

(Projects funded under the Call 2014 onwards must use this format)



LIFE Project Number
LIFE15 NAT/PL/000728

Final Report
Covering the project activities from 01/08/2016 to 31/07/2020

Reporting Date¹
30/10/2020

LIFE PROJECT NAME or Acronym
LIFEciconiaPL

Data Project

Project location:	NE Poland
Project start date:	01/08/2016
Project end date:	31/07/2020
Total budget:	1 320 414 €
EU contribution:	792 248,40 €
(%) of eligible costs:	60%

Data Beneficiary

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¹ Include the reporting date as foreseen in part C2 of Annex II of the Grant Agreement

This table comprises an essential part of the report and should be filled in before submission

Please note that the evaluation of your report may only commence if the package complies with all the elements in this receivability check. The evaluation will be stopped if any obligatory elements are missing.

Package completeness and correctness check	
Obligatory elements	✓ or N/A
Technical report	
The correct latest template for the type of project (e.g. traditional) has been followed and all sections have been filled in, in English <i>In electronic version only</i>	✓
Index of deliverables with short description annexed, in English <i>In electronic version only</i>	✓
Mid-term report : Deliverables due in the reporting period (from project start) annexed <u>Final report</u> : Deliverables not already submitted with the MTR annexed including the Layman's report and after-LIFE plan Deliverables in language(s) other than English include a summary in English <i>In electronic version only</i>	✓
Financial report	
The reporting period in the financial report (consolidated financial statement and financial statement of each Individual Beneficiary) is the same as in the technical report with the exception of any terminated beneficiary for which the end period should be the date of the termination.	✓
Consolidated Financial Statement with all 5 forms duly filled in and signed and dated <i>On paper (signed and dated originals*) and in electronic version (pdfs of signed sheets + full Excel file)</i>	✓
Financial Statement(s) of the Coordinating Beneficiary, of each Associated Beneficiary and of each affiliate (if involved), with all forms duly filled in (signed and dated). The Financial Statement(s) of Beneficiaries with affiliate(s) include the total cost of each affiliate in 1 line per cost category. <i>In electronic version (pdfs of signed sheets + full Excel files) + in the case of the Final report the overall summary forms of each beneficiary on paper (signed and dated originals*)</i>	✓
Amounts, names and other data (e.g. bank account) are correct and consistent with the Grant Agreement / across the different forms (e.g. figures from the individual statements are the same as those reported in the consolidated statement)	✓
Mid-term report (for all projects except IPs): the threshold for the second pre-financing payment has been reached	✓
Beneficiary's certificate for Durable Goods included (if required, i.e. beneficiaries claiming 100% cost for durable goods) <i>On paper (signed and dated originals*) and in electronic version (pdfs of signed sheets)</i>	✓
Certificate on financial statements (if required, i.e. for beneficiaries with EU contribution ≥750,000 € in the budget) <i>On paper (signed original) and in electronic version (pdf)</i>	✓
Other checks	
Additional information / clarifications and supporting documents requested in previous EASME letters (unless already submitted or not yet due) <i>In electronic version only</i>	✓
This table, page 2 of the Mid-term / Final report, is completed - each tick box is filled in <i>In electronic version only</i>	✓

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2. List of key-words and abbreviations

BbPN – Biebrzański Park Narodowy – Biebrza National Park

EU – European Commission

GBBB – Grupa Badawcza Bociana Białego - White Stork Research Group

GDOŚ – Generalna Dyrekcja Ochrony Środowiska – General Directorate for Environmental Protection

ŁPKDN – Łomżyński Park Krajobrazowy Doliny Narwi – Łomża Landscape Park of the Narew Valley

MTR - Mid-term Report

NFOŚiGW – Narodowy Fundusz Ochrony Środowiska i Gospodarki Wodnej – National Fund for Environmental Protection and Water Management

PGE – Polska Grupa Energetyczna Dystrybucja S.A. Oddział Białystok – Polish Energy Group Dystrybution Inc Branch in Białystok

PR1 – Progress Report 1

PTOP – Polskie Towarzystwo Ochrony Ptaków - Polish Society for Bird Protection

RDOŚ – Regionalna Dyrekcja Ochrony Środowiska - Regional Directorate for Environmental Protection

SC – Steering Committee

SDF – Standard Data Form

SPA – Special Protection Area

UDT – Urząd Dozoru Technicznego – Technical Inspection Authority

VsK – Vogelschutz Komitee e.V.

3. Executive Summary

The main objective of the project was to secure 400 White Stork (C.1) nesting sites and to reduce its mortality due to electric shocks (C.2) in selected Natura 2000 sites in north-eastern Poland, where this species is characterized by the highest concentrations in the country. The project originally identified 10 mainstays, but the monitoring of the success of White Stork breeding performed in July 2017 showed that one of them, the smallest (the Upper Nurzec Valley), did not meet these criteria (1 inhabited nest) and therefore this Natura 2000 site was excluded from the project.

As part of the project, 411 nesting sites of the White Stork were secured. We moved more than 301 nests from endangered and dangerous locations (roofs of buildings, active chimneys, old damaged free standing poles, decayed trees) to new free standing poles with nesting platforms. Due to the lack of interest of residents in roof platforms (weight, faecal contamination), we installed only 5 such structures, the rest was replaced by metal platforms for installation on power poles, where birds built their nests directly on wires. We purchased 36 structures, which, in cooperation with PGE, were installed in the indicated locations by power engineers. We purchased a vehicle with an aerial work platform (C.3), which allowed us to reach the nests that require our intervention, located on the roofs of buildings, free standing posts and trees, even those located in difficult terrain. Thanks to this, we have carried out 69 interventions consisting of trimming branches making access difficult, renovating an old nest, reducing its weight, leveling and installing platforms, etc.

The implementation of measures aimed at protecting the power grid against fatal electric shocks and collisions of birds (C.2) was possible with the participation and cooperation of power engineers – PGE Dystrybucja S.A. Białystok Branch. We started our work on the task by participating in the design of a device isolating Storks from disconnector poles and electrical substations (making it impossible for them to sit on them), as it turned out that so far there were no solutions that would meet the requirements of the operator on the Polish market. The construction is based on the shape of St. Andrew's cross made of flexible and durable UV-resistant material. Subsequently, we purchased 270 sets of the above described devices, which together with the list were handed over to the power engineers who mounted them. The second part of the task included marking 4 sections of high voltage lines (110 kV) with FireFly tags. Originally, the application provided for installation of marker balls on the lines, but as they put more load on the wires, accumulate ice and resist the wind, they were replaced by FireFly markers. We decided to use this solution after analyzing the latest knowledge on protection of birds against collisions with power lines. The line sections selected for protection ran across river valleys (of Narew and Biebrza rivers), which posed a risk of collision with birds, especially during migration. This action was carried out with the use of an innovative method of installation – a drone. This made it possible to work without the need to switch off the power to the lines and was safer for people, because in the traditional method markers are mounted from an aerial work platform or with the use of climbing techniques.

As part of the project, we have renovated and equipped two functioning medical care points for wild birds (C.4): Animal Rehabilitation Center in Grzędy in the Biebrza National Park and the Bird Rehabilitation Center (BbPN) of the Łomża Landscape Park of the Narew Valley in Drozdowo. The renovations and new equipment provide a comprehensive improvement in the quality of care in both centers, from the stage of diagnosis, curing, conducting treatments to rehabilitation of birds and their release into the wild.

