



2011

**Annual Report**  
**Environmental, Social, Health and Safety**  
**(ESHS)**  
**Pestera and Cernavoda Wind Farms**  
**Dobrogea Region, Romania**



EDP Renewables Romania

Issued: January 2011

## Table of Contents

<b>Introduction:</b> .....	<b>3</b>
<b>Executive summary:</b> .....	<b>3</b>
<b>A: Summary of any material regulatory changes related to the environmental aspects in 2010</b>	<b>5</b>
A.1. Summary of Romanian EIA framework legislation: .....	5
A.2. Modifications of Romanian EIA framework legislation during 2010:.....	5
A.3. Legislative and funding framework of Pestera and Cernavoda Wind Farms .....	6
A.4. Authorizations obtained for Pestera and Cernavoda Wind Farms within 2010.....	7
<b>B. Information on the status of the two wind farms</b> .....	<b>9</b>
B.1. Location.....	9
B.1. Status of Projects during 2010.....	10
<b>C. Information on EMMP implementation</b> .....	<b>12</b>
<b>D. Information on ESAP implementation</b> .....	<b>17</b>
<b>E. Information on SEP implementation</b> .....	<b>19</b>
<b>F. Information on any changes to Natura 2000 areas or Important Bird Areas</b> .....	<b>22</b>
<b>G. Information regarding avifauna monitoring programs</b> .....	<b>25</b>
<b>H. Information regarding environmental construction monitoring</b> .....	<b>29</b>
H.1. Purpose of Environmental Construction Monitoring (ECM) .....	29
H.2. Applied methodology for ECM .....	30
H.3. Construction Environmental Management Plan (CEMP) .....	30
H.4. Result of Environmental Construction Monitoring – PESTERA Wind Farm .....	33
H.5. Result of Environmental Construction Monitoring – CERNAVODA Wind Farm.....	35
<b>I. Other relevant information</b> .....	<b>37</b>
I.1. Summary of any areas of non-compliance with Environmental regulations, or exceedances of the relevant permit levels .....	37
I.2. Information on any fines or other penalties or pending prosecutions related to ESHS matters .....	37

# Annual Report

---

## Environmental, Social, Health and Safety (ESHS)

### Introduction:

EDP Renewables is a world leader in the renewable energy sector and is the world's fourth largest wind energy company. The EDP Group is EDP Renewables' major shareholder. The EDP Group is Portugal's largest industrial group and one of Europe's main energy companies. It is currently the Iberian Peninsula's third largest energy operator, holding business interests in the generation, distribution and supply of electricity and gas in Portugal and in Spain. Besides its leadership position on the Iberian Peninsula, the EDP Group also holds a significant position in the Brazilian electricity sector.

The **Annual Report on Environmental, Social, Health and Safety, year 2010** has been prepared in accordance with the requirements of **ESAP** (Environmental and Social Action Plan) for EDP Renewables Romania wind farm projects, Dobrogea Area and **EMMP** (Environmental Monitoring and Management System) – prepared in April 2010 as part of the environmental due diligence performed in accordance with EBRD and IFC standards.

A Stakeholder Engagement Plan (**SEP**) has been prepared which describes the key stakeholders and the information and communication plans intended in respect of the two wind farm developments and associated infrastructure. The SEP takes into account best international practice in relation to information disclosure and outlines the general engagement principles that EDPR will adopt and those which will be used for the current modernisation programme. The SEP will be reviewed and updated on a regular basis.

### Executive summary:

This Annual Report presents the key information relating to the Wind Farms constructed during 2010 by EDP Renewables Romania (Pestera WF and Cernavoda WF), in order to allow all stakeholders involved to understand the impacts on the sites and surrounding area.

The information in this Annual Report is based on the results of Environmental Impact Assessment (EIA) studies, environmental due diligence prepared for the Projects in line with EBRD Performance Requirements and IFC Performance Standards as well as the monitoring programs conducted during 2010 for developed wind farms in Dobrogea Area.

The annual report is presenting information regarding the following aspects related to Pestera and Cernavoda Wind Farms, Dobrogea Region, Romania:

- A. Summary of any material regulatory changes related to the environmental or social aspects in 2010
- B. Information on the status of the two wind farms
- C. Information on **EMMP** implementation
- D. Information on **ESAP** implementation
- E. Information on **SEP** implementation
- F. Information on any changes to Natura 2000 areas or Important Bird Areas
- G. Information regarding avifauna monitoring programs

This chapter refers to the avifauna monitoring programs developed for each wind farm during 2010. The data presented here is consisting in a summary of field observations and required actions, conclusions of monitoring reports.

- H. Information regarding construction works monitoring programs

This chapter refers to the environmental monitoring programs developed for each wind farm during construction works period 2010. The results of this environmental monitoring are also presented.

- I. Other relevant information

# Chapter A: Summary of any material regulatory changes related to the environmental aspects in 2010

---

## A.1. Summary of Romanian EIA framework legislation:

The process of aligning national legislation with the **EU environmental regulations** required relevant Directives to be transposed, such as:

- **Directive 85/33/EC**, amended by Directive 97/11/EC on the assessment of the effects of certain public and private projects on the environment;
- **Directive 2001/42/EC** on assessment of the effects of certain plans and programmes on the environment;
- **Directive 90/313/EEC** on free access to environmental information.

The transposition of EU requirements regarding EIA to Romanian legislation has happened stepwise, first with Law 137/1995 – Environmental Protection Law, article 4, which stated that the EIA procedure is compulsory in the initial stages of projects, programmes or activities. The Directive 85/33/EC was transposed by following regulations:

- Governmental Decision no. 445/2009 regarding the framework for environmental impact assessment of certain public or private projects
- Order no. 860/2002 regarding the assessment procedure of environmental impact and issuance of environmental agreement
- Order no. 863/2002 regarding the methodological guides applicable to environmental assessment procedure
- Order no. 214/2008 modifying Law n0. 50/1991 regarding permitting of construction works
- Order no. 164/2008 modifying Order no. 195/2005 regarding environmental protection

During the Operational period of both wind farms, an Environmental Authorisation is required.

Regulations on the procedure for issuing environmental authorisations are contained in the **Order no. 1798** of 19 November 2007 approving the procedure for issuing environmental permits.

## A.2. Modifications of Romanian EIA framework legislation during 2010:

New norms regarding the issuance of the environmental agreement have been published in the Official Gazette no. 274 and entered into force in April 2010: **Order of the Ministry of Environment no. 135/2010 regarding the Applicable Methodology of environmental assessment of certain public or private projects** replacing **Order no. 860/2002**.

The main aspects regulated by **Order no. 135/2010** include:

- a. The correlation between the procedures of the environmental impact assessment (“EIA”) and the adequate assessment (“AA”) in relation to Natura 2000 areas, namely between the issuance of the environmental approval and the Natura 2000 endorsement. In principle, when there is a need for both an EIA and an AA for a project, the procedure is common and is finalized only by the issuance of the environmental agreement.
- b. The regime of projects developed in several stages or located on a surface pertaining to neighboring counties - the principle set out in this respect is that the environmental assessment is to be carried out for the entire investment.
- c. The minimum content of the environmental agreement and Natura 2000 endorsement is regulated.
- d. If a project adversely impacts a Natura 2000 site and there are no other solutions, the environmental authority must inform or obtain the point of view of the EU Commission in relation to compensation measures respectively, depending on whether a priority species is affected or not.
- e. Maintenance of confidentiality of information submitted by the project developer may be requested, and, subject to certain conditions, granted; and
- f. The regime of the extension or amendment of a project is clarified from an environmental point of view, as well as the procedure for the revision of the environmental approval and the Natura 2000 endorsement.

There are also certain final provisions that should be noted by developers:

- If all the information necessary for the issuance of the environmental agreement is not provided to the environmental authority within two years from the date when such information is requested, the application for the environmental agreement is rejected and the procedure must be recommenced.
- The EIA reports submitted to the environmental authority within a currently pending procedure must be updated according to the legislation in force upon the request of the competent environmental authority.
- Upon finalization of the projects regulated by the environmental approval, the competent authority must control the observance of the environmental agreement, and the minutes of such control are to be part of the hand-over minutes of the project.

