Importance of planning, including sensitivity mapping, to inform the siting of new windfarms

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CMS ENERGY TASK FORCE

UN environment CMS

Summary

- The CMS and the Energy Task Force
- Flyways can guide sustainable renewable energy deployments
- The importance of best-practice guidance and strategic planning
- The case of MSB or Avistep tools

Convention on Migratory Species CMS

- The Convention on Migratory Species is a multilateral environmental agreement (MEA) of the United Nations
- 133 Parties – 132 countries plus the European Union
- The only global treaty to focus on the conservation of migratory species and their habitats

Relevant CMS daughter agreements represented in the ETF

AEWA

EUROBATS

Raptors MOU

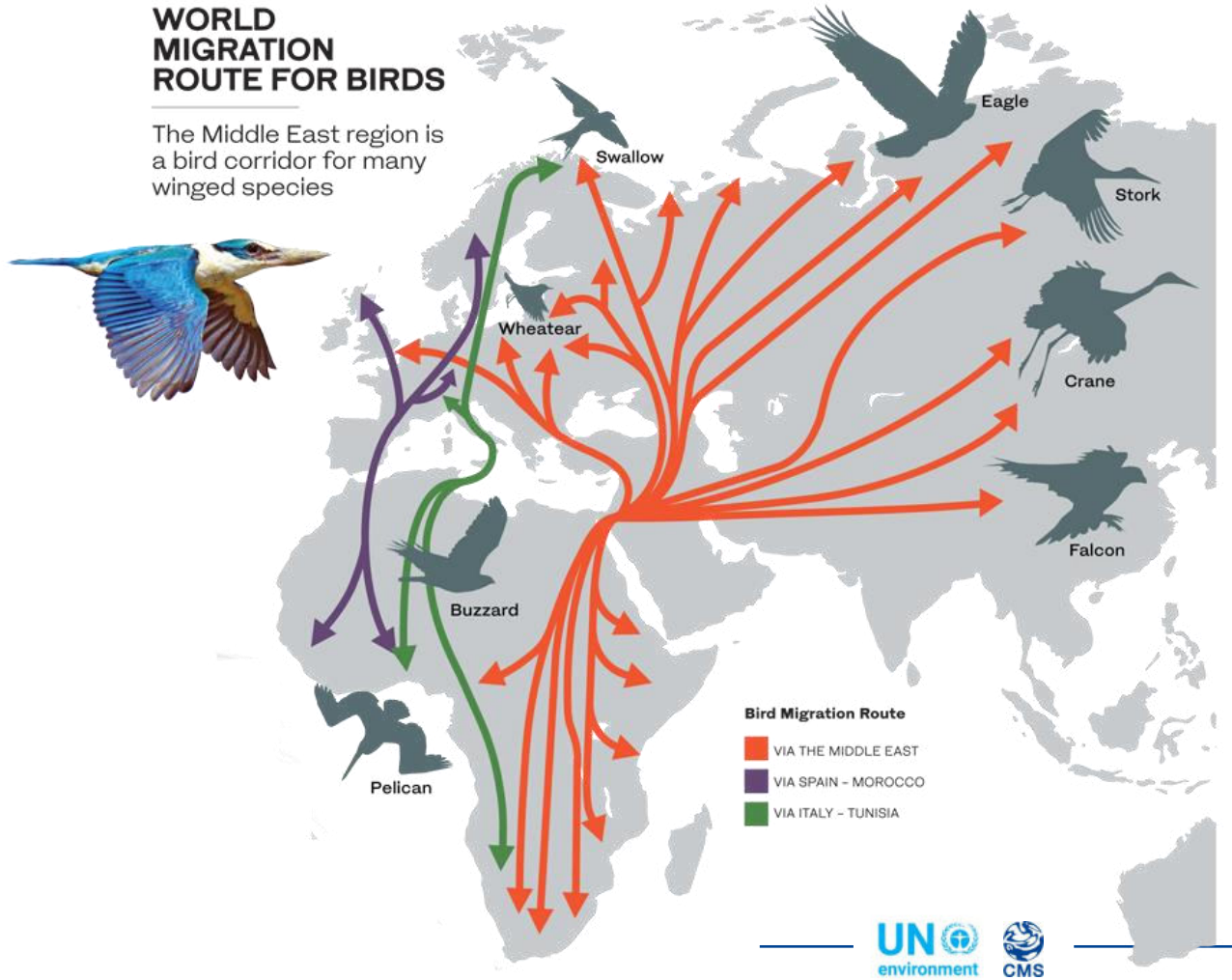
MULTI-STAKEHOLDER MEMBERSHIP

- **National governments [environment & energy]:** Brazil, Bulgaria, Egypt, Ethiopia, France, Germany, Ghana, Greece, Hungary, Israel, Jordan, Kenya, Morocco, Nigeria, Saudi Arabia, South Africa, Spain
- **Secretariats of MEAs:** AEWA, CMS, CBD, EUROBATS, Ramsar Convention, Raptors MOU
- **Industry:** African Sustainable Energy Association, WindEurope
- **Bilateral & multilateral organisations:** African Union, African Sustainable Energy Association, European Bank of Reconstruction and Development EBRD, East Asian-Australasian Flyway Partnership, International Finance Corporation (IFC/World Bank Group),Renewables Grid Initiative RGI, IRENA, Power Africa – USAID, World Bank
- **NGOs and other:** BirdLife International, British Trust for Ornithology, Endangered Wildlife Trust (EWT)
- **Observers**: Euronatur, IUCN, Ethiopian Wildlife and Natural History Society, Regional Center for Renewable Energy and Energy Efficiency (RCREEE), 10 National Birdlife partners, IAF, OREE, UNAM Mexico, SABAA, American Bird Conservancy (ABC)

FLYWAYS ARE VITAL CORRIDORS

- They can foster international cooperation
- They demand strategic planning and cumulative impact assessment
- They benefit from country-to-country support
- Migratory birds are threatened!

(40%) of 119 Afro-Palearctic migrant species (long-distance migrants that breed in Europe and winter in sub-Saharan Africa) exhibited substantial negative population trends (Sanderson et al. 2006)



ETF EXPERIENCE HAS ALREADY HELPED TO DESTROY SOME MYTHS

