



# PLAN FOR ERADICATING BIRD ELECTROCUTION AND COLLISION WITH POWER LINES IN THE REGION OF MURCIA

## INDEX

<b>1. BACKGROUND, JUSTIFICATION AND OBJECTIVES.....</b>	<b>3</b>
<b>2. AGENDAS AND ACTIONS .....</b>	<b>5</b>
<b>Programme for identification of facilities with high risk of bird electrocution (I.A.P.A.).....</b>	<b>5</b>
Action 1. Removal of dead bodies by following telephone notification.....	5
Action 2. Inspection of electric power lines where dead birds were reported in order to find new black spots.....	5
Action 3. Inspection of new electric power lines in order to find potential black spots.....	5
Action 4. Collecting Electrocution and collision reports from different resources and updating of Black Spots Database .....	6
<b>Adaptation and correction programme for electric facilities .....</b>	<b>6</b>
Action 5. Writing of Technical Reports for I.A.P.A. declaration .....	6
Action 6. Creation of I.A.P.A. database .....	6
Action 8. I.A.P.A. declaration .....	7
Action 9. Correction of I.A.P.A., property of power distribution companies or power transportation companies. ....	7
Action 10. Correction of I.A.P.A. property of private owners. ....	7
Action 11. Adaptation of electric power lines identified under Article 5 of R.D. 1432/2008 .....	8
Action 12. Updating Correction Project Database.....	8
<b>Cooperation and Coordination Programme .....</b>	<b>8</b>
Action 13. Cooperation agreements with power distribution companies and power transportation companies to correct and adapt I.A.P.A. and electric power lines according to the R.D. 1432/2008 .....	8
Action 14. Cooperation agreements with private owners of to correct and adapt I.A.P.A. and electric power lines according to the R.D. 1432/2008.....	9
Action 15. Cooperation agreements with other agencies for funding and implementing actions. ....	9
Action 16. Meetings between the Environment Agency and the Energy Agency to adapt electric power lines according to Article 5 of RD 1432/2008.....	9
Action 17. Promotion and coordination of corrections carried out by other agencies .....	9
Action 18. Creation and updating of a profile on a social networking site.....	9
<b>Evaluation Programme for assessment of effectiveness of measures against electrocution and collision.....</b>	<b>10</b>
Action 19: Checking of I.A.P.A. and other corrected lines.....	10



Action 20. Report of effectiveness and durability of the measures applied .....	10
Action 21. Supervising of the monitoring carried out by owners of electric power lines .....	10
Action 22. Monitoring and inspection of electric power lines under EIA. ....	10
<b>Programme for new electric facilities .....</b>	<b>11</b>
Action 23. Authorization for construction of new electric power lines Description: Writing of <i>Dirección General de Medio Ambiente's</i> reports, as it is established in Article 6.2 of D. and processing of environmental authorization.....	11
<b>Training Programme .....</b>	<b>11</b>
Action 24. Course for designing safe electric power lines for birds and correcting existing electric power lines .....	11
Action 25. Course for establishing administrative procedure for the authorization of electric power lines in the environment .....	11
<b>Informative and Exchange Programme .....</b>	<b>11</b>
Action 26. Recycling Project WEB LIFE06NAT/E/000214.....	11
Action 27. Scientific Articles.....	11
Action 28. Popular science magazine articles .....	12
Action 29. Reports in local media.....	12
<b>Research, Development and Innovation Programme .....</b>	<b>12</b>
Action 30. Research grants .....	12
Action 31. Creating a "Bird Safe" logo .....	13
Action 32. Environmental responsibility award .....	13
<b>3. MEMBERS AND FUNDING SOURCES .....</b>	<b>14</b>
3.1. Dirección General de Medio Ambiente (DGMA).....	14
3.2. Dirección General de Industria, Energía y Minas (DGIEM).....	14
3.3. Ministerio de Medio Ambiente y Medio Rural y Marino.....	14
3.4. Dirección General de Universidades y Política Científica .....	14
3.5. Instituto de Fomento de la Región de Murcia.....	14
3.6. Iberdrola Distribución S. A. U. ....	15
3.7. Other distributors.....	15
3.8. Red Eléctrica de España .....	15
3.9. Public agencies .....	15
3.10. Private owners .....	15
3.11. European Commission .....	16
3.12. Manufacturers of insulating materials and electrical equipment.....	16
3.13. Project offices and electrical installation companies.....	16
3.14. Banks and Savings Banks .....	16
3.15 CROEM .....	17
<b>4. CALENDAR.....</b>	<b>18</b>
<b>5. ANNEXES .....</b>	<b>19</b>



