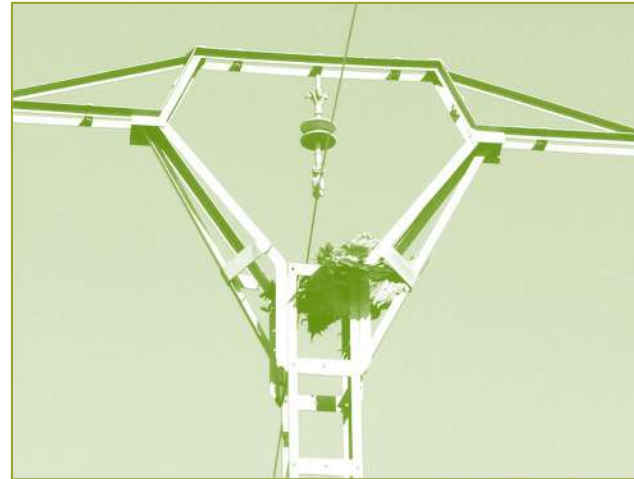
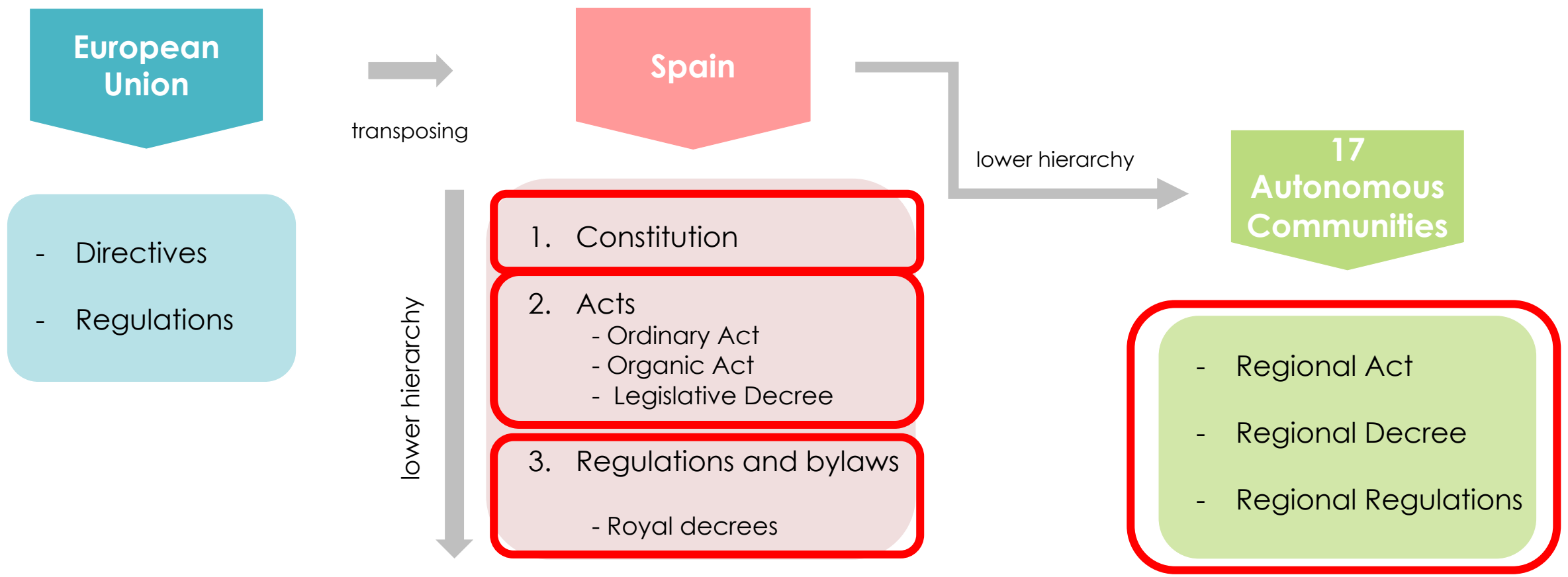


Powerlines and birds. Legislative framework in Spain

M. Paula Delgado



1. GENERAL STRUCTURE OF LEGAL SYSTEM IN SPAIN



2. SPANISH LEGISLATION AFFECTING POWERLINES AND AVIFAUNA



Energy sector legislation

- Act 24/2013, on the Electricity Sector
- Royal Decree 1955/2000 Electrical energy regulations
- Act 21/1992, on Industry
- Royal Decree 223/2008 Technical and safety guarantees
- Royal Decree 542/2020 Technical and safety guarantees