A wide monitoring of the effects of the project (D.1) was carried out, which included:

- monitoring of the success of White Stork breeding in the years 2017 – 2020 in 9 Natura 2000 areas included in the project – a total of about 2500 nests each year,

- comparison of two methods of counting: classic versus drone – for 3 years we have been tracking the number of Stork chicks in the nests from the ground (the classic way) and using a drone,
- monitoring of the effectiveness of high-voltage line marking with the use of an ornithological radar, which allowed for precise determination of the number, height and spatial distribution of bird migration routes in relation to the power line,
- monitoring of the effectiveness of the protected elements of the power grid on a sample of 34 poles (over 10%),
- monitoring of the survival of birds treated in rehabilitation centers by means of GPS-GSM telemetry transmitters and rings,
- assessment of social and economic impact of the planned actions on the local economy and society and on restoration of the ecosystem functions (D.2).

Increasing knowledge about the protection of the species allows to stop the decline of society's tolerance towards the White Stork, therefore in the project we have included a number of activities in this area (E.1). Particularly noteworthy are the “busłowe łapy” baking workshops, during which we cultivated the almost forgotten tradition of baking yeast rolls in the shape of Stork feet, to encourage birds to settle on the farm. We conducted 5 training courses on White Stork protection (E.3), with the practical part dedicated to first aid, addressed to employees of local administration, power distribution companies, regional directorates of environmental protection, national and landscape parks and veterinarians. In order to summarize the current knowledge about the Stork and our project, we organized an international conference (E.4), during which the main focus was on practical conservation of the species. Among the speakers, apart from the project workers, there were representatives of institutes and universities from Poland and abroad (Lithuania, Belarus), as well as members of the White Stork Research Group (GBBB). For lovers of active tourism we have built a lookout tower, an active education pathway and organized an outdoor exhibition of works awarded in the competition. Home birds were able to watch the life of Storks in an on-line stream from the nest. Each year, viewers from nearly 50 countries around the world took advantage of this opportunity. We prepared and handed over to the bird rehabilitation centers, municipal offices and regional directorates of environmental protection special cardboard boxes for transporting injured Storks. As part of the activity, educational materials were developed, where you can find more information about the project itself as well as about the White Stork: project website, web map presenting a GIS database of White Stork nests and results of conducted monitoring (E.2), “White Stork protection guide” and “White Stork protection guide for veterinarians”, instructions for dealing with Storks, educational boards, layman’s report (E.5). As part of networking with other projects (F.4), we have carried out 3 study visits, during which we visited 8 similar projects. The knowledge gained and contacts established result in further cooperation in our subsequent initiatives.

4. Introduction

General and detailed objectives

1. Preserve the White Stork population in the eastern Polish river valleys (about 1600 pairs).
2. Protection of endangered and conflicting nesting sites of the White Stork (400).
3. Decreasing the decline in society's tolerance towards the White Stork.
4. Reduction of White Stork mortality due to fatal electric shock and 110 kV line collisions.
5. Increasing the effectiveness of intervention measures related to the protection of White Stork nests.

6. Improvement of the standards of functioning of two rehabilitation centers specializing in treatment of Storks.
7. Protecting biodiversity by safeguarding the umbrella species.

Which places does it concern

9 Natura 2000 areas (SPA Biebrza Refuge, Marshy Valley of the Narew River, Ravine Valley of the Narew River, Upper Narew River Valley, Lower Narew River Valley, Wizna Marsh, Omulew and Płdownica Rivers Valley, Liwiec River Valley, Lower Bug Valley).

Which habitat types and/or species are targeted

The *Ciconia ciconia* White Stork.

Main conservation issues that are objectives (including risks)

1. Moving the most endangered and conflicting White Stork nests on 300 standalone pillars, installation or replacement of 60 platforms and repairing 40 nests.
2. Safeguarding of 110 transformer stations, 80 switchboard stations and 80 branching stations, which contribute to the highest Stork mortality in the project areas.
3. Securing with markers of 4 sections of 110 kV lines crossing river valleys with the highest number of bird collisions during migration.
4. Creating a GIS database of White Stork nests and a project website.
5. Online transmission from the White Stork nest in the breeding season.
6. Purchase of a specialist off-road car with an aerial work platform for interventions at Stork nests (renovations, creation of an access area).
7. Conducting 5 training sessions for energy company employees, municipal offices, veterinarians, volunteers, regarding interventions with nests and first aid for wounded and sick Storks.
8. Renovation and adjustment of two rehabilitation centers for Storks.
9. Monitoring of the breeding population of the White Stork.
10. Organization of an international conference on the protection of the White Stork.

Threats:

1. Reduction of the area of feeding grounds and the number of potential victims, due to river regulation, development of river valleys other than in the form of grasslands, water reclamation and agricultural intensification.
2. Collisions with power lines, which occurs most frequently in the vicinity of the nest. The species for which the collision rate of the young is very high is the White Stork.
3. Electric shocks - this risk occurs most often on low and medium voltage lines and transformer stations, where the distance between conductive elements of different voltages or between the live element and grounded element is too small.
4. Loss of nesting sites, as a result of roof repairs, eliminating nesting platforms on poles, regrowth of tree branches, etc.
5. Mortality during migration caused by collisions with wind farms, overhead lines, and recently mainly due to deliberate killing (Syria, Lebanon, Oman).
6. Predation - mainly from the marten, especially the beech marten. Literature indicates that birds nesting on the roofs of buildings are most at risk (mainly chicks), and the best protected are birds nesting on active power poles.

The social and economic context

1. Meetings with the local community, decision-makers and other stakeholders responsible for the subjects targeted by the project (e.g. restoring the old traditions of "Stork paws") as a part of the promotion of the project.

2. Mobilization of the society by including various social groups in its implementation, among others local authorities (communes), residents, children and youth, members of the fire brigade.
2. Website of the project and GIS database ensuring the involvement of local communities and nature lovers from all over the country in monitoring the distribution, density, location and changes of the population of this species in the most valuable area of Poland in terms of natural environment.
3. Maintaining an appropriate conservation status of the White Stork, a species that is still very much liked by the society.
4. Securing the roofs of buildings against their destruction by White Stork nests is an indirect form of economic aid.
5. Building an active educational path and a tower, as well as installing a webcam at the White Stork nest will contribute to a better understanding of natural issues and promoting pro-ecological attitudes.
6. Educating and consolidating through a series of trainings the patterns of proper handling of conflicting nests, injured and sick Storks.
7. A large part of the tasks planned in the project are contracted out, which means that their implementation provides work for tens (and sometimes hundreds) of people during the project, for many months, often coming from local communities.
8. Securing power lines ensures the reduction of network failure rate and thus contributes to measurable financial benefits.

Expected long-term results (as foreseen at the beginning of the project)

Maintenance in good conservation status of the White Stork population in the river valleys of north-eastern Poland (1590 pairs at the beginning of the project versus 1600 pairs at the end of the project). A number of good practice measures have been applied in the project (e.g. the relocation of nests to freestanding poles, securing the electricity grid against fatal electric shocks, monitoring with the use of generally applied methodology), but also several demonstrative solutions (e.g. radar and drone monitoring). These solutions are generally available, easy to implement and relocate and deploy elsewhere (also abroad).

