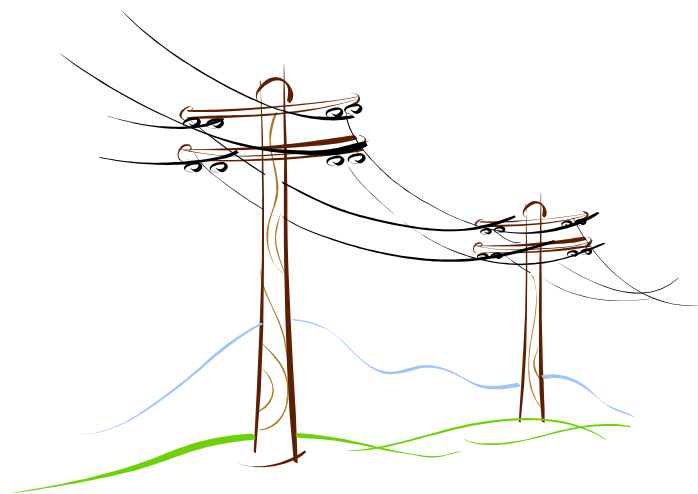




# MODERNIZATION AND RECONSTRUCTION OF ELECTRICITY DISTRIBUTION GRID FOR BIRDS' PROTECTION

*LIFE16/NAT/BG/000612*



28 – 29 June  
Vilnius, Lithuania

Krum Gledzharski  
Mariya Georgieva

# CEZ IS AN INTERNATIONAL UTILITY COMPANY WITH A STABLE MARKET POSITION



## **CEZ in Poland**

- 100% share in Scania
- 100% share in Elho

**CEZ in the Slovak Republic**  
trade in electricity

**CEZ in Czech Republic**

## **CEZ in Romania**

100% share in CEZ Distribution,  
CEZ Vanzare  
Wind farm Fetanelle and Coellac  
Hydroelectric power plant Resita

**CEZ in Hungary**  
trade in electricity

## **CEZ Bulgaria**

67% share in CEZ Distribution  
and CEZ Electro  
100% share in Oreshets  
(solar power system)

## **CEZ in Turkey**

44.31% share in SEATSH  
37.36% share in Akersay

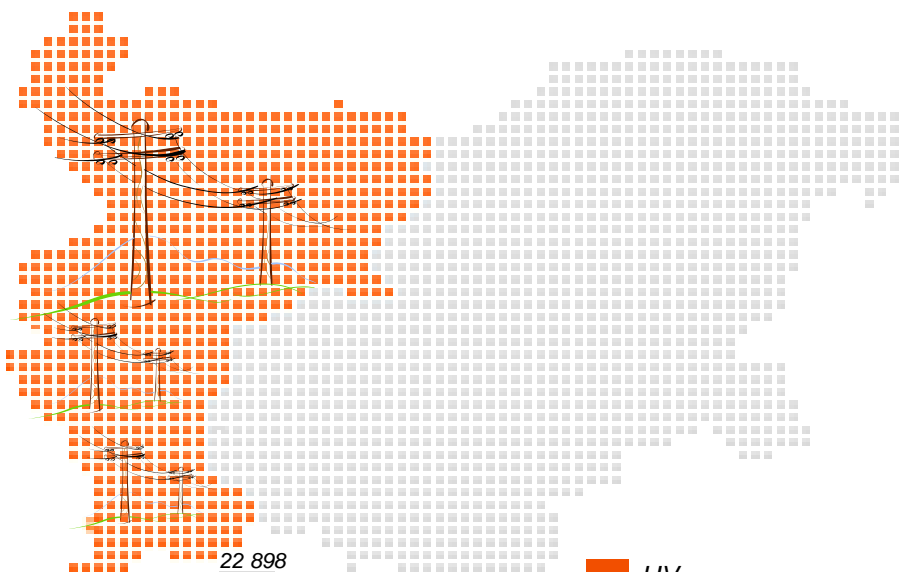
# CEZ DISTRIBUTION BULGARIA AD



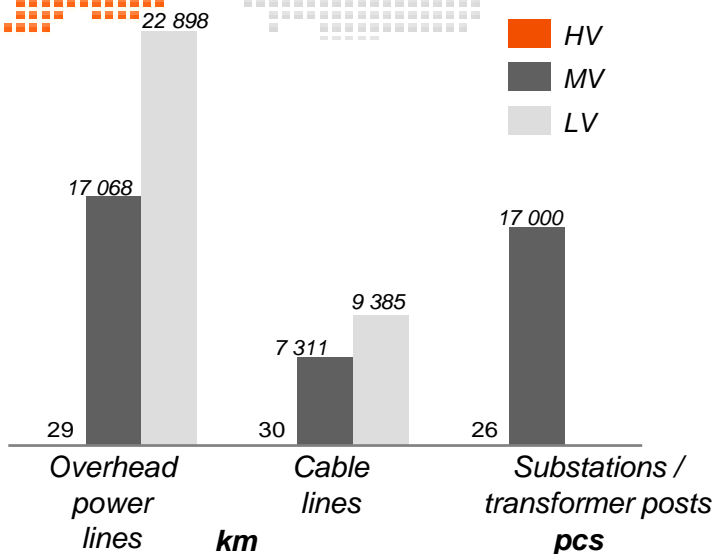
- ❑ CEZ Distribution is a joint-stock company with shares distributed as follows: 67% owned by the main shareholder of ČEZ, as, Czech Republic and 33% of the shares traded on the Bulgarian Stock Exchange
- ❑ The company's activities are:
  - distribution of electricity on the territory of 10 districts in Western Bulgaria including the capital Sofia;
  - operation and management of the electricity distribution network;
  - construction of new installations for distribution and measurement of electrical energy and maintenance of existing facilities and facilities
- ❑ Three-stage control system:
  - General meeting of the shareholders,
  - Supervisory Board
  - Management Board