- Understanding movement patterns BEFORE construction phase is vital.
- Governments NEED data
- NGO & Academia CAN provide data
- IFIs are EAGER to use most up-to-date data
  - So, what are the key problems?

SO WHAT IS MISSING?

- Ensure Strategic Environmental Assessment of all projects
- Trust across stakeholders
- Time (to countries, to NGOs, to IFIs)
- Access to data and data ownership
- Sharing of adequate guidance
- Capacity building at all levels

ETF OFFERS SOLUTIONS

- There is interest and transparency at local level, but we need to ensure best practice is shared faster, so national & international cooperation is more efficient
- We offer a repository for best-practice
- Design tailored workshops/webminars
- We work together on the next big challenges
  - Photo Voltaic
  - Mining issues for electric vehicles.
  - Offshore floating infrastructure
  - Sub-regional needs

SOME EXAMPLES OF OUR WORK

- More than 30 guidance documents available at our web site
  - Sustainable deployment of RE
  - RE and migratory species
  - Mitigation of power grids
  - etc
- Working with parties to improve deployment of tools such Migratory Soaring Bird and AVISTEP
- Database of national experts
- Engagement strategy with International Finance Institutions
- Tailored workshops

Guidelines for sustainable deployment

Main impacts to migratory birds

- Habitat los, fragmentation & degradation
- Disturbance & displacement
- Mortality: collision and electrocution at power lines
- Worsened health condition while migrating: flight dispersal, increased stress levels

Main recommendations

- Countries should develop National Strategic Environmental Assessment (SEA)
  - Enables a framework to identify high risk áreas
  - Vital for spatial planning of large landscapes
  - Good examples from Scotland., France, Egypt, Spain
- Predictive models, sensitivity mapping, IT Tools
- Environmental Impact Assesments at site level
- Wind farm configuration: Ideally in paralell to migration route, and including corridors in between
- Include shut-on-demand while in operation
- Vital monitoring of biodiversity data pre and post construction

Some examples of planning tools

BirdLife International

BirdLife INTERNATIONAL | Partnership for nature and people

Guidance to Developing National Avifauna-Powerline Guidelines and Engagement with Relevant Stakeholders on Powerlines and Birds in the Mediterranean Region

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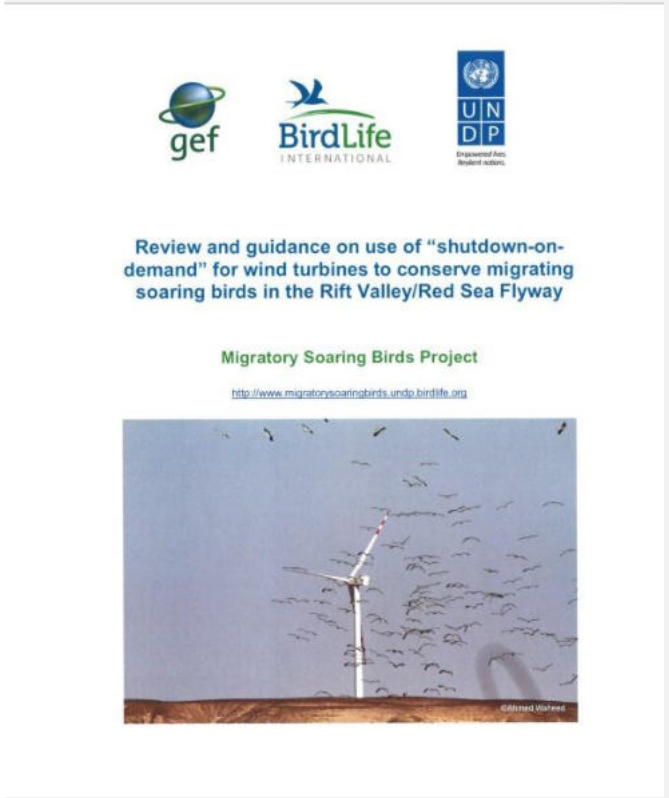
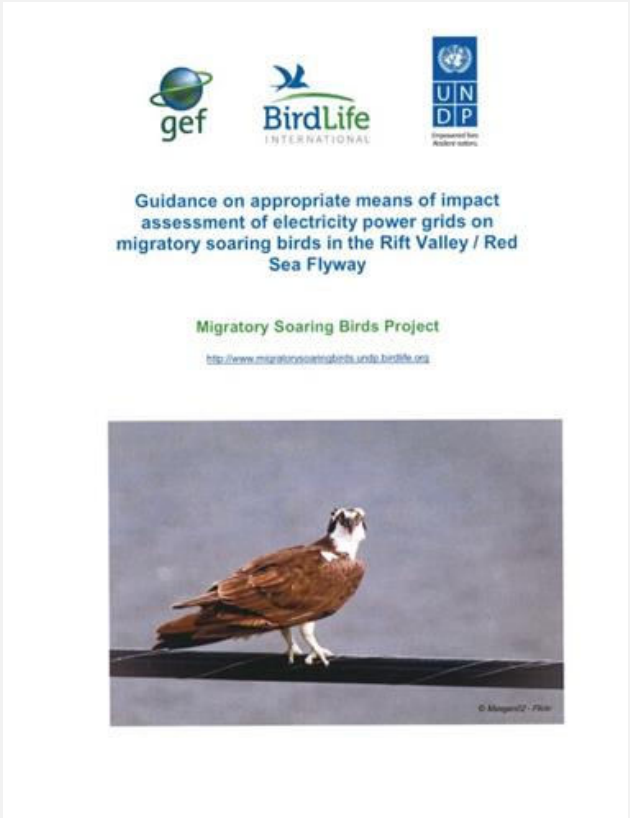
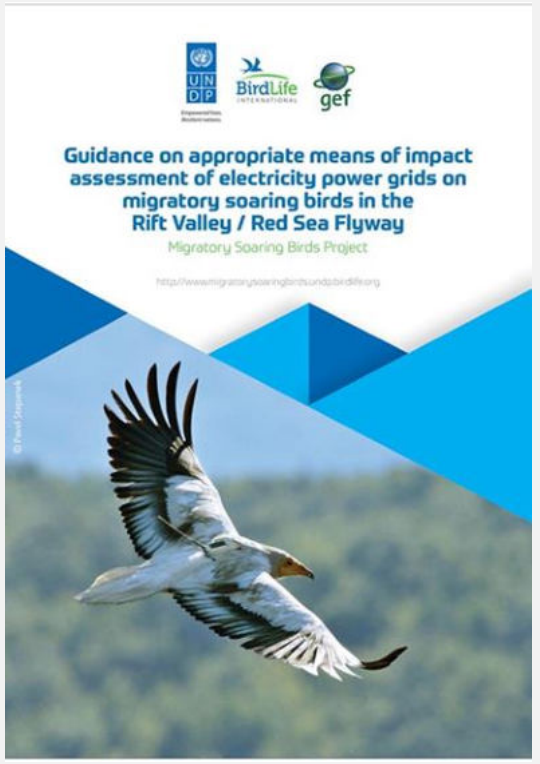
Content, tools and capacity







Soaring Bird Sensitivity Mapping Tool

A planning tool for wind energy and other sectors

BirdLife INTERNATIONAL

Further Information

gef UNDP

Select a query geometry and then delineate the search area on the map

Enter a buffer distance and select metric

Distance: 20 Kilometers

Enter X coordinate (longitude) in decimal degrees

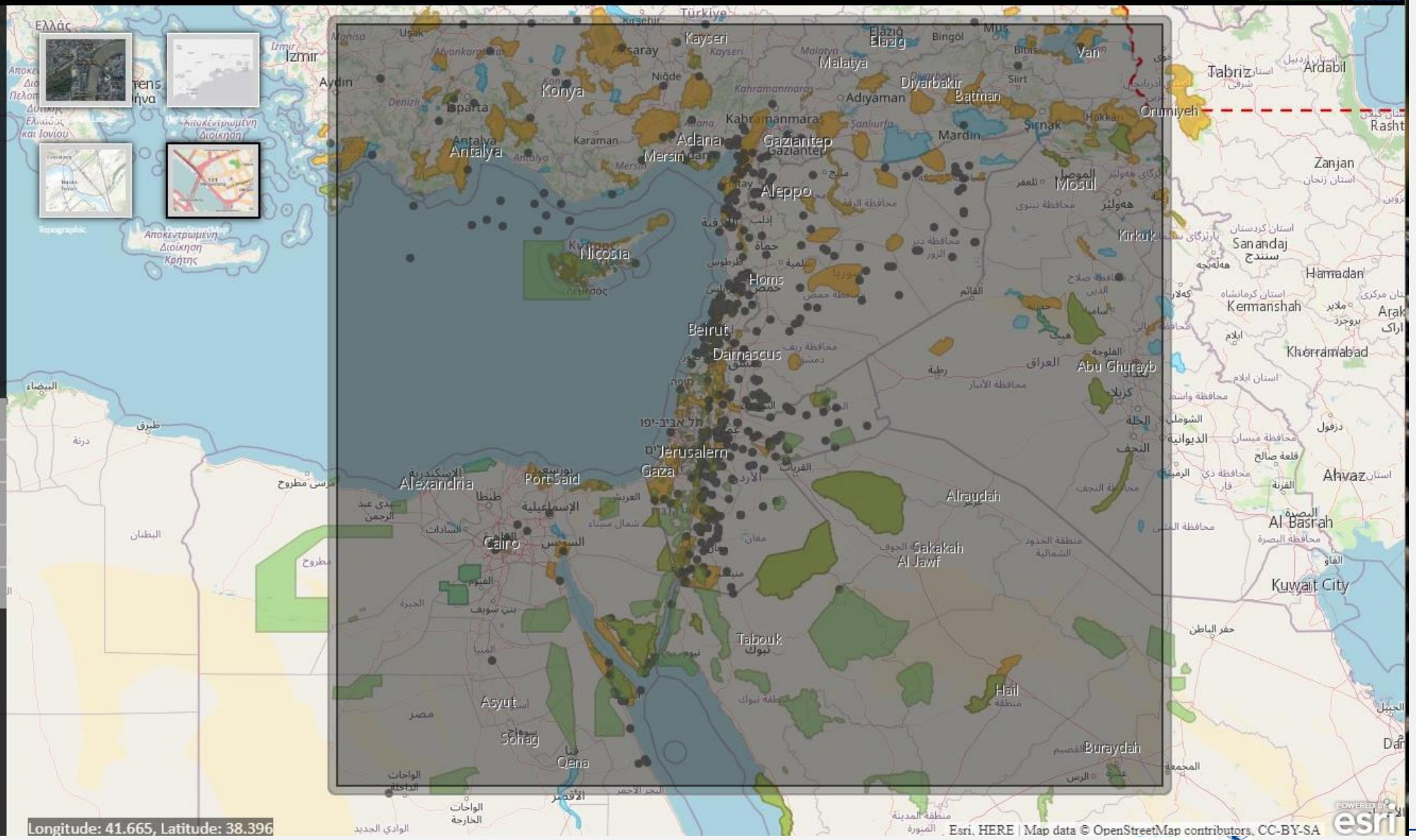
Enter Y coordinate (latitude) in decimal degrees

Apply Coordinates

Show/Hide Assessment

New Query

- Important Bird Areas supporting soaring birds
- Important Bird Areas for other birds
- Soaring bird observation locations
- Protected Areas
- Soaring bird satellite tracks



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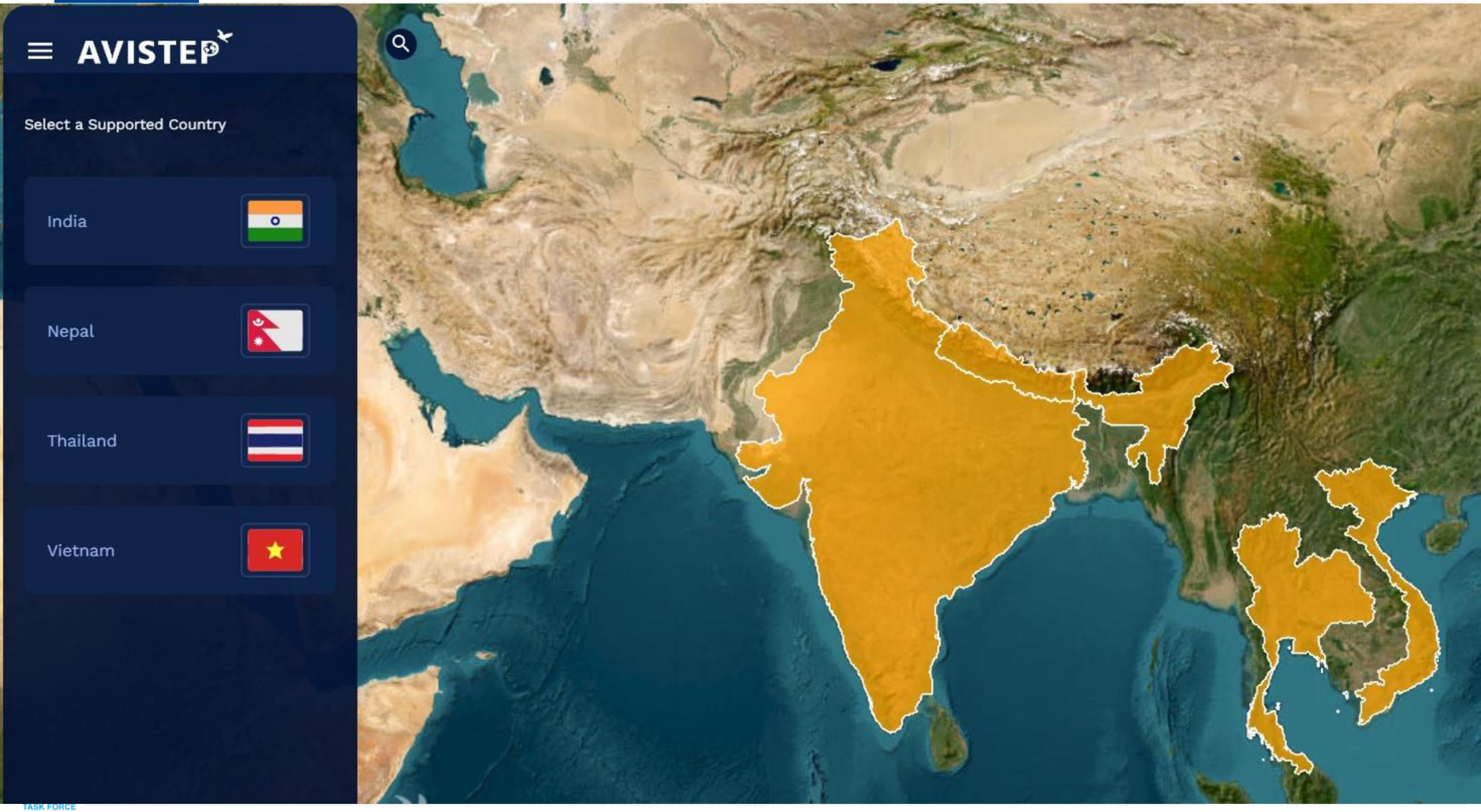
AVISTEP

The Avian Sensitivity Tool for Energy Planning

Get Started | Learn More

BirdLife INTERNATIONAL


AVISTEP
Select a Supported Country
India
Nepal
Thailand
Vietnam

Thank you!

www.cms.int

www.cms.int/en/taskforce/energy-task-force

For more information, please contact
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CHAMPION PLUS ENERGY TASK FORCE

The Government of India, through the Ministry of Environment, Forest and Climate Change were recognized as Champion Plus for their generous support and commitment towards Making energy safe for wildlife for the period 2020-2023. The operations of the Energy Task Force have been funded with the contribution granted by India under the Migratory Species Champion Programme.

Ministry of Environment, Forest and Climate Change

CMS BirdLife INTERNATIONAL MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE OFB

Convention on Migratory Species