

DANUBE FREE SKY

The Danube Protected Areas' initiative for bird conservation at powerlines along the Danube River

*Georg Frank, DANUBE PARKS Secretary General
8th MAVIR Bird Conservation Conference
Budapest, 8th November 2017*

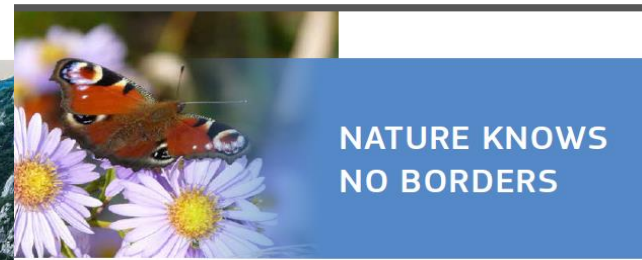
- 1 Danube Delta Biosphere Reserve
- 2 Lower Prut Natura Reserve
- 3 Small Wetlands of Braila
- 4 Ruzselski Lom Nature Park
- 5 Persina Nature Park
- 6 Iron Gates Natural Park
- 7 Kopačkit rt Nature Park
- 8 Gornja Podunavlje Special Nature Reserve
- 9 Duna-Dráva National Park
- 10 Duna-Ipoly National Park
- 11 Szigetköz Landscape Protection Area, Fertő-Hanság National Park
- 12 Dunajskó Luhy Protected Landscape Area
- 13 Záhorie Protected Landscape Area
- 14 Donsau-Auen National Park
- 15 Wachau Protected Landscape Area
- 16 Narrow Valley of the Danube In Passau district
- 17 Donaueauwald Neuburg-Ingolstadt



DANUBEPARKS
network of protected areas

„...the EU Natura 2000 Award for its **ambitious, friendly and trustworthy** cooperation **crossing all borders** and its **concerted efforts** to preserve the Danube’s natural heritage.“ (2015)





NATURE KNOWS NO BORDERS

The Danube is the longest river in the European Union and the most international river in the world, stretching 2857 kilometres through ten countries, including dozens of protected areas and national parks. The contribution made by these protected areas to the conservation of Europe's natural heritage is of immense importance now and for future generations.

River Protected Areas, to manage these areas wisely, to exchange and promote management expertise, and to improve knowledge of the river's ecological status, as well as the economic, social and environmental impacts. The network is taking action for the prevention, control and reduction of pollution in the flood plains and wetlands in the Danube Basin, and raising awareness of the river's international importance and of sustainable development.

DANUBE PARKS – the Danube River Network of Protected Areas – was founded in 2007 with the signing of the Declaration of Tulcea in Romania. Joint projects are crucial to achieving the initiative's goals which, along with the continuing informal cooperation from the national parks and protected areas, are made possible mainly by the framework of cooperation across the Danube Region – the EUSDR.

Rivers are interrelated ecosystems, and nature does not recognise borders. Thus, nature conservation efforts along this most international of rivers need to find transnational answers and initiatives.

As stated in the Declaration of Tulcea, the network is determined to improve conservation of the Danube



„It (DANUBE PARKS) is now a **recognized label** for Nature Conservation in the Danube Region. ...established a **fruitful transfer of know-how**....started region-wide **initiatives**...helped to develop a **stronger voice at the policy level.**“ (2016)

DANUBE parks CONNECTED – to strengthen the Danube Habitat Corridor (2017 – 2019)

- River habitats (Danube Wild Island Habitat Corridor)
- Danube Dry Habitat Corridor
- Riparian forests Corridor
- **DANUBE FREE SKY: Danube as flyway**



DANUBE INSIDE

**DANUBE parks CONNECTED –
Bridging the Danube Protected Areas
towards a Danube Habitat Corridor**

**Countering the main threat to biodiversity
in Europe: landscape fragmentation and
isolation of Protected Areas**

Sheng Zouk
DANUBEPARKS
Project Manager

DANUBEPARKS – The Danube River Network of Protected Areas – preserves some of our most valuable natural sites. Yet habitat fragmentation limits efforts to preserve a truly cohesive ecosystem. In recent decades, the dynamic economic development of Southeast Europe has put growing pressure on the natural treasures of the Danube. Urban sprawl, major new infrastructure projects in transportation and energy, and the increasing intensification of land use has led to less ecological connectivity. Together, the fragmentation of ecosystems and lack of connectivity among Protected Areas pose the greatest threat to biodiversity in Europe, and limit the effectiveness of existing conservation efforts in valuable natural sites.

To counteract this development, the EU Strategy for the Danube Region (EUSDR) Action Plan and other important policies have issued calls for action to restore and preserve habitat connectivity, and to strengthen Protected Areas in their function as key axes of the Danube Habitat Corridor. European initiatives like the Natura 2000 Network and the Green Infrastructure concept should bring about the establishment of trans-European green networks (TEN-G).

