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CONVENTION ON THE CONSERVATION OF EUROPEAN WILDLIFE
AND NATURAL HABITATS

Standing Committee

41st meeting
Strasbourg, 29 November – 3 December 2021

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Complaint on stand-by No. 2018/01

Presumed threat to Emerald Network site "Polonina Borzhava" from wind energy development (UA0000263) (Ukraine)

- REPORT OF THE ONLINE ADVISORY MISSION –

20-23 September 2021

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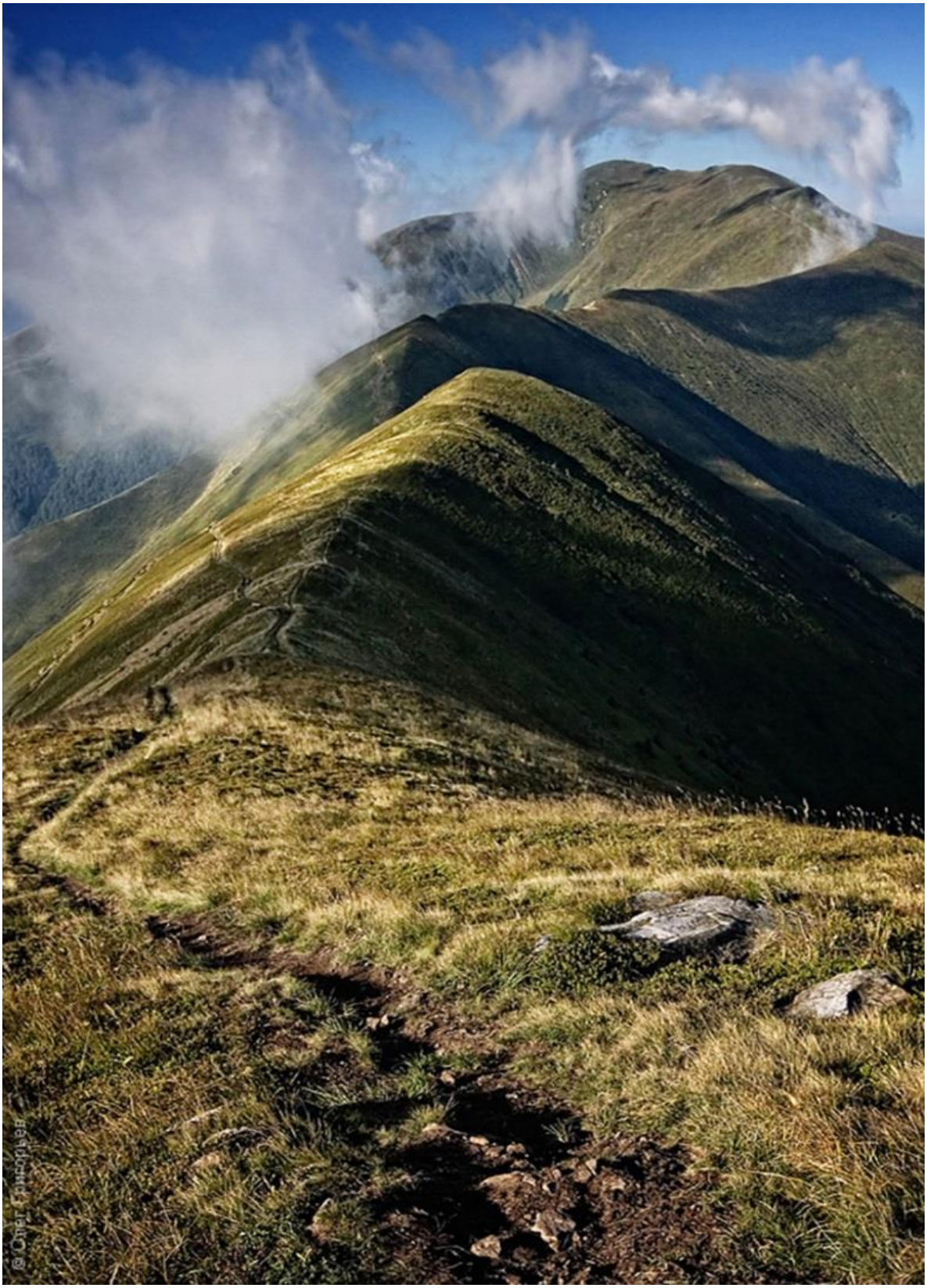

Polonina Borzhava (Oleg Grigoryev)

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1. Executive summary

This online advisory mission has reviewed evidence presented by the complainant, developer, and both local and national Government regarding the proposed establishment of a wind farm within the Polonina Borzhava Emerald Network site (UA0000263).

We believe that development of this scale and nature within an Emerald Network site allied with shortcomings in the Environmental Impact Assessment (EIA) process should not be permitted at this location. To do so would, we believe, conflict with the requirements and spirit of the Bern Convention. Therefore, we recommend that the Standing Committee takes the following action:

Primary recommendation: *The plans for the development should be cancelled.*

It is clear that there will be significant impact on the biodiversity interest; thus alternative sites should be sought where the impact would be much less and would not impinge on an Emerald Network site, but would allow a similar contribution to be made to Ukraine's renewable energy targets.

Mindful of the ongoing court case, we have also recommended the following alternative action *but only if consent is confirmed by the Supreme Court*:

Alternative recommendation: *If the development is to proceed, the environmental impact assessment should be repeated using current methodology that is agreed between the developer, the regulator and the complainants; in doing so this will mean that the results are less likely to be challenged and can potentially form a better basis for decision-making in relation to 'go and no-go areas' for development.*

However, please note that we consider this to be a less viable option because it still offers the potential for the site to be developed and we feel that the current proposal is inappropriate given the status of the site as a protected area (Emerald Network), its fragility and rarity, and its position in relation to migrating birds and its intrinsic value for fauna and flora.

We have made a number of other recommendations in section 9 that would lead to improvements regarding these and other related issues that would allow Ukraine to better meet its international biodiversity obligations.