Environmental legislation

- Act 42/2007 on Natural heritage and biodiversity
- Act 26/2007 on Environmental Liability
- Royal Decree 1432/2008 Powerlines and birds

2. SPANISH LEGISLATION AFFECTING POWERLINES AND AVIFAUNA

ENERGY SECTOR LEGISLATION: Electricity sector



Act 24/2013, of the Electricity Sector (before Act 54/1997)

Its purpose is "to establish the regulation of the electricity sector, guaranteeing electricity supply with the necessary levels of quality and at the lowest possible cost, ensuring the economic and financial sustainability of the system and allowing a level of effective competition in the electricity sector, all within of the principles of environmental protection of a modern society"

2. SPANISH LEGISLATION AFFECTING POWERLINES AND AVIFAUNA

ENERGY SECTOR LEGISLATION: Electricity sector



Act 24/2013, of the Electricity Sector

Royal Decree 1955/2000, of 1 December,

by which the activities of transport, distribution, commercialization, supply and authorization procedures of electrical energy installations are regulated

2. SPANISH LEGISLATION AFFECTING POWERLINES AND AVIFAUNA

ENERGY SECTOR LEGISLATION: Electricity sector



Act 24/2013, of the Electricity Sector

Royal Decree 1955/2000, of 1 December,

11th Additional Provision:

Protection of avifauna: technical measures to avoid collision and electrocution of birds with power lines will be established

2. SPANISH LEGISLATION AFFECTING POWERLINES AND AVIFAUNA

ENERGY SECTOR LEGISLATION: Industry and industrial security



Act 21/1992, on 16 July, on **Industry**

Its purpose is to "establish the bases for the regulation of the industrial sector". The activities of generation, distribution and supply of energy and energy products shall be governed by this law.

- **Article 31:** Classification of the infractions: very serious infringement "the fraudulent breach on the requirements, obligations or prohibitions established in the industrial regulations whenever they cause serious risk or damage to people, flora, fauna, things or the environment"

2. SPANISH LEGISLATION AFFECTING POWERLINES AND AVIFAUNA

ENERGY SECTOR LEGISLATION: Industry and industrial security



Royal Decree 337/2014, of 9 May,

approving the Regulations on technical conditions and safety guarantees in high-voltage electrical installations and their **Complementary Technical Instruction ITC-LAT 01-09**

ITC-LAT 05 Verification and inspections

2. SPANISH LEGISLATION AFFECTING POWERLINES AND AVIFAUNA

ENERGY SECTOR LEGISLATION: Industry and industrial security



Royal Decree 337/2014, of 9 May,

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ITC-LAT 05 Verification and inspections

Royal Decree 542/2020, of 26 May,

By which different provisions on quality and industrial safety are modified and repealed.

2. SPANISH LEGISLATION AFFECTING POWERLINES AND AVIFAUNA

ENERGY SECTOR LEGISLATION: Industry and industrial security



Royal Decree 337/2014, of 9 May,

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ITC-LAT 05 Verification and inspections

Royal Decree 542/2020, of 26 May,

By which different provisions on quality and industrial safety are modified and repealed.

“Verifications and inspections” should include technical prescriptions of powerlines for the conservation of birds

2. SPANISH LEGISLATION AFFECTING POWERLINES AND AVIFAUNA



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2. SPANISH LEGISLATION AFFECTING POWERLINES AND AVIFAUNA

ENVIRONMENTAL LEGISLATION



Act 42/2007, on Natural Heritage and Biodiversity: Birds Directive transposition

2. SPANISH LEGISLATION AFFECTING POWERLINES AND AVIFAUNA

ENVIRONMENTAL LEGISLATION



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2. SPANISH LEGISLATION AFFECTING POWERLINES AND AVIFAUNA

ENVIRONMENTAL LEGISLATION



Act 42/2007, on Natural Heritage and Biodiversity: Birds Directive transposition

Royal Decree 1432/2008 of 29 August: Establishing technical measures for the protection of birds against collision and electrocution in high voltages powerlines



- **Royal Decree 1955/2000**

Additional Provision: technical measures to avoid collision and electrocution of birds with power lines will be established