The special relevance of river ecosystems as eco-corridors

While most may associate habitat connectivity as pertaining to rivers with the longitudinal connectivity of aquatic habitats, rivers in fact serve an even greater purpose: as essential wildlife corridors, whose semiaquatic habitats like sandbars, gravel banks and islands are literal stepping stones. They are also flyways of extraordinary importance for the migration of waterfowl, geese, gulls, and birds of prey. Rivers even form ecological corridors for dry and semi-arid habitats. This sheer variety of habitats – which can only be formed by intact river systems – provides suitable living conditions for a wide range of organisms. This makes riverine habitats essential eco-corridors.

Danube Protected Areas' responsibility for ecological connectivity in Europe

Because the Danube links more separate ecological and bio-geographic regions than any other corridor in Europe, habitat connectivity and functioning riverine ecosystems that enable animal migration are especially pertinent issues. Counteracting the negative effects of long-term habitat displacement and climate change will

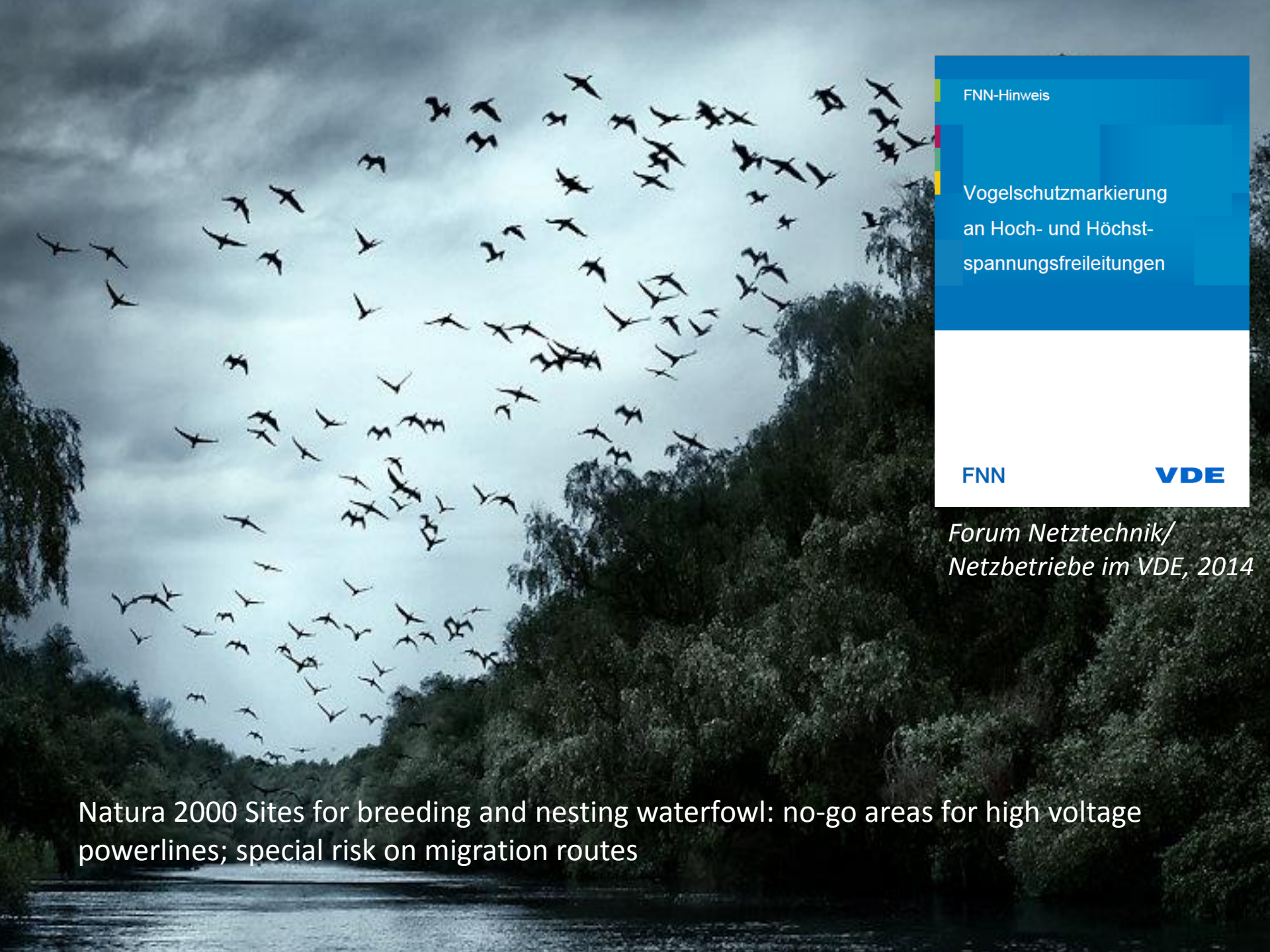
Discoveries by the Danube Habitat Corridor network (MELDAN), in the so-called FREE SKY and online (Free and Dry Fishes)

be more important than ever in future in order to ensure adequate and functioning migration corridors connecting the Black Sea, Steppes, Pannonian, Continental and Alpine regions.