5. Administrative part

In order to effectively manage the project in accordance with the planned schedule, PTOPI recruited a project director and part-time accountant, 4 project coordinators and a financial coordinator (full time positions) for the entire period of the project implementation 01/08/2016 – 30/07/2020.

On 30/09/2016, an agreement was signed with the partner project BbPN, and on 03/11/2016 with the second partner – ŁPKDN.

BbPN has engaged 3 full-time employees to implement the LIFEciconiaPL project on the basis of an increase in the scope of responsibilities under the existing employment contract, as non additional personnel. Formally, however, all these 3 people were recruited to the project in March 2017, as until then BbPN had held internal consultations with its legal counsel, human resources specialist, management and accounting staff on the possibilities and manner of hiring these people. Some of the duties connected with monitoring have been moved from the category of personnel to the category of external assistance.

Immediately after signing the partnership agreement, ŁPKDN concluded mandate agreements with two local project coordinators and an accountant, in the form of additional personnel. All

ladies work full-time at ŁPKDN, but their duties do not correspond to the scope of works at LIFEiconiaPL project. Due to the sick leaves, the local coordinators were changed, which did not affect the project implementation.

The settlement of working time of all beneficiaries was carried out with the use of timesheets.

On 5 September 2016 an agreement was signed with the VsK a party co-funding the project. During the project we visited the foundation's headquarter twice with a detailed progress report. The difference in relation to the contract with the EC is the introduction of a new party co-financing the project, on 10 August 2020 we signed a contract with the NFOŚiGW for reimbursement of part of the PTOp costs.

In December 2016, the project SC was established, composed of representatives of PTOp (project director), project partners as well as RDOŚ, and from 2017 also PGE Branch in Białystok. 4 Meetings of the Committee. project management were organized (described in the item 6.1 - Action F.1)

During the implementation of the project there were 4 visits of the project monitor: 9-10 May 2017, 10-11 May 2018 , 6-7 June 2019 and 24-25 June 2020. The meeting in 2019 has a character of a joint visit of an external monitor and EASME representative. The purpose of the visits was to control the implementation of individual project tasks, discuss technical and financial issues and issues contained in the letters from the EC. Consultations with the project monitor took place, depending on the needs, also in addition to the visits.

Technical and financial control of the project implementation was carried out on an ongoing basis. Co-beneficiaries submitted financial reports with supporting documents to the Coordinating Beneficiary every 3 months. The representative of RDOŚ in Białystok, being a member of SC, showed little involvement in the project works, except that, the communication between the project partners, SC members and the project monitor was smooth and fruitful.

6. Technical part (maximum 25pages)

6.1. Technical progress, per Action

Action A.1. Selection of nests to be secured

Foreseen start date: III/2016 Actual start date: III/2016

Foreseen end date: 04/2017 Actual end date: 06/2017

Planned scope: selection of approx. 90% of the detailed locations of the nests where construction of a new nesting site (transfer to a post), platform replacement or installation or renovations of the nest will be carried out and appropriate arrangements will be made for this purpose.

Completed scope: accomplished

Implementation of the task started as planned. PTOB employees carried out numerous field inspections in individual Natura 2000 sites. In order to obtain information on nests at risk of collapse or in conflict, the database at www.kartoteka-przyrodnicza.pl, own PTOB archival data, and information obtained from residents were used. By 30/06/2017, 90% of the nests to be relocated were selected including:

In the SPA Ravine Valley of the Narew River, the ŁPKDN selected 8 nests.

PTOB made selections in the area of:

SPA Upper Narew Valley, SPA Marshy Valley of the Narew River, SPA Wizna Marsh – 92 nests,

SPA Biebrza Refuge – 94 nests,

SPA Liwiec River Valley – 17 nests,

SPA Lower Bug Valley – 112 nests,

SPA Lower Narew Valley – 30 nests,

SPA Omulew and Płdownica Rivers Valley – 28 nests,

Total: 381 nests selected.

Appropriate arrangements for transferring onto poles, replacing the platform or renovating the nest were carried out as part of the resources allocated for the implementation of action A. 1.

Action C.1. Securing 400 nesting sites

Foreseen start date: I/2017 Actual start date: I/2017

Foreseen end date: 03/2020 Actual end date: 03/2020

Planned scope: securing 200 nests before March 2018, securing subsequent 200 nests before March 2020.

Completed scope: accomplished

The task included securing 400 White Stork breeding sites, including the transfer of 300 nests to free-standing poles, another 60 nests to roof platforms and 40 interventions using an aerial work platform.

Protecting nests by moving them to a safe and conflict-free location on free-standing poles proceeded as planned. As part of the project, we moved 301 nests from endangered and dangerous locations (roofs of buildings, active chimneys, old damaged free standing poles, decayed trees) to new free standing poles with nesting platforms and roof platforms, 292 of which was performed by PTOB and 9 by ŁPKDN. In order to achieve the greatest possible effect of the new platform settlement, we transferred at least a thirty centimeters of the old nest layer to the platform and calcimined some of the nests with orchard-grade lime (to make them look like used), additionally, for research purposes, the nests were measured and weighed before dismantling. In order to compensate for possible losses of species breeding sites associated with White Stork nests, each new platform post was equipped with 3 additional breeding stalls for Sparrows.

We encountered some difficulties in the implementation of the task in the case of roof platforms. We installed only 5 such structures out of the 60 planned. It turned out that the owners of the property in most cases did not agree to replace the roof platform with a new one, fearing further damage caused by the heavy load on the roof by the nest and the destruction of the roof by bird droppings. In such situations we moved nests to free-standing poles. In order to maintain the project indicators, we performed more interventions using a lift and, in addition, we have taken into account one more nesting hazard, not previously considered in the project. Birds are increasingly attempting to build nests on active power poles without platforms. This situation poses a threat to Storks, e.g. by increasing the likelihood of electrocution, especially in the case of young birds during their first flights. Storks' nests located on power poles without platforms are unstable, more exposed to weather conditions. In addition, they cause short circuits causing periodic power outages, which generates social conflicts. After consultation with the project monitor, we purchased 36 metal platforms to be installed on power poles. We signed an agreement with PGE, the only entity in the project area that can install such structures. The purchased platforms were transferred to PGE, which, in cooperation with PTOB, anchored them in dangerous, platformless locations (identified by the beneficiaries during the monitoring of the breeding success of the White Stork). One metal platform was installed by the PTOB as part of the intervention on a standalone pole.

We carried out 69 interventions with the use of a car with an aerial work platform, which consisted in trimming the branches making access difficult, renovating the old nest, i.e. reducing its weight, leveling and mounting platforms, etc. The equipment purchased under the project allowed us to reach the nests requiring intervention, located on the roofs of buildings, free standing posts and trees, even those located in difficult terrain.

After moving the endangered nests, we installed security devices on roofs, chimneys and power poles in old and conflicting locations, so as to prevent Storks from rebuilding the nests. As part of the task, we installed 143 such security devices. In response to a request by PGE made during the SC meeting, PTOB purchased 60 such security devices and handed them over

to PGE to be assembled on power lines poles in the project implementation area during interventions performed by power engineers. These security devices were also constructed in cooperation with us. As part of the task, we undertook additional works aimed at resolving the conflict with neighbors resulting from the activity of the animal rehabilitation center in Drozdowo. The owners of the houses next to the center in ŁPKDN complained about the destruction of roofs by bird droppings. The problem was discussed during the SC meeting. We secured 2 roofs with steel cords mounted along the ridge from sitting and being defecated on by flying Storks, but ones still under the care of the center.