2. Context

In 1998 and 1999 respectively, Ukraine became a party to the Bern Convention on the Conservation of European Wildlife and Natural Habitats and Bonn Convention on Migratory Species (subsequently referred to in this document as the Bern and Bonn Conventions, respectively). In December 2019, Ukraine officially adopted Emerald Network sites on its territory in order to fulfil its obligations to the Bern Convention. Ukraine is also a signatory to the Convention on Biological Diversity (CBD) which, under Target 11 of the Aichi protocols, requires that co-signatories protect and manage at least 17% of their terrestrial area that are of particular importance for their biodiversity and ecosystem services. The Emerald Network and other domestically designated sites will represent Ukraine's contribution to the CBD target.

Renewable energy generation is one of the key priorities of the Ukrainian energy sector and national economy. However, the current share of energy generated from renewable sources is still relatively small.[1] The Energy Strategy of Ukraine aims for renewable energy to account for 25% of Ukraine's

[1] https://cms.law/en/int/expert-guides/cms-expert-guide-to-renewable-energy/ukraine

energy needs by 2035; by 2020 it had achieved an 11% share[2] of which wind contributed less than a fifth.

In March 2018, a complaint was lodged with the Bureau of the Standing Committee of the Bern Convention (henceforth referred to as the Bureau) by the 'Ukrainian Nature Conservation Group' (UNCG) concerning an alleged breach of the Bern Convention relating to proposals for a wind farm on the Polonina Borzhava Emerald Network site.

UNCG suggested that harmful effects on biodiversity would result, especially on the habitats and species of the Polonina Borzhava Emerald Network site. A second procedure on the EIA of this project was launched on 2 August 2018, the conclusion on EIA was positive, and it is subject of an ongoing court case. The cancellation of the EIA conclusion was supported by the Court of first instance, but was subsequently overturned in the Court of Appeal. Following another appeal, it is to be considered by the Supreme Court in the near future.

These circumstances prompted this 'On-the-spot' Appraisal (OSA) which was carried out between 20-23 September 2021. Because of restrictions imposed by the coronavirus pandemic, the event was held remotely with contributions gathered via a series of online events supported by written responses to a comprehensive list of questions provided in advance by the independent experts commissioned to review the case by the Bern Convention.

3. Polonina Borzhava

Polonina Borzhava lies in the north-east Carpathian mountain range within the Zakarpattia Oblast. Although accounting for only 5% of the land area of Ukraine, the Carpathian Mountains support a varied though distinctive flora and fauna and this is evident at Polonina Borzhava.

Extending over an area of 4250ha, it is characterised by a wide range of habitats and species listed on Resolution 4[3] and Resolution 6[4] of the Bern Convention respectively. These 'qualifying features' include extensive subalpine meadows comprising good examples of mat-grass (*Nardus stricta*) swards, dry heath, acid grassland, subalpine moist tall-herb and fern communities and beech woodland. Wetlands consisting of springs, streams and transition mires are also represented. Notable species include *Campanula serrata* and *Poa granitica* amongst many others. It is surrounded on all sides by extensive montane beech woodlands. The meadow habitat (e.g. the *Nardus* grassland) is rare nationally and is particularly important in the context of the montane ecosystems of the Carpathians.

Reflecting its wider setting, it supports a diverse and important bat and avifauna including Tengmalm's owl (*Aegolius funereus*), golden eagle (*Aquila chrysaetos*), lesser spotted eagle (*Aquila pomarina*), short-toed eagle (*Circaetus gallicus*), peregrine falcon (*Falco peregrinus*), honey buzzard (*Pernis apivorus*), bluethroat (*Luscinia svecica*), nightjar (*Caprimulgus europaeus*) and four species of woodpecker; barbastelle and greater mouse-eared bats are also found (*Barbastella barbastellus, Myotis myotis*, respectively). All the raptors and barbastelle bats forage at a range of latitudes and their ranges extend over great distances.

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[2] Energy Strategy of Ukraine to 2035' - https://www.kmu.gov.ua/en/news/250210653

[3] Revised Annex I to Resolution No. 4 (1996) of the Bern Convention on endangered natural habitat types using the EUNIS habitat classification *(Adopted by the Standing Committee on 6 December 2019)* ENDANGERED NATURAL HABITAT TYPES

[4] Convention on the Conservation of European Wildlife and Natural Habitats Standing Committee Resolution No. 6 (1998) listing the species requiring specific habitat conservation measures *(Adopted by the Standing Committee on 4 December 1998, including revised Annex I adopted in 2011 by the Standing Committee)*

This high level of biodiversity interest allowed it to be included in the Emerald Network under the Bern Convention in November 2016. As such it is positioned to qualify as a Natura 2000 site in the context of Ukraine's accession process to the EU.

Many of the species listed above are also listed in the Red Book of Ukraine[5] and afforded protection under domestic law. The territory is also an important crossing point for a number of migrant bird species that include raptors, cranes and storks[6] and a number of other species that are protected not only under national law but also the Bonn Convention to which the Ukraine is a co-signatory.

In common with many mountain massifs, Polonina Borzhava delivers a range of valuable ecosystem services. It is vital watershed for a number of major rivers and it has cultural value as a unique landscape feature. Its position and elevation (altitude) within the Carpathian Mountains also makes it a popular recreational destination for a number of activities that include hang gliding, paragliding, downhill and cross-country skiing, hiking and all-terrain vehicle use. The recreational use can be heavy and, in relation to the hang-gliding and cross-country skiing includes national competitions, while the Ukrainian paragliding federation also organises international competitions. In the recent past it was put forward as a possible location for the winter Olympics. A chairlift from Pylypets up Hymba mountain to the treeline operates all year round providing easy access to a popular destination for a large number of visitors; several cafes can be found at the upper chairlift station, and a dirt road leading from here to Hymba mount (which represents the main site for hang-gliding and paragliding) has become very wide due to frequent use. Pylypets and neighbouring villages have hotels, guesthouses and restaurants. Away from the chairlift and Hymba mount, the site is quieter.

At present, in common with virtually all of the Emerald Network sites within Ukraine, there is neither a management plan nor a formal biodiversity monitoring programme. Apart from the required maintenance of the recreational resources (specifically the downhill skiing) there is no formal management of any kind carried out on the site. Whilst it is possible to find the boundaries of the Emerald Network site via the Internet, there are no indications or signs on the ground to show where the boundaries of the site are located. Similarly, there appears to be no written or visual interpretive material to guide and encourage good behaviours amongst users.