- **Act 42/2007 Natural heritage and biodiversity**

Measures to ensure the conservation of wildlife species

2. SPANISH LEGISLATION AFFECTING POWERLINES AND AVIFAUNA



ENVIRONMENTAL LEGISLATION

Royal Decree 1432/2008 of 29 August: Establishing technical measures for the protection of birds against collision and electrocution in high voltages powerlines

Objective: minimize the risks of electrocution and collision

- Apply to high voltage powerlines (30kV – 66Kv)
- Apply to **all new powelines built** and their extensions or modifications
- Apply to **powerlines already built within the Protection Zones for electrocution:** Areas where protection measures against collision and electrocution must be applied, to prioritize investment efforts.

PROTECTION ZONES

Current situation of approval of Protection Zones



2. SPANISH LEGISLATION AFFECTING POWERLINES AND AVIFAUNA



ENVIRONMENTAL LEGISLATION

Royal Decree 1432/2008 of 29 August: Establishing technical measures for the protection of birds against collision and electrocution in high voltages powerlines

Objective: minimize the risks of electrocution and collision

Technical standards of industrial safety in powerlines aimed at the protection of birds

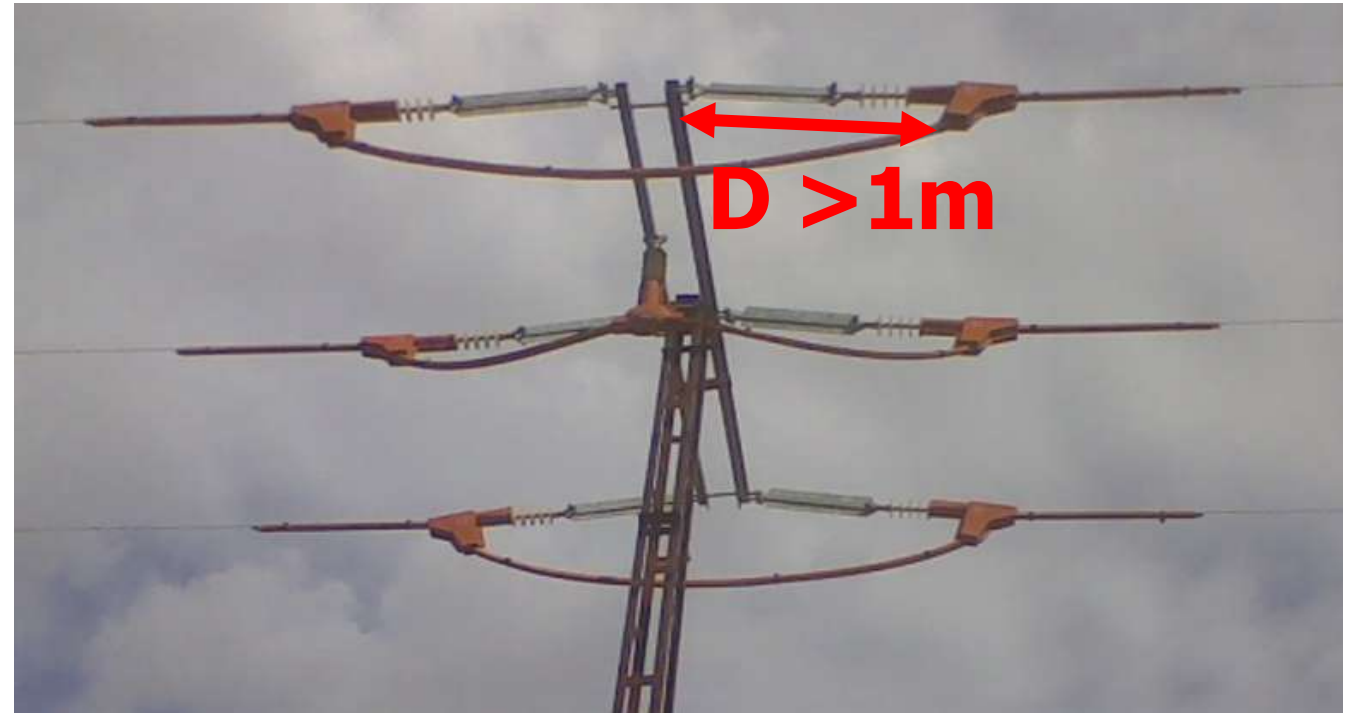


Establishes **design measures of the pylons** to avoid electrocution, so that the different parts of the pylon and wires **guarantee minimum safety distances “D”**

2. SPANISH LEGISLATION AFFECTING POWERLINES AND AVIFAUNA

ENVIRONMENTAL LEGISLATION

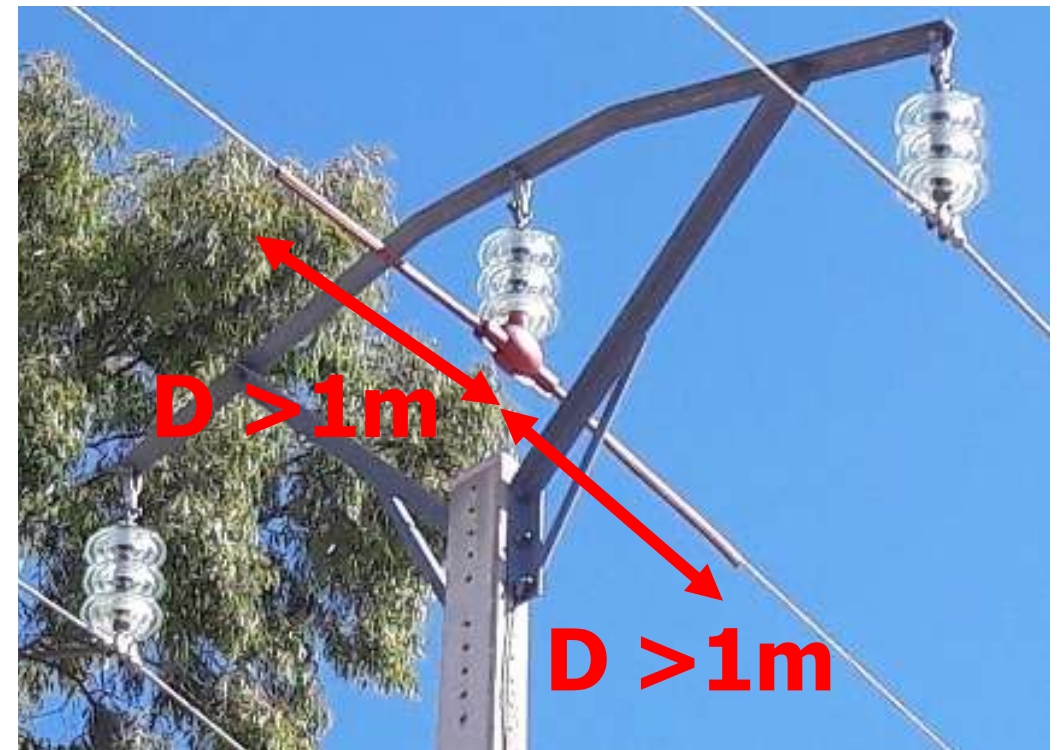
Royal Decree 1432/2008 of 29 August: ELECTROCUTION



2. SPANISH LEGISLATION AFFECTING POWERLINES AND AVIFAUNA

ENVIRONMENTAL LEGISLATION

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Royal Decree 1432/2008 of 29 August: ELECTROCUTION