The first milestone was achieved with a slight delay. The occurrence of a muddy and wet soil due to difficult weather conditions made it impossible to install the posts in part of the location and finally fewer posts were set up in the first tender, but this did not pose a threat to the timely execution of the whole activity. We informed about all difficulties and proposed solutions on an ongoing basis during the project monitor visits and in subsequent reports. The substitution measures applied made it possible to secure 411 breeding sites of the White Stork within the set deadline and within the available financial resources.

The continuation of the task after the end of the project will consist in the ongoing maintenance of nests on posts and interventions on the nests. For this purpose PTOP will use a car with a lift purchased under task C.3. In order to ensure durability, the owners of the land on which the post with the platform was installed had signed declarations in which they agreed to the installation and undertook not to take any actions that might endanger durability in the long term (25 years). We used spun prestressed concrete posts of E type with a sufficiently high load capacity, maintenance-free, with a manufacturer's guarantee for at least 25 years, with durability of even more than 50 years. In the case of durability of metal platforms mounted on power poles, we signed an appropriate agreement with PGE (Annex 2. action C2)

The following was attached to the final report (Annex 1. action C1):

- lists with the location of secured nests,
- photographs of the progress of works.

Location of new poles and platforms made by PTOP and ŁPKDN is also available on a webmap made within the project:

<https://mangomap.com/3bird-radar-system/maps/73890/lifeciconiapl-ochrona-bociana-bia-ego-w-dolinach-rzecznych-wschodniej-polski?preview=true#>

In order to see the locations of the poles and platforms made by PTOP and ŁPKDN select the appropriate layer in the right menu Map Legend.

Action C.2. Securing the power grid

Foreseen start date: I/2017

Actual start date: I/2017

Foreseen end date: 03/2020

Actual end date: 07/2020

Planned scope: securing 50% of the grid elements by 07/2018, securing the remaining 50% of the grid elements by 03/2020, securing 4 sect. of the 110 kV line before 06/2018.

Completed scope: accomplished with a delay

More than planned, as 274 out of 270 objects were selected for securing, on which fatal electrocutions of Storks, mainly young ones (1.5 Storks per post on average), were recorded. We started our work on the task by participating in the design of a device isolating Storks from disconnecter poles and electrical substations (making it impossible for them to sit on them), so far there were no solutions that would meet the requirements of the operator on the Polish market. The construction is based on the shape of St. Andrew's cross made of flexible and durable UV-resistant material. The device has undergone all the necessary tests and inspections and has been approved for installation on power grid elements. We purchased 270 sets of the above described devices, which together with the list of selected objects were handed over to PGE. Some of the dangerous elements of the power grid were also located in a short distance outside the project area and outside the Natura 2000 area (observation of power engineers, notification of residents). Due to the potential risk of a fatal bird electrocution in the immediate vicinity of Natura 2000 areas, such constructions were also secured. 46 of the facilities selected by PTOP were secured by PGE independently of the project by modernization of the line, which also included reconstruction to ensure bird safety. In total, 283 poles were secured. The efficiency of the devices was one hundred percent. In all monitored cases, fatal electrocution of Storks was completely eliminated. In the whole country, the process of mounting these devices on poles by various network operators (over 500 poles) started in addition to the project, which is a replication of the project.

On 11 October 2018, markers were installed on more than 700 meters of high-voltage line (110 kV) in the Narew River valley (near BbPN), commissioned by PTOP. Initially, we assumed in the application only the purchase and handover of equipment for assembly, but in order to improve cooperation with PGE and speed up their further activities and to be able to monitor the effectiveness of this solution within the project, we decided to commission the first installation. This section was monitored using ornithological radar (before: spring 2018 and after: spring 2019). On 11 December 2019, on behalf of PGE, markers were installed on the remaining 3 sections of high voltage lines planned to be secured in the project. A total of 150 markers were installed. This action was carried out with the use of an innovative method - a drone. This made it possible to work without the need to switch off the power to the lines and was safer for people, because in the traditional method markers are mounted from an aerial work platform (the use of which was impossible here due to the wet terrain) or with the use of climbing techniques. Originally, the application provided for installation of marker balls on the lines, but as they put more load on the wires, accumulate ice and resist the wind, they were replaced by FireFly markers. The decision was made after analyzing the latest knowledge on protection of birds against collisions with power lines (*Bernardino et al. 2018. Bird collisions with power lines: State of the art and priority areas for research. Biological Conservation, 222: 1–13*). The exchange of these markers met with great interest and acceptance of PGE. The option of using the balls was associated with the preparation of a specialized expertise on the possibility of their assembly (the cost of about 25 000 PLN). This was due to the fact that the line was quite old, and additionally there was an optical fiber on the lightning conductor on which the assembly was to be performed. FireFly markers, due to

their low weight, made expertise unnecessary. Besides, its result could turn out to be negative (high probability), which would make the use of the balls impossible.

The task was completed in its entirety, there were some delays, which ultimately did not affect the final result. We informed about the difficulties that occurred on an ongoing basis in subsequent reports, requesting a postponement of the deadline for the implementation of the task. The implementation of measures aimed at protecting the power grid against fatal electric shocks and collisions of birds was possible with the participation and cooperation of power engineers – PGE. The delays were largely influenced by the company's internal procedures at the stage of agreements and formalities, described in details in previous reports. The letter of intent, in which the general conditions of cooperation were established, was signed at the beginning of the project implementation, and the relevant agreement enabling the commencement of work was signed on 1 March 2018. The agreement also defines sustainability issues. In the course of the conducted arrangements we managed to work out cheaper and more effective solutions. It is planned to use the acquired knowledge and developed methods in other protection projects.

The following was attached to the Final Report (Annex 2. action C2):

- a table with location of protected grid elements,
- photographs of objects secured with deterrents,
- PGE-PTOP agreement of 4 November 2019.

The previous reports included respectively:

- PR1 – Annex 2. action C2 – cooperation agreement PGE-PTOP of 1 March 2018, photographs presenting the installation of FireFly markers

Location of secured power grid element is also available on a webmap made within the project:

<https://mangomap.com/3bird-radar-system/maps/73890/lifeciconiapl-ochrona-bociana-bia-ego-w-dolinach-rzecznych-wschodniej-polski?preview=true#>

In order to see the locations of the secured power grid elements select the appropriate layer in the right menu Map Legend.