Along with the Natura 2000 Network, the Danube Protected Areas represent the key areas, and form the backbone of this ecological corridor. However, because the amount of land designated as national conservation areas is still too small to serve self-sustaining wildlife populations, our main challenge – now and in future – will be to create and maintain habitat connectivity and contiguous ecosystems in order to ensure biodiversity in the centuries to come.

DANUBEPARKS
network of protected areas

Interreg EUROPEAN UNION
Danube Transnational Programme
DANUBE parks CONNECTED



FNN-Hinweis

Vogelschutzmarkierung
an Hoch- und Höchst-
spannungsfreileitungen

FNN

VDE

*Forum Netztechnik/
Netzbetriebe im VDE, 2014*

Natura 2000 Sites for breeding and nesting waterfowl: no-go areas for high voltage powerlines; special risk on migration routes



Common Sandpiper (Category A: Very high risk for collision)



Bis zu 2,8 Millionen Vögel sterben pro Jahr an Stromleitungen

NABU appelliert an Netzbetreiber, Leitungen zu sichern

Mehr als 60.000 Kilometer Hochspannungsleitungen durchziehen Deutschland ein Bruchteil davon liegt als Erdkabel unter der Erde. Freileitungen können zu tödlichen Kollisionen von Vögeln führen. Der NABU hat ermittelt, wie viele Tiere dadurch umkommen.



NABU, 2017



- Germany: 2,8 million birds killed/year through collision on high voltage power lines
- *...and (some) available studies stressing the need for actions against collision at large rivers*



Danube Delta: Europe's most important breeding site for pelicans (*Pelecanus crispus*, *Pelecanus onocratus*) – extremely high risk for collision



**LIFE+ Nature „Saving *Pelicanus crispus*
in the Danube Delta“ (2005-2009)**



White-tailed Eagle (Category B: high risk for collision)



Photo: Wolfgang Nerb/LBV

	DE	AT	SK	HU	HR	RS	BG	RO
Forestry	L	**	C	M	H	M	H	C
Land exploitation	L	M	H	L	L	L	H	L
River regulation / drainage	N	L	M	L	H	L	M	H
Disturbance	L	**	H	M	M	M	H	C
Reduction of prey base	N	N	U	L	L	C	L	M
Shooting and trapping	N	U	C	L	L	L	M	H
Nest robbing	N	N	L	L	L	U	L	L
Poisoning	L	H	C	H	U	L	U	H
Lead poisoning	*	*	U	M	H	U	U	M
Pesticides and pollutants	N	U	U	M	U	M	U	L
Collision and electrocution	L	M	H	M	L	L	U	U

Table 4: Threats to the White-tailed Sea Eagle along the Danube.

Danube-wide cooperation to raise the awareness!!

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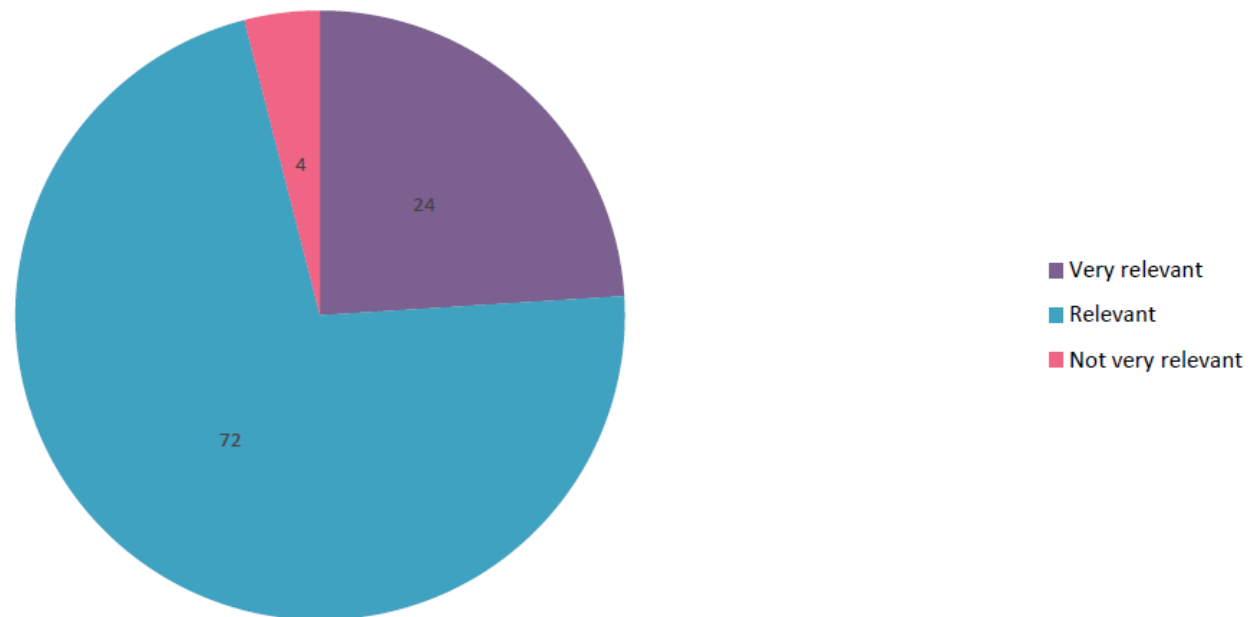
Goals and Objectives:

