

3rd Meeting of the CMS Multi-Stakeholder Energy Task Force (ETF3)
Sharm El Sheikh, Egypt, 16 November 2018

ETF3/Inf.2

REPORT OF THE 2nd MEETING OF THE TASK FORCE ON RECONCILING SELECTED ENERGY SECTOR DEVELOPMENTS WITH MIGRATORY SPECIES CONSERVATION



The Government of the Federal Republic of Germany, through the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) were recognized as Champion Plus for their generous support and commitment towards Reconciling Energy Sector Developments with Migratory Species Conservation for the period 2018-2020. The Energy Task Force has been funded with the contribution granted by Germany under the Migratory Species Champion Programme.

Supported by:



Federal Ministry
for the Environment, Nature Conservation
and Nuclear Safety

based on a decision of the German Bundestag

**2nd Meeting of the Task Force on Reconciling Selected Energy Sector
Developments with Migratory Species Conservation**
Bonn, Germany, 14-15 September 2017

MEETING REPORT



The Government of the Federal Republic of Germany, through the Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB) were recognized as Champion Plus for their generous support and commitment towards Reconciling Energy Sector Developments with Migratory Species Conservation for the period 2015-2017. The Energy Task Force has been funded with the contribution granted by Germany under the Migratory Species Champion Programme.



2nd Meeting of the Task Force on Reconciling Selected Energy Sector Developments with Migratory Species Conservation

Agenda Item 1 - Welcoming remarks

Mr. Marco Barbieri (CMS Secretariat) opened the meeting on behalf of CMS Executive Secretary, Bradnee Chambers, welcoming participants to Bonn and Langer Eugen. Mr. Barbieri noted the importance of the Energy Task Force (ETF) to the CMS, and said that the multi-stakeholder nature of the ETF was a strength and made it unique.

Mr. Jürgen Friedrich (Germany), the first Chair of the ETF, joined Mr. Barbieri in welcoming participants. He stressed that renewable energy development is important to address climate change, a key threat to biodiversity, but that it must be developed in a wildlife-friendly way. Mr. Friedrich announced that the German Government would continue to fund the ETF for a further three years.

Mr. Friedrich introduced Mr. Edward Perry (BirdLife International) who succeeded Ms. Aida Kowlaska as ETF Coordinator. Mr. Perry thanked Germany for its renewed support and welcomed participants, noting the diversity and experience in the room. He emphasised the importance of integrating biodiversity issues and concerns into climate and energy policy, and said the ETF was well-placed to break down the “silo mentality”.

Mr. Barbieri informed participants that no candidate for Chair had come forward. It was therefore proposed that the incumbent Chair (Mr. Friedrich) and Vice-Chair (Ms. Wilma Lutsch, South Africa) would preside over the meeting. Elections would be held at the end of the meeting for a Chair and Vice-Chair. These arrangements were approved.

Agenda Item 2 - Introduction of participants and adoption of the agenda

Noting the wide range of expertise represented in the ETF, the Chair conducted a *tour de table*. The list of participants, including those taking part remotely, is available in Annex 2. Mr. Mohamed El Khayat was congratulated on his recent promotion to the Chair of Egypt’s Renewable Energy Authority.

Mr. Perry introduced the agenda [ETF2/Doc.1](#) and outlined the three objectives for the meeting: 1) Review progress of ETF and CMS Parties to reconcile energy developments with migratory species conservation; 2) Exchange experience, lessons learned and information on ongoing or planned initiatives; 3) Identify priorities for future work of ETF, and opportunities for collaboration. There being no requests for changes, the Chair declared the agenda adopted.

Agenda Item 3 - ETF Membership and Scope

Mr. Barbieri (CMS Secretariat) reminded the meeting of the composition and scope of the ETF. The ETF was established under CMS Resolution 11.27 and the *modus operandi* adopted at the first meeting in Cape Town. The scope of the ETF was intended to eventually become global and cover all taxonomic groups. In the initial stages, it had been agreed to focus on the Africa-Eurasian region, migratory birds and the effects of powerlines and hydro, wind and solar technologies. Mr. Barbieri welcomed new members to the ETF, including Saudi Arabia, EUROBATS, WindEurope and the Africa Sustainable Energy Association. The inclusion of EUROBATS indicated an extension of the taxonomic scope of the ETF to include bats as well as birds.

The Chair invited participants to consider further expansion of the geographic scope and membership of the ETF. There was general consensus that while the ETF should extend its membership, this had to be done in a pragmatic way to avoid hampering progress. Participants suggested *inter alia* extending invitations to Jordan and Sudan, and engaging power pools in Africa. Regarding the involvement of individual energy companies in the ETF, the Chair reminded participants of the decision to invite industry umbrella groups only, while leaving it to the discretion of the Chair to invite individual companies as guest speakers to specific meetings.

Participants also sought advice on involving other ministries in the ETF. The Chair recalled that one action

point from ETF1 had been for representatives from Environment Ministries to encourage their colleagues in Energy Ministries to become involved. Countries could have multi-member delegations or a support network of focal points in different ministries. The ETF Coordinator encouraged representatives from environment ministries to reach out to their national energy agencies, and suggested including them in the CMS mailing list.

The Coordinator undertook to circulate to ETF members the rules and regulations about recruitment and nominating new members, which were contained in rules 9-11 in the modus operandi.

Agenda Item 4 - Summary Report 1st meeting of ETF and review of action points

The Chair gave a summary of the 1st Meeting of the ETF in Cape Town, December 2016. A comprehensive written report is available as an information document [ETF2/Inf.2](#).