### **A.3. Legislative and funding framework of Pestera and Cernavoda Wind Farms**

Due to their size and location the Projects were identified as requiring an Environmental Impact Assessment (EIA) in accordance with Romanian and EU legislation. An EIA was completed for each Project in 2008 as part of the environmental permit application process in accordance with Governmental Emergency Ordinance 195/2005, approved by Law 265/2006 Article 11.

The purpose of the EIA process is to identify any potential environmental issues associated with the developments, assess the significance of the impacts and, where appropriate, identify measures to avoid or reduce these effects.

The EIA for each of the sites was undertaken by Cabinet Expert Traian Petrescu. Construction Authorisations and Environmental Agreements have been granted for both sites in 2008.

EDPR has approached the European Bank for Reconstruction and Development (EBRD) and the International Finance Corporation (IFC) for co-financing of the wind farms. The Projects have been classified as **Category A** projects and have been assessed in accordance with the EBRD Performance Requirements and IFC Performance Standards.

The development of sustainable renewable energy sources to replace traditional fossil fuel based technologies is a priority at both at National and European policy levels. Energy generation from wind farms, in appropriate locations, is recognised as a sustainable alternative to fossil fuel power stations.

The energy generated by the Pestera and Cernavoda wind farm Projects will be delivered to the national grid and will help to meet national energy demand through the use of a renewable energy source.

#### **A.4. Authorizations obtained for Pestera and Cernavoda Wind Farms within 2010**

##### **Environmental Authorization (EA)**

The environmental authorization is defined as the technical and legal document establishing the operational terms and parameters for existing activities as well as for new ones, based on the environmental permit. Consequently, the application for the environmental authorization aimed to obtain the competent authority's permission to operate the Pestera and Cernavoda Wind Farms.

The procedure followed for obtaining the EA for both wind farms is shortly presented in the table below:

	<b>EA procedure</b>	<b>Pestera Wind Farm</b>	<b>Cernavoda Wind Farm</b>
<b>1</b>	Request for EA submitted to Constanta EPA	Request no. 9552 RP / 13.09.2010	Request no. 11231 RP / 01.11.2010
<b>2</b>	Public announcement of the request for EA	Observatorul de Constanta newspaper 2.09.2010	Observatorul de Constanta newspaper 22.10.2010
<b>3</b>	Site visit of Constanta EPA representatives and verification of conditions set in the environmental agreement	16.09.2010	11.11.2010
<b>4</b>	Decision of EPA for issuance of EA	Decision No 9552 RP/ 17.09.2010	Decision No 11231 RP/ 18.11.2010
<b>5</b>	Public announcement of the EA issuance decision Contestation period for public	17.09.2010 15 working days	18.11.2010 15 working days
<b>6</b>	Environmental Authorization issuance	EA No. 463 / 18.10.2010	EA No. 578 / 29.12.2010

The environmental authorisations are published on EDP Renewables website. ([www.edprenovaveis.com](http://www.edprenovaveis.com))

The validity of the environmental authorisations is 10 (ten) years starting with the issuance date.

The environmental authorizations will be suspended in case of failure to comply with the provisions stipulated therein. In such cases, the a notice from the environmental authority will be sent, and the activity will remain suspended until the elimination of the causes determining the authorization suspension. If, during the permit/authorization suspension period, the beneficiary fails to take the necessary steps to meet the environmental parameters established in the issued authorization, the environmental authority is entitled to order the cancellation of the wind farms operation.

#### **Conditions set in the Environmental Authorisations for Pestera and Cernavoda WF:**

- The operator of Wind farms has the obligation of informing the public (webpage or other communication means) regarding the environmental impact of their activities
- Continuance of Environmental impact Assessment during the first year of operation. The conclusions of the study will be presented to Constanta EPA
- Maintenance of technological platforms, substation and inner access road clean
- Access to wind turbines will be allowed only to authorised persons
- Proper signalling of wind turbines
- Monitoring of dead birds or bats number and reporting to EPA when required
- Complying with all legislative requirements in force related to environmental protection
- The activity will be developed in accordance with the noise maximum allowed limits foreseen in STAS 10009/1988
- The generated waste will be selectively collected (recyclables waste) by specialised agents
- It is forbidden in any way affecting the neighbouring areas of the wind farm site
- The beneficiary has the obligation of notifying EPA regarding any new modifications of the project
- Any accidental pollution must be reported to EPA

#### **Producer Licence (PL) of renewable energy**

The Producer Licence for the commercial operation of electric power capacities is issued by **ANRE** (Romanian Energy Regulatory Authority).

For Pestera WF, EDP Renewables Romania has obtained the Producer Licence No 974 /25.11.2010.

In order to obtain Green Certificates from Transelectrica (National Grid Operator), both wind farms need to have a **Qualification as a Priority Producer (QPP)**. For Pestera WF the **QPP** was obtained on 25 November 2010.

For Cernavoda WF the procedure for obtaining the PL was started in November 2010 and the issuance of PL is expected in February 2011. The QPP for Cernavoda Wind Farm is also expected to be issued in February 2011.

# Information on the status of the two wind farms

## B.1. Location

The Project sites are located in the County of Constanta in the south-west region of Romania, approximately 33km (Pestera) and 45km (Cernavoda) respectively west of Constanta on the Black Sea coast. Both sites are located in rural areas and are more than 600m from the closest residential properties.

The distance between the Pestera and Cernavoda sites is approximately 7km at the nearest point and approximately 15km from the centre of each site. Figure 1 shows the approximate location of the Projects.



Figure 1 - Site Location Plan (Source: Google Maps)

The site at **Pestera** is located approximately 2.5km south-west of Pestera town and 1km south of Ivrinezu Mic and to the south east of Rasova. The site is accessed via the DJ223b to the west and the DJ222 to the east. The eastern part of the site is located near the Ivrinezului Valley and the Movila Lui Lipan. The Danube to Black Sea Navigable Canal, a tributary of the River Danube is located approximately 2km to the north of the site, with the River Danube being approximately 10km to the west. The Pestera site is approximately 38km west of the Black Sea coast.

The site at **Cernavoda** is located approximately 1km south west of Tibrinu and approximately 4km east of the town of Cernavoda. Access to the site is via the DJ225 county road and then via the existing roads associated with general activities in the area.

To the north of the Cernavoda site are Lake Tibrinu (including a fish farm), the villages of Tibrinu and Gherghina and the boundary of the Cernavoda administrative area. The village of Stefan cel Mare is located to the east and to the west is the boundary of the settlement of Micea Voda. The areas of Faclia and the outskirts of Mircea Voda and

Saligny are present to the south. The Danube to Black Sea Navigable Canal is located approximately 5km to the south of the site, and the River Danube itself is located approximately 8km to the west. The Cernavoda site is located approximately 50km east of the Black Sea coast.

## B.1. Status of Projects during 2010

The proposed wind farm at **Pestera** will contain 30 wind turbines (turbine model VESTAS V90 3.0 MW), providing a total installed capacity of **90MW**. The wind farm at **Cernavoda** will comprise 46 wind turbines (also VESTAS V90 3.0 MW), providing a total installed capacity of **138 MW**.

The **construction works** consisted in:

- **Site preparation** –The preparatory works for each Project started in August 2009 (Pestera) and October 2009 (Cernavoda) respectively. These works included top soil stripping and localised vegetation clearance in the vicinity of the construction compounds, access roads and the turbine footprints.
- **Construction of supporting infrastructure and temporary facilities** – Upgrading of local roads and associated infrastructure was required to accommodate heavy goods vehicles which transported the components of the wind turbines and also allowed access to the site by construction vehicles. In addition, construction compound areas including areas for storage of construction materials and provision of welfare facilities for workers have been provided in accordance with the requirements of the Building Permits and the Environmental Agreements. During this and the subsequent construction stages an archaeological watching brief is to be provided by the Museum of Archaeology, who are kept informed of the progress of construction works and the schedule for reinstatement of excavated areas.
- **Installation of services infrastructure** – Electrical cables were installed in trenches below ground and the electrical transformer stations were constructed during this stage. In addition, HVL were constructed.
- **Transportation of components** – The majority of the wind turbine components (including the tower and rotor blades) were transported directly from the equipment supplier (VESTAS), having been fabricated off-site. Due to the size of the components a detailed plan and programme has been developed to manage their transportation.
- **Wind turbine assembly** – Assembly of the wind turbines required specialised heavy lifting equipment and highly experienced staff. The assembly was carefully executed with appropriate health and safety precautions and procedures documented and implemented.
- **Commissioning and Operation** – Following assembly, the Projects will undergo a series of technical and safety checks and tests to ensure that the installations are functioning properly.