- 1) Raising awareness
- 2) cooperation platform energy & conservation sector along the Danube river
- 3) Inventory of (critical) powerlines
- 4) **Initiate technical solutions**
- 5) DANUEPARKS Position Paper
- 6) Strategy & follow-up's
- 7) Communication



1) Raising awareness

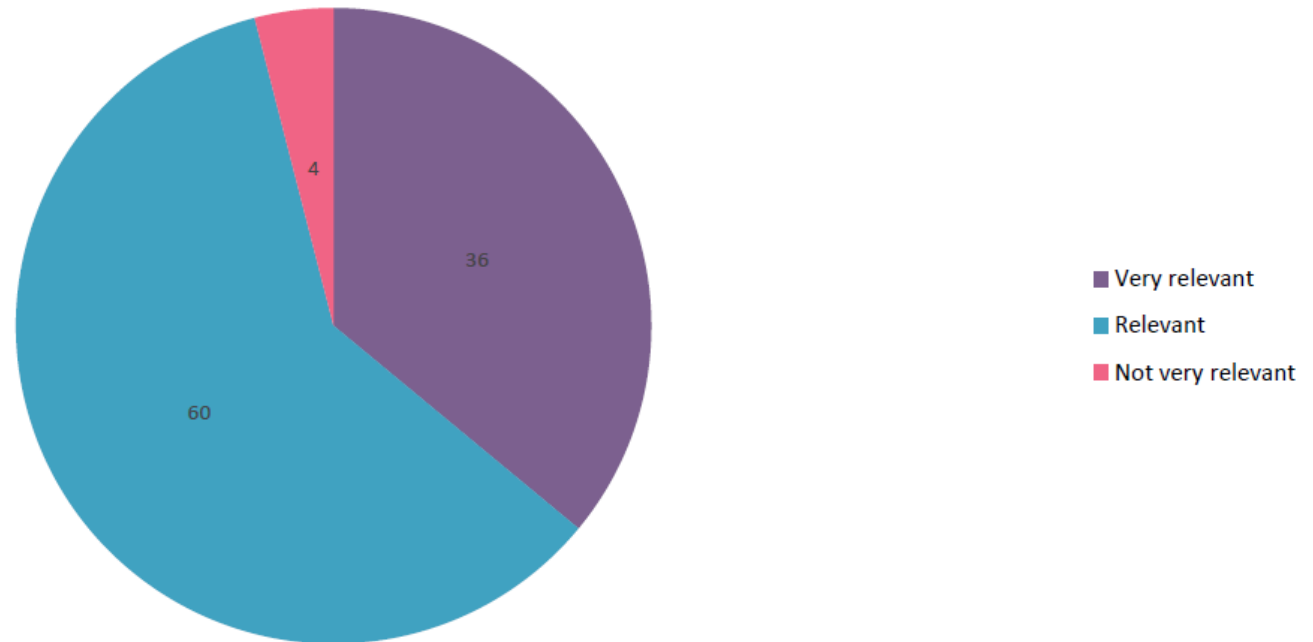
How relevant, do you think, is bird collision at powerlines in and close to your protected area?



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1) Raising awareness

How relevant, to your opinion, is electrocution in and close to your protected area?



DANUBE FREE SKY

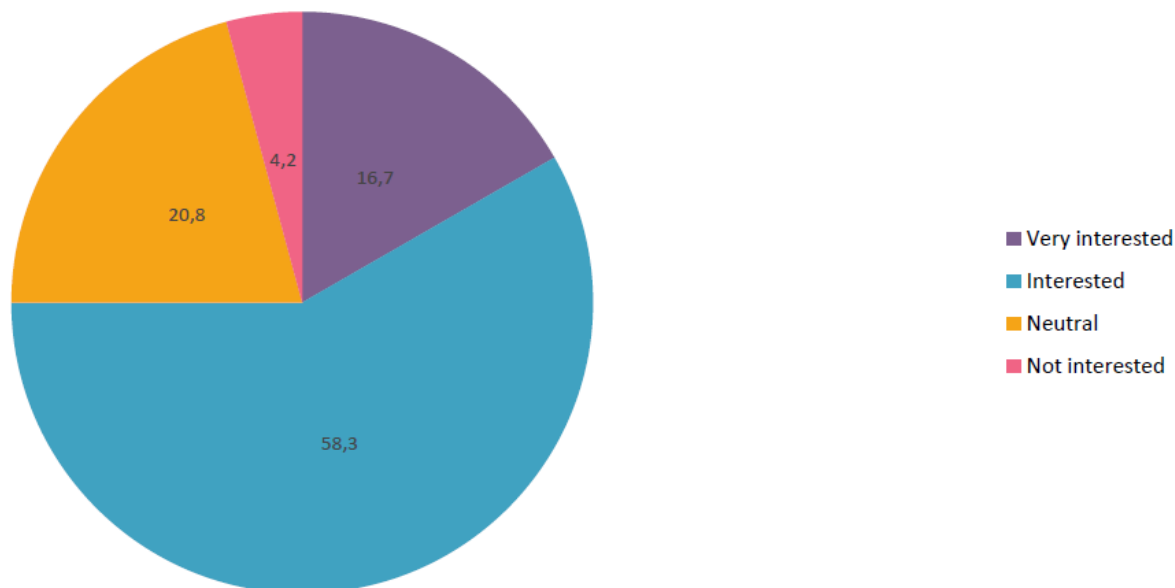
2) Cooperation platform energy & conservation sector along the Danube river