Elimination of electrified parts above the crossbar of the pylon



2. SPANISH LEGISLATION AFFECTING POWERLINES AND AVIFAUNA

ENVIRONMENTAL LEGISLATION

Royal Decree 1432/2008 of 29 August: ELECTROCUTION



RETROFITTING



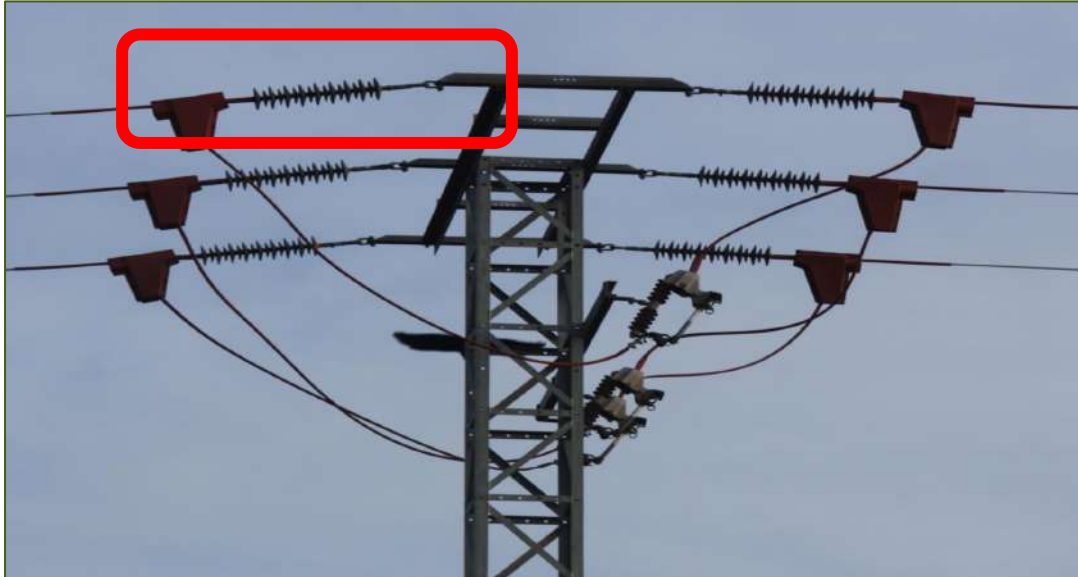
2. SPANISH LEGISLATION AFFECTING POWERLINES AND AVIFAUNA

ENVIRONMENTAL LEGISLATION

Royal Decree 1432/2008 of 29 August: ELECTROCUTION



RETROFITTING



2. SPANISH LEGISLATION AFFECTING POWERLINES AND AVIFAUNA

ENVIRONMENTAL LEGISLATION

Royal Decree 1432/2008 of 29 August: COLLISION (VOLUNTARY)



2. SPANISH LEGISLATION AFFECTING POWERLINES AND AVIFAUNA



ENVIRONMENTAL LEGISLATION

Act 42/2007, on Natural Heritage and Biodiversity: Birds Directive transposition

Royal Decree 1432/2008 of 29 August: Establishing technical measures for the protection of birds against collision and electrocution in high voltages powerlines

Act 26/2007, on Environmental Liability: Directive 2004/35/EC transposition

- Obligation to prevent, avoid and remedying damage to the environment
- The owners of powerlines, as responsible, have to know and notify the environmental authorities if damage (electrocution) has occurred or **may occur as an imminent threat for wildlife.**
- There is an obligation to repair/remedy, using the best available technologies

3. IN SUMMARY

Royal Decree 1432/2008 of 29 August: Establishing technical measures for the protection of birds against collision and electrocution in high voltages powerlines



Technical standards of industrial safety in powerlines aimed at the protection of birds

Limitations:

- Sanctioning regime: vague and does not refer to Industry Act
- Applies to powerlines already built within the Protection Zones: Insufficient
- Links the modification of old power lines to the existence of public funding, slowing down implementation .
- Addresses the issue of collision insufficiently

3. IN SUMMARY

Power lines retrofitting:

From 2008

- ➔ Autonomous Communities
- ➔ Electricity companies
- ➔ Others (i.e. NGO`s)



Handicap:

Correction rate is slow

Despite this:

There is a predisposition to change the dynamic

3. IN SUMMARY



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3. IN SUMMARY

Power lines retrofitting: From 2008...

To 2017

- ➔ Public administration
- ➔ Public awareness
- ➔ Legal sector



Increased pressure

- **Act** 42/2007 on Natural heritage and biodiversity
- **Act** 26/2007 on Environmental Liability



- Punishable infraction and obligation to bear costs
- Not restricted zone to protected areas
- Best available technologies → Royal Decree 1432/2008



3. IN SUMMARY

Power lines retrofitting: From 2008...

To 2017

- ➔ Public administration
- ➔ Public awareness
- ➔ Legal sector



Increased pressure

- **Act** 42/2007 on Natural heritage and biodiversity
- **Act** 26/2007 on Environmental Liability



COURT SENTENCES EXAMPLES:

- Sentence 146/2017: 4 griffon vultures
- Sentence 164/2017: 4 White storks
- Sentence 250/2018: 1 Bonelli's Eagle
- Sentence 258/2018: 2 Imperial eagle



Thank you

<https://www.miteco.gob.es/es/biodiversidad/temas/conservacion-de-especies/especies-silvestres/tendidos/ce-silvestres-tendidos-RD.aspx>



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