



# Project LIFE Safe Grid for Burgas

Elektrorazpredelenie Yug EAD /EP Yug/  
Bulgarian Society for the Protection of Birds

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Project "LIFE20 NAT / BG / 001234 LIFE Safe Grid for Burgas"  
is funded by the LIFE program of the EC





Imperial eagle, picture: Andras Kovacs, RaptorImages



## Risks

- Birds use medium-voltage overhead power lines to sit and rest
- When spinning their wings, the birds can touch simultaneously a live conductor and a grounded part of the pole

## EVN Bulgaria's concept for medium voltage grid (20 kV):

- When building a new grid, underground cable lines are designed (cable installation)
- In special occasions when replacing overhead lines are used insulated conductors



Photo: Internet

- PROJECT LOCATION: Burgas region, Bulgaria
- BUDGET INFO:
  - Total amount: 5 492 571€
  - % EC Co-funding: 75%
- DURATION:
  - Start: 15/09/2021 - End: 30/09/2026
- PROJECT'S IMPLEMENTORS:
  - Coordinating Beneficiary: Elektrorazpredelenie Yug EAD /EP Yug/
  - Associated Beneficiary:
    - Bulgarian Society for the Protection of Birds

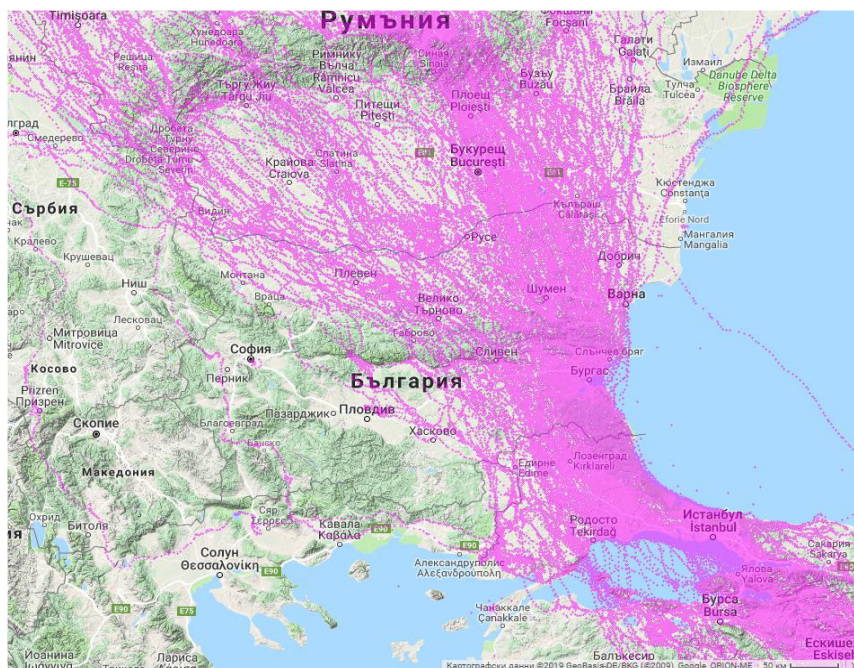


- Main objectives of the project:
  - To reduce unnatural mortality among wild birds caused by electrical infrastructure
  
- Solution(s) proposed
  - Replacing overhead power lines with underground cables - the most effective solution in case of collision and electrocution for wild birds
  - Securing overhead power lines with protective insulation caps and diverters
  - Cooperation between project partners to identify the most critical areas and implement the best measures