- MAVIR, ENEL, APG: Strategic Project Partners
- patronage by PA2 Energy and PA6 Biodiversity of the EU Danube Strategy

2) Cooperation platform energy & conservation sector along the Danube river

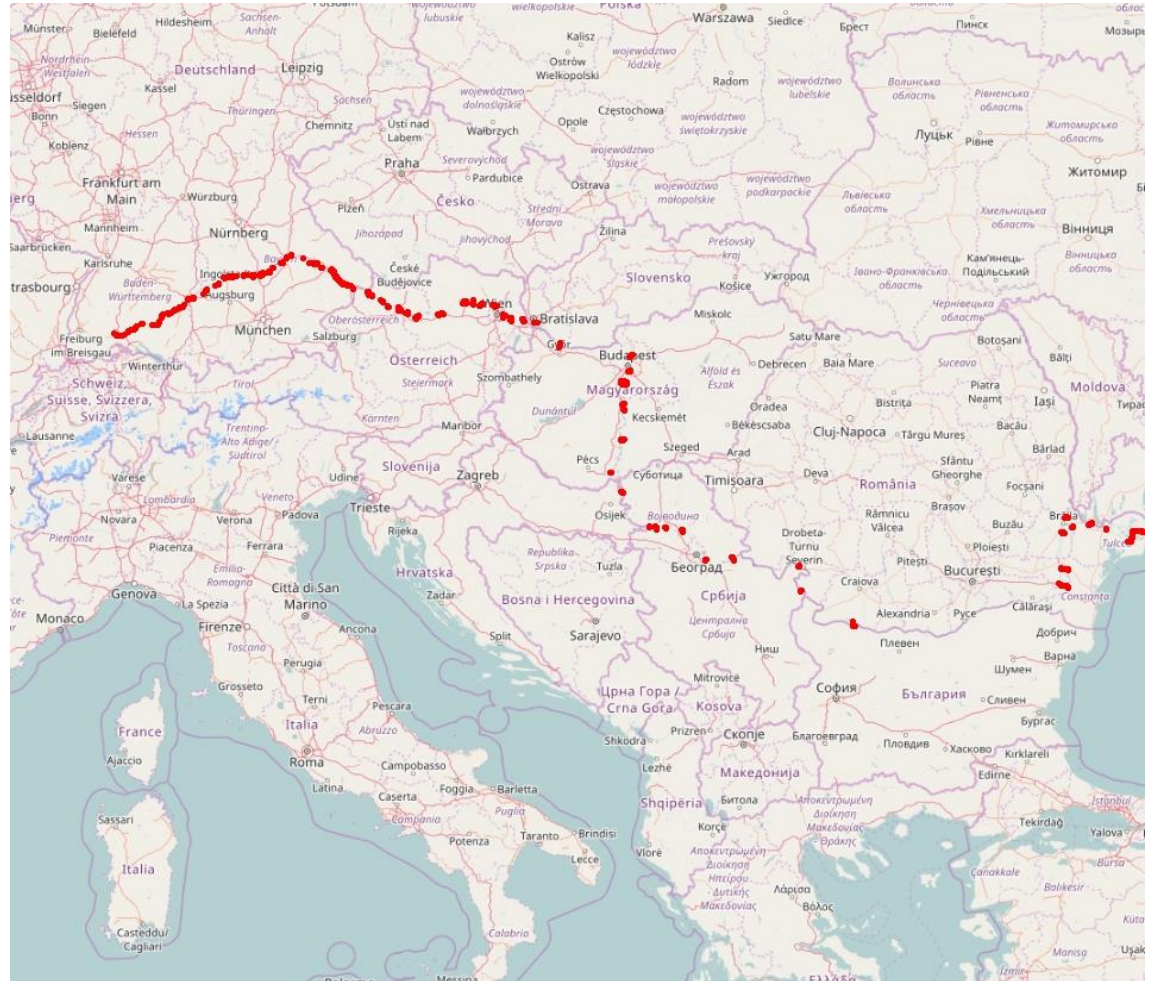
How interested are the powerline operators in your country in a closer cooperation?