Agenda Item 5 - Review of Modus Operandi

Regarding the modus operandi adopted at ETF1, Mr. Barbieri (CMS Secretariat) said that one point had been deferred concerning voting rights for participants attending remotely. Decisions were to be reached as far as possible by consensus, which meant that voting should be rare. The Rules of Procedure for the CMS COP had no provisions to allow those not present to vote.

The Chair recommended to restrict voting to those present, while seeking to reach decisions by consensus. Host Governments were urged to do their utmost to ensure that visas were issued. The modus operandi was not amended and ETF members attending remotely would not be allowed to vote.

Agenda Item 6 - Monitoring implementation and impediments to implementation

6.1 Overview of work plan activities and report on progress to date from ETF Coordinator

Mr. Perry said that the National Reports submitted to CMS COP11 (2014) and COP12 (2017) had been reviewed to assess efforts taken by Parties to the CMS to implement Resolutions on renewable energy and associated infrastructure, and an information paper prepared for COP12. He indicated that the next stage would be to interview key Parties and stakeholders to further understand the opportunities and barriers to implementing AEWA, CMS and EUROBAT guidelines. Another area of work, which would be advanced by the Technical Working Group, was the review of existing guidelines to identify gaps where more technical detail was required.

6.2 Presentation of 2014/2017 CMS national report analysis prepared by ETF Coordinator

Mr. Perry presented an overview of the paper ETF2/Doc.3, which he said would be revised over the next two weeks before submission to the CMS COP. The final version can be found [here](#). The paper was based on the 2014 and 2017 CMS National Reports and focussed on the threats posed by renewable energy technologies and the measures adopted to address them in line with CMS COP [Resolutions 7.4, 7.5, 10.11](#) and [11.27](#). Mr. Perry noted that more than half of reporting Parties identified wind turbines or electrocution as a threat to migratory species, and a similar number reported taking actions to address them. Environmental Impact Assessments were commonly reported, but few countries reported Strategic Environmental Assessments, or cited the precautionary principle and cumulative effects. Mr. Perry suggested a more comprehensive implementation of Resolutions was needed, with Parties taking actions across the entire planning cycle.

The Chair invited participants to discuss the report and provide further information on the barriers. Discussions focussed on the necessity for strong cooperation and effective communication between representatives from the environmental and energy sectors – even where good legislation is in place – the importance of harmonising national and international guidelines and standards, issues arising from data confidentiality, and the need to consider ecosystem service impacts of renewable energy developments in addition to species impacts. The Chair remarked that Egypt provided an excellent example of where energy and conservation interests were working together.

The Chair asked that comments on the draft paper be sent to the Secretariat by 22 September so that the COP deadlines could be met.

6.3 National case studies, followed by discussion of impediments to implementation

Mr Andreas Klepke - Germany

Mr. Andreas Klepke presented possible ways of reconciling the development of energy production and conservation, while implementing Germany's energy transition. He said that Germany's experience shows that it is important to consider and address potential conflicts as early as possible in the planning process. Concerns over species conservation should be raised at the outset, and installations should not be built in Protected Areas or National Parks. Mr. Klepke informed participants that a "Competence Centre" for nature conservation and energy transition had been set up in 2016, as a neutral body designed to settle disputes and conflicts.

In the questions and discussion following the presentation, participants observed that offshore energy developments in Germany were subject to fewer controls and criteria than onshore windfarms. This is also the case in other countries, and may result in part from the lack of reliable baseline information on the sensitivity of these areas. Addressing this data gap was flagged as an important piece of work for the ETF. Another question raised was whether all sites posing low risk to wildlife had been examined prior to expanding into areas with higher or unknown ecological sensitivity. It was noted that in the UK, the RSPB (BirdLife in the UK), had carried out a spatial analysis that showed that national energy demand could be met by renewables without encroaching into higher-risk areas.

Participants also asked whether there was compensation for utility companies when windfarms were shutdown. While Mr. Klepke said this was not the case in Germany, Mr. El Khayat (Egypt) informed participants of a scheme in Egypt that compensates operators when shutdowns exceed 2% of capacity, Mr. Adamczyk (EBRD) shared an example of where shut-down costs had been successfully built into the financial model, and Mr. Carryer (Renewables Grid Initiative) said that compensation was paid to grid operators in Europe when there was shut-down due to grid stress.

Agenda Item 7 - Promoting implementation of relevant guidelines

The Chair said that sub-items 7.1 and 7.2 would be taken together.

7.1 Overview of work plan activities and report on progress to date

7.2 Review of information package prepared by ETF Coordinator, and discussion of dissemination plans

The ETF Coordinator reported progress on work plan activities related to promoting the implementation of relevant guidelines. An information package had been created for dissemination and a copy was included in the meeting documentation (see [ETF2/Doc.4](#)). The original version was posted on the ETF workspace in May, with a revised version following in August. Mr. Perry reported a well-attended side event at the UNFCCC intersessional meeting in Bonn in May 2017, which attracted good media coverage. He informed participants of plans for a multi-stakeholder dialogue on energy and migratory species for CMS COP12 and side events at the UNFCCC COP in Bonn.

Members of the ETF were asked to review and discuss opportunities for disseminating the information package, and to consider supplementary information requirements. It was agreed that the package was comprehensive and useful, and should be disseminated by members among relevant stakeholders. Smaller, two-page briefs targeting specific audiences were recommended as a supplement to the information package, as well as further a package of case studies.