More information regarding the construction process is presented in **Chapter I. Information regarding construction works monitoring programs.**

### Size of land affected by construction works:

**Pestera WF** has in total 307 ha (30 wind turbines). In the table below are listed the surfaces affected by constructions:

Pestera WF	UM	Affected surface per wind turbine	Total affected surface
<b>Wind Turbines</b>			
Technological platform	ha	0,08	2,4
Foundation of wind turbine	ha	0,04	1,2
Access roads	-	26,82 km	1,07 ha
Pestera Substation	ha	-	0,4176

**Cernavoda WF** has in total 568 ha (46 wind turbines). In the table below are listed the surfaces affected by constructions:

Cernavoda WF	UM	Affected surface per wind turbine	Total affected surface
<b>Wind Turbines</b>			
Technological platform	ha	0,08	3,68
Foundation of wind turbine	ha	0,04	1,84
Access roads	-	40,4 km	1,61 ha
Cernavoda Substation	ha	-	0,60

### Status of Pestera Wind Farm:

- The **civil works** of Pestera Wind Farm have finished in September 2010
- **Connection** to the national grid was allowed by Transelectrica (National Grid Operator) and established in October 2010, with the condition of finishing the works needed in Medgidia Sud and Rasova substations until January 2011.
- **Connection works** consisting in additional works executed in Enel facilities (Rasova substation) and Transelectrica facilities (Medgidia Sud Substation) were executed according with the connection permits in force (issued by Enel and Transelectrica) and finished in January 2011. Also communication works are required to ensure proper communication between Pestera substation and National Grid Dispatcher (DEN).
- **Tests of wind turbines** started immediacy after the connection to the grid (October 2010). Special tests required by Transelectrica according to their Operational Procedure will start at the end of January 2010.

### Status of Cernavoda Wind Farm:

- The **civil works** have finished in Cernavoda Wind Farm in December 2010.
- **Connection** to the national grid is expected to be at the end of March 2011
- **Connection works** consisting in additional works executed in Enel and Transelectrica facilities (Ecluza 110 kV, Tortomanu 110 kV, Mircea Voda 110 kV, Mircea Voda Nord and Medgidia Nord substations) will be executed according with the connection permits in force (issued by Enel and Transelectrica) and finished until the end of March 2011. Also communication works are required to ensure proper communication between Cernavoda substation and National Grid Center.
- **Tests of wind turbines** Special tests required by Transelectrica according to their Operational Procedure will start immediately after the connection to National Grid.

### Information on EMMP implementation

This **Environmental Management and Monitoring Plan (EMMP)** has been produced to identify the needs and priorities for the future environmental mitigation measures and improvements in respect of two new wind farms Pestera and Cernavoda, in the Drobogea Region of Romania.

Implementation of the EMMP will ensure compliance with Romanian National legislation, EU environmental legislation and good international industry practice as embodied in the European Bank for Reconstruction and Development (EBRD) and the International Finance Corporation (IFC) performance requirements and guidelines.

The mitigation and enhancement measures detailed within EMMP represent commitments which EDP Renewables Romania will implement during various stages within the lifetime of the two wind farms. The EMMP focuses on avoiding environmental and social impacts and where this is not possible appropriate mitigation measures are identified to minimise or reduce potential impacts to acceptable levels.

#### Structure of EMMP:

The programme of actions provided below is divided into the following sections:

- Actions required to achieve compliance with National Romanian environmental, health and safety legal requirements and EU environmental standards;
- Procedures for environmental and social assessment of the wind farms in line with best international practice;
- Actions required to contain/remediate past environmental damage and assessment of costs and/or further investigations; and
- Actions to improve environmental, social and health and safety management, monitoring and performance of the wind farms in accordance with good international industry practice.

Opportunities to achieve additional environmental benefits from the Projects have been identified where practicable.

#### Actions implemented during 2010:

As the foreseen actions of EMMP were divided into 4 main sections, below is presented one table for each section containing the actions implemented during 2010 year. From the list of measures presented in the EMMP, for 2010 were considered only the actions related to the construction period.

**1. Actions required to achieve compliance with National Romanian environmental, health and safety legal requirements and EU environmental standards:**

No.	Actions set in EMMP	Performance Standard /Legislation or permits requirements	Implementation during 2010	Further actions
1.1	Undertake site specific bird and bat surveys during and after construction	IFC Performance Standard EBRD PR 6 Requirement of Environmental Agreement (including environmental monitoring programme)	<p>Monitoring of birds was undertaken during construction works, using the services of an independent Company: Blue Terra Consulting. The monitoring team consisted in experienced ornithologists and bat experts.</p> <p>Monitoring period:  <b>Pestera WF:</b> April-September 2010.  <b>Cernavoda WF:</b> April-December 2010.</p> <p>The scope of monitoring was to assess the impact of construction works on birds and bats and to identify the measures for improvements.</p> <p>Every 3 months a monitoring report was elaborated for each wind farm. The reports were submitted to Constanta Environmental protection Agency.</p> <p>For birds monitoring a video surveillance system was installed in each wind farm. The system is expected to become operational in February 2011 at Pestera WF and in April 2011 in Cernavoda WF.</p>	The program for monitoring of birds and bats will continue during the operational period, starting with 2011.
1.2	Establish a protocol / approach for monitoring of ecological impacts during construction and operation	IFC Performance Standard EBRD PR 6 Requirement of Environmental Agreement (including environmental monitoring programme)	Monitoring of construction works with propose of minimising the environmental impact and compliance with the conditions et in the Environmental Agreement was undertaken during construction period of each wind farm, by an independent company.	-
1.3	Undertake monitoring of effectiveness of ecological off-setting measures (these may include financial contributions towards long-term ecological management of a protected area,	IFC Performance Standard EBRD PR 6 Requirement of Environmental	Implementation of this action was not applicable for Pestera and Cernavoda WF. The results of undertaken avifauna monitoring during construction works didn't show any adverse impacts that needed further studies.	-

No.	Actions set in EMMP	Performance Standard /Legislation or permits requirements	Implementation during 2010	Further actions
	funding initiatives to enhance ecological awareness, funding research into the ecological impacts of wind farms)– if applicable, depended on the results of ecological monitoring (see 1.1 above)	Agreement (including environmental monitoring programme)		
1.4	Develop a <b>Construction waste management Plan</b> identifying methods to reduce waste generation and re-use and recycle wastes in preference to disposal. Implement the construction waste management plan	Romanian Legislation EU directives	A Construction Environmental Management Plan (CEMP) was developed and distributed for implementation to all constructors hired for the wind farms construction. CEMP is containing specific measures for produced waste management (construction waste, domestic type waste, recyclables, hazardous waste).	-
1.5	Continue the Ecological monitoring during the entire construction works and for at least one year following commissioning to provide a more complete baseline of the sites conditions and to verify the conclusions of the EIA Reports	Environmental agreement	Monitoring of fauna and flora was undertaken during construction works, using the services of an independent Company: Blue Terra Consulting.  Monitoring period: <b>Pestera WF:</b> April-September 2010. <b>Cernavoda WF:</b> April-December 2010.  The scope of monitoring was to assess the impact of construction works on fauna and flora and to identify the measures for improvements.  Every 3 months a monitoring report was elaborated for each wind farm. The reports were submitted to Constanta Environmental protection Agency.	This study will be continued in the first year of operation as a request of the Environmental Authorisation.
1.6	Review and monitor implementation of Contractors' health and safety plans, health and safety risk assessments and associated procedures during construction and operation (e.g. maintenance activities).	Romanian Legislation (e.g. Law 319/2006 on Health and Safety at Work) and  EU Directives  EBRD PR2	All contract signed with contractors have stipulated the obligation of complying with all national environmental, healthy and safety laws in force. The conditions set by the permits of Pestera and Cernavoda Wind Farm are part of the signed contracts. In order for EDP Renewables Romania to assure the implementation of Health and Safety laws, it was foreseen to hire a Health and Safety Coordinator during the construction works.	The activity of H&S coordinator will continue during the operational period of both wind farms.