Perhaps as a consequence, a number of illegal activities take place including off-road driving, burning and littering. No systematic measures have been or are taken to manage this. At this time there are no staff dedicated to the site and therefore there is no visitor management and, as a consequence, no budget to carry out management works.

4. Wind power development in Polonina Borzhava

The location, aspect and elevation of Polonina Borzhava provides suitable environmental conditions for wind energy generation and proposals to construct a wind farm were put forward by Atlas Volovets Energy (subsequently referred to in this document as 'Atlas') in 2018.

Construction of the wind power development has not yet started. As can be seen from Figure 1, the turbines will be located along the main ridges that provide the 'backbone' of the site. This is to ensure that they most effectively capture and convert the available wind into usable energy. At present, the development proposes 34 turbines (a reduction from the original 48 proposed) located within a network

[5] Didukh, YA. P. (ed). (2009). Red data book of Ukraine. Vegetable kingdom.

[6] Dubovyk, A. Bokotey, L. Pokrytiuk, V. Bodnar, Yu. Strus, O. Ruchko4 (2020) Autumn Migration of Birds over Polonyna Borzhava (Ukrainian Carpathians) - Zoodiversity, 54(1):43–52, 2020

that stretches along two intersecting ridges, one that extends for approximately 14km from north to south and one that stretches over about 10km from east to west. The turbines fall entirely within the boundary of the Emerald Network site.

Figure 1: Map of Polonina Borzhava Emerald Network site (white line) showing the approximate, proposed location of wind turbines (red dots) (though this may not fully reflect the latest proposals)

The design of the turbines gives them a total height of around 180m. Their concrete footings/ foundations are of a size that reflects the need to support the significant structure that each wind turbine represents.

Underground cables will link individual turbines to a local distribution point situated on the top of Temnatyk mountain. The latter will occupy an area of 6m x 15m (or 0.009ha) (not including the likely need for subsidiary facilities around it). In turn, this will link to a transformer substation, presently proposed to be located on top of Plaj mountain (90m x 90m or 0.81ha). In addition, this will require repair, maintenance and warehousing facilities. Overhead power lines will be constructed in order to link the sub-station to the national electricity supply grid.

Construction of the facility will require the creation of new access tracks to allow establishment of the turbine foundations and both the distribution point and substation. In turn the turbine towers, nacelles and blades will be moved along the same to allow erection *in situ*. Trenches (2m x 2m) will also be excavated to hold the underground cables. Both tracks and trenches will have to negotiate difficult and challenging terrain including steep slopes spring lines, and bad weather. In addition, these will cross the qualifying features of the Emerald Network site.

In parallel, the distribution point and the transformer substation will also be constructed in order that the energy generated can be fed into the national grid, including the erection of overhead power lines.

Once the roads and other infrastructure are included, it was suggested that the development will stretch over a length of approximately 30km and an estimated area of approximately 50ha. Again, it was suggested that the EIA did not address the impact of this supporting infrastructure.

Following construction the operational phase will commence. The turbines are likely to require regular inspection and maintenance that will be carried out using the access tracks.

5. Background to Complaint No. 2018/01

In March 2018, a complaint was lodged with the Bern Convention by UNCG concerning an alleged breach of the Convention relating to proposals for a wind farm on the Polonina Borzhava Emerald Network site. UNCG stated that there could be harmful effects on biodiversity resulting from the development.

Following requests from the Bureau, an EIA report was prepared and published in early 2019. The lengthy document covered a number of issues including biodiversity. Based on the inventory it made of the ecological interest, it concluded that impacts were relatively modest and proposed mitigation measures, especially for birds and bats, but also in relation to other aspects such as the disruption of spring lines within the meadows. It also set out proposals for monitoring and made reference to the ability to cancel the project if significant impacts arose.

The complainant, UNCG, disagreed with the outcome of the EIA, and set out a series of concerns including:

- the inability of Civil Society to influence the outcome;
- the lack of an assessment of associated roads, power lines and other infrastructure, and
- drew attention to a separate assessment carried out by independent experts which came to different conclusions from the EIA in general, but also specifically in relation to impacts on biodiversity and the capacity to rectify these via mitigation measures and
- the lack of a trans-boundary assessment.

In March 2019, the Bureau encouraged the establishment of fair and transparent hearings in order to capture the views of Civil Society; in doing so they made reference to established, international best practice for the assessment of wind energy proposals. The consultation exercise took place in January 2019.

September 2019 brought further allegations from UNCG and others concerning the potential illegality of the EIA process.

However, the EIA was accepted and the project approved by the Department of Ecology of the Transcarpathian Regional State Administration (or Zarkapattia Oblast).

This prompted a legal challenge by NGO “Noosphera” and others and in March 2020, the consent was cancelled by the Transcarpathian Regional Administrative Court.

As part of a parallel process, the developer has pursued a separate consent to allow construction. This was finally secured from the central office of the State Architectural and Construction Inspection following two refusals by the regional body. It is alleged that this goes beyond its powers and prompted a further court case (No260/1058/19) to revoke the permit. This failed but the NGO “Noosphera” prepared an appeal. However, this was subsequently reinstated in November 2020 by the Court of Appeal.

Mindful of these developments, in late 2020, the 40th Standing Committee of the Bern Convention mandated this online advisory mission. In the meantime, the Court of Appeal judgement has been challenged and the case is set to be heard by the Supreme Court of Ukraine though a date has not yet been set.

6. The Environmental Impact Assessment

A copy of the EIA was not available in English and so was not studied. Instead, reliance was placed on the comments of key stakeholders including the investors, regulators and complainants.

Two editions have been produced, both in 2018 (though it has been suggested the most recent was published in 2019). The first was cancelled due to procedural reasons, but was followed swiftly by publication of the second and current version. In line with domestic law, a public consultation was required for both. Despite suggestions that the consultation process was flawed, each exercise attracted numerous and comprehensive comments from across Civil Society including local communities and independent nature conservation bodies; the majority were opposed to the development. These concerns, relating to the availability of information, the ability to comment at public hearings and the scrutiny applied to those submitted in writing, amongst others continue to be tested in the courts but at present, the process has been found adequate.