7.3 National case studies, followed by a discussion on integrating guidelines into policy-making and planning

Kofi Adu-Nsiah - Ghana

Mr. Adu-Nsiah presented on renewable energy developments in Ghana. He said that electricity supplies reach 80% of Ghana and that renewable sources are part of its national energy policy. The government takes into account guidelines produced by CMS, AEWA and the Ramsar Convention, and there are national laws on EIA and SEA. Mr. Adu-Nsiah said that Ghana has a Renewable Energy Act, along with an Environmental Protection Council (1973), an Investment Code (1985) and an Environment Protection Agency (1994). An EIA Technical Review Committee and structures in the ten regions to support EIA process have also been established. The main challenges according to Mr. Adu-Nsiah are uncertainties concerning regulations and policy, institutional, administrative and financial barriers, and a lack of both general awareness and skilled personnel. A summit chaired by the Vice-President is held each year to encourage the relevant agencies to engage in dialogue. Mr. Adu-Nsiah noted the role that ETF could have in sharing experiencing and helping Ghana learn from others to avoid repeating their mistakes.

The slides making up Mr. Adu-Nsiah's presentation are available on the ETF pages of the CMS website.

Stephen Manegene - Kenya

Mr. Manegene said that Kenya is situated on an important migration route, the African-Eurasian Flyway and is considered a biodiversity hotspot. A priority for the government is to increase energy production using geo- and wind sources. Implementation of CMS Resolutions is the responsibility of a number of authorities in central and county government, including the Kenya Wildlife Service and the National Environmental Management Authority. On paper, the legislation is clear and the supporting policies are sound, but implementation has to be improved.

The Chair noted a number of similarities between the situations in Ghana and Kenya, especially regarding the challenges. Mr. Magenene said that in Kenya while national government was responsible for passing legislation, implementation was carried out at the county level, and that tier was dependent on central government for funding. A mechanism is needed for collecting, integrating and sharing data, and more efforts should be made to build capacity in the agencies to learn how better to monitor projects undertaken in the country.

Mr. Perry said there was a role for the ETF in bringing material together for dissemination across different ministries within governments, and also to communicate to different parts of government through forums such as the UNFCCC, SDGs and other policy frameworks.

The slides making up Mr. Manegene's presentation are available on the ETF pages of the CMS website.

Mohammed Shobrak - Saudi Arabia

Mr. Shobrak presented on electrocution and collisions of birds with powerlines. In 2008 White Storks and 15 other species including Quails and various crakes were electrocuted on power lines, largely in a narrow strip along the Red Sea coast where installations were concentrated. Enhanced conservation measures was enshrined in the Coastal Protection Act, and a booklet highlighting some success stories has been produced as a means of communicating key messages from the guidelines to those that needed them.

The slides making up Mr. Shobrak's presentation are available on the ETF pages of the CMS website.

7.4 Case studies and reflections, followed by a discussion on promoting guidelines with investors and industry

Agustin Rioperez - DTBird and DTBat

Mr. Rioperez described technology designed and employed by DTBird and DTBat to protect birds and bats from collisions with turbines using cameras recording in real time and ultra sound detectors. All devices are customized to species, location and turbines. Mr. Rioperez informed participants of a system that uses microphones and loudspeakers to issue warning sounds when birds get too close to the windfarms. Its effectiveness has been tested in Sweden with two control samples. Without the alarms only 40% of birds took evasive action to avoid the blades; with the sound this rose to 87%.

Mr. Rioperez said that authorities could require mitigation action if collisions occurred or if there was a high risk of them occurring. However, it is more difficult for authorities to require further measures after a scheme has been given planning permission. He said that developers sometimes opt to install these systems in order to obtain permissions in places with high risk, but the technology is not perfect and high-risk areas should still be avoided.

In the discussion, participants agreed with the need for technological mitigation measures, including devices that could be fitted retrospectively after unforeseen problems arose. However, it was suggested that further data is needed to ensure a scientific approach, and that further focus should be given to new bladeless turbine designs which could potentially make mitigation measures superfluous.

The slides making up Mr. Rioperez's presentation are available on the ETF pages of the CMS website.

Mihaela Dragan - WindEurope

Ms. Dragan explained that WindEurope has 450 members including utilities, suppliers, cable manufacturers, logistics and financial services. WindEurope established a sustainability task force which among other things looks at nature conservation. Solutions to conservation problems lie in planning, design and mitigation. It is often the case that just one turbine on a farm causes most of the collisions. Case studies involving Golden Eagles in Scotland and Lesser Kestrels in Spain show that tailored measures can eliminate the majority of collisions. In other cases, countries applying bad practices have been taken to the European Court of Justice and mitigation measures have been required. More collaboration with planners at the initial stages of a project reduced the need for retrospective fitting of safety devices and ensuring that everything was done right at the start reduced jeopardizing the viability of the project. Shut-down should be the last resort when other options had proved ineffective. Ms. Dragan informed participants of forthcoming opportunities to promote the ETF at the Amsterdam exhibition taking place in November 2017, an event in Brussels in February 2018 and a conference in Hamburg in September 2018.

The slides making up Ms. Dragan's presentation are available on the ETF pages of the CMS website.

Christopher Edeh - AFSEA

Mr. Edeh said that his organization represented small- to medium-size renewable energy concerns in Africa, a continent as large as the USA and Europe combined, but where power consumption was six times less than in Europe. There is often a total lack of awareness of the conservation aspects, but with 200 million Nigerians as potential customers and huge scope to increase energy production (currently 10Gw), there is a pressing need to explain the consequences of expanding electricity supplies. There has been a huge increase in the number of overhead cables in Nigeria and a similar expansion of turbines could be foreseen. The ETF should reach out to partners to make sure that its voice is heard, but within governments it is not always clear which agency is responsible.

The slides making up Mr. Edeh's presentation are available on the ETF pages of the CMS website.