No.	Actions set in EMMP	Performance Standard /Legislation or permits requirements	Implementation during 2010	Further actions
	Ensure effective control and management of all health and safety risks by contractors, such as through the adoption of safe working practices and use of personal protective equipment where required.		<p>His task was to check and require to all contractors and subcontractors involved in the construction works to comply with the legislative constrains in force.</p> <p>All contractors have implemented H&amp;S Plans that were previously approved by EDPR Romania.</p> <p>Also every contractor has sent monthly reports containing following data for them and their subcontractors:</p> <ul style="list-style-type: none"> <li>- activity;</li> <li>- executed works;</li> <li>- Number of workers involved;</li> <li>- Number of worked hours;</li> </ul> <p>Number and type of accidents</p> <p>A Grievance Mechanism Register and a Work Accident Record was distributed to all contractors and subcontractor for implementation.</p>	

## 2. Procedures for environmental and social assessment of the wind farms in line with best international practice:

No.	Actions set in EMMP	Performance Standard /Legislation or permits requirements	Implementation during 2010	Further actions
1.1	Provide information on public access	Best practice	The access of public during the construction works was allowed with the acceptance of main constructor or EDPR representative on site. Personnel was available at site organisation office.	-
1.2	Undertake preparation and implementation of a <b>Construction Environmental Management Plan</b> – to cover construction material storage, site security arrangements, wheel washing, dust control measures, landscaping etc	Best practice Would provide a mechanism to ensure implementation of conditions of the Environmental Agreement	A Construction Environmental Management Plan ( <b>CEMP</b> ) was developed and distributed for implementation to all constructors hired for the wind farms construction. Please see a detailed description of CEMP in <b>Chapter I</b> .	-

**3. Actions required to contain/remediate past environmental damage and assessment of costs and/or further investigations;**

Not applicable.

**4. Actions to improve environmental, social and health and safety management, monitoring and performance of the wind farms in accordance with good international industry practice.**

No.	Actions set in EMMP	Performance Standard /Legislation or permits requirements	Implementation during 2010	Further actions
1.1	Develop a corporate annual EHS report and disclose on the internet. Disclose information to the Lenders to show compliance with the EMMP and current status of EHS issues	EBRD PR10	This Annual report will be available on company website. <a href="http://www.edprenovaveis.com">www.edprenovaveis.com</a>	-
1.2	Monitor subcontractors' compliance with EDPR and EBRD health and safety policies and procedures  Creation of a register of near-misses and accidents (including by subcontractors)	Best practice EBRD PR2	Task undertaken by H&S Coordinator hired by EDPR Romania. All contractors have implemented H&S Plans that were previously approved by EDPR Romania. Also every contractor has sent monthly reports containing following data for them and their subcontractors: - activity; - executed works; - Number of workers involved; - Number of worked hours; Number and type of accidents A Grievance Mechanism Register and a Work Accident Record was distributed to all contractors and subcontractor for implementation.	-
1.3	Monitor the removal temporary construction access roads, construction compounds and other areas following completion of construction and their restoration to encourage re-vegetation over time (such as. top soil reinstatement, ground modelling to original conditions)	Best practice EBRD PR6	The restoration of site and re-vegetation of the land affected during construction activities was monitored within the Construction Monitoring program implemented on both wind farms.	-

## Chapter D:

### Information on ESAP implementation

The actions foreseen in **ESAP** (Environmental and Social Action Plan) for Pestera and Cernavoda Wind Farms and implemented during 2010 are indicated in the following table. The table is showing only the actions that needed implementation during the construction period of the wind farms. The other actions set by ESAP will be further implemented during operational period, starting with 2011.

No.	Actions set in ESAP	Benefits/Reasons	Implementation during 2010	Further actions
1.	Implementation of the Environmental Management and Monitoring Plan, (“EMMP”) prepared by WSP Environment and EDP Romania dated April 2010, which can be changed from time to time on a none objection basis of the Lenders.	The EMMP, includes the management and monitoring plan for the Pestera and Cernavoda wind farms based on the findings of the environmental and social assessment for the project. This has been communicated third parties and is the basis of the Lenders agreeing to finance the project.	Please see previous Chapter regarding the EMMP implementation and the measures developed during 2010.	The actions foreseen in the EMMP for operational period will be implemented starting with 2011.
2.	Development and implementation of a corporate Stakeholder Engagement Plan (SEP) in line with EBRD and IFC PR 10 and PS 8 at corporate level	Prove EDP Romania’s commitment to social aspects. Avoid opposition to EDP Romania projects.  The corporate SEP will outline the Company’s public communications policy and commitments, including the grievance mechanism, indication of contact persons and indication on projects information availability (on internet and in hard copy format also).	Please see Chapter regarding the SEP implementation and the measures developed during 2010.	The actions foreseen in SEP related to operational period of the 2 WF will be implemented starting 2011.
3.	Require contractors to comply with all national environmental and health and safety laws, EBRD and IFC PRs and PSs as well as with any provisions of the EIAs, EMMP, construction consents and other relevant	Develop and include in contracts EHS and labour provisions and compliance conditions which will provide contractors with clear guidelines on EHS and labor performance.  Develop and implement contractor control system to monitor and enforce	All contract signed with contractors have stipulated the obligation of complying with all national environmental, healthy and safety laws in force. In addition to this conditions set by the permits of Pestera and Cernavoda Wind Farm are part of the signed contracts.  In order for EDP Renewables	The Health and Safety Coordinator appointed by EDP Romania will continue his activity during operational period.

No.	Actions set in ESAP	Benefits/Reasons	Implementation during 2010	Further actions
	permits.	contractors and sub-contractors' compliance with EHS and labor conditions.	<p>Romania to assure the implementation of Health and Safety laws, it was foreseen to hire a Health and Safety Coordinator during the construction works.</p> <p>His task was to check and require to all contractors and subcontractors involved in the construction works to comply with the legislative constraints in force.</p> <p>All contractors have implemented H&amp;S Plans that were previously approved by EDPR Romania.</p> <p>Also every contractor has sent monthly reports containing following data for them and their subcontractors:</p> <ul style="list-style-type: none"> <li>- activity;</li> <li>- executed works;</li> <li>- Number of workers involved;</li> <li>- Number of worked hours;</li> <li>- Number and type of accidents</li> </ul>	
4.	Make publicly available general environmental information on project	To include results of any monitoring or studies completed according to permits or regulatory requirements.	As part of the procedure developed for obtaining the Environmental Authorisation, it was mandatory by the legislation in force to make public announcements regarding all prepared documentation for Pestera and Cernavoda WF. The documentation was showing the environmental information during the construction period and planned measures for the operational period.	This annual environmental report will be published on our company website. Also results of monitoring campaign undertaken for operational period will be made available for public information.

### Information on SEP implementation

Stakeholder Engagement Plan (SEP) is describing the key stakeholders and the information and communication plans intended during construction and operational period of Pestera and Cernavoda wind farms.

The key objective of SEP is to inform identified stakeholders regarding the potential impacts of the projects.

A formalized **Grievance Mechanism** has been developed and implemented by the company to cover both the construction and operational phases of the Pestera and Cernavoda wind farms.

The grievance mechanism register was elaborated in May 2010 and distributed to all Contractors and subcontractors involved in the two wind farms construction.

