please indicate (by ticking X in the corresponding box) suggestions which could support the implementation of conservation measures for CC adaptation/mitigation. Select one or more of offered options, or describe in your own words:		
III-3_A	Study tours to sites which already implement conservation measures for CC adaptation/mitigation	☐
III-3_B	Launch of an international knowledge exchange on site management similar to the "new bio-geographical process" in the EU[5] [This also relates to all other points in this section]	☒
III-3_C	Provide guidance on where to find published materials on adequate management techniques	☐
III-3_D	Other, please specify:	☐
Additional comments if appropriate:		

4. Please indicate (by ticking X in the corresponding box) suggestions which could support the monitoring of management results and the sharing of this information at national and/or international level. Select one or more of offered options, or describe in your own words:		
III-4_A	Seminars aimed to foster the development of monitoring systems of species and habitats	☐
III-4_B	Training on adaptive management planning: how to use monitoring results to review conservation objectives	☐
III-4_C	Other, please specify:	☒
Additional comments if appropriate: More knowledge is needed to relate monitoringresults to the effects of (site-) managementmeasures. This would make it possible to go into more detail on the exact impact of conservation measures in the context of the ecology of a site.		

[5] http://ec.europa.eu/environment/nature/natura2000/seminars_en.htm