# CEZ DISTRIBUTION BULGARIA IN NUMBERS



- Territory 40 000 km<sup>2</sup>**
- Density 76 people / km<sup>2</sup>**
- Population 2 980 000**
- Settlements 1 567**
- Network length ~ 55 000 km**



No	Equipment	Measure	Till now
1	Substations	pcs	26
2	110 kV overhead lines	km	29
3	110 kV cable lines	km	33
4	Overhead power lines MV	km	17 068
5	Cable lines MV	km	7 311
6	Overhead power lines LV	km	22 898
7	Cable lines LV	km	9 385
8	Transformer posts	pcs	17 000
9	Transformers HV / MV	pcs	49
10	Transformers MV/0.4	pcs	19 200
11	Electrometers	pcs	2 108 145

# BIODIVERSITY CONSERVATION POLICY



*620 secured nests*

**50 000 € invested  
since 2016**

*502 secured poles*



# BIRD PROTECTION MEASURES



## Technical solutions



Insolation caps and extensions

Wing spacers

Bird diverting spikes

Bird perches

Bird diverters

Nest platforms

# BIRD PROTECTION MEASURES



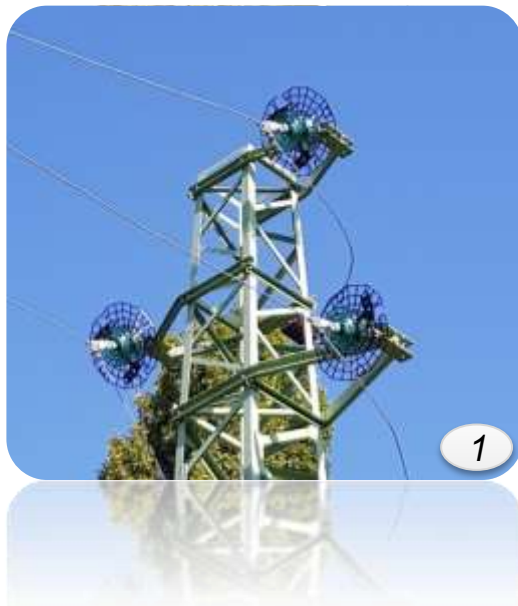
- ❑ Insulation caps and extensions



# BIRD PROTECTION MEASURES



- Wing spacers (1) and bird diverting spikes (2)





# BIRD PROTECTION MEASURES



## □ Bird perches



# BIRD PROTECTION MEASURES



## □ Bird diverters



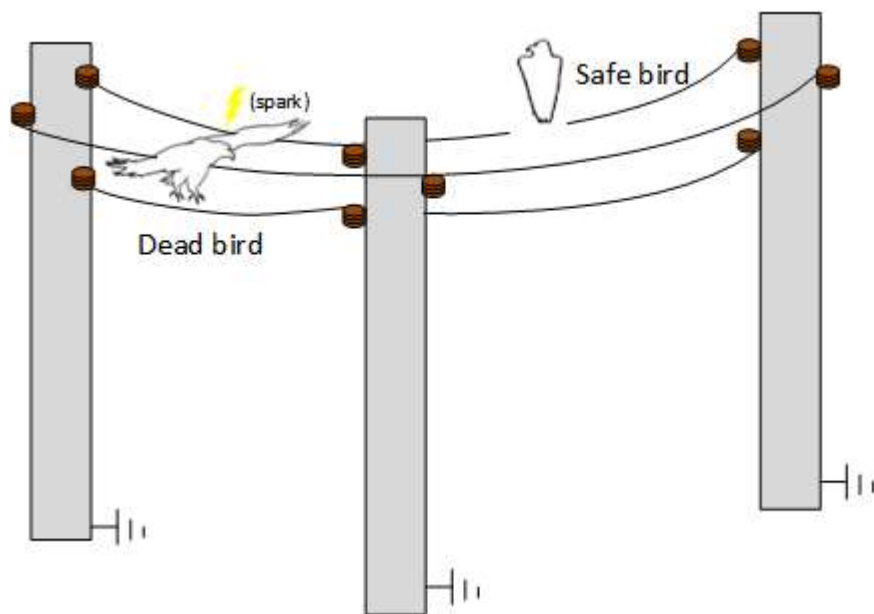
# BIRD PROTECTION MEASURES



## Nest platforms



# BIRD-FRIENDLY PROTOTYPE POLES



- ❑ Development of standards for bird-friendly power lines
- ❑ Development, production and testing of bird-friendly prototype pylons:
  - ❑ Lattice-type steel pylons - 20 pcs
  - ❑ Concrete poles - 20 pcs



## ***„LIFE BIRDS ON POWER LINES“***

*LIFE16/NAT/BG/000612*



# PROJECT TIMEFRAME AND BUDGET



Start: **01.10.2017**

End: **31.12.2022**

**Duration: 63 months**



Total budget: **2,647,481 €**

Co-financing from EU: **1,832,933 €**

(= 74.95% of total eligible budget)



# PROJECT GOALS

## LIFE16NAT/BG/000612



### MAIN GOALS

- Conservation of the populations of endangered bird species by reducing the mortality caused by electric shocks and collision with overhead power lines
- Secure the White Stork' nests in Western Bulgaria
- Reducing the conflict wild birds - power lines and providing more reliable power supply



# HOW TO FIND US?



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