Robert Adamczyk - EBRD

Mr. Adamczyk from the European Bank for Reconstruction and Development (EBRD) informed participants of EBRD's aim to increase its environmental portfolio to 40% (€4 billion). Environment and sustainability are, however, also part of the bank's founding terms of reference and the EBRD adheres to the European Union's green standards. Mr. Adamczyk said that in the past, there have been cases where deals have been cancelled because of failure to comply with environmental criteria, and that the EBRD insists on full Level A EIA for wind plants and even smaller-scale hydro projects. The EBRD usually deals with projects that have already been given planning approval as it is a financial institution and not a project designer. It therefore relies on others to check that the plans are in order. Mr. Adamczyk stated that uniform standards should be adopted to avoid inconsistencies and confusion, and that investors could be deterred if the legislation was constantly changed.

The slides making up Mr. Adamczyk's presentation are available on the ETF pages of the CMS website.

Constant Hoogstad - South Africa

Mr. Hoogstad reported on a study underway to examine the costs of wildlife collisions/electrocutions with electrical infrastructure in South Africa. A conservative and preliminary estimate of the costs is around USD 18 million per year. As the retrospective fitting of mitigation devices on powerlines is expensive, the best solution is to locate and design powerlines appropriately at the outset. The study has identified the worst 5% of the lines in the country in terms of negative wildlife interactions and these would be retrofitted as a priority in pro-active strategies for both the Transmission and Distribution networks in South Africa. The cost of comprehensively retrofitting the network would be prohibitive. The full report is due to be published by the end of December 2017.

Participants welcomed the report, noting the importance of such reports for engaging with utility companies. Similar issues with large and old infrastructure were arising in Germany and US, requiring retrofitting. However, while the costs could be borne by industry, questions were arising about liability. A participant emphasised that an important issue was whether, and to what extent, regulators would take account of the increased costs of mitigation measures incurred by developers. The ETF Coordinator recommended promoting the report outside South Africa, once it was published, and to consider replicating this type of study elsewhere.

The slides making up Mr. Hoogstad's presentation are available on the ETF pages of the CMS website.

Agenda Item 8 - Stimulating communication and information exchange, and strengthening networks

The Chair introduced the agenda item, explaining the process to be followed.

8.1 Overview of work plan activities and report on progress to date

Regarding communications, Mr. Perry suggested participants post more case studies and guidance on the CMS website and the dedicated ETF pages, noting that the ETF's workspace had not been used by all members of the ETF. He suggested additions to the work plan including the development of short videos about the ETF and the issues that it was addressing. These videos could also explain the scientific aspects and some of the solutions, using footage from the field. Fact sheets explaining what the ETF did could also be produced and articles placed in the industry press. A comprehensive communications plan should be developed.

8.2 Presentations, followed by discussion on strengthening collaboration and harnessing synergies with other networks

Miguel Repas Goncalves - STRIX (remotely)

Mr. Repas Goncalves gave an overview of the work of STRIX, an ecological and environmental consultancy for wind energy development with 15 years' experience based in Portugal. STRIX was involved in developing guidelines for CMS and AEWA and has also tested sensitivity mapping in the Rift Valley. Mr. Repas Goncalves said that projects affecting migratory species often need innovative solutions, including selective shut-down or shut-down on demand combined with the use of radar. Shut-down can be done in ways that reduces wear and tear on the gears, by adjusting the angle of blades, allowing the turbines to return to normal operation as soon as the birds have passed. There are many different technologies available – radar, thermal sensors, infrared and cameras – but their effectiveness depends on how they are applied.

In response to questions from participants about the effectiveness of the approaches, Mr. Repas Goncalves said that radar is an effective tool for detecting the presence of birds, to trigger shut-down on demand. However, despite having superior range, it is less effective at identifying species than human observers. Both radar and human observers are therefore needed. Several participants recommended that a technical meeting be convened to discuss the merits of radar and other technologies regarding different species, and to consider thresholds in terms of acceptable levels of mortality.

The slides making up Mr. Repas Goncalves's presentation are available on the ETF pages of the CMS website.

Karin Sinclair - National Renewable Energy Laboratory

Ms. Sinclair explained that the US National Renewable Energy Laboratory is funded by the Department of Energy. The International Energy Agency (IEA) brings together 20 active countries in Wind Task 34 known as WREN (Working together to resolve environment effects of wind energy). Eleven of the participating countries recently met in Portugal. WREN Hub was a knowledge base and portal providing a wide range of information about renewable energy and its impacts on wildlife. The database is searchable by species and location.

WREN produces white papers detailing work on issues such as adaptive management and risk-based management. Outreach is achieved through a programme of “webinars”, expert forums, short science summaries (e.g. Harbour Porpoises offshore), fact sheets, conferences and targeted workshops. Products included manuscripts, slide decks, and stories for the Tethys database, an online knowledge management system that provides marine renewable energy and offshore wind energy producers with scientific information.

The slides making up Ms. Sinclair’s presentation are available on the ETF pages of the CMS website.

8.3 Discussion on internal and external communications

The Coordinator invited participants to consider the ETF’s internal and external communications. With regard to external communications, decisions were needed regarding the role and niche of ETF, how it should engage with other bodies, what use to make of social media and which events organized by third parties to attend to promote its work.

The meeting recommended that other forums operating in similar fields be identified and synergies sought with them. Immediate opportunities include finding the overlaps, gaps and synergies across the ETF and WREN. It was recommended that the WREN hub and Tethys stories be utilised to communicate the work of the ETF. An important step is to identify key audiences, find appropriate messengers and tailor the ETF’s message. ETF members all have their own networks and these could form the basis of a network for the ETF. One participant also stressed the importance of targeting EIA specialists, as they are in a position to raise issues with developers and planning authorities.

ETF participants discussed opportunities to profile work in external events including the annual World Energies Futures Summit in Abu Dhabi, which attracted 6,000-7,000 participants, and the next AEWA MOP, which is due to take place at the end of 2018.