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3) Inventory

Total electric power lines crossing the Danube	212
Germany	131
Austria/Germany	1
Austria	36
Slovakia	1
Hungary/Slovakia	1
Hungary	10
Croatia/Serbia	1
Serbia	13
Romania/Serbia	5
Romania/Bulgaria	1
Romania	12

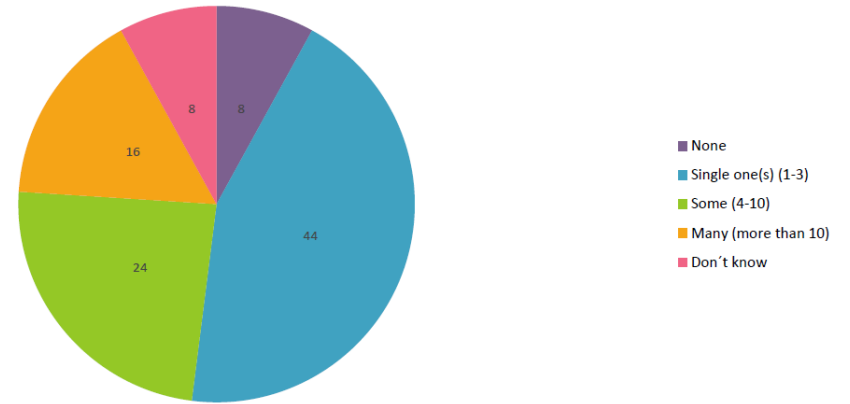


Sources: Open Street Map, shipping navigation map <https://www.d4d-portal.info/>, Ortho pictures and google earth

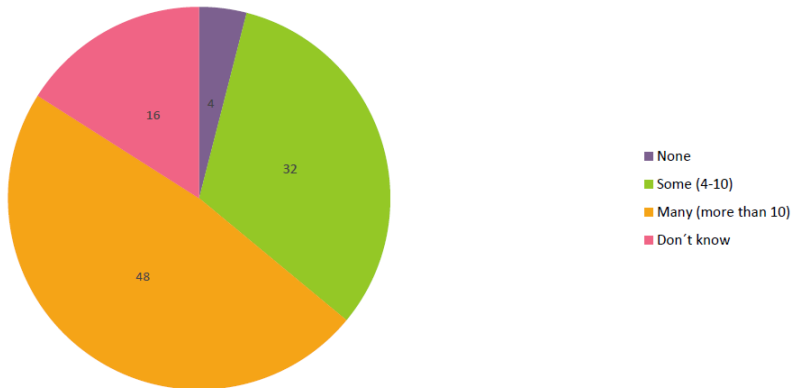
3) Inventory

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Do you have high- or highest voltage powerlines (>60 kV) in/close to your protected area?



Do you have any medium and/or low voltage powerlines

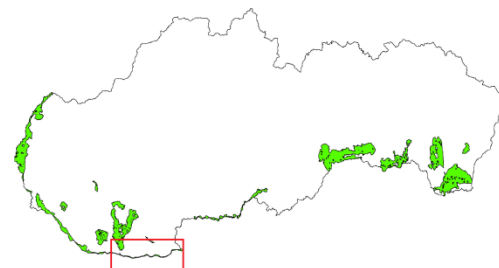
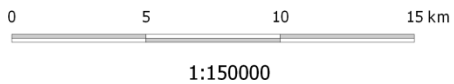


SPA SKCHVU007 Dunajské luhy - east part



LEGEND:

- SPA SKCHVU007 Dunajské luhy
- Area of baseline survey
- Danube river
- 22 kV power lines
- 110 kV power lines
- 22 kV power lines with highest risk of collision
- 110 kV power lines with highest risk of collision