Information gained from the question-and-answer process, and subsequent discussions during the online meetings, suggest considerable shortcomings with the technical elements of the EIA. These include, but are not limited to, the following:

- A lack of recognition of the Emerald Network site;
- The absence of detailed assessments on the Resolutions 4 and 6 features;
- A lack of assessment on the avifauna of six other protected areas nearby;
- A lack of assessment of associated infrastructure such as roads, substations and both buried and overhead cables;
- The absence of a trans-boundary assessment in terms of:
    - Bird migration;
    - The Ukrainian Carpathian ecological network; and
    - Transboundary rivers;
- The lack of an assessment of credible, alternative locations for the wind farm, and
- Flaws in the ornithological survey techniques and subsequent assessment.

Beyond these, it was also suggested that the change in land use from agricultural (grazing meadows) to energy production also required EIA though none was provided.

Whilst elements of these can be subjective, for instance the interpretation of survey data, it is clear, on the evidence available, that inadequate attention was given to substantive issues that should, according to established international standards, have formed fundamental components of any EIA. Consequently, this suggests that the requirements of the Bern and Bonn Conventions have not been met.

The EIA only appears to have assessed the impact of the construction and operation of the wind turbines, affecting an area of perhaps 30ha. Once the roads and other associated infrastructure is included, it is clear the entire wind farm will significantly affect, either by the direct loss of habitat or changes to the

hydrological regime or other indirect effects, approximately 50ha of the subalpine meadows within the Emerald Network site. It is expected that these will be exacerbated by the nature of the terrain, steep slopes and harsh weather. The assessment has been further compromised by failure to describe adequately the Emerald Network site, its qualifying features and its place within a wider ecological network.

Mitigation has been proposed but given the limitations of the assessment, little weight can be attached to this and it is concluded there is reasonable doubt these measures would prove effective given the complex abiotic factors that characterise this site and the fragility of the qualifying features; it is difficult to accept that harmful effects can be avoided, mitigated or compensated.

One of the other, most significant omissions relates to impacts on the avifauna either resident within the site and its environs or those found on migration. The standard data form identifies the presence of a number of raptors that make use of Polonina Borzhava. Atlas made clear that it had followed best practice in the form of guidance provided by Scottish Natural Heritage[7] from the UK. However, this clearly recommends that two years of survey information is required and encourages survey effort that reflects the degree of ornithological value.

In contrast, only one year (2017) of data was provided and the amount of survey effort was modest; only a small number of days of survey effort were presented. Independent survey effort that took place in the autumn of 2018, using GPS data and visual observations, extending, altogether over 55 days, identified considerably greater ornithological importance including the passage on migration of 3,000 common cranes (*Grus grus*). In 2018, GPS data indicated that flocks flew through at heights between 100-300m; the proposed turbines will be 180m tall. Thirty flocks, together comprising 3,000 cranes were separately recorded. In addition to the common crane, five other migratory species, also listed in the Red Book, fly over Polonina Borzhava in the autumn: hen harrier (*Circus cyaneus*), stock dove (*Columba oenas*), Alpine accentor (*Prunella collaris*), osprey (*Pandion haliaetus*) and peregrine falcon (*Falco peregrinus*).

All species typically fly at a range of altitudes which, in the case of common cranes, would typically be higher than the turbines in ideal conditions. However, this can be heavily modified by topography and weather and so the erection and operation of wind turbines at this location represents a clear collision risk to all. Given the shortcomings of the ornithological survey and assessment, mitigation measures proposed again are considered inadequate.

This report acknowledges that these or similar issues have been assessed by the courts and, whilst an appeal to the Supreme Court is underway, the Court of Appeal found the EIA conclusion to be acceptable.

7. Other complaints registered with the Bern Convention regarding Ukrainian sites

It is noted that the complaint regarding Polonina Borzhava is not the only case currently under investigation by the Bern Convention. Other complaints are listed below, with all but one pertaining to Emerald Network sites:

[7] Scottish Natural Heritage (2017). Recommended bird survey methods to inform impact assessment of onshore wind farms. March 2017. Version 2.

- (2018/05): Alleged threats to the Emerald network sites "Skhidnyi Svydovets" (UA 0000259), "Marmaroski ta Chyvchyno-Hryniavski Hory" (UA 0000117) and "Carpathian Biosphere Reserve" (UA 0000006)
- (2019/01):Possible negative effects of hydrocarbon extraction in four Emerald sites in Donetsk-Kharkiv region.
- (2019/02): Presumed threat to Emerald site Zakoty (UA0000214) from windfarm developments.
- (2020/01): Recognising Horbachykha as a protected area to save it from residential developments.
- (2020/02): Logging threats to the Black Tysa River in Emerald Network site "Mamarovski ta Chyvchyno-Hryniavski" (UA0000117).
- (2020/03): Presumed threat to Emerald Network site "Bugzkyi Gard National Nature Park" (UA0000040.
- (2021/04): Threats to wild flora and fauna and their natural habitats in Irpin river valley Emerald Network site from constructions

Together, these suggest either a lack of awareness of the requirements of the Bern Convention or inadequate domestic legislation to provide effective safeguards.

The conclusions and recommendations made in this text for the specific case can also be applied to the overall establishment of the Emerald Network in Ukraine, including the above complaints; thus potentially helping to resolve them in a timely manner, and avoiding possible future complaints.

8. The protection of Emerald Network sites in law in Ukraine

Perhaps reflecting the number of complaints, a Draft Law to secure the management and safeguard of the Emerald Network in Ukraine has been in development over the last three years. This was registered in the Verkhovna Rada (Ukrainian Parliament) on 4 December 2020.

The Draft Law seeks a new approach to the management of the protected areas by:

- shifting from the protection of the territory to the conservation of the qualifying features, the natural habitats and fauna and flora by establishing and implementing measures to maintain or restore (as appropriate) the qualifying features to favourable conservation status;
- the effective monitoring of the conservation status of the qualifying features;
- the development of management plans (including measures to 'preserve' priority species and habitats;
- establishing an effective environmental impact assessment mechanism; and
- the establishment of a central body to ensure implementation of the above across Protected Areas, and both Ecological and Emerald Networks.