Action C.3. Purchase of a specialist off-road vehicle with a basket crane

Foreseen start date: IV/2016 Actual start date: IV/2016

Foreseen end date: 03/2017 Actual end date: 09/2017

Planned scope: purchase of a specialist off-road vehicle with a 4x4 drive and a basket crane

Completed scope: accomplished with a delay

Work on preparing the procurement procedure started as planned. The tender for the purchase of a specialist off-road vehicle (4x4) with a lift was announced in the first quarter of 2017, but due to the long time of waiting for the chassis at the manufacturer (Mercedes-Benz), the process of mounting the lift on the chassis and obtaining all necessary permits from the Technical Inspection Office, the subject of the order was received at the beginning of the third quarter of 2017. At the time of preparing the terms of reference, it turned out that the equipment meeting the specific requirements presented in the application, such as the maximum length of the lift arm, is not available for sale, and requires the process of mounting the lift on the chassis and obtaining additional permits. Despite the timely completion of the procurement procedure, a ready to work vehicle was collected on 22 September 2017. In order to operate the purchased equipment, two persons employed in the project were trained (the coordinators of the Biebrza Refuge and Narew Valley project), who acquired state qualifications to operate and work on the lift (UDT IP category). The purchased Mercedes-Benz Sprinter 316 CDI car with 4x4 drive and aerial work platform has a maximum arm operating range of up to 16 m. This allows it to reach most of the nests requiring intervention on the roofs of buildings, stand-alone posts and trees (cutting off branches making access difficult, renovating old nests, reducing their weight, etc.), even in difficult terrain and fairly high location (e.g. on a barn top). We performed a number of such activities under task C.1., additionally the lift made it possible to take samples of the material from the nests, which in turn provided us with a lot of valuable information about its content. The delay in the delivery of equipment did not negatively affect the implementation of protection tasks, we conducted 50% more interventions than originally assumed.

After the completion of the project, PTOB will use the car with a lift to maintain the durability of task C.1., i.e. for the ongoing maintenance of the nests transferred to the poles and subsequent interventions at the nests (reducing, trimming the branches).

The final report is attached to task C.1., related to the use of the purchased equipment (Annex 1. action C.1.):

- a list with the location of the secured nests (including the interventions with the use of a lift),
- photographs presenting the progress of the works, including works with the use of a lift.

The previous reports included respectively:

- MTR Annex 6 – photographs of the purchased equipment

Action C.4. Renovation and adaptation of rehabilitation centers for Storks

Foreseen start date: IV/2016 Actual start date: IV/2016

Foreseen end date: 03/2017 Actual end date: 09/2019

Planned scope: renovating and further equipping two existing bird rehabilitation centers

Completed scope: accomplished with a delay

BbPN:

The actual date of starting of works for the implementation of the activity for BbPN is 01/03/2017. The start of implementation was delayed due to organizational problems with employing the project staff. In March 2017, when an employee of BbPN was engaged in this task, a tender procedure was conducted and public procurement contractors were selected, including the contractor for a Stork aviary at the Animal Rehabilitation Center in Grzędy. The works were completed and accepted on 2 September 2017.

In the fourth quarter of 2017, as part of the task, 3 artificial nests for rearing small nestlings, as well as the first batch of equipment that allowed to raise the standards of care of the treated birds were purchased. In the MTR the EC was requested to change the list of purchases made as part of this task together with a detailed justification for the purchase of individual devices. The changes resulted from the fact that BbPN carried out a significant scope of work planned in the LIFEciconiaPL project from other sources, mainly from the Forest Fund, because the needs were urgent, and more than two years passed from the time of preparing the application for project financing to the moment of signing the grant agreement between PTOPI and the EC. Renovation of the isolation stall for Storks, construction of a coop and purchase of: Stork cage, transport cages, taming equipment, biological and stereoscopic microscopes, animal scales, ozone generator and pressure washer was made outside the LIFE project. BbPN renounced the purchase of suitcase ultrasound device because, apart from the project, X-ray equipment has already been purchased, which ensured sufficient diagnostics. In the first quarter of 2018, the permission to make additional purchases was obtained (EASME B3/RH/at D (2018) 898831, 12 February 2018), which were made in the second and third quarter of 2018. Thanks to this, the center was equipped with a haematology analyzer, biochemical analyzer, magnetic stirrer with accessories, wall incubator with stand, laboratory centrifuge, ceiling treatment lamp, microscope camera, washing and drying machine, ultrasonic cleaner, dishwasher.

In 2019, the last, third part of the veterinary accessories, such as dressings and disposable equipment, was purchased. Such small equipment was purchased according to the current needs of the center. Some object could not be stored for lengthy periods of time as they lose quality and usability. The delay in the implementation of the action, resulting from the change of the procurement list and involvement of BbPN employees to the project with a slight delay - from March 2017, has been made up for.

LPKDN:

Work on the implementation of the task began as planned, however some difficulties were encountered in the renovation of the center. A cost estimate was developed in December 2016, taking into account all the elements necessary to create a center that would meet all the basic standards that such a center should meet, previously the necessary expansion of the building's cubic capacity was not taken into account.

Due to the fact that one of the walls of the expanded building was to be in direct contact with the neighbor's plot of land, it has become necessary to request from the Minister of Infrastructure and Construction an authorization to grant an exemption from the technical and construction regulations. A relevant application was submitted by the Poviast Staroste's Office

in Łomża on 21 November 2016. On 14 April 2017, the Staroste's Office issued its consent to the above via letter no. ROŚB.6740.3.24.2016. Following the permit, a construction project was prepared for the expansion of the animal rehabilitation center. The next stage was to obtain a permit for the expansion and reconstruction of the animal rehabilitation center on plot No. 736 cadastral district Drozdowo. In this case, at the request of ŁPKDN, the Staroste's Office initiated the administrative proceedings on 31/07/2017 via the letter no. ROŚB.6740.1.312.2017. Permission to expand and reconstruct the center was obtained on 21/08/2017 via decision No. 299/2017 of the Łomża Staroste. The decision became final on 7 September 2017, and immediately, because already on 14 September 2017 an inquiry for the execution of construction works was announced.

ŁPKDN spared no effort to carry out the task on time, yet, for independent reasons, there was another delay. In the period 14/09/2017 – 05/02/2018 offer inquiries for the execution of construction works were announced 5 times, however the contractor was not selected (lack of offers or offers exceeded the amount allocated to the task). It was only as a result of the 6th offer inquiry that the contractor was selected and an agreement was signed. The works were completed and on 05 July 2018 the construction works were accepted. ŁPKDN did not have the facilities to store furniture and veterinary equipment, so only after the renovation of the center could proceed with the purchase of equipment. Immediately, on the day following the acceptance of the construction works, the inquiry for the purchase and delivery of veterinary equipment and furniture was announced. One partial offer was received, which did not comply with the provisions of the offer inquiry, and therefore the procedure was canceled. On 20 July 2018 the inquiry was re-announced, as a result of which the contract was signed and the equipment was delivered in October 2018. On the basis of the BbPN's experience, the list of equipment purchased as part of the resources allocated to the implementation of the task has been slightly amended to optimally meet the needs of the center's patients. It was decided to purchase a set of surgical instruments and a set of stainless steel cages instead of a suitcase ultrasound device.

Despite the delay, all the birds were given help; those who needed to stay in isolation were provided with a temporary place in the farm building. The remaining birds were placed in a large external aviary, which was the first to be prepared as part of the expansion of the center.

Both centers functioned continuously and provided care for injured birds despite the renovation works and the delay in the implementation of the task did not cause any deterioration in the level of care, which was explained in details in the cover letter to PR1. The renovations (major overhaul in the case of the ŁPKDN) and new equipment provide a comprehensive improvement in the quality of care in both centers, from the stage of diagnosis, curing, conducting treatments to rehabilitation and release into the wild. During the sustainability of the project, the funds for the centers' current operations are secured by BbPN and ŁPKDN.