Mr. Perry asked whether the ETF should emphasize its linkage to the United Nations through CMS, operate largely in the background working through ETF members, or create a unique brand. Mr. Barbieri (CMS Secretariat) confirmed that CMS was keen to promote the ETF but could conceive of circumstances where outreach would be made easier if the CMS connection was downplayed. Participants observed that the ETF’s strength is both its multi-stakeholder nature and UN credentials. Mr. Barbieri explained that CMS while a UN body could not claim to be the UN. CMS was administered by UN Environment (UNEP) and it might be possible to emphasize this.

It was felt that it was important to have a social media presence, but that a shorter name and hash-tag (#) would be needed. “Energy Task Force” is too general, and reference in the name to CMS would be better.

The Chair said the ETF should first be clear about its niche and questioned whether the emphasis should be on conservation when more involvement from Energy Ministries was needed. Mr. Florian Keil (CMS/AEWA Communications) agreed that it was important to identify the niche and unique selling point of the ETF, which were the connection to the UN and the range of international stakeholders involved.

Mr. Perry agreed to draft a paper setting out the ETF’s niche, its target audience and the media it should use.

Agenda Item 9 - Stimulating research

9.1 Overview of activities and report on progress to date

9.2 Current and future research: presentation on two related projects assessing predicted impacts of renewable energy deployment, and analysing bird and bat collisions with wind turbines

Mr. Perry introduced Mr. Pearce-Higgins (BTO) who presented on recent science work. The Cambridge Conservation Initiative's project modelled collision rates. A literature review has been carried out on bird and bat collisions, detailing species, habitat location and the size of the turbines. Important predictors were identified through habitat associations, with farmland and grassland birds facing higher risks in open habitats where turbines had been built. Migratory birds and those undertaking middling dispersal were worst effected and larger turbines were involved in more collisions. With bats, "trait information" was less conclusive than it was for birds.

Most of the data underpinning the study were from North America and Europe, and although the models can be used to indicate the most likely vulnerable species around the world, they should be applied with caution. The paper was published two days before the start of ETF2 and a summary could be posted on the ETF workspace. The second piece of work concerned the future of renewable energy and the likely land take and effects on wildlife.

Several participants raised questions about potential data limitations and emphasised the need for a robust dataset. Doubts were also expressed about generalizing that fewer larger turbines were better than smaller ones, stressing that the key factor was the altitude at which the birds flew. Mr. Pearce-Higgins responded that efforts had been made to account for inconsistencies in data and also to address questions about turbine height and the area covered by the rotors' sweep. He agreed that further data was needed, including on the relationship between turbine size and species collision, and the timing of collision in relation to prevailing wind speeds and direction. Other participants contemplated whether migrant species identified as being more susceptible to collisions were being killed at breeding sites or during migration, and any difference had been recorded between diurnal and nocturnal species.

The slides making up Mr. Pearce-Higgins's presentation are available on the ETF pages of the CMS website.

9.3 Research gaps and priorities

Mr. Pearce-Higgins referred to the document on the Work Plan prepared by Mr. Perry and the initial assessment of research gaps and priorities. These research options and priorities were presented to the participants. They were then asked to suggest additional research priorities to this list, and to identify a top priority for action in the coming year. The following graphic highlights the suggested research options which received two or more recommendations.

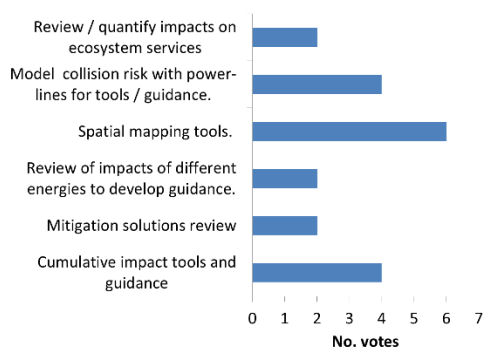


Figure 1. The level of support different research options received.

The support for spatial mapping tools resulted from the recognition that the appropriate location of renewable energy development is the first precursor to minimising biodiversity impact. This is particularly a priority for African countries to guide the appropriate growth and expansion of energy, and for bodies with a strategic perspective, such as Renewables Grid Initiative.

A more comprehensive summary of this session can be found on the ETF pages of the CMS website.

Agenda Item 10 - Work Plan and Resource Mobilization

Participants were invited to review the 2017-2018 work plan and identify funding priorities. The Coordinator reminded participants that a work plan had been agreed at Cape Town, and that less than halfway through its lifespan much progress had already been made. The existing timeframe covered the period 2017-2018 and this would need to be amended to look to 2019 and beyond given that further funding from Germany had been promised. Mr. Perry said that long-term planning (i.e. over three years and more) helped give a strategic direction and longer-term aims could be revisited and revised. The meeting agreed to a three year planning period, with shorter term deadlines or milestones for some activities.

It was agreed to have a follow-up mechanism with quarterly or biannual reports from each task leader rather than waiting for the end of the Work Plan period to expire. Mr. Perry offered to synthesise the reports received before meetings and telephone conferences and to speak to the task leaders in advance to solicit their input.

ETF members attending meetings of other organizations could be asked to report back. Mr. Perry suggested that the workspace could be used for this purpose.

Mr. Perry went through each item of the Workplan highlighting current activities and noting which members of the ETF were interested in being involved on particular tasks. He invited comments and undertook to refine the language at a later stage, concentrating initially on capturing ideas. Each item would be assigned a priority status and consideration would also be given to funding requirements.