Whilst the Draft Law has received positive feedback from the Committee of the Verkhovna Rada set up to provide oversight on accession to the EU, its adoption in its current form cannot be guaranteed; indeed it failed to pass a vote in July 2021. The measures listed above would appear to establish the basic necessary safeguards to embed many of the requirements of the Bern Convention into domestic law. Whilst its adoption should be welcomed by the Standing Committee, should the Verkhovna Rada fail to ratify this, it is reasonable to conclude that more conflicts would be likely, especially in the

context of Ukraine's proposal to the Standing Committee in 2020, to identify an additional 161 Emerald Network sites.

9. Recommendations of the independent experts to the Standing Committee

The main objectives of the mission are recalled below. These headings have been used as the basis for the recommendations in the concluding section to this report.

1. **Review and assess the Environmental Impact Assessment procedure** carried out for this case, and evaluate if it was undertaken according to national law and to international standards.
2. **Gain a preliminary understanding of the environmental assessment procedures** (EIAs, SEAs, CIAs) grounded into the national legislation of Ukraine, and verify if they comply with international standards.
3. Review the process of **creating a nature reserve** within the territory of Polonina Borzhava in order to improve its conservation status.
4. Provide commentary in relation to the **overall progress in the implementation of the Emerald Network**.

These are taken in turn and described in more detail below. Recommendations are shown in "arrow" bullet points (and summarised along with a suggested timetable for implementation in Annex 3):

1. Review and assessment of the Environmental Impact Assessment procedure (and compliance with national law and international standards).

Several of the salient issues that relate directly to this case are covered in the subsection above which deals with the national and general procedures for EIA. Many of the recommendations listed can apply directly to the circumstances at Polonina Borzhava. The causes of some of the problems at least stem from issues that relate to the (lack of) understanding and/or knowledge in relation to the implementation of the EIA regulations.

Thus, when the proposal was first presented, the need for an EIA was not identified. Had the process been better known, or had that information been available to the initial decision makers, perhaps an EIA would have been requested immediately.

Once the EIA was initiated, it was carried out according to the requirements set out in the basic framework of national and regional legislation; an outcome that was subsequently endorsed by the court. However, it is apparent the content of the EIA was lacking in relation to the consideration of biodiversity-related issues. Specifically, the assessment failed to properly take into account the Emerald Network status of the Polonina Borzhava site and its importance in the context of a national network of protected areas.

By failing to fully recognise and account for the Emerald Network designation the decision to go forward with the proposal calls into question the commitment of Ukraine in relation to the international treaty to which the Ukraine is a co-signatory, the Bern Convention. Similarly, the failure to fully take into account the migratory bird species that are protected under the Bonn Convention (mainly due to the chosen methodology that was applied in the assessment), to which the Ukraine is also co-signatory, potentially places Ukraine in breach of this legislation.

There was apparently no consideration of alternative locations (at least this is not clear from the current EIA).

Thus, whilst the consideration of the impacts was based on the declared interest of the site in terms of its fauna and flora (rare and vulnerable habitats, red list species) there was apparently no effort to look beyond this. This included the need to take into account national and regional government obligations in relation to the Bonn Convention and the Bern Convention; thus, the migratory birds and the Emerald Network site were not given proper and thorough consideration in terms of the impacts of the proposal. A failure to consider such issues places state and regional government in jeopardy in terms of their requirement to uphold international responsibilities.

In addition it was clear that the methodology used by the developer in order to make the assessment of impacts was different from that applied by the complainants resulting in very different outcomes; on the one hand that impacts would be negligible and can be mitigated for and on the other that they would be significant, to the extent that the development should be prevented.

In this respect the EIA does fall short in terms of the depth of its coverage of biodiversity aspects and this, therefore, had knock-on effects in relation to the proposed mitigation. We have no reason to doubt the results obtained by the complainant in relation to the biodiversity interest and, clearly, if the development was allowed to go ahead with the current proposed mitigation then it would have a significant effect on both the site-based biodiversity (habitats and species) and the migratory species with transboundary implications for their conservation. This therefore calls into question the methodology applied by the developer and our conclusion is that this was also inadequate in this case.

We believe that a better understanding and awareness of the EIA regulations and their implementation amongst officials and other decision-makers would have helped to create an improved process in terms of carrying out the EIA in practice; thereby avoiding the shortfalls referred to above.

It is also clear from our discussions with the proponents that this knowledge would have helped the developer to make better decisions in relation to the design, location and management of the proposed development; including to find alternative locations that would have avoided the current (inevitably costly) dispute.

We therefore make the following main recommendations to the Standing Committee of the Bern Convention, the relevant authorities of Ukraine and other involved stakeholders:

- **Primary recommendation:** *The plans for the development should be cancelled.*
  It is clear that there will be significant impact on the biodiversity interest; thus alternative sites should be sought where the impact would be much less and would not impinge on an Emerald Network site, but would allow a similar contribution to be made to Ukraine's renewable energy targets.

Mindful of the ongoing court case, we however recommend the following alternative action *but only if consent is confirmed by the Supreme Court*:

- **Alternative recommendation:** *If the development is to proceed, the environmental impact assessment should be repeated using current methodology that is agreed between the developer, the regulator and the complainants; in doing so this will mean that the results are less likely to be challenged and can potentially form a better basis for decision-making in relation to 'go and no-go areas' for the development.*

However, please note that we consider this to be a less viable option because it still offers the potential for the site to be developed and we feel that the current proposal is inappropriate given the status of the

site as a protected area (Emerald Network), its fragility and rarity, and its position in relation to migrating birds and its intrinsic value for fauna and flora.

2. Understanding and assessment of the environmental assessment procedures (and compliance with international standards).

It is clear that the EIA procedures adopted by the Ukraine at national level are based on and are compliant with international standards, including those of the European Union.

However, the issue is the extent to which they are put into practice according to those standards. It is evident that, in relation to this case and perhaps more widely, their implementation falls well short of expected practice.

It should be noted that the failure to properly implement the regulations results in significant cost to both public and private institutions. Correct delivery of the regulations (certainly in relation to this case) would have avoided the need for three iterations in the process all of which cost time and resources for the institutions and organisations involved.

At a basic level, this may simply be due to a lack of knowledge and understanding on the part of the officials and others charged with the implementation of the EIA regulations. Linked to this can be issues such as the financial resourcing of departments that have responsibility for executing such measures.