Beside the grievance mechanism, as part of H&S requirements of Governmental decision 1425/2006, a **Record of Work Accidents** was distributed to all our contractors and subcontractors in 2010. The H&S Coordinator of EDPR Romania checked the implementation of this mechanism.

The grievance mechanism register and record of or work accidents was distributed to main contractors, listed below. Each contractor continued the distribution to all their subcontractors. The engagement of implementing these two mechanisms was decided in April 2010 by minutes signed by each contractor and EDPR Romania.

Objective	Contractors Pestera WF	Contractors Cernavoda WF
Civil works for Wind farm	GES	STRABAG / GES
Wind turbines	Vestas	Vestas
Pestera Substation	GES	Energobit
High voltage line	Energobit	ISATUR / AMPEL
Power transformers	Concear	Concear and Abengor
Meteorological towers	Telsat	Telsat

#### Disclosure of information

##### The Types of Information to be Disclosed

The information that will be disclosed will be assessed on a specific basis as part of the overall EDPR development programme for the Pestera and Cernavoda sites. In general terms, internal and external communications are handled by EDPR in a number of ways as detailed below.

The objectives of external communications are to provide continuous engagement with targeted audiences to inform about the company activities,

including company performance, company development and investment plans and their implementation.

### The Methods of Communication

The methods of communication used by EDPR are summarised in the following:

- Publication for public review of the Stakeholder Engagement Plan, Non-technical Summary and Environmental and Social Action Plan;
- Meetings with regulatory bodies;
- Public meetings;
- Announcements in local media;
- Provision of general information on notice-boards at key public locations; and
- Publication of project information including Environmental Statements for both the Cernavoda and Pestera wind farm development, a Non-Technical Summary, Environmental and Social Action Plan and additional information on the company website – <http://www.edprenovaveis.com/sustainability/EDPR> in the community/Romania sustainability.

### Actions set in SEP and implemented during 2010:

No.	Actions set in SEP	Type of information disclosed	Forms of communications	Stakeholder Groups informed
1.	Publication of ESIA Disclosure Package.	<ul style="list-style-type: none"> <li>- Stakeholder Engagement Plan,</li> <li>- Non- Technical Summary,</li> <li>- full ESIA documentation and</li> <li>- Environmental and Social Action Plan</li> </ul>	<p>Disclosure: April 2010</p> <p>Internet: - Company website and Emails</p> <p>Local newspaper: - public announcement in Observatorul de Constanta newspaper from 22 April 2010</p> <p>Announcements at Headquarters of Pestera, Saligny and Mircea Voda Local Councils</p>	<ul style="list-style-type: none"> <li>-Constanta APM</li> <li>-Pestera Local Council</li> <li>-Saligny Local Council</li> <li>-Mircea Voda Local Council</li> <li>-SOR Romanian Ornithology Society</li> <li>- Biodiversity Department of Ministry of Environment</li> </ul>
2.	Announcement of construction programme to residents of Pestera, Saligny and Mircea Voda local villages.	Details of propose construction programme including proposed work on local roads and transportation programme for major components (road closures).	<ul style="list-style-type: none"> <li>- Announcements at Headquarters of Pestera, Saligny and Mircea Voda Local Council</li> <li>- Information Panel containing construction, duration, contractors was /is available at access road in WF construction works site</li> </ul>	Local residents

No.	Actions set in SEP	Type of information disclosed	Forms of communications	Stakeholder Groups informed
3.	Announcement of the Pestera Wind Farm commissioning and start-up	Formal notification of operation of the wind farm.	November 2010 –started the tests period. The Wind farm will be fully operational after finishing all required tests. Estimative date: February 2011.  Start-up announcement will be made on: Internet – company website. Local newspapers	All interested Stakeholders
4	Funding approval for the development of the Pestera and Cernavoda Wind farms.	When funding has been arranged, an announcement of full decision to develop the plant and the coverage of the implications (social / employment / EIA etc) will be confirmed to stakeholders.	Not taken yet during 2010	-
5.	Environmental Authorisation for Pestera Wind Farm	Information regarding the project (construction and operation) , assessed environmental impact	-Public announcement of the request for EA in Observatorul de Constanta newspaper 2.09.2010  -Public announcement of the EA issuance decision in 17.09.2010 at Constanta EPA Headquarters  -	All interested Stakeholders
6.	Environmental Authorisation for Cernavoda Wind Farm	Information regarding the project (construction and operation) , assessed environmental impact	-Public announcement of the request for EA in Observatorul de Constanta newspaper 22.10.2010  -Public announcement of the EA issuance decision in 18.11.2010 at Constanta EPA Headquarters	All interested Stakeholders

### Information on any changes to Natura 2000 areas or Important Bird Areas

The key Romanian legislation on Protected Areas (including Natura 2000 sites - Special Protection Areas, Sites of Community Importance - as well as Important Bird Areas) and on Appropriate Assessment (as transposed from the EU Habitats Directive into Romanian legislation) is summarised in Table 4.2 below:

Summary of Romanian Legislation on Protected Areas:

Legal Act	Overview of Content
Law 5/2000	Relates to the management of the country's natural resources - Section III refers to protected areas
Law 462/2001	Law of Protected Areas
GEO 57/2007	Relates to the natural protected areas regime, conservation of natural habitats, wild flora and fauna
GD 1284/2007	Declares the Special Protected Areas for birds as part of Natura 2000 ecological area network in Romania
MO 776/2007	Declares the Sites of Community Importance as part of the Natura 2000 ecological area network in Romania
MO 19/2010	Approving the Methodology on the Appropriate Assessment of plans and projects with potential effects on natural protected areas of Community interest (Natura 2000 sites)

Please see also the *Chapter A.2. Modifications of Romanian EIA framework legislation during 2010.*

The **EIA Reports** and the **Supplementary Information Report** prepared for the Pestera and Cernavoda wind farms have assessed the potential environmental issues associated with the developments, and where applicable, have provided recommendations for appropriate mitigation measures.

An ecological assessment was undertaken as part of the EIA Reports prepared for the sites and this information has been supplemented with further ecological assessment, which is presented in a Supplementary Information Report.

This assessment confirmed that both sites consist of flat, apparently un-irrigated, agricultural land; without field boundary margins, with very few trees, no buildings on either site, and no wetlands, significant watercourses or other notable features close by. The EIA Reports present the floral species present on site being those typical of intensively managed agricultural land. There are no protected floral species or habitats on either of the sites.

Although the proposed Projects are not located within any protected area, the Pestera site lies approximately 5km from the Aliman-Adamclisi Important Bird Area (IBA) and Special Protection Area (SPA). Bird species reported to move

through the IBA/SPA during spring and autumn migration include Levant sparrowhawk, Red-footed falcon, Collared pratincole, Pallid harrier, Montagu's harrier and Booted eagle.

The Cernavoda site lies 6.5km to the east, with Pestera approximately 7km to the south east of the Dunare-Ostroave IBA and SPA (also known as the River Danube SPA). This designated site contains a number of bird species which are classified as threatened in an EU context, in both summer (breeding), winter and migration seasons. The Cernavoda site also lies approximately 5.7km from the Canaralele Dunarii Site of Community Importance (SCI).

The River Danube (situated to the west of the sites) is a major flyway during spring and autumn migration periods for such species as Osprey, Little tern, Pygmy cormorant, Ferruginous duck, White-tailed eagle and Glossy ibis. The Via Pontica flyway (to the east of the sites) is a major flyway for migrating birds from Eastern Europe, Scandinavia and Russia which is largely situated on the Black Sea coast with the southern Bulgarian part being a "bottle-neck".

In addition, Societatea Ornitologica Romana (SOR) report that the Cernavoda site is located 10km and 14km respectively from the Allah Bair-Capidava IBA/SPA and Bratul Borcea IBA/SPA. Both of these sites are of value to birds in the summer (breeding) winter and migration periods.

**For the project sites there are no potentially significant impacts identified upon floral habitats due to the lack of semi-natural habitats on site.**

Although (with the exception of avifauna) no dedicated faunal surveys were undertaken for the sites during 2010, the lack of semi-natural habitat reduces the likely faunal species the sites are likely to support, therefore no significant impacts on faunal species are predicted, with the exception of avifauna.