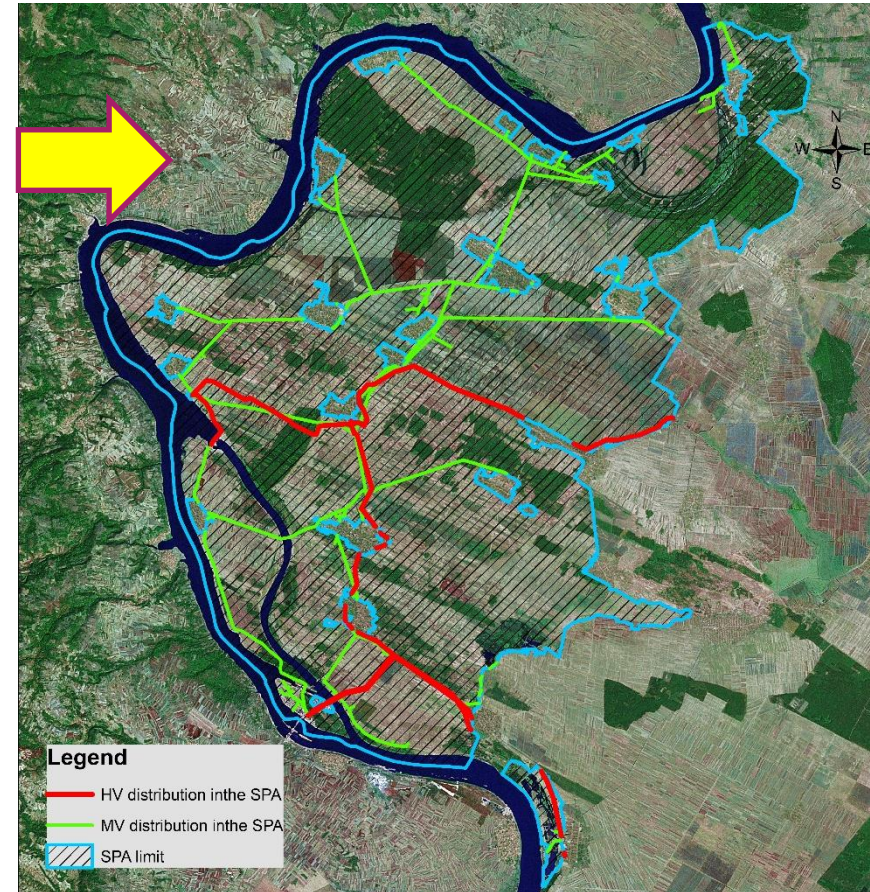


DANUBE FREE SKY



What is the High and Medium Voltage lines distribution in SPA`s along the Danube?

Collision Risk Assessment

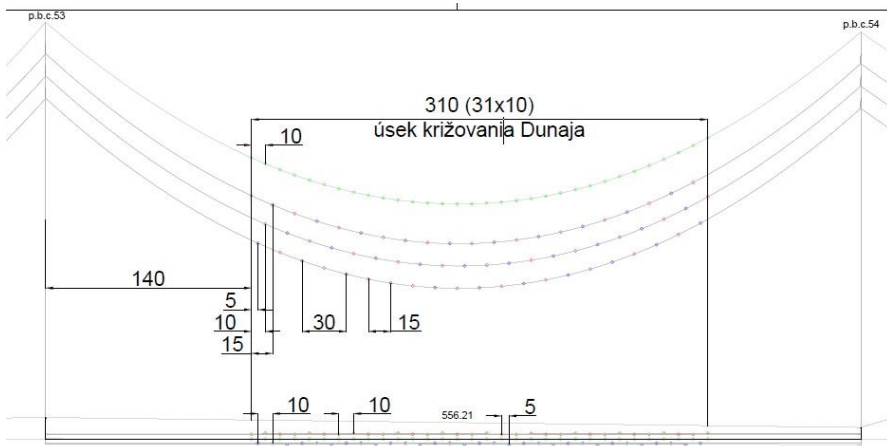


Electric lines distribution along the Danube in Romania

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4) (Initiate) technical solutions: good practice Slovakia

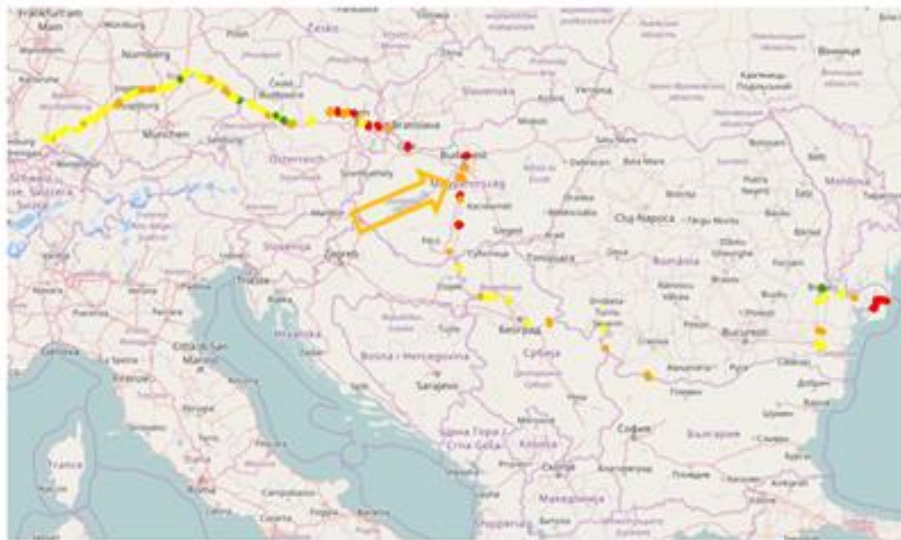
- ZSE – **Západoslovenská energetika** and environmental sector (NGOs)
- Project of powerline ecologization planned for spring 2018
- ZSE - Syker Engineering, Danubeparks (BROZ), Raptor Protection Slovakia



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4) (Initiate) technical solutions: good practice Hungary

- Cooperation: MAVIR & Duna-Ipoly National Park
- Site: Száhalombatt (south of Budapest)
- Marking above the Danube (length: 800 m, 7 wires, 320 diverters)



Priority

- 0
- 1
- 2
- 3

1st draft of prioritization:

- Natura 2000
- White-tailed Eagle (breeding, wintering)
- waders (Little-ringed Plover)

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4) (Initiate) technical solutions: good practice Austria

- **Austrian Power Grid (APG)** organize marking of all (!!) power lines crossing the Austrian Danube in winter 2017/18 (for all 6 power line operators)
- Implementation: winter 2017/2018
- Video monitoring at Danube side branch