Awareness of the legislation and how it should be implemented should be raised amongst key officials, certainly through the provision of simple written advice and guidance and possibly through targeted training. The availability of this information (the same or similar) to private sector developers will also help to streamline the process and would allow them to see exactly what is required before launching new projects and proposals. The provision of best practice from the Ukraine and neighbouring countries in order to provide reference points in relation to the advice and guidance, but also as stand-alone exemplars, would also be valuable.

Furthermore, the development of common standards in relation to the collection of biodiversity data and information for EIA would significantly help in the streamlining process on the basis that 'like could be compared with like' when making an assessment about impacts and mitigation; (and in this case that was clearly one of the key issues). Thus, the EIA regulations to be accompanied by guidance that would ensure methodologies applied to the establishment of impact were agreed as best practice and would be applied commonly by developers and complainants in cases such as this, thereby reducing arguments over outcomes and interpretation. They should also be flexible to accommodate new developments in biodiversity assessment, for example use of remote sensing, drones and other technological advances to provide better and more accurate results upon which to base decisions.

It would also be helpful to develop an independently administered national level certification scheme for ecologists involved in commercial work such as EIA and other aspects of the design implementation and management of development. This would avoid some of the questions around the legitimacy of the way data and information is collected and how it is interpreted.

A range of tools could be developed that would help in the process of site selection for (a range of) developments, but also specifically for alternative energy. These could take the form of 'opportunity maps' with 'go and no-go areas' that show where windfarms could be placed without significant impact on environmental and other issues. They could accompany and supplement the guidance already mentioned above and would have applications and use at the regional and municipal level.

In addition, this map would provide a powerful supporting framework for the delivery of the national strategy for renewable energy. Emerald Network and other protected areas could be highlighted on such

maps. A national spatial planning policy statement, to accompany written guidance, could set out the criteria by which energy proposals will be assessed and which could also describe the level of monitoring and mitigation required.

The map would show areas where development could proceed with fewer or no restrictions. As suggested above, this could be combined with training and awareness raising for officials, decision-makers and developers.

We therefore recommend the following:

- Produce country-wide 'opportunity maps' with 'go and no-go areas' that show where windfarms could be placed without significant impact on environmental, social or cultural aspects.
- Implement a programme of awareness raising of the legislation and how it should be implemented for key officials including private developers, through the provision of simple written advice and guidance and targeted training.
- Develop common standards in relation to the collection of biodiversity data and information for the EIA process.
- Develop an independently administered national level certification scheme for ecologists involved in commercial work such as EIA.

3. Creation of a nature reserve

The Council of Europe, through the Standing Committee to the Bern Convention, makes it clear that setting-up the Emerald Network at national level is considered as one of the main tools for the Contracting Parties to comply with their obligations under the Bern Convention, and that once the areas proposed are officially adopted as Emerald Network sites, they have to be designated and managed at national level. The national designation and management measures are decided and put in place to contribute to the main objective of the Network and their efficiency will be regularly monitored.[8] This statement provides a basis for considering the various options that may be available for improving the conservation status of Polonina Borzhava. It has already been noted above that there are no current frameworks in place for the management and regulation of potentially damaging activities on the site and that this is resulting in damage and erosion to the biodiversity interest, principally through uncontrolled recreational use, but that a number of illegal activities are also being carried out.

It is perhaps useful to make reference to Article 6(2) of the Habitats Directive, which is purposed to prevent deterioration of Natura 2000 sites beyond the impact of development proposals. Thus, in order to reverse the current adverse effects of recreational pressure and illegal use both in relation to its status as an Emerald Network site, and were it to become part of the Natura 2000 network as part of the accession process, the production of a management plan would be required. A management plan could guide the allocation of resources and the prioritisation of actions to be taken. Under its current designation as an Emerald Network site it would still therefore benefit significantly from some kind of status as a national or regional Park (or related designation).

In the wide-ranging discussion of this issue we noted a number of potential nature reserve/ National Park/Regional Park designations that have the potential to fulfil the objective of improved management and protection of the site. It may be that a parallel process of deciding management objectives and the appropriate Park/reserve designation would be the best way to resolve the question of which means would be most appropriate at Polonina Borzhava. It would be highly desirable for this to be carried out as a multi-stakeholder process in which the key actors were involved in agreeing multiple objectives

[8] Explanatory document on the Emerald Network: T-PVS/PA(2016)4

for the site that would provide the basis for an integrated, holistic approach that would allow it to fulfil a number of ecosystem services including cultural, recreational and biodiversity-related. The process of joint visioning, objective setting and the agreement of actions and who will carry them out is an extremely powerful way of achieving consensus and realising tangible action on the ground.

It is noted that UNCG stated that plans were first put forward in 2007 to create the Zhdymyr' national park that would have included the whole of Polonina Borzhava though these came to nothing. In 2019, UNCG proposed the establishment of the 'Zelenytsia' local protected area extending over 1,000ha within the Mizhgirya district though again, little progress was made. Again, in 2020, other local organisations proposed a Regional Landscape Park to cover the entire Emerald Network site with the aim of managing the subalpine meadows and to regulate recreational activities; it is understood that negotiations with local landowners continue.

We therefore recommend that:

- a multi-stakeholder process is initiated in order to: i) define a vision and high-level conservation objectives for the site; ii) identify the critical issues (opportunities, threats, conflicts, relating to the various uses, ecosystem services and other features); iii) set objectives for the resolution of those issues; and iv) agree on costed actions and the timescale for the delivery in order to achieve those objectives.
- the above process be translated into an integrated management plan for the site.
- the above process be used to determine the most appropriate designation for the site in order to achieve its management and protection and, in particular, to provide the basis for staffing and the provision of resources for actions to be taken.
- the process be accompanied by the development of a communications plan to raise general awareness of users and the general public in relation to the correct behaviour required to maximise the enjoyment that can be achieved from recreating on the site whilst at the same time protecting its fragile and valuable natural resources.

4. Overall progress in the implementation of the Emerald Network

Our understanding of the current situation in relation to the overall progress in the implementation of the Emerald Network in Ukraine, based on our review of documents and interviews with key stakeholders indicates that approximately 50% of the Network has been formally approved at government level and that the remaining 50% is awaiting national approval at this time. Thus, the process of setting up the Network at national level is moving forwards and all indications are that 100% of the Network will have been approved by the end of 2021 or the beginning of 2022.