Mr. Gazaryan (EUROBATS Secretariat) said that he saw no niche for EUROBATS as bats had been excluded at the outset and EUROBATS had only been asked to join after the ETF had been established. Mr. Barbieri (CMS Secretariat) said that the original TOR of the ETF were confined initially to birds in Africa-Eurasia and certain technologies, but in the long term the scope of the ETF was to be universal. At Cape Town, it had been agreed to extend the scope to include bats, but the structure of the Work Plan had already been adopted. Mr. Perry said that the Work Plan contained many references that were not specific to any particular taxon and offered to examine the Work Plan bilaterally to ensure that there were suitable references to bats.

The Chair said that Mr. Perry would revise the draft and recirculate it to ETF members that had not attended the meeting or that had had to leave early. The revised work plan can be found in Annex 3.

Agenda Item 11 - CMS COP12

The Chair invited Mr. Barbieri (CMS Secretariat) to report on progress on planning the COP side event. Mr. Barbieri said that a 90-minute side event was being organized by a small contact group on progress made by the ETF and case studies. It was agreed that a flyer should be developed to promote the event. Mr. Barbieri added that the COP would also present opportunities to promote the ETF and recruit new members. Mr. Shobrak (Saudi Arabia) said that Saudi Arabia was also holding a side event concerning raptors and electrocution. The ETF and Saudi Arabia would support each other's event.

Agenda Item 12 - Appointment of Chair and Vice-Chair

Mr. Barbieri (CMS Secretariat) reminded the meeting of his earlier intervention (See agenda item 1). No nominations had been received for either the chair or vice-chair before the meeting so nominations had reopened. Mr. Hoogstad as nominee for Vice-Chair was invited to consider standing for the post of chair instead; this he agreed to do. Mr. Hoogstad's nomination as Chair was put to the meeting and he was duly elected. Consultations regarding the Vice-Chair had resulted in Mr. Pearce-Higgins being proposed. He had accepted nomination and he too was duly elected in absentia.

Agenda Item 13 - Next meeting of the Task Force

The timing and venue of the third meeting should take account of other events in the calendar, such as AEWA MOP. The default option in the absence of offers were the UN Premises in Bonn, which the Secretariat could

book. Mr. Dereliev (AEWA Secretariat) repeated that the decision on the dates (late 2018) and venue (possibly South Africa, with the default being Bonn) for the next AEWA MOP would be made soon. The CBD COP14 was also scheduled for late 2018 in Egypt. The Chair said that one option was for ETF3 to be held in Bonn with dates to fit around the AEWA MOP. A deadline of 15 October was set for offers to host the next meeting.

Mr. Perry discussed the timing and format of the meeting. He suggested that if funding permitted the event should be extended to three days to allow for more substantive work and a potential field trip. He recommended the next meeting contain a mix of plenary sessions, presentations and smaller working groups. Inter-session work would mean that momentum was maintained.

Agenda Item 14 - Meeting Wrap-up

Mr. Perry (BirdLife International) summarised the proceedings and main outcomes of the meeting.

Close of Meeting

Mr. Bradnee Chambers, Executive Secretary of CMS, said that renewable energy is a key issue for CMS and that there is a need for win-win solutions serving conservation and alternative energy demands. He was pleased to see such a diversity of stakeholders around the table and said that the two years of trying to assemble the team had borne fruit. The ETF represents an opportunity, as a forum where views can be exchanged, innovative solutions sought, and new ideas devised for regulation, development, capacity-building and communications. The ETF has a unique niche, but time is not on its side.

After expressions of thanks to those involved in the preparation and running of the meeting the Chair declared proceeding closed at 17:18 on 15 September 2017.

Annex 1. Abbreviations

AEWA - The Agreement on the Conservation of African-Eurasian Migratory Waterbirds