No important changes regarding the surrounding Natura 2000 sites of the 2 wind farms appeared during 2010.

The location of Pestera and Cernavoda Wind Farms in relation to the neighbouring Natura 2000 sites is presented in Map 1.

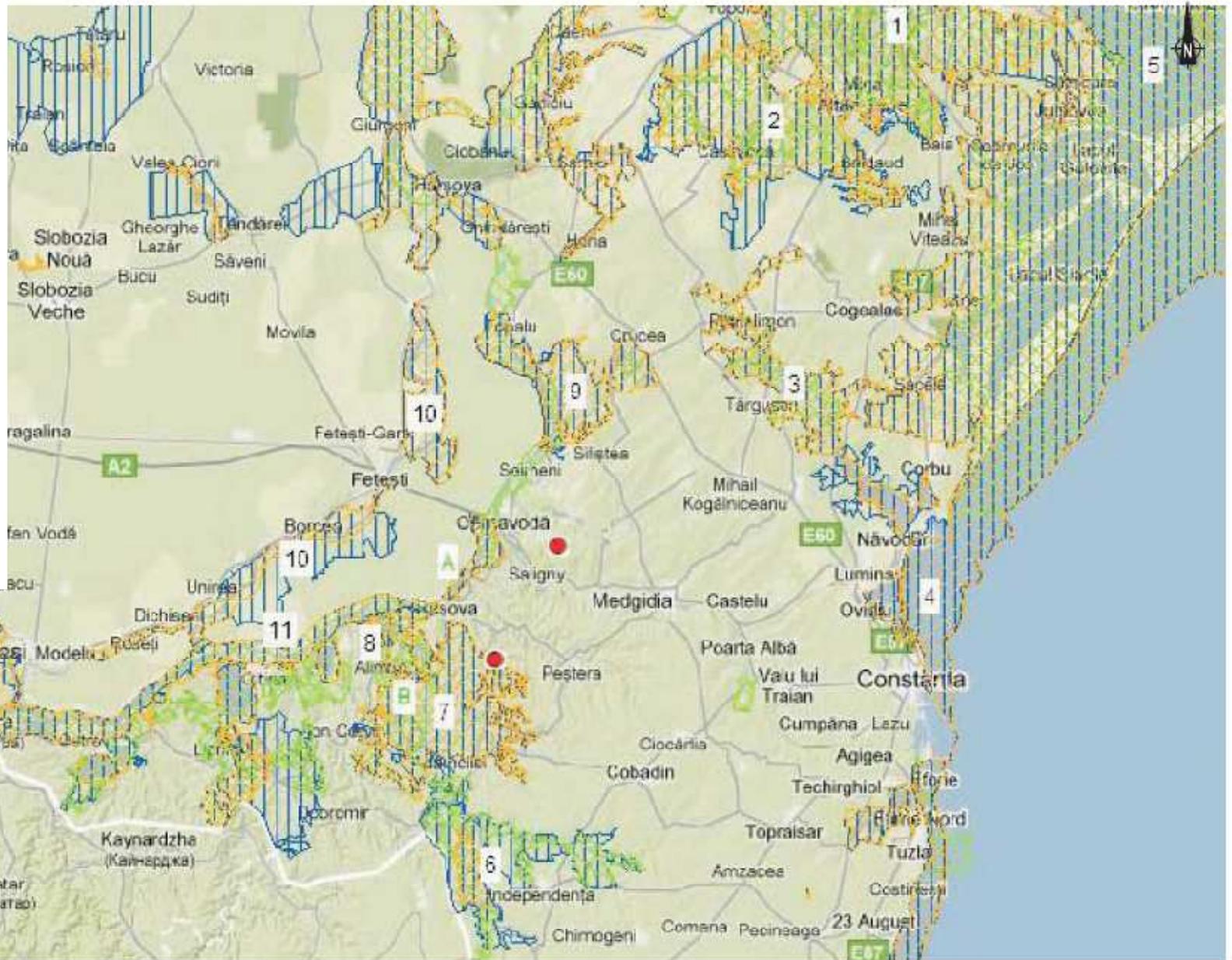
- Key**
- Pestera and Cernavoda EDPR Sites
  - Special Protection Area
  - Important Bird Area
  - Sites of Community Importance

**SPAs Within 15km of the Proposed Developments:**

- 1) Ostrovu Lung Gostinu
- 2) Podisul Hartibaciului
- 3) Chiele Dobrogei
- 4) Magura Odobeoti
- 5) Danube Delta
- 6) Dumbraveni
- 7) Aliman-Adamclisi
- 8) Balta Vederosa
- 9) Allah Blair
- 10) Bratul Borcea
- 11) Dunare-Ostroave

**SCIs Within 15km of the Proposed Developments:**

- A) Canaralele Dunarii
- B) Dumbraveni Valea Urliula Lcaul Verderosa



Map 1. Location of Pestera and Cernavoda Wind Farms.

## Chapter G: Information regarding avifauna monitoring programs

This chapter refers to the avifauna monitoring programs developed for each wind farm during 2010.

The methodology of assessing the impact on avifauna consisted in:

- weekly site visits
- direct visual observation
- samples collection of plants
- observations with binoculars, photos using professional equipment
- correlation with existing biographical data.



*Riparia riparia* (lastun de mal)



*Papaver rhoeas* (macul de camp)

The experts in charge with the monitoring elaborated and submitted to Constanta EPA a Monitoring Report every 3 months, containing a summary of field observations, required actions, and conclusions of monitoring reports.

The period considered for monitoring was the period of construction works (civil works of wind farm, wind turbines installation and substation execution):

- Pestera WF: April - August 2010 (2 reports were elaborated and submitted to Constanta EPA in May and August)
- Cernavoda WF: April- December 2010 (3 reports were elaborated and submitted to Constanta EPA in May , August and December)

Due to the fact that the wind farms are located at approximate 7 km distance, no important differences were observed regarding types of natural habitats and avifauna species. Below a short presentation of monitoring conclusions is presented for both wind farms:

### ➤ **Observations on avifauna:**

During monitoring period a total number of 20 species were observed on both sites. Generally, the specimens were identified in flight near the ground, probably in search of food, except for specimens of predatory species identified through binoculars at greater heights, but still in search of food. No nests were found on the sites.

The locations are not situated on any birds migration routes. No special mitigation measures were required for the execution of works during this period.

	List of identified avifauna species during Cernavoda WF monitoring.	National legislation	Category	Category
		OUG 57/2007	SPEC	IUCN
1	<i>Alauda arvensis</i> (ciocarlie de camp)	Annex 5 C	3	LC
2	<i>Buteo buteo</i> (sorecar comun)	-	Non-Spec	LC
3	<i>Columba livia domestica</i> (porimbel domestic)	-	Non-Spec	LC
4	<i>Coracias garrulus</i> (dumbraveanca)	Annex 3	2	NT
5	<i>Corvus corone cornix</i> (cioara griva)	Annex 5C	Non-Spec	LC
6	<i>Corvus frugilegus</i> (cioara de semanatura)	Annex 5C	Non-Spec	LC
7	<i>Corvus monedula</i> (stancuta)	Annex 5C	Non-Spec	LC
8	<i>Erithacus rubecula</i> (macaleandru)	Annex 4B	Non-Spec	LC
9	<i>Falco tinnunculus</i> (vanturel rosu, vinderel)	Annex 4B	3	LC
10	<i>Galerida cristata</i> (ciocarlan)	Annex 3	3	LC
11	<i>Lanius collurio</i> (sfrancioc rosatic)	-	3	LC
12	<i>Lanius excubitor</i> (sfrancioc mare)	Annex 4B	2	LC
13	<i>Melanocorypha calandra</i> (ciocarlie de Bragan)	Annex 4B	3	LC
14	<i>Merops apiaster</i> (prigorie)	-	3	LC
15	<i>Miliaria calandra</i> (presura sura)	-	3	LC
16	<i>Passer domesticus</i> (vrabie e casa)	Annex 5 C	Non-Spec	LC
17	<i>Passer montanus</i> (vrabie de camp)	-	3	LC
18	<i>Pica pica</i> (cotofana)	Annex 5C	3	LC
19	<i>Riparia riparia</i> (lastun de mal)	-	3	LC
20	<i>Sturnus vulgaris</i> (graur comun)	Annex 3	3	LC