In this respect, Ukraine as a Contracting Party to the Bern Convention is complying with its obligations. Once designated, these sites will represent 15% of the terrestrial area of the country. It is not clear whether, in combination with other national-level protected area designations, this will allow Ukraine to reach the CBD target of 17% terrestrial coverage; (and in terms of the pre-accession process, the EU Biodiversity Strategy to 2030 requires 30% coverage to have been achieved in the next 10-year period).

In addition, none of the sites presently have management plans or resources dedicated to the implementation of their protection and management. It is therefore impossible at this time to provide a clear picture in relation to the condition of the biodiversity of these sites. It is also clear from this and a number of other Emerald Network site infraction cases within the Ukraine, that the thorough safeguard of the Network is not presently being achieved.

Furthermore, there are no national, regional or local monitoring schemes targeted at reporting on and assessing the status of the biodiversity (habitats and species) found within the sites. Thus it seems that

the Standing Committee's Recommendation 208 (2019) on detecting, reporting, assessing and responding to changes in the ecological character of the Network is presently far from implementation.

We therefore recommend that:

- a multi-stakeholder process is initiated in order to: i) identify key issues that constrain progress; ii) identify key organisations with responsibility for these; iii) identify mechanisms which would allow the effective and timely detection, reporting, assessment and resolution of potential conflicts before they threaten international biodiversity obligations; and iv) identify a timeline to secure and monitor progress.

In relation to the question of how to allow the Emerald Network to contribute towards the decarbonisation of Ukraine's economy without loss of biodiversity value, this has been addressed in the subsections above. In summary, the combined terrestrial area of the Emerald Network in the Ukraine represents a significant contribution to the sequestration and storage of carbon. The value of such regulating ecosystem services is often underestimated when considering economic models, including in relation to the production of renewable energy. There have been a number of studies into the contribution of biodiversity to these ecosystem services, and it may be useful to quantify these in relation to the Emerald Network and other nationally designated nature areas within the country.

The provision of an 'opportunities map' (mentioned above) that would avoid damage to Network sites but also allow renewable energy schemes to go forward in suitable areas, thereby preserving their storage and sequestration capacity, would be an important step forward together with the quantification of the contribution.

We therefore recommend that:

- The quantification of the contribution of the Emerald Network to carbon sequestration and storage is assessed.
- The production of an 'opportunities map' to support the national renewable energy strategy (Repeated above).

10. Conclusion

This online advisory mission has reviewed evidence presented by the complainant, developer, and both local and national Government regarding the proposed establishment of a wind farm within the Polonina Borzhava Emerald Network site. This is currently the subject of an appeal to the Supreme Court of Ukraine that if successful, would reverse an earlier decision in a lower court to refuse permission.

Fundamentally, we believe that development of this scale and nature within an Emerald Network site allied with shortcomings in the EIA process should not be permitted at this location. To do so would, we believe, conflict with the requirements and spirit of the Bern Convention.

We have made a number of recommendations that would lead to improvements regarding these and other related issues that would allow Ukraine to better meet its international biodiversity obligations.

Mindful of the ongoing court case, we have also recommended suitable actions should consent be confirmed by the Supreme Court.

Annex 1: Programme of the online advisory mission

MONDAY 20TH SEPTEMBER

All times are indicative and given in Central European Summer Time (CEST)

Time (*CEST*)	Theme
9.00-12.00 *(including 20min coffee break)*	**Meeting with the national and regional authorities**

TUESDAY 21ST SEPTEMBER

All times are indicative and given in Central European Summer Time (CEST)

Time (*CEST*)	Theme
14.00-17.00 *(including 20min coffee break)*	**Meeting with civil society and other stakeholders**

THURSDAY 23RD SEPTEMBER

All times are indicative and given in Central European Summer Time (CEST)

Time (*CEST*)	Theme
9.00-16.00 *(including lunch and coffee breaks)*	**Meeting with all concerned stakeholders**
16.15-17.30	**Concluding meeting with the core parties (focal point & complainant)**

Annex 2: List of Participants

AUTHORITIES OF UKRAINE

- Ms Anastasiia DRAPALIUK, Ministry of Environmental Protection and Natural Resources
- Ms Darya BOLDARIEVA, Ministry of Environmental Protection and Natural Resources
- Mr Yuriy SHPONTAK, Department of Ecology and Natural Resources of Zakarpattia Regional State Administration
- Mr Taras MYKITCHAK, Deputy Director of the Institute of Ecology of the Carpathians National Academy of Sciences of Ukraine

CIVIL SOCIETY

- Ms Kateryna BORYSENKO, Ukrainian Nature Conservation Group (UNCG) (complainant)
- Mr Oleksii VASYLIUK, UNCG (complainant)
- Ms Olena KRAVCHENKO, Executive director, NGO Environment People Law (EPL)
- Ms Kateryna POLIANSKA, Ecologist, EPL
- Ms Sofija SHUTIAK, Lawyer, EPL
- Ms Julia BURLACHENKO, Public Initiative «Save Borzhava»
- Mr Volodymyr PREDKO, Head of the village of Berezniki
- Mr Dmytro SKRYLNIKOV, Lawyer, NGO «Bureau of Environmental Investigations»
- Mr Andriy KONECHENKOV, Chairman of the Board of Ukrainian Wind Energy Association
- Ms Galyna SHMIDT, Member of the Board of Ukrainian Wind Energy Association
- Ms Tatiana KUZMENKO, Ukrainian Society for the Protection of Birds
- Mr Vasyl MOCHAN, Ukrainian Society for the Protection of Birds
- Ms Iryna CHERVINSKA-KOVACH, Chairperson of the Board of the NGO "International Institute of Human and Global Studies "Noosphere""
- Mr Mykhailo MUSHKA, Head of the Keretsivka United Territorial Community