## PLAN FOR ERADICATING BIRD ELECTROCUTION FROM AND COLLISION WITH FROM POWER LINES IN MURCIA REGION

### 1. BACKGROUND, JUSTIFICATION AND OBJECTIVES

The development of a Conservation Plan after finishing the LIFE Project is part of the commitments made by the “*Comunidad Autónoma de la Región of Murcia*”, as result of being beneficiary of European funds from the LIFE Project Programme LIFE06NAT/E/000214 “*Correcting Hazardous power lines Special Protection Areas for Birds of the Region of Murcia (2007-2011)*”.

Among the main achievements of the LIFE Project, special mention should be given to the correction of 726 electric poles and the technical support given to different owners for the correction of another 298 electric poles in 5 SPA (Special Protection Area) of Murcia Region. Some of them were responsible for the electrocution of at least 180 birds: 7 Bonelli’s eagle, 7 Golden eagles, 9 Griffon vulture, 8 Goshawks, 45 Eagle Owl, 7 Short-toed eagle, etc. (Protected and / or endangered species), among others.

The project estimated a minimum mortality of 47 birds per year in 10 selected areas (300 poles, 32 km), half of them belonging to species included in Annex I of the “*Directiva Aves*” or threaten in Murcia Region. After a short-term, this initial mortality rate was reduced up to 70% for all birds, 75% for protected birds, 87% for raptors and 100% for both threatened birds of prey and species listed in ANNEX I of “*Directiva Aves*”, confirming the high effectiveness of the corrections made.

In the same line of work, on 29th August 2008, approval was given to the Royal Decree number 1432 of Birds protection against collision and electrocution resulting from high voltage power lines, establishing the technical requirements to avoid these sorts of accidents from new electric power lines or existing ones located in birds protection areas.

Finally, the draft decree called: “*Additional rules to be applied in high voltage overhead power installations to protect birds and mitigate environmental impacts*”, whose approval was another commitment in the LIFE Project, includes standards of bird protection to be applied throughout Murcia Region.

The general objective of this Conservation Plan is to implement an effective continuation of the actions initiated by the LIFE Project. Among others, the plan will establish the actions needed to implement the Royal Decree (hereafter “R.D.”) and Decree (hereafter “D.”).

In particular, it will develop three specific objectives:

1. Detailing the different actions that will be carried out: eventually 32 actions split into 8 action programmes
2. Establishing a work schedule for 5 years
3. Identifying stakeholders and potential funding sources



**Región de Murcia**  
Consejería de Presidencia  
Dirección General de Medio Ambiente



LIFE06NAT/E/000214



The Conservation Plan mentioned has been translated into Spanish and English, and it will be submitted attached to the final LIFE project report.



## 2. AGENDAS AND ACTIONS

### **Programme for identification of facilities with high risk of bird electrocution (I.A.P.A.)**

According to Article 7 of D., “When technical or scientific data exist, particularly bird mortality, the Dirección General de Medio Ambiente will start the procedure for declaring High Bird Electrocution Risk Facility. This declaration will apply to all or part of an installation when species included in the List of Wildlife Special Protection Regime under Article 53 of Law 42/2007 are affected”.

#### Action 1. Removal of dead bodies by following telephone notification

Description: Removal of dead bodies which have been victims of accidents caused by electric power lines, by following notifying by owners, maintenance companies or others, and writing of reports. This would be done by environmental agents according to Article 10.3 of D.

#### Action 2. Inspection of electric power lines where dead birds were reported in order to find new black spots.

Description: Often, both electrocutions and collisions are concentrated in some sections of different length along the electric power lines. The presence of a body could give hints of the existence of more bodies along the line, so in some cases, it would be more effective the correction of a complete area rather than just one or two isolated poles. To determine what to do, some inspection of the area should be carried out by personnel specifically designated and trained for it, who would be in charge of collecting any further information needed to write Technical Reports that would justify the correction of these poles (Article 7. 2. of D.), such as: photos, UTM coordinates, owners' telephone number, and so on.