The following was attached to the Final Report (Annex 3. action C4):

- photographs from the current work of both centers,
- photographs of all equipment purchased for the ŁPKDN center,
- reports on the work of both centers for the years 2018, 2019.

The previous reports included respectively:

- MTR Annex 6 – photographs of a part of BbPN equipment, Annex 13 Report from the rehabilitation center covering 2016 - BbPN, Annex 14. Report from the rehabilitation center covering 2016 – ŁPKDN
- PR1 – Annex 3. action C4 – photographs from the course of renovation of BbPN, ŁPKDN, other equipment purchased by BbPN, parts of ŁPKDN equipment, reports from the work of both centers in 2017

Action D.1. Monitoring of the results of the project

Foreseen start date: I/2017

Actual start date: I/2017

Foreseen end date: 07/2020

Actual end date: 07/2020

Planned scope: purchase of monitoring equipment: PTOp, BbPN, ŁPKDN, conducting monitoring activities 2017-2020

Completed scope: accomplished

Monitoring the success of White Stork breeding in Natura 2000 areas

As part of the project, a 4-year monitoring of the number of breeding population and productivity of the White Stork was carried out in 9 Natura 2000 areas included in the project. The monitoring was carried out in two-person teams in order to improve work efficiency and safety. Each year about 2500 nests were controlled, about 1600 of which were occupied by breeding pairs. The average number of young birds per breeding pair in each year was at a similar level. The monitoring allowed to establish a short-term trend in the number of breeding population, which indicated a slight decrease. This condition was the result of a long-term drought during this period. In spite of this, the annual control of the nests secured in the project showed their high settlement (around 80%), this result was the highest among those recorded so far in other projects. It is planned to continue the monitoring of the settlement of nests transferred to free-standing poles and to continue monitoring productivity. ŁPKDN completed the task in the Ravine Valley of the Narew River Natura 2000 area. In the case of the part of the activity being BbPN's responsibility, the project assumed that field inspections would be carried out by a BbPN specialist employed in the project as additional personnel. However, this task was outsourced in the 2017-2019 season, in 2020 the field work was carried out by BbPN specialist. Monitoring of the remaining area was carried out by PTOp project coordinators.

The task also included the purchase of equipment for monitoring. The beneficiaries made their purchases in accordance with the assumptions, instead of purchasing 1 digital SLR camera, PTOp decided to purchase 3 compact digital cameras with high zoom (to be used by 3 monitoring teams) within the same costs.

Monitoring of the efficiency of the secured elements of the power grid

In order to monitor the effectiveness of the protected power elements, 34 poles were selected (according to plans it was 10%, i.e. 27). The inspection showed one hundred percent effectiveness of the conducted protective measures – no cases of fatal electrocutions after installation of devices constructed within the project were reported.

Monitoring of the efficiency of high-voltage line marking (110 kV)

Monitoring was conducted before (spring 2018) and after (spring 2019) the installation of FireFly tags on the line. An ornithological radar was used for this purpose. It was carried out on the longest marked section of the high voltage line – about 700 m. Each year, a very high use of air space by birds over the monitored section was found (about 90,000 individuals during four 24-hour inspections from over 50 species). After the line was secured, there was a significant change in the height of the birds flight and their behavior. Significant decrease was recorded in the percentage of birds flying through the collision zone (from 40% to 23%) and in sudden close reactions such as sudden increase or decrease in height or attempts at stopping in panic (from 13% to 3%). The overall height of the birds migration routes increased significantly beyond the collision zone, which shows that the markers have fulfilled their role.

Comparison of two methods of calculation: classic vs. drone

In the years 2017-2019, during the monitoring of breeding success rate in the selected research area in the Biebrza Refuge, a comparison of the number of young birds in nests was made using two methods - from the ground and from the drone. Almost 200 pairs of Storks nest in this area. The observations from the ground were conducted simultaneously by two observers, including a drone operator, who carried out the aerial control, after determining the number of nestlings by means of the traditional method. The difference in the number of young Storks in the nest observed by the inspectors and the drone in particular years was statistically insignificant. The only difference found was the extension of the control time using a drone (article in preparation). It was found that a drone can also be used for assessing the condition of the nest and potential dangers (e.g. presence of cords, rubbish), and the condition of the nestlings during the period of leaving the nest. During the intervention it allows to identify the situation more precisely in advance, which often excludes the need to go to the given location or set up the car equipped with an aerial work platform. During the inspection, data on behavioral reactions of Storks to the drone were also collected. Moreover, it was verified whether the drone is a safe tool to control the breeding parameters of the White Stork. For this purpose the reactions of birds in the nest to the drone during the breeding period were examined. The experiment has shown that this device is minimally invasive and can be used to control the nests of this species at any stage of breeding. The results were accepted for printing in a scientific journal (Zbyryt et al. 2020. Behavioural responses of breeding White Storks *Ciconia ciconia* to an Unmanned Aerial Vehicle. Acta Ornithologica. in press).

Monitoring of survival of the birds cured in rehabilitation centers

The monitoring was carried out using 6 purchased GPS-GSM loggers. In total, 13 young White Storks released from two rehabilitation centers undergoing modernization and retrofitting were traced. The higher number of Storks being tracked was due to the fact that the transmitters were recovered due to the death of birds (loggers were recovered even from countries such as Turkey and Romania) or when they did not fly away to wintering grounds. 4 Storks died killed by predators, 4 did not fly out of the center, 3 died after leaving Poland (2 in Turkey, 1 in Romania), including 2 of them due to an electric shock. Birds which flew away behaved in a standard way. They started migration in the right direction and along the White Stork migration route. The low effectiveness of restoring Storks from the rehabilitation centers to the environment is in line with the trend of high mortality of young Storks in general. For the time being, a small sample does not allow to generalize the obtained conclusions yet, so we plan to continue the monitoring.

The following was attached to the Final Report (Annex 4. action D1):

- reports on monitoring the breeding success rate of White Stork in Natura 2000 areas - seasons 2019 and 2020, summary report 2017-2020 (reports on seasons 2017-2018 attached to PR1 in Annex 4. action D1)
- monitoring of the effectiveness of the secured elements of the power grid – final report (partial report as above)
- radar monitoring of the power line - final report (partial report as above)
- reports on the comparison of two counting methods traditional vs. drone-based - seasons 2019 (reports on seasons 2017-2018 as above)
- reports on monitoring of survival rate of birds treated in rehabilitation centers - seasons 2019 and 2020 (reports on season 2017 and 2018 as above)
- photographs

Action D.2. Assessment of social and economic impact of the planned actions on the local economy and society and on restoration of the ecosystem functions.

Foreseen start date: II/2019 Actual start date: I/2017 (the timetable indicated only the period of preparation of the reports, the collection of data for the reports should have been started earlier)

Foreseen end date: 12/2019 Actual end date: 06/01/2020

Planned scope: evaluation

Completed scope: accomplished

The assessment of the socio-economic impact

Partial reports and the final report on the social and economic impact of the project's activities on the local economy and society were received, including:

- the methodology report,
- the opening report,
- the final report.