PRIVATE & LEGAL SECTOR

- Mr Pavlo BYELOUSOV, Lawyer
- Ms Ksenia KORIUKALOVA, AEQUO law firm
- Mr Loic LERMMINIAUX, Representative of the Investor (Guris)
- Ms Natalia MAJSTRENKO, Lawyer defending Polonyna Borzhava in court
- Mr Erman ÖZGÜR, Lawyer
- Mr Svyatoslav ZHMUTSKYY, Land Expert from Atlas Volovets Energy LLC

SCIENTIFIC COMMUNITY

- Mr Andrij BOKOTEJ, Ornithologist
- Ms Liubow FELBABA-KLUSHYNA, Biologist
- Ms Hanna KUZYO, Ornithologist

INTERNATIONAL ORGANISATIONS

- Mr Tris ALLINSON, Birdlife International
- Ms Aleksandra BUJAROSKA, Secretariat of the Energy Community Treaty

- Mr Peter VAJDA, Secretariat of the Energy Community Treaty

INDEPENDENT EXPERTS

- Mr Bernard Fleming
- Mr Lawrence Jones-Walters

SECRETARIAT OF THE BERN CONVENTION

- Ms Ursula Sticker
- Mr Marc Hory
- Mr Eoghan Kelly

INTERPRETERS

- Mr Alexander GULIDOV
- Mr Serhii NALIESNYI
- Mr Yuriy VELYKORODA

Annex 3: Table of Recommendations, actions and a proposed timeline

Objectives and Recommendations	Start date	Completion date	By Whom	Explanatory Notes
Objective 1: Review and assess the Environmental Impact Assessment procedure carried out for this case, and evaluate if it was undertaken according to national law and to international standards.				
Primary recommendation: *The plans for the development should be cancelled.*	Immediately	Single action, completed on implementation	Government (and courts)	Cancellation should provide a trigger for the implementation of other recommendations listed below
Alternative recommendation: *If the development is to proceed, the environmental impact assessment should be repeated using current methodology that is agreed between the developer, the regulator and the complainants; in doing so this will mean that the results are less likely to be challenged and can potentially form a better basis for decision-making in relation to 'go and no-go areas' for the development.*	Process to begin as soon as a decision is made by the courts	Likely to require a two-year time-frame for implementation: December 2023	Developer, regional government and NGOs	
Objective 2: Gain a preliminary understanding of the environmental assessment procedures (EIAs, SEAs, CIAs) grounded into the national legislation of Ukraine, and verify if they comply with international standards.				
Produce country-wide 'opportunity maps' with 'go and no-go areas' that show where windfarms could be placed without significant impact on environmental, social or cultural aspects.	To commence immediately	Completion date for working draft October 2022. Final version available in January 2023	National government (with involvement of regional government, private sector and NGOs)	Should be carried out as a participatory process allowing input by key stakeholders as the map is developed
Implement a programme of awareness raising of the legislation and how it should be implemented	January 2022	December 2024	National government (with involvement of	Two-year programme of training, supported by provision of written

Objectives and Recommendations	Start date	Completion date	By Whom	Explanatory Notes
for key officials including private developers, through the provision of simple written advice and guidance and targeted training			regional government, private sector and NGOs)	advice and guidance (available on line) to be completed. Advice to be completed by June 2022; training to begin July 2022 and completed by December 2023
Develop common standards in relation to the collection of biodiversity data and information for the EIA process.	January 2022	December 2024	National government (with involvement of regional government, private sector and NGOs)	Should be carried out as a participatory process allowing input by key stakeholders as the map is developed
Develop an independently administered national level certification scheme for ecologists involved in commercial work such as EIA.	January 2022	December 2025	NGOs to initiate process with support of other key stakeholders.	Can be based on best practice models from (e.g.) Germany, UK
Objective 3: Review the process of **creating a nature reserve** within the territory of Polonina Borzhava in order to improve its conservation status.				
A multi-stakeholder process is initiated in order to: i) define a vision and high-level conservation objectives for the site; ii) identify the critical issues (opportunities, threats, conflicts, relating to the various uses, ecosystem services and other features); iii) set objectives for the resolution of those issues; and iv) agree on costed actions and the timescale for the delivery in order to achieve those objectives.	January 2022	December 2022	Regional government (with involvement of national government (as observer), private sector recreation operators and key NGOs)	Process should be moderated and guided by professional facilitator(s)
That the above process be translated into an integrated management plan for the site.	January 2023	December 2023	Regional government (with involvement of national government (as observer), private sector recreation	The stakeholder process, if managed correctly, will generate the basic content of the plan. The first 6 months of 2023 should be used to deliver a process of wider

Objectives and Recommendations	Start date	Completion date	By Whom	Explanatory Notes
			operators and key NGOs)	consultation, input of comment, formal approval and publication.
That the above process be used to determine the most appropriate designation for the site in order to achieve its management and protection and, in particular, to provide the basis for staffing and the provision of resources for actions to be taken.	January 2023	December 2023	Regional government (with involvement of national government (as observer), private sector recreation operators and key NGOs)	As part of the above
The process be accompanied by the development of a communications plan to raise general awareness of users and the general public in relation to the correct behaviour required to maximise the enjoyment that can be achieved from recreating on the site whilst at the same time protecting its fragile and valuable natural resources.	June 2022	December 2023	Regional government (with involvement of national government (as observer), private sector recreation operators and key NGOs)	As part of the above
Objective 4: Provide commentary in relation to **the overall progress in the implementation of the Emerald Network**				
A multi-stakeholder process is initiated in order to: i) identify key issues that constrain progress, ii) identify key organisations with responsibility for these, iii) identify mechanisms which would allow the effective and timely detection, reporting, assessment and resolution of potential conflicts before they threaten international biodiversity obligations and iv) identify a timeline to secure and monitor progress	January 2022	June 2022	National and local Government and NGOs	Process should be moderated and guided by professional facilitator(s)
The quantification of the contribution of the Emerald Network to carbon sequestration and storage is assessed.	January 2022	June 2022	National government	Should be a straightforward accounting process based on current methodology

Objectives and Recommendations	Start date	Completion date	By Whom	Explanatory Notes
The production of an 'opportunities map' to support the national renewable energy strategy (Repeated above).	To commence immediately	Completion date for working draft October 2022. Final version available in January 2023	National government (with involvement of regional government, private sector and NGOs)	Should be carried out as a participatory process allowing input by key stakeholders as the map is developed