#### Action 3. Inspection of new electric power lines in order to find potential black spots.

Description: This will complete mentioned actions for the designation of I.A.P.A. and it will consist of checking electric power lines where correction is supposed to be needed although there are no previous bodies found. These lines are:

- a) Electric power lines in areas with endangered species, dangerous poles, or other biological criteria, off Protection Zones (Annex II D) that could have a significant effect on birds, on public safety or on the power supply.
- b) Electric power lines in Protection Zones where a criterion for prioritizing and adaptation is needed (These criteria could be: dangerously designed poles, bird density, presence of threatened birds, and so on).



#### Action 4. Collecting Electrocutation and collision reports from different resources and updating of Black Spots Database

Description: The records of bird electrocution and collision with overhead electric power lines come from many sources: environmental agents, SEPRONA, Wildlife Recovery Centre "El Valle" (CRFS), individuals, naturalists, and so on. This action consists in collecting all the documents from the different sources, verifying and completing the information and removing duplicated information.

This information will be the starting point for identifying, prioritizing and declaring an I.A.P.A. and it will be included in the Black Spots Database. This database, with a mainly biological focus, would be uploaded with new data of accidents so that the inventory would offer the possibility of tracking and creating statistics of the casuistry of bird electrocution and bird collision.

#### **Adaptation and correction programme for electric facilities**

##### Action 5. Writing of Technical Reports for I.A.P.A. declaration

Description: According to Article 7 of the D., the declaration of I.A.P.A. has to be made after writing a technical report with the following minimum contents:

- a. Information about the location of the section of high voltage overhead line.
- b. Ownership of the facility.
- c. Electric poles and wiring characteristics.
- d. Mortality data detected. Hazard assessment.
- e. Corrective measures to be taken to minimize the impact on birds.

##### Action 6. Creation of I.A.P.A. database

Description: Creation of a database, with a mainly administrative focus, that will register information related to the declaration of I.A.P.A process (Article 7 of the D.). This information would be: Ownership of the facility, I.A.P.A. number, date of the communication to the owner, claims received, the advertisement in the BORM, publication of the Director's Order, and so on.

##### Action 7. Inventory of electric power lines responsible for significant confirmed collision mortality

Description: In the specific case of accidents by collision, the "*Disposición Transitoria Unica*" of the R.D., called "*Adaptación de líneas eléctricas*", will oblige to make an inventory of overhead electric power lines that are responsible for significant confirmed collision mortality. Especially, birds included in the list of wild bird species for special protection rules ("*Listado de Especies Silvestres en Régimen de Protección Especial*"),



particularly those included in the Spanish Catalogue of Endangered Species (“*Catálogo Español de Especies Amenazadas*”), in addition to those included in the Regional Catalogue of Threatened Species (“*Catálogo Regional de Especies Amenazadas*”) and other protected birds.

The action will consist in the creation of this inventory. These facilities will be included in the I.A.P.A. to be adapted as the R. D. establishes.

#### Action 8. I.A.P.A. declaration

Description: Administrative procedure for declaring an I.A.P.A.. According to Article 7 of the D. the ownership will receive a copy of the Technical Report. Then, the information of the ownership and the location of the electric power lines affected would be published in the BORM (Official Publication of Murcia Region) for 20 days, in order to give enough time to present any claim or allegation that could be considered appropriate. Finally, if it is applicable, the facility would be included in the I.A.P.A. by order of the Director with responsibility for environment.

Action 9. Correction of I.A.P.A., property of power distribution companies or power transportation companies.

Description: The correction of the I.A.P.A. will be carried out by the ownerships: Iberdrola Distribución S. A. U., Red Eléctrica de España, or any other owner. The “*Dirección General de Medio Ambiente*” (DGMA) will provide technical advice, however the required funds for corrections should be a combination from DGMA’s funds and ownerships’ funds. The conditions of this cooperation would be established in a cooperation agreement.

Action 10. Correction of I.A.P.A. property of private owners.