**LEGEND:**

**OUG 57/2007:**

- ANNEX 3: plants and animals whose conservation requires the designation of special areas Conservation and Special Protection Areas of birds and fauna
- ANNEX 4B: SPECIES OF NATIONAL INTEREST, animal and plant species requiring strict protection
- Annex 5C: SPECIES OF COMMUNITY INTEREST whose hunting is allowed

**Category SPEC:**

- SPEC 3 - species whose populations are not concentrated in Europe, with unfavourable conservation status in Europe
- Non-SPEC-species whose populations are not concentrated in Eruropa, favourable conservation status in Europe

**Category IUCN:**

- Easy threatened (NT)
- With Low Risk (LC)



*Alauda arvensis* (ciocarlie de camp)



*Corvus corone corone* (cioara neagra)

#### Conclusions:

The construction works are not a disturbing factor for any species of avifauna, including for *Lepus europaeus* (observed in four site visits at considerable distances), ethology of the species being influenced insignificantly.

No migration routes were identified, but obviously, it was noticed that starting September, initially identified species of migratory birds were no longer observed.

#### ➤ **Observations on bats:**

Both WF areas have a low importance in terms of bat conservation habitats, considering that the sites consist in agricultural lands and pastures and have a low importance as feeding habitat for bats. During site visits no bats species were observed.

#### ➤ **Observation on Flora and Habitats:**

The construction works are executed only on agricultural lands and pastures. The environmental impact was assessed as local and temporarily.

	List of identified flora species during WF monitoring visits.	Category		List of identified flora species during WF monitorin visits.	Category
		IUCN			IUCN
1	<i>Achillea millefolium</i> (coada soricelului)	LC	17	<i>Onopordon acanthium</i> (scaiul magarului)	LC
2	<i>Agrimonia eupatoria</i> (turita mare)	LC	18	<i>Papaver rhoeas</i> (macul de camp)	LC
3	<i>Althea rosea</i> (nalba)	LC	19	<i>Reseda lutea</i> (rezeda de camp)	LC
4	<i>Anagallis arvensis</i> (scanteiuta)	LC	20	<i>Robinia pseudoacacia</i>	LC
5	<i>Artemisia sp.</i>	LC	21	<i>Salsola kali</i> (ciurlan)	LC
6	<i>Bromus erectus</i> (obsiga)	LC	22	<i>Salvia aethiopsis</i> (salvie austriaca)	LC
7	<i>Cannabis ruderalis</i>	LC	23	<i>Setaria viridis</i> (mohor)	LC
8	<i>Centaurea solstitialis</i>	LC	24	<i>Stachys annua</i>	LC
9	<i>Cichorium intybus</i> (cicoare)	LC	25	<i>Taraxatum officinale</i> (papadie)	LC
10	<i>Consolida regalis</i>	LC	26	<i>Tribulus terrestris</i> (coltii babei)	LC
11	<i>Convolvulus arvensis</i> (volbura)	LC	27	<i>Triticum aestivum</i> (grau)	LC
12	<i>Diploxaxis tenuifolia</i> (ridichioara)	LC	28	<i>Verbascum phlomoides</i>	LC
13	<i>Eryngium campestre</i>	LC	29	<i>Vicia cracca</i> (mazariche)	LC
14	<i>Heliotropium europeum</i>	LC	30	<i>Xanthium spinosum</i> (scai tataresc)	LC
15	<i>Heliotropium europeum</i>	LC	31	<i>Xanthium strumarium</i>	LC
16	<i>Lathyrus tuberosus</i>	LC	32	<i>Xeranthemum annuum</i> (plevaita)	LC

#### **LEGEND:**

##### **Category IUCN:**

-With Low Risk (LC)

Conclusions:

On small surfaces with spontaneous vegetation, representing anthropogenic natural habitat, the execution of works was carried out without affecting other areas than those provided in the projects.

It was observed that on the majority of topsoil storages that the habitat has the ability of restoration to original composition.

Also heavy rains registered in July-August2010 had a positive impact for the biodiversity.



*Cichorium intybus* (cicoare)



*Convolvulus arvensis* (volbura)

## Chapter H: Information regarding environmental construction monitoring

### H.1. Purpose of Environmental Construction Monitoring (ECM)

This chapter is describing the environmental monitoring programs developed for each wind farm during construction works, year 2010 and is showing the obtained results.

The purpose of the **Environmental Construction Monitoring** was to assure compliance with environmental laws and regulations and any permit conditions are met and potential environmental impacts are addressed for both wind farms.

These monitoring campaigns for each of our wind farms focused on the provisions of **EA** (Environmental Agreement) and **EMMP** (Environmental Management and Monitoring Management Plan). Moreover, the monitoring aimed to assess onsite environmental situation.

According to the provisions of **EA**-Environmental Agreement, the monitoring construction visits aimed:

- depositing of construction raw materials
- construction and demolition waste management
- site organization signalling
- construction vehicles cleaning on accessing public roads
- construction vehicles speed limiting onsite
- toilets provision for personnel for entire construction and mounting period
- earthworks management

Compliance with the conditions set in the **EA** is essential in the process of obtaining the Environmental Licence. Constanta EPA conducted a site visit to each of our wind farms and assessed the compliance with the above mentioned conditions. (See *paragraph. A.4. Authorizations obtained for Pesteria and Cernavoda Wind Farms during 2010*).

The **EMMP**-Environmental Management and Monitoring Plan foresee the following actions:

- establish a protocol for monitoring of ecological impacts during construction and operation
- develop a construction waste management plan identifying methods to reduce waste generation and reuse and recycle wastes in preference to disposal
- implementing the construction waste management plan and maintain records for annual environmental audits
- Monitor the removal temporary construction access roads, construction compounds and other areas following completion of construction and their restoration to encourage re-vegetation over time

## H.2. Applied methodology for ECM

The methodology applied for Environmental Construction Monitoring for both wind farms, Pestera and Cernavoda, consisted in the activities listed in the table below. In addition, the table is containing the actions undertaken in order to fulfil with each proposed activity.

No.	Activities	Actions
1.	Defining the framework - Identification of all relevant aspects in order to reach the proposed objectives	<ul style="list-style-type: none"> <li>- Meetings with all involved Constructors and Sub-constructors</li> <li>- Defining the necessary information for EMC and identification of data suppliers</li> <li>- Elaboration of initial report for each wind farm showing the methodology propose for EMC</li> </ul>
2.	Data collection	<ul style="list-style-type: none"> <li>- Assessment of construction works</li> <li>- Study of all relevant documents: technical projects, EMMP, EIA , etc.</li> </ul>
3.	Monitoring activities	<p>In order to monitor how the construction works are respecting with all requirements of permits and plans, site visits were undertaken <u>weekly</u>. During site visits following aspects were assessed:</p> <ul style="list-style-type: none"> <li>- Place for storing the construction materials and hazardous materials;</li> <li>- Waste collection and storage generated during construction;</li> <li>- Site organisation;</li> <li>- Signalling of construction activities;</li> <li>- Checking the compliance of traffic program;</li> <li>- Methodology of removal, storage and transport of vegetal soil layer;</li> <li>- Methodology of storage and transport of soil resulted from excavation</li> </ul>
4.	Compliance with the provisions of EMMP	<ul style="list-style-type: none"> <li>- Elaboration of <b>Waste Management Plan</b></li> <li>- Elaboration of <b>Construction Environmental Management Plan</b></li> </ul>

## H.3. Construction Environmental Management Plan (CEMP)

The CEMP describes how EDP's proposes to manage and control the environmental aspects of the Projects during the construction phases. The necessity of the CEMP elaboration is mentioned in the Environmental Management and Monitoring Plan (EMMP) of Pestera and Cernavoda Wind Farms.

The **CEMP** will be applicable to all EDP's staff and contractors during the Projects.