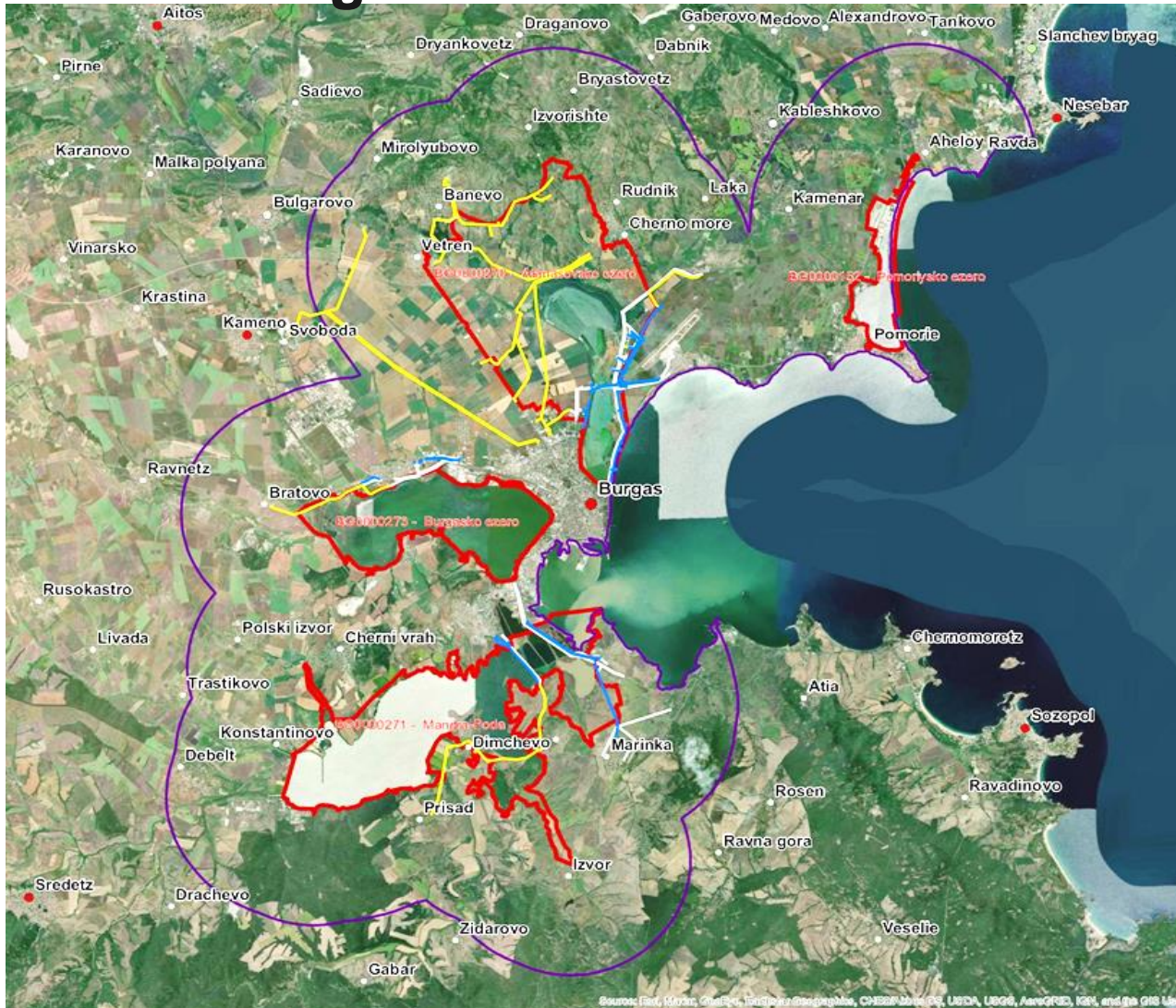


# Via Pontica - migration route of the birds



- Via Pontica, the second most important migration route of wild birds in Europe
- The route connects Europe and Africa and passes through more than 20 countries (from the Netherlands to South Africa)
- Over 550 000 birds are passing during the spring migration from Africa to Europe
- In autumn migration, more than 880 000 birds fly from Europe to Africa
- Over 78% of the entire world population of the white stork passes through this migration route
- In the entire Bulgarian section of Via Pontica the largest gathering of birds is monitored in the area of Burgas Lakes

# Birds and grid: a major challenge in the migratory and lake areas around Burgas



- NATURA 2000 zones:**
- Atanasovsko Lake
  - Burgas Lake
  - Mandra – Poda
  - Pomorie Lake





52 km of overhead power lines will be installed underground



200 km of overhead power lines will be secured by protective insulations



Over 2 000 electrical diverters will be mounted



Surveys for protected bird species

# EXPECTED IMPACTS



- The project will save between 15,000 and 150,000 birds every year in the project area
- 58 km of overhead power lines dismantled and replaced with around 52 km underground cables
- 200 km overhead power lines retrofitted by insulation of
  - 1,600 pin type pylons and
  - 400 metal frame type pylons
- 75 km of aerial conductors in priority areas marked with 2,000 bird diverters
  - bird-collision risks reduced by up to 90%



# Significance of the project area for bird conservation

- 330 bird species recorded in the project area
- 117 species are included in Annex I of the Bird Directive
- 126 species are listed in the Red Data Book for Bulgaria
- 127 species are of European conservation concern
- 500,000 water birds recorded per annum
- Bottle-neck site along Via Pontica migration route with 240,000 storks and 60,000 raptors recorded every autumn
- Biggest concentrations of migrating White and Dalmatian Pelicans and Red-footed Falcon in Europe and second in terms of concentrating Lesser Spotted Eagles



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**Thank you for your attention!**