AFSEA - African Sustainable Energy Association

BTO - British Trust for Ornithology

CMS - The Convention on the Conservation of Migratory Species of Wild Animals

COP - Conference of the Parties

EBRD - European Bank for Reconstruction and Development

EIA - Environmental Impact Assessment

ETF - CMS Energy Task Force

EUROBATS - Agreement on the Conservation of Populations of European Bats

IRENA - International Renewable Energy Agency

RSPB - Royal Society for the Protection of Birds

SEA - Strategic Environmental Assessment

TOR - Terms of Reference

TWG - Technical Working Group of the CMS Energy Task Force

UNFCCC - United Nations Framework Convention on Climate Change

Annex 2. Participants List

Name	Organization / Institution	ETF Status	Contact
Mr Agustín Rioperez	DTBird&DTBat	Non-member	arioperez@dtbird.com
Mr Ahmad Salihijo Ahmad	Federal Ministry of Environment, Nigeria	Member country	ahmad.salihijo@gmail.com
Mr Andreas Klepke	Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety, Germany	Member country	andreas.klepke@bmub.bund.de
Mr Andreas Streit	UNEP/EUROBATS Secretariat	Member MEA	andreas.streit@eurobats.org
Mr Andrew Carryer	Renewables Grid Initiative	Member organisation	andrew@renewables-grid.eu
Mr Bert Lenten	UNEP/CMS Secretariat	Member MEA	bert.lenten@cms.int
Dr Borja Heredia	UNEP/CMS Secretariat	Member MEA	borja.heredia@cms.int
Dr Bradnee Chambers	UNEP/CMS Secretariat	Member MEA	bradnee.chambers@cms.int
Mr Christopher Edeh	Africa Sustainable Energy Association	Member organisation	chris@afsea.org
Mr Edward Perry	BirdLife International	Member organisation	edward.perry@birdlife.org
Mr Fawaz Albaroudi	Saudi Wildlife Authority, Saudi Arabia	Member country	foa99@hotmail.com
Dr James Pearce-Higgins	British Trust for Ornithology	Member organisation	james.pearce-higgins@bto.org
Ms Jenny Renell	UNEP/CMS Secretariat – Raptors MoU	Member MEA	jenny.renell@cms.int
Dr Jürgen Friedrich	Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety, Germany	Member country	juergen.friedrich@bmub.bund.de
Ms Karin Sinclair	National Renewable Energy Laboratory	Non-member organisation	karin.sinclair@nrel.gov
Mr Kofi Adu-Nsiah	Wildlife Division Forestry Commission, Ghana	Member country	adunsiah@yahoo.com
Mr Marco Barbieri	UNEP/CMS Secretariat	Member MEA	marco.barbieri@cms.int
Ms Melanie Jakuttek	UNEP/CMS Secretariat	Member MEA	Melanie.jakuttek@cms.int
Mr Miguel Repas Goncalves	Strix	Member organisation	miguel.repas@strix.pt
Ms Mihaela Dragan	Wind Europe	Member organisation	mihaela.dragan@windeurope.org
Mr Mohamed El Khayat	New and Renewable Energy Authority, Egypt	Member country	t.vicechair@nea.gov.eg
Professor Mohammed Shobrak	Saudi Wildlife Authority/ Taif University, Saudi Arabia	Member country	shobrak@saudibirds.org
Mr Nick P Williams	UNEP/CMS Secretariat – Raptors MoU	Member MEA	Nick.williams@cms.int
Mr Osama Ahmed Moustafa Saadawy El-Gebaly	Egyptian Environmental Affairs Agency, Egypt	Member country	oss.eglebaly@yahoo.com
Mr Robert Adamczyk	European Bank for Reconstruction and Development (EBRD)	Member organisation	protsenv@ebrd.com
Mr Robert Vagg	UNEP/CMS Secretariat	Member MEA	robert.vagg@cms.int

Mr Ricardo Tomé	Strix	Member organisation	ricardo.tome@strix.pt
Ms Samantha Ralston-Paton	BirdLife South Africa	Observer organisation	energy@birdlife.org.za
Mr Sergey Dereliev	UNEP/AEWA Secretariat	Member MEA	sergey.dereliev@unep-aewa.org
Ms Siri Quade	UNEP/CMS Secretariat	Member MEA	siri.quade@cms.int
Ms Stephanie Weckend	IRENA	Member organisation	sweckend@irena.org
Mr Stephen Manegene	Ministry of Environment and Natural Resources, Kenya	Member country	smmanegene@gmail.com
Dr Suren Gazaryan	UNEP/EUROBATS Secretariat	Member MEA	suren.gazaryan@eurobats.org
Ms Tine Lindberg-Roncari	UNEP/CMS Secretariat	Member MEA	tine.l-roncari@cms.int
Mr Tris Allinson	BirdLife International	Member organisation	Tris.Allinson@birdlife.org
Mr Willem Constantyn Hoogstad	Endangered Wildlife Trust / Department of Environmental Affairs, South Africa	Member country	ConstantH@ewt.org
Ms Wilma Lutsch	Department of Environmental Affairs, South Africa	Member country	wlutsch@environment.gov.za
Mr Tilman Schneider	UNEP/CMS Secretariat	Member MEA	Tilman.Schneider@cms.int
Ms Harriet Taberner	UNEP/CMS Secretariat Intern	Member MEA	
Mr Hendrik Kuehn	BMUB Intern	Member country	
Mr Philip Steitz	BMUB Intern	Member country	

Annex 3. Revised Work Plan 2018-2020

	Actions	Responsible Entity(ies) (Bolded names = lead)	Timeline	Funding Status	Next Steps / Roll Out Action
1	Theme: Promote implementation of relevant guidelines adopted in the frameworks of the participating MEAs Expected Result: Guidelines are integrated into decision-making				
1.1	Prepare and disseminate factsheets on ETF and key issues, briefs and information about existing decision support tools. Translate material on demand.	Coordinator , CMS, AEWA, EUROBATS Secretariats, Task Force Members	2018	Funded	Coordinator to work with ETF members to draft briefs and share for input and comment
1.2	Continue to identify relevant stakeholders in energy and financial sectors.	Coordinator , CMS Secretariat	2018	Funded	Coordinator to invite relevant stakeholders
1.3	Engage with industry and investors - build partnerships and establish pilot initiatives with industry and investors.	Coordinator , CMS Secretariat, Task Force Members	2018-2020	Unfunded / In-kind	Coordinator to continue engagement
1.4	Engage national focal points from relevant MEAs (including CBD and UNFCCC) and national energy authorities, to inform them of the work of the ETF, the AEWA/ CMS/ EUROBATS guidelines, and upcoming ETF events.	ETF member governments	2018-2020	In-kind	Government members to initiate
1.5	Host side event at CBD COP14 in Egypt	Coordinator, Egypt , AEWA, CMS, EUROBATS Secretariats	2018	In-kind	Coordinator and Egypt to initiate plan
1.6	Host side event at EUROBATS MOP in Monaco	Coordinator, EUROBATS Secretariat	2018	Unfunded / In-kind	EUROBATS Secretariat and coordinator to initiate plan and prepare event
1.7	Host side event at AEWA MOP	Coordinator, AEWA Secretariat	2018	Unfunded / In-kind	AEWA Secretariat and Coordinator to initiate plan
1.8	Track, engage with and support as appropriate CBD agenda on Mainstreaming biodiversity in the Energy Sector	Coordinator , Task Force Members	2018	Unfunded / In-kind	Coordinator to engage CBD Secretariat and provide information to ETF Members
1.9	Incorporate environmental considerations into Power Purchase Agreement templates	IRENA , Task Force Members	2018	In-kind	Member initiative. IRENA will share draft for ETF Member input
1.10	Identify opportunities for including more (environmental mitigation) costs in approval of energy developments	RGI , Task Force Members	2018	In-kind	Member initiative.