**Pestera WF** contractors are:

Objective	Contractor
Civil works for Wind farm	GES

Objective	Contractor
Wind turbine	Vestas
Pestera Substation	GES
High voltage line	Energobit
Power transformers	Concear
Meteorological towers	Telsat

**Cernavoda WF** contractors are:

Objective	Contractor
Civil works for Wind farm	STRABAG / GES
Wind turbine	Vestas
Cernavoda Substation	Energobit
High voltage line	ISATUR / AMPEL
Power transformers	Concear and Abengor
Meteorological towers	Telsat

The **key objectives** of the **CEMP** are to:

- ensuring that works are carried out in accordance with appropriate environmental statutory requirements, the conditions of approval for the project, relevant guidelines and existing environmental management systems and procedures (EMMP) of Pestera and Cernavoda Wind Farms
- Define actions that will be implemented by all Contractors and Subcontractors during construction, commissioning and testing of Pestera and Cernavoda Wind Farms to avoid and/or minimize the potentially adverse environmental, health and safety effects identified in the EIA reports and ESIA documentation.
- ensuring that works are carried out in such a way as to minimise the likelihood of environmental degradation occurring;
- ensuring that all employees engaged in the works comply with the terms and conditions of the CEMP;
- providing clear procedures for management of environmental impact including corrective actions.
- ensuring that works are carried out in such a way as to manage the impact of the works on neighbouring land uses;
- Ensure the construction work procedures minimize potential impacts on the environment and community.
- Ensure that EDP Renovaveis (EDPR) and all its Contractors and Subcontractors are committed to the philosophies of good site practice and safe working conditions. EDPR is also committed to ensuring that Pestera and Cernavoda Wind Farms are engineered and constructed in accordance with all applicable laws and regulations of Romania.

Projects **Environmental Objectives and targets** are:

Environmental Impact	Objective	Target
Environmental Approvals	Project to be constructed in accordance with planning, environmental and other approvals.	No identified non-compliances with approvals.
Effect on the natural ecosystem due to Project activities	To ensure there are no adverse effects on the natural ecosystem as a result of Project activities beyond those predicted in the EIA for the Works.	To have no release of materials toxic to the natural ecosystem.
		To cause no unnecessary or irreparable damage to the natural ecosystem during construction.
Air pollution resulting from Project activities	To ensure any release of pollutants to the air is within statutory limits.	To minimise complaints in relation to dust generated by Project.
Noise pollution resulting from Project activities	To keep noise pollution within statutory and contractual requirements.	To minimise complaints in relation to noise generated by Project activities that result from noise levels outside predicted and/or contractual /legislative limits.
Generation of waste	To minimise the generation of waste by: (a) recycling waste to other uses where practicable; (b) ensuring waste materials are deposited in bins / designated areas and that the waste is removed as appropriate.	To separate waste into streams to maximise recycling / reuse to minimise, within budgetary constraints, waste sent to landfill.
Contaminated Land	To identify contaminated land, minimise the disturbance and ensure there are no adverse impacts on human health or the environment.	<b>No soil contaminated by construction activities to be left on site at the completion of construction.</b>
Deposition of mud and slurry on roadways	To minimise mud and slurry deposited on roadways as a result of Project activities.	To receive no complaints or regulator action relating to mud or slurry being deposited on roadways as a result of Project activities.

A copy of CEMP can be found on EDPR website.

## H.4. Result of Environmental Construction Monitoring – PESTERA Wind Farm

Date: 2010-04-26  
Location: Access road to the site



Access road condition: compacted gravel road

Date: 2010-04-26  
Location: Access point



Access information panels

Date: 2010-04-26  
Location: Access point



The access road is clean, no marks of construction waste present on the road  
View in site direction

Date: 2010-04-26  
Location: DJ 255 Access road conditions



Compacted gravel access road close up – clean  
View in Pestera Village direction

Location: 26 wind turbine  
Description: Axis 2 – near the 26 Wind turbine, right side of the road,



Location: 22 wind turbine  
Description: 22 Wind turbine platform



Location: **13 wind turbine**  
Description: **13 Wind turbine platform**



Location: **18 wind turbine**  
Description: **18 Wind turbine platform**



Location: **12 wind turbine**  
Description: **12 Wind turbine platform**



Location: **Wind turbine 4**  
Description: **Wind turbine 4 platform**



Location: **Substation**  
Description: **Substation site organization**  
Date: **9/17/2010**



## H.5. Result of Environmental Construction Monitoring – CERNAVODA Wind Farm

Date: 6/4/2010  
 Location: DJ 255 Access road



Near the site organization the access road is clean

Location: **Access road**  
 Description: Axis 1 – Access to the left side of the site (Wind turbines 42 to 46)



Location: **42 Wind turbine**  
 Description: Wind turbine platform



Vegetal soil was installed  
 Excess soil was leveled

Location: **44 wind turbine**  
 Description: Wind turbine platform



Vegetal soil was installed  
 Excess soil was leveled  
 Concrete blocks were removed

Location: **36 Wind turbine**  
 Description: 36 Wind turbine platform



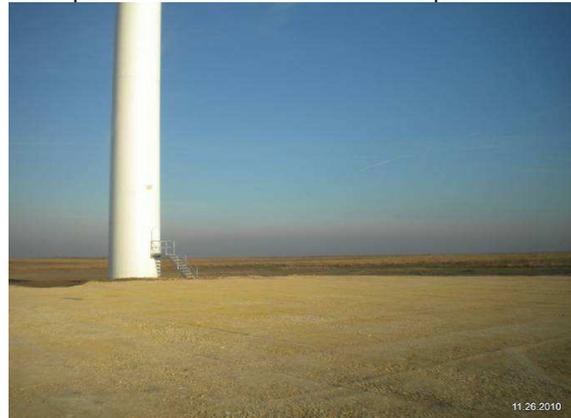
Location: **31 wind turbine**  
 Description: 31 Wind turbine platform



Location: **13 wind turbine**  
Description: **13 Wind turbine platform**



Location: **19 Wind turbine**  
Description: **19 Wind turbine platform**



Location: **12 wind turbine**  
Description: **12 Wind turbine platform**



Location: **Access road**  
Description: **Access road to Cernavoda 2**



Location: **110 kV Underground Power Line**  
Description: **Near 44 wind turbine platform**  
Date: **11/26/2010**



Location: **Substation**  
Description: **Substation site organization**



### Other relevant information

#### I.1. Summary of any areas of non-compliance with Environmental regulations, or exceedances of the relevant permit levels

During construction period of Pestera and Cernavoda Wind farms, EDPR Romania monitored the compliance with all conditions set in the Environmental Agreement. No non-compliance issues were registered.

This fact was certified by Constanta Environmental protection Agency (EPA), as part of the procedure for obtaining the Environmental Authorization for each wind farm.

In this regard, EPA has made a site visit in Pestera WF in 16.09.2010 and in Cernavoda WF in 11.11.2010, with the purpose of checking if all conditions imposed by them during construction were complied. Representatives of EDPR Romania and Constructors were present during site visits. This is a critical step for obtaining the Environmental Authorizations, valid for 10 years and mandatory for the operational period of both projects.

	<b>Pestera Wind Farm</b>	<b>Cernavoda Wind Farm</b>
Environmental Authorization issuance	EA No. 463 / 18.10.2010	EA No. 578 / 29.12.2010

At the end of construction period of each wind farm, take over certificates were signed between EDPR Romania, all main constructors and Constanta County council. These certificates are mandatory according with provisions of Governmental decisions: GD274/1994, modified by GD 940/2006 and GD 51/1996. These documents certify for each wind farm, that the constructions works were made according with all relevant permits, including construction authorizations.

Compliance of construction works with all relevant technical documents was checked by Constanta State Inspectorate in Constructions during relevant phases of construction.

#### I.2. Information on any fines or other penalties or pending prosecutions related to ESHS matters

No fines or other penalties were paid by EDPR Romania or hired constructors during construction period of both wind farms, as a result of non-compliance with regulations in force related to environmental, social or health& safety issues.