Foto: Archiv Staatliche Vogelschutzparke Frankfurt

5) DANUBE PARKS position paper

- Collision AND electrocution
- In cooperation with BirdLife Austria and the Danube Delta Institute
- In progress

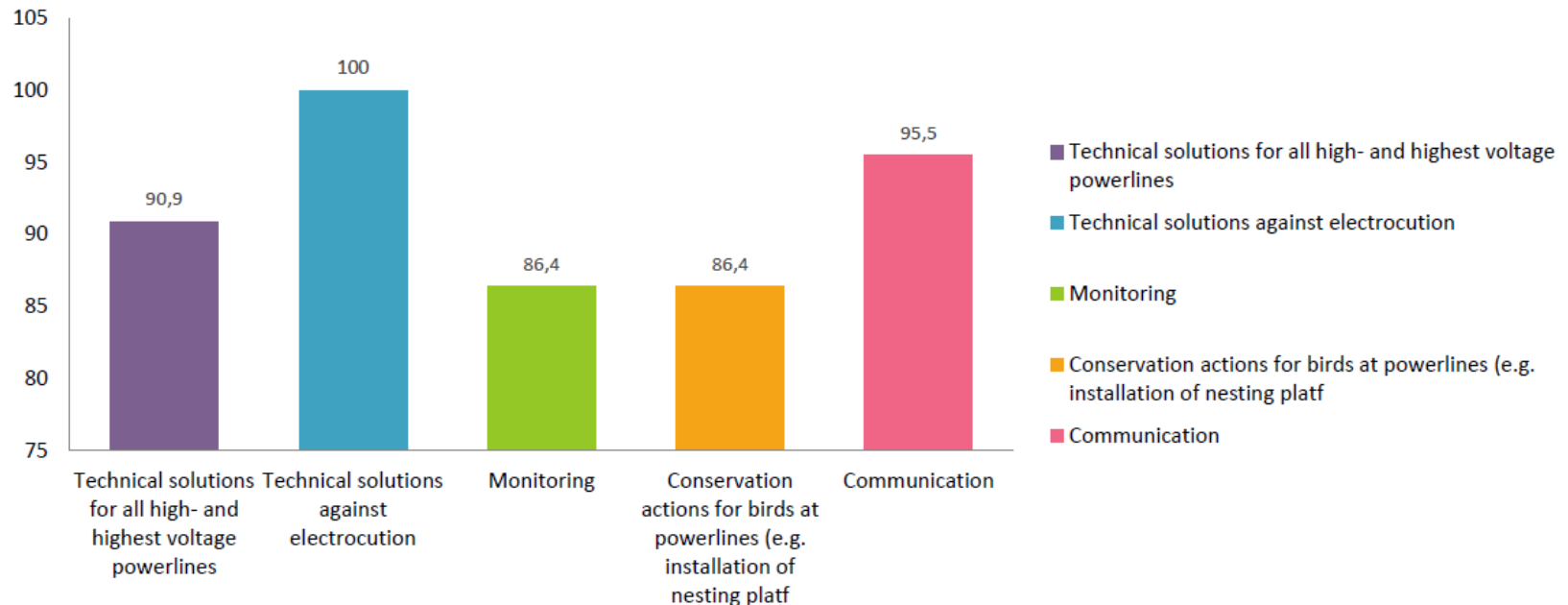


DANUBE PARKS Expert Meeting
(Budapest, 8th November 2017)

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6) Strategy & follow-up

What would be most interesting for you and your protected area as a follow-up activity on this field? Please rank the priority 1-5 in the text field.



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7) Communication



22.02.2017

Ingolstadt (intv) Die Donau ist der zweitlängste Fluss Europas. 10 Länder. Die haben es sich vor Jahren zur Aufgabe gemacht, Mittlerweile hat sich daraus ein starkes Netzwerk gebildet, „Danubeparks“ Ingolstadt zusammengekommen.

Das Budget für die nächsten zweieinhalb Jahre beläuft sich auf insgesamt drei Millionen Euro, wovon 85 Prozent von der EU über das Interreg Donau-Programm refinanziert werden. Der Austausch zwischen den Vertretern von Donau-Schutzgebieten, Energiesektor, Wasserstraßenverwaltung, Umweltschützern, lokaler Politik und Bevölkerung soll das Fundament sein, auf dem das Projekt aufbaut. Im Zuge der Konferenz sollten die Grundsteine für zukünftige Kooperationen gelegt werden.

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A joint Danube-wide process – next steps

- Continue the transnational cross-sector Cooperation (including policy level like EU Strategy for the Danube River)
- Danube-wide GIS-inventory of powerlines (high, medium AND low voltage)
- The big goal: best practice implementation in EACH Danube country for high-voltage powerlines (as model for large rivers in Europe)
- partners for Danube-wide project proposal (optional: LIFE+ 2019 – 2024)
- Joint communication and dissemination (public, stakeholder, policy)
- Joint Conference (Tulcea, Danube Delta/spring 2019)

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Thank you for the fruitful cooperation!