The evaluation was to provide answers to basic questions:

- 1) How did the project affect the local community's awareness of nature conservation, including the perception of the White Stork?
- 2) Have the project activities inhibited the decrease in tolerance to the White Stork as a result of moving nests from the roofs of buildings and other conflicting places to free-standing poles and installing new nest platforms on the roofs?
- 3) Does the local community recognize the benefits of nature conservation?
- 4) How are Natura 2000 areas perceived by residents?
- 5) Do the respondents believe that they have an impact on nature conservation?

As the final report showed, the vast majority, as 77% believe that nature conservation activities are needed, more than half of the respondents (60%) feel that they have an impact on nature conservation. One of the most frequently mentioned answers to the question about the impact on nature conservation was refraining from littering and burning plastic materials, segregating waste and direct assistance to animals, especially birds. Almost half of the respondents (48%) assess life near the Natura 2000 area as good or rather good. 6% of the respondents consider it as bad or rather bad. As many as 88% of respondents consider the presence of a Stork in their area to be beneficial or rather beneficial. The research has shown the relationship between the knowledge of nature conservation activities and the education. The higher the education, the greater the awareness.

At the moment, the White Stork protection project is recognized primarily among people who have encountered the installation new poles for the Stork nests. The approach to the Stork, both among local communities and among local government authorities, is positive. Due to the specificity of the recipients, it seems that the best form of contact is direct contact with residents and local government representatives.

Monitoring of ecosystem services

The survey included 262 questionnaires with people living in the project area. By studying ecosystem services we have proven that the Stork is a species that brings many benefits to humans. People having Stork nests on their property are more willing to protect nature and allocate more resources for its protection (at least on a declarative level), with women much more willing than men. On the basis of research we proved that the presence of Storks in the

landscape increases its attractiveness. We showed the respondents two types of photos, landscape with Storks and landscape without Storks, we asked to assess which landscape is more conducive to increasing biodiversity. Additionally, we have shown that the inhabited Stork nests tell us a lot about other birds nesting in the meadows around these structures. In places where Storks were constantly present, within a range up to 500 m, there are many more birds, both in terms of the number of individuals and species.

Looking at their diet, we have noticed that currently the basic food of Storks are so-called grasshoppers (over 65%) and beetles. Amphibians, rodents and birds constituted only a small percentage of the food studied. We do not know whether this is an effect of drought and progressive climate change, but all indications are that Storks are flexibly adapting to changing environmental conditions. It is not clear how such a diet will affect the Stork populations in the long run.

The project staff took an active part in the monitoring of ecosystem services, conducting surveys with residents of Natura 2000 areas covered by the project and carrying out bird counts at points around selected occupied, unoccupied and random points to assess biodiversity in the vicinity of White Stork nests.

The data obtained were compiled and summarized in a report.

The following was attached to the Final Report (Annex 5. action D2):

- Final report on the assessment of the socio-economic impact of the planned actions on the local economy and community
- ECOSYSTEM SERVICES PROVIDED BY WHITE STORK *Ciconia ciconia* prepared under the project

The previous reports included respectively:

- PR1 – Annex 5. Action D2 — Opening report on the assessment of the socio-economic impact of the planned actions on the local economy and community

Action E.1. Promotional and educational activities

Foreseen start date: I/2017 Actual start date: IV/2016

Foreseen end date: II/2019 Actual end date: II/2020 (we do not foresee a delay, but there is an erroneous date indicated in the proposal because we have milestones for 2020)

Planned and completed scope: in tables below

PTOP

Our guides, “White Stork protection guide” and “White Stork protection guide for veterinarians” have been published on paper as well as in electronic version (the first one also in English) and are available on the project website. The feedback showed that the guide for veterinarians was particularly popular, so in January 2018 we decided to print another 250 copies of this edition. We handed over the guides, among others, to Bird Sanctuary at the Warsaw Zoo, for further distribution during trainings for veterinarians. We sent instructions on how to deal with injured Storks to all Municipal Offices located on the project site. It is also available, together with other published materials, on the project website. We have installed 15 information and education boards, which in an interesting and accessible way bring closer the assumptions of the project and information on the biology of the White Stork. Due to limited possibilities of storing promotional materials, we decided to prepare T-shirts and cups in two stages. The first order for 1000 T-shirts and 1000 cups was completed in 2017, the second with the same number of T-shirts and cups in 2019. The materials, due to their attractiveness, were very popular. Printed T-shirts and cups are practical and the information placed on them affects the recipient and their environment for a long time, so it is possible to record the image of the White Stork and the logos of the institutions financing the project in the recipient's awareness. In the description of task E.1 there was an error in the number of cardboard boxes for transporting Storks, it was 750 pcs., it should be 500 pcs. The calculation included 500 pcs. cardboard boxes and we prepared such a number of pieces. To label the cardboard boxes we ordered a sticker with the name and acronym of the project, as well as the logos of Life, Natura 2000 and all beneficiaries. The sticker was not included in the cost calculation and is a new element. As part of this order we also made information signs for posts. 3 roll-ups were made in the second year of the project. All the materials were widely distributed during meetings with residents and during the selection of nests and monitoring of Storks.

During the project, we issued three calendars – in 2017, 2019 and 2020. We added it to the conference materials, of the international conference ending the project, which took place in autumn 2019. The calendar for 2017 included colorful drawings related to the White Stork. In 2019 the calendar contained black-and-White ink-drawn graphics, depicting architectural monuments and other buildings with Storks' nests. The last calendar for the year 2020 consisted of colored graphics stylized on the nineteenth century with representatives of the *ciconia* species.

Particularly noteworthy are the "busłowe łapy" baking workshops, during which we cultivated the forgotten tradition of baking yeast rolls in the shape of Stork feet. In the past, in early spring, the dwellers of north-eastern Poland, holding the baked rolls in their hands, shouted out to greet the Storks: “Busioł, busioł, tut łapka, tut twoja chatka” [Busioł, busioł, here's your paw, here's your hut], which was supposed to encourage the birds to nest, or they put the rolls in existing nests hoping that the Storks will occupy them that year. It was believed that these birds bring happiness, prosperity, abundant crops and even protect against fire. We have encountered some unforeseen difficulties during the implementation of the workshops. The first one was a selection of rooms which have the technical possibility to carry out the meetings (a kitchenette, sufficient number of ovens, cinema room) and order a coffee service.

It turned out that most of the communes do not have such places at their disposal, and the available locations are usually cultural centers with variable equipment. In order not to restrict the organization of workshops by the venue conditions, we bought portable ovens and all accessories for conducting classes (including a multimedia projector) and organized a coffee service on our own.

Under the project, 16 out of 20 planned meetings with the inhabitants titled "Busłowe łąpy" took place, which gathered 832 people in total. Out of 5 meetings planned in 2020, only one was held. The remaining meetings were canceled due to the Covid-19 epidemic, which caused the country to lockdown in mid-March. The ban on gatherings was introduced, schools and public places were closed. Our workshops were very popular and often became an inspiration for cyclical meetings to cultivate this old tradition. Since 2018 such meetings are held annually in Narew Commune. The workshops aroused interest also outside the project area, we received many inquiries about the baking tradition as well as about the rolls recipe. In 2018, workshops were also held at the Primary School No. 1 in Białystok, which was attended by 20 students from grade III. In 2020 PTO submitted the "Busłowe łąpy" implemented under the project to take part in the 6th edition of "Olimpiada aktywności wiejskiej" (ang. *Olympics of rural activity*), a competition promoting initiatives aimed at rural communities.