Description: This action will include the creation of technical projects, safety and health projects and any other legal obligations needed to carry out the corrections. The “*Consejería de Presidencia*” will carry out the correction work for all I.A.P.A declared facilities.

For this purpose, a cooperation agreement will be signed between the owner and the regional administration. In the document, it will be clearly mentioned that the former will give permission to the “*Consejería de Presidencia*” and the latter will assume all the expenses of the correction. The owner could also ask for a whole correction of their electric power line instead of individual correction, when they participate economically in the investment. In any case, all these aspects would be included in the cooperation agreement.



Action 11. Adaptation of electric power lines identified under Article 5 of R.D. 1432/2008

Description: All overhead electric power lines located in the Protection Areas included in Article 4 of the R. D. must be adapted compulsorily against electrocution regardless or not the existence of bird mortality data. However, the application of measures against collision would be voluntary.

The identification of these lines would be carried out by the “*Dirección General de Industria, Energía y Minas*” (Art. 4 of D.), although the writing of the technical project would be responsibility of the ownership of the facility (*Disposición Transitoria Única*. Point 2 of the R. D).

Funding will be given for the execution of adaptation works of these lines. Financial aid will be stipulated by agreement with the owner, where among other things, the characteristics of the project, the amount contributed by both parties (The owner will be able to contribute or not with a portion of the amount) expected date of execution, and other details will be provided, plus any applicable law.

Funding is expected to come mainly from the “*Ministerio de Medio Ambiente y Medio Rural y Marino*”, as it is mentioned in the “*Disposición Adicional*” of R. D., although other sources of investment could be sought among the ownership of the facilities.

Action 12. Updating Correction Project Database

Description: The correction project database will register every single feature of the correction made through the actions 9 and 10. This database not only makes it possible to analyze and follow every correction but also it would become an excellent source of information for statistical work. The information registered would be: ownership, source of funding, investment, company involved, corrected sections in electric power lines, completion date, location, I.A.P.A. number, and so on.

### **Cooperation and Coordination Programme**

According to point 2 in Article 9 of the D., the “*Comunidad Autónoma de la Región de Murcia*” could approve cooperation agreements with the ownerships of the electric power lines for establishing the mechanisms of technical and economic cooperation in order to carry out the corrections.

Action 13. Cooperation agreements with power distribution companies and power transportation companies to correct and adapt I.A.P.A. and electric power lines according to the R.D. 1432/2008





Description: Writing and processing of agreements with major companies involved in distribution and transmission of electricity in Murcia Region (Distribution SAU Iberdrola Distribución S. A. U., Red Eléctrica de España, EON, Eléctrica Corvera S., etc.) for the implementation of actions 9 and 11. These actions may be included within the agreements to improve quality of electricity service under the electricity sector regulation. Therefore, the aim is that these companies could provide some of the funds needed to carry out these actions.

Action 14. Cooperation agreements with private owners of to correct and adapt I.A.P.A. and electric power lines according to the R.D. 1432/2008

Description: Writing and processing of agreements with private ownerships for the implementation of actions 9 and 10. They could contribute or not with funds for the executions of the actions.

Action 15. Cooperation agreements with other agencies for funding and implementing actions.

Description: Writing and processing of agreements with other agencies involved in this Conservation Plan. For the implementation of certain actions, it is expected to find external funds and cooperation with other organizations, such as savings banks, “*Consejería de Universidades, Empresa e Innovación*”, manufacturers, etc. In each case the most appropriate form of cooperation would be applied.

Action 16. Meetings between the Environment Agency and the Energy Agency to adapt electric power lines according to Article 5 of RD 1432/2008

Description: Semi-annual meetings between the “*Dirección General de Medio Ambiente*” and the “*Dirección General de Industria, Energía y Minas*” for organizing the adaptation of the electric power lines identified (Article 5 of R.D.).

Action 17. Promotion and coordination of corrections carried out by other agencies

Description: In recent years, some public agencies have been correcting electric poles in order to protect birds against electrocution. From now on, the “*Consejería de Presidencia*” will notify the public agencies of the location of the dead bodies found on their own properties, so that they could correct these electric poles, voluntarily if they are interested. In that case, the “*Dirección General de Medio Ambiente*” will offer technical advice.

Action 18. Creation and updating of a profile on a social networking site

Description: Nowadays, one of the most successful ways of communication for sharing



ideas, opinions and information are social networking sites; therefore, a discussion thread will be created and regularly updated to talk about the Conservation Plan throughout the process. The idea would be to offer a spot, where all stakeholders were able to participate in an interactive and dynamic way.

### **Evaluation Programme for assessment of effectiveness of measures against electrocution and collision**

#### Action 19: Checking of I.A.P.A. and other corrected lines

Description: According to Article 10. 1 of D., in I.A.P.A. declared lines or in any other line where high mortality had been detected, a search for dead birds will be done after corrections in order to evaluate and calculate the effectiveness of the measures applied and the residual mortality rate.

Regardless of the inspections carried out by “*Dirección General de Industria, Energía y Minas*”, any damage or defect found in the isolated material installed would be written down, during the searches to find dead birds. Such defects will be communicated to the “*Dirección General de Industria, Energía y Minas*” and the ownership.

#### Action 20. Report of effectiveness and durability of the measures applied

Description: Analysis of the information collected from searches and writing of the subsequent report. This report will be communicated to companies, ownerships, distributors and transporters of electricity, environmental and industry agencies and any other stakeholders.

#### Action 21. Supervising of the monitoring carried out by owners of electric power lines

Description: Definition of the methodology, the scope, and the supervising of the monitoring programmes run by the ownership, if necessary, according to Article 10.2 of D. This action will also assess the effectiveness of the measures established in the authorizations.

### **Action 22. Monitoring and inspection of electric power lines under EIA.**

Description: Control of monitoring programmes of electric power lines under Environmental Impact Assessment (EIA) and inspection of the actions taken due to the requirements of the Environmental Impact Declaration (DIA). This action will also assess the effectiveness of the measures imposed by the DIA.



## **Programme for new electric facilities**

Action 23. Authorization for construction of new electric power lines

Description: Writing of *Dirección General de Medio Ambiente's* reports, as it is established in Article 6.2 of D. and processing of environmental authorization.

## **Training Programme**

The purpose of this programme will be to assure the correct and effective knowledge of the bird protection decrees among the electric power designers and professionals involved. Cooperation will be requested of entities, such as, CEMACAM-Torre Guil or CROEM and to professional associations.

Action 24. Course for designing safe electric power lines for birds and correcting existing electric power lines

Description: Two courses would be imparted

Action 25. Course for establishing administrative procedure for the authorization of electric power lines in the environment

Description: Two courses would be imparted

## **Informative and Exchange Programme**

Programme to communicate results and actions of the Conservation Plan and the LIFE06NAT/E/000214 project, not only to general public but also to technical and scientific community.

Action 26. Recycling Project WEB LIFE06NAT/E/000214

Description: Reusing of the LIFE06NAT/E/000214 project website for adding and publishing new content, such as: documents, images and videos from the Conservation Plan.

Action 27. Scientific Articles

Description: Writing of 2 articles for publication in scientific journals, preferably



international, with the information and results obtained during the LIFE06NAT/E/000214 project.

#### Action 28. Popular science magazine articles

Description: Writing of 4 articles for publication in popular science magazines, professional associations or magazine, such as: “*Enclave Ambiental*”, “*Quercus*” or any other European publications, with the information and results obtained in the LIFE06NAT/E/000214 project or in the Conservation Plan.

#### Action 29. Reports in local media

Description: Cooperation with local media, for communicating at least 4 reports (2 in press and 2 on television).

### **Research, Development and Innovation Programme**

This programme includes both the objectives of the aforementioned laws and the objectives in the Article 113 for Research, development and innovation in the environment field, and in Article 115 for promoting environmental responsibility in companies and activities.

#### Action 30. Research grants

Description: Financial contribution for research related with:

- a. Development of materials and methods of distribution for electricity according to the R.D. and D.
- b. Distribution and transportation network for electricity in the future.
- c. Negative economic impact on electric distribution companies and their clients as result of bird electrocutions.
- d. Specific electrocution risk models for threatened birds.
- e. Specific collision risk models for birds and overhead electric power lines.

Only research centres, companies and individuals with proven experience in these fields were allowed to ask for a grant.

The number of grants, duration and amount of money given will depend on the characteristics of the research projects presented and the budget available. The bases of these grants would be published in the BORM by the “*Consejería de Presidencia*”.



The budget will come from different sources: European funds, “*Consejería de Universidades, Empresa e Investigación*” funds, electric distribution companies, manufacturers, savings banks, etc.

#### Action 31. Creating a "Bird Safe" logo

Description: Creating a quality environment logo for electric companies. This logo should be seen as an identity mark used to identify electric companies and distributors with an environmental protecting policy. Like the "Dolphin Safe" label, whose mark identifies the tuna canning industries that use capture methods safe for dolphins and allows consumers to select the brands with more environmental benefits.

This logo will also mean that an electric company has incorporated the bird protection standards into its work procedures. As a result of that, the logo will appear incorporated in all the invoices.

This distinctive award will be given by the “*Consejería de Presidencia*”, without affecting any inspections carried out by the “*Dirección General de Industria, Energía y Minas*”.

#### Action 32. Environmental responsibility award

Description: Grant for the production of films, short films or stories about innovative projects related to the protection of birds against accidents with overhead electric power lines.

An annual prize is awarded to those electric companies that have developed innovative projects in this area. The amount of the grant will depend on both the quality of applications submitted and the budget available. The bases of these grants would be published in the BORM by the “*Consejería de Presidencia*”.



### 3. MEMBERS AND FUNDING SOURCES

#### 3.1. Dirección General de Medio Ambiente (DGMA)

As far as the Conservation Plan is concerned, the “*Dirección General de Medio Ambiente*” (DGMA) which is part of the “*Consejería de Presidencia*”, will be involved in all actions, providing staff and budget for its implementation.

According to the Article 9.3 of the D. The DGMA will reserve an amount of money from the annual budget to support the correction of I.A.P.A.

In addition, the DGMA will be in charge of searching other sources of funding and coordinate the actions of the Conservation Plan with the stakeholders.

#### 3.2. Dirección General de Industria, Energía y Minas (DGIEM)

Regarding the Conservation Plan, the “*Dirección General de Industria, Energía y Minas*” (DGIEM) which is part of the “*Consejería de Universidades, Empresa e Investigación*”, will be in charge of identifying the electric poles that have to be adapted to the R. D. (Action 11). The DGIEM will take part in actions 16 and 18.

#### 3.3. Ministerio de Medio Ambiente y Medio Rural y Marino

This Ministry has been the promoter of the R. D. 1432/2008, which includes in the “*Disposición Unica: Plan de inversiones a la adaptación de líneas eléctricas*”, the mechanisms and budgets needed to finance the corrections requested in point 2 of the “*Disposición Transitoria Única*”.

It is expected that this Ministry will transfer funds to the “*Dirección General de Medio Ambiente*” to carry out the required adaptations (Action 11).

#### 3.4. Dirección General de Universidades y Política Científica

As regards the Research, Development and Innovation Programme, the “*Dirección General de Universidades y Política Científica*” (DGUPC) which is part of the “*Consejería de Universidades, Empresa e Investigación*”, will be asked to participate in the funding of the programme.

#### 3.5. Instituto de Fomento de la Región de Murcia

As far as the economic growth is concerned, this agency is in charge of the promotion and the momentum, stimulating competitiveness, innovation and productivity of



business. It is responsible for the technological development. This agency, that is under the “*Consejería de Universidades, Empresa e Investigación*”, will be asked to participate in the funding of the Research, Development and Innovation Programme.

### **3.6. Iberdrola Distribución S. A. U.**

The main distributor of electricity in Murcia Region has been working with DGMA for the protection of birds since 2002. Their participation in this Plan is not only a continuation of their collaboration, but also an enlargement of the objectives. The participation of Iberdrola in the Correction and Adaptation Programme for Electrical facilities has been considered essential. This contribution could be included within the agreements to improve the quality of electricity service established in electricity sector legislation.

In addition, this company would participate in the actions: 1, 13, 18, 19, 21, 22 and 30. In the action 30, an agreement with the Funding Programme of the Foundation Iberdrola could be promoted.

### **3.7. Other distributors**

Other electricity distributor companies that operate in Murcia would be asked to contribute with funds in the Research, Development and Innovation Programme, such as: EON and also Corvera Electrical S.A.

### **3.8. Red Eléctrica de España**

Company in charge of electricity transport in Spain, which has an environment department focus on bird protection and forest protection, and that has been working with DGMA for years. They could participate in actions 9, 11, 13, 18, 21, 22 and be asked to contribute with funds in actions 7, 13, 19 and 30.

### **3.9. Public agencies**

Some public agencies have electric power lines in the región of Murcia, like: “*Confederación Hidrográfica del Segura*”, “*Mancomunidad de los Canales del Taibilla*”, “*Instituto Meteorológico Nacional*” and “*Ministerio de Defensa*”, among others. Therefore, they would be asked to participate in the actions 10, 11, 17 and 18 when their electric power lines are affected.

### **3.10. Private owners**

A large percentage of electric poles are private and belong to individuals, agricultural



cooperatives, farms, factories or others. They are expected to participate in actions: 10, 11, 14 and 18.

### **3.11. European Commission**

The Conservation Plan is being developed under a co-funded LIFE project, however, it should be mentioned that there is a tendency to correct electric power lines by means of structural funds for regional development and rural development, such as FEDER, FEOGA, FEADER, etc.

On the other hand, some European funds for researching and technological development and business, could be considered to finance part of the Research, Development and Innovation Programme, directly or indirectly.

### **3.12. Manufacturers of insulating materials and electrical equipment**

Manufacturers of insulating materials and other materials used in the construction of power lines are the key players in the implementation of this Plan. These companies often have their own R + D + I for the development and approval of materials. Their participation will consist on not only to provide materials for Adaptation and correction programme but also to develop new materials and techniques. They are expected to participate in actions 30 and 32.

### **3.13. Project offices and electrical installation companies**

They have the ultimate responsibility for the implementation of the measures against electrocution and collision established in the decrees. For that reason, they would be asked to participate in the Training Programmes, through their professional associations.

### **3.14. Banks and Savings Banks**

Some banks and savings banks have been addressing their social contributions to the environmental field. So, an economic participation of the new companies resulting from the merger of savings banks is expected in the different programmes mentioned:

- Adaptation and correction programme for electric facilities
- Training Programme
- Informative and Exchange Programme
- Research, Development and Innovation Programme





### **3.15 CROEM**

Among the activities of the “*Confederación Regional de Organizaciones Empresariales de Murcia*” (CROEM), their work in the diffusion, organization and accomplishment of training courses, specifically in the field of environment stands out. Therefore, the CROEM could be considered an excellent candidate for participation in the Training Program.



#### 4. CALENDAR

	1st year	2nd year	3rd year	4th year	5th year
Action 1.	*	*	*	*	*
Action 2.	*	*	*	*	*
Action 3.		*	*	*	*
Action 4.	*	*	*	*	*
Action 5.	*	*	*	*	*
Action 6.	*	*	*	*	*
Action 7.	*				
Action 8.	*	*	*	*	*
Action 9.		*	*	*	*
Action 10.		*	*	*	*
Action 11.		*	*	*	*
Action 12.	*	*	*	*	*
Action 13.	*				
Action 14.	*	*	*	*	*
Action 15.	*	*	*	*	
Action 16.	*	*	*	*	*
Action 17.	*	*	*	*	*
Action 18.	*	*	*	*	*
Action 19.			*	*	
Action 20.					*
Action 21.		*	*	*	*
Action 22.	*	*	*	*	*
Action 23.	*	*	*	*	*
Action 24.	*		*		
Action 25.		*		*	
Action 26.	*	*	*	*	*
Action 27.	*	*	*		
Action 28.	*		*		*
Action 29.	*		*		*
Action 30.		*	*	*	*
Action 31.		*	*	*	*
Action 32.			*	*	*



## 5. ANNEXES

ANEXO I: Proyecto de decreto por el que se establecen normas adicionales aplicables a las instalaciones eléctricas aéreas de alta tensión con objeto de proteger la avifauna y atenuar los impactos ambientales

ANEXO II: Real Decreto 1432/2008

ANEXO III: Artículos 113 y 115 de la Ley 4/2009 de Protección Ambiental Integrada