2.	Theme: Priority setting Expected Result: Work plan reflects priorities				
2.1	Review work plan annually at Energy Task Force meetings to identify additional priority activities in line with CMS Resolution 11.27 and including long term goals.	Task Force Members	2018-2020	Funded	Coordinator to initiate review
2.2	Review progress on implementing the work plan, every six months	Coordinator, Task Force Members	2018-2020	Funded	Coordinator to initiate progress review
3.	Theme: Mobilising resources Expected Result: Priority activities identified and funded				
3.1	Identify key funding priorities and opportunities.	Coordinator, CMS Secretariat, Task Force Members	2018-2020	In-kind	Responsible entities for work plan activities to identify funding gaps and opportunities
3.2	Prepare fundraising concept note(s), with input from Energy Task Force members	Coordinator, CMS Secretariat, Task Force Members	2018-2020	Funded	Coordinator to prepare based on needs identified
3.3	Liaise with potential donors to seek support for Energy Task Force activities	CMS Secretariat, Coordinator, Task Force Members	2018-2020	Funded	Member initiative
4.	Theme: Monitoring implementation and impediments to implementation Expected Result: Report on status of implementation; impediments to implementation and potential solutions identified				
4.1	Conduct survey and interviews to assess progress of CMS Parties to implement different components of AEWA/CMS/EUROBATS guidelines and identify impediments to implementation	Coordinator, AEWA, EUROBATS and CMS Secretariats, Task Force Members	2018	Unfunded / In-kind	Coordinator to develop survey and interview questions working with AEWA, EUROBATS and CMS Secretariats
4.2	Analyse existing guidelines to identify gaps and need for more technical detail; develop complementary technical notes (e.g. sensitivity mapping, thresholds, data collection and monitoring, mitigation hierarchy and powerlines).	Technical working group	2018-2019	Unfunded	Member initiative
5.	Theme: Stimulating communication and information exchange Expected Result: Task force members collaborate and share information.				
5.1	Make information about the ETF available via dedicated web space on CMS website.	Coordinator, CMS Secretariat	2018-2020	Funded	Coordinator to develop content and CMS to upload
5.2	Energy Task Force members exchange case studies, tools, lessons learnt and best practices	Task Force Members	2018-2020	ETF meetings Funded	Member initiative

	during task force meetings and through online platform (ETF Workspace).			Workspace exchange in-kind	
5.3	Deliver and record webinar series for CMS Parties, financial institutions and energy sector stakeholders, with presentations by Energy Task Force members and other experts.	Coordinator , BirdLife, RGI, WindEurope, WREN	2018-2019	Unfunded / In-kind	Coordinator to determine next steps in consultation with responsible entities
5.4	Identify relevant Best Practices in relation to powerline impacts that could be applicable in other countries. Disseminate guidelines.	RGI, EWT , Egypt, Saudi Arabia	2018	Unfunded / In-kind	Member initiative
5.5	Develop short video highlighting the role of ETF and sharing case studies/views from across ETF members	Coordinator , CMS Secretariat, Task Force Members	2018-2019	Unfunded / In-kind	Coordinator to develop draft concept together with CMS Secretariat
5.6	Disseminate research and other ETF outputs e.g. through WREN hub and expert forum	Coordinator , Task Force Members, WREN	2018-2020	In-kind	Member initiative
5.7	Develop communications strategy for Energy Task Force	Coordinator and CMS Secretariat	2018	Funded	Coordinator to prepare draft
6.	Theme: Strengthening regional and international networks Expected Result: Strong regional and international networks				
6.1	Task Force members promote the aims of the Task Force through relevant regional and international networks.	Task Force Members	2018-2020	In-kind	Member initiative
6.2	Map priority regional and international networks	Coordinator , Task Force Members	2018	Funded	Coordinator to map priority regional and international networks
7.	Theme: Stimulating research Expected Result: Significantly increase the evidence base on which to make planning and mitigation decisions.				
7.1	Complete a global assessment of predicted impacts of large-scale renewable energy deployment on birds and mammals.	BTO , BirdLife International, IUCN, RSPB, University of Cambridge, EWT	2018	Funded	Publish 2 nd paper on global assessment, identify priority audiences, and communicate.
7.2	Develop spatial mapping tools to assess the potential risk of government commitments following the Paris Agreement, and to help show governments how they can meet their commitments with minimal impact upon biodiversity	Task Force Members , EWT, BTO, BirdLife, RSPB	2018-2019	Unfunded	Develop concept
7.3	Develop appropriate tools and guidance for developers and regulators to help them assess	BTO, BirdLife , EBRD, Egypt, EWT, RGI, Saudi	2018-2020	Unfunded	To be determined

	cumulative impact across powerlines and RETs, collaborating with CMS Scientific Council.	Arabia, Wind Europe, WREN (in consultation with consultants, developers and regulators)			
7.4	Synthesise and compare information on the impacts of different renewable energy options, and the potential for mitigating species impact.	BTO , BirdLife, Kenya, Egypt,	2018-2019	Unfunded	Organise planning meeting for interested members
7.5	Collision modelling for powerlines to identify vulnerable species globally	BTO , BirdLife , Egypt, EWT, RGI, Saudi Arabia	2018-2019	Unfunded	Organise planning meeting for interested members
7.6	Review and synthesise mitigation solutions (e.g. shut down-on-demand) across different technologies and powerlines to identify whether there is sufficient evidence to promote particular solutions, and to identify knowledge gaps for further assessment.	BirdLife South Africa , BTO, Egypt, EWT, Israel	2018-2020	Unfunded	Organise planning meeting for interested members