Tab.1. Promotional materials

Material type	Planned number of copies	Received number of copies	Reception date	Delivered with a report
A guide to the protection of the White Stork	1500 pcs.	1500 pcs.	23/02/2017	MTR annex 15, English version annex 16
White Stork protection manual for veterinarians	250 pcs.	250 pcs.	23/02/2017	MTR annex 17
White Stork protection manual for veterinarians	reprinting due to very high interest	250 pcs.	02/02/2018	
Information boards for posts	420 pcs.	420 pcs.	30/03/2017	MTR annex 21
T-shirts	1000 pcs.	1000 pcs.	30/03/2017	MTR annex 19
T-shirts	1000 pcs.	1000 pcs.	25/03/2019	Final Report annex 6. action E1
Cups	1000 pcs.	1000 pcs.	30/03/2017	MTR annex 20
Cups	1000 pcs.	1000 pcs.	25/03/2019	Final Report annex 6. action E1
Sticker for cardboard boxes	in addition to carton marking	500 pcs.	30/03/2017	
Cardboard boxes for transporting Storks	500 pcs.	500 pcs.	04/04/2017	MTR annex 18
Roll-up	3 pcs.	3 pcs.	25/09/2017	Final Report annex 6. Action E1
Calendar for 2017	1500 pcs.	1500 pcs.	23/02/2017	MTR annex 23
Calendar for 2019	1500 pcs.	1500 pcs.	18/12/2018	Final Report annex 6. action E1
Calendar for 2020	1500 pcs.	1500 pcs.	14/11/2019	
Instructions for dealing with Storks	120 pcs.	120 pcs.	23/11/2018	
Informational and educational boards	15 pcs.	15 pcs.	23/11/2018	Final Report (pictures and table with locations annex 6. action E1)

Tab. 2. Location of the workshops

No.	Locality	Date	Number of participants	Place	Delivered with a report
1.	Mielnik, Mielnik Commune	25/03/2017	63	Communal Cultural Center	The minutes of all meetings, together with attendance lists and photos were provided with PR1 Annex 6. Action E1
2.	Goniądz, Goniądz Commune	27/03/2017	81	Communal Cultural Center	
3.	Różan, Różan Commune	01/04/2017	58	Communal Cultural Center	
4.	Narew, Narew Commune	06/04/2017	38	Communal Public Library	
5.	Dozdowo Piątnica Commune	07/04/2017	66	Primary School	
6.	Rakowo-Boginie, Piątnica Commune	19/03/2018	47	Primary School	
7.	Lipsk, Lipsk Commune	22/03/2018	52	Communal Cultural Center	
8.	Baranowo, Baranowo Commune	18/04/2018	51	Communal Cultural Center	
9.	Suraż, Suraż Commune	24/04/2018	29	Communal Cultural Center	
10.	Łochów, Łochów Commune	26/04/2018	70	Communal Cultural Center	
11.	Suchowola, Suchowola Commune	26/06/2019	50	Communal Cultural Center	The minutes of all meetings, together with attendance lists and photos were provided with the Final Report annex 6. action E1
12.	Nowogród, Nowogród Commune	27/03/2019	35	Communal Cultural Center	
13.	Trypucie Turośń Kościelna	29/03/2019	41	Countryside common room in Trypucie	
14.	Choroszcz, Choroszcz	30/03/2019	42	Communal Cultural Center	
15.	Drohiczyn, Drohiczyn	01/04/2019	59	Communal Cultural Center	
16.	Sztabin, Sztabin	09/03/2020	50	The fire station in Sztabin	
Planned and agreed workshops, which did not take place due to the Covid-19 epidemic:					
17.	Węgrów, Węgrów	16/03/2020	-	Communal Cultural Center	-
18.	Wesołowo, Wielbark Commune	17/03/2020	-	Community Self-help Home	-
19.	Pułtusk, Pułtusk Commune	19/03/2020	-	Communal Cultural Center	-
20.	Wizna, Wizna	25/03/2020	-	Primary School	-

ADDITIONALLY PTOP:

As part of the promotion of the project and presentation of unique results from the measurement of the weight of White Stork nests obtained in the project, a poster to the 27th International Ornithological Congress in Vancouver was submitted. It was the first time in the world that this type of data was collected on such a large scale with respect to the weight of nests of this species. The abstract passed the review of the scientific committee and was accepted for presentation at the conference (found in the Book of Abstracts). The Congress took place on 19-26 August 2018. The poster with the results was presented on 23 and 25 August. The results of the measurements and their practical dimension in particular gained

interest of the conference participants. White Stork nests can weigh more than 1,000 kg, which can pose a serious threat to the structure of buildings and columns on which they are usually placed on. It was found that on the basis of such a simple to read parameter as the height of a nest, its weight can be estimated quite precisely. Such information may be helpful for owners of buildings and operators of grids with Stork nests on them. Additionally, it was found out that the weight of the nest was not affected by humidity. The poster, abstract and photos are attached to PR1 Annex 6. action E1.

ŁPKDN

The broadcast from the nest started on 5 April 2017 and lasted until 15 August 2019 using the project funds, and during the breeding season of 2020 ŁPKDN obtained external funds for the broadcast. It is planned to look for funding for the broadcast also in the following years. The nest was occupied each year and a total of 14 young Storks were raised there. By the end of July, the broadcast from the nest had about 838 000 hits from 48 countries.

In 2017 an educational senses path “Natural Playground Klekotek” was created on the premises of the ŁPKDN in Drozdowo. The path is a perfect complement to the didactic base of the education center and at the same time a treasury of knowledge about the White Stork and its habitats. On the premises, there are installations which allow the little ones to easily gather knowledge about nature through play. The path is made up of natural materials, mainly wood, which fits perfectly into the landscape of the Narew Valley.

In June 2019 ŁPKDN announced a nationwide photographic competition entitled “White Stork”. Three main prizes and six distinctions were selected from among the variety of works. The exhibition can be seen at the ŁPKDN headquarters, it was also presented at the international conference on the protection of the White Stork, which took place in November 2019.

There were minor and insignificant delays in the implementation of the above initiatives, and ŁPKDN encountered greater difficulties during the construction of the observation tower. The delay resulted from the extension of work on the technical documentation due to the need to carry out geotechnical surveys, which was not known at the time of commencement of this work. It was also very difficult for ŁPKDN to find a contractor for the construction itself, in the subsequent 6 tenders there were no bids or the amounts definitely exceeded the funds available. Only as a result of the last award procedure was it possible to select a contractor. The building was erected by ŁPKDN on 29 November 2019, not as planned in the application until June 2018. We informed about the difficulties that occurred in subsequent reports, requesting a postponement of the deadline for the implementation of the task. Changing the deadline for the implementation of the task did not have an adverse effect on other promotional activities and the achievement of the project objectives. On 31 January 2020 the ceremonial opening of the observation tower took place, widely spread in local media. The tower is still accessible for naturalists and tourists. The park ran educational activities for children and youth from the local schools until the state of the epidemic was declared.

ŁPKDN will maintain the built facilities and continue to conduct educational classes on the “Natural Playground Klekotek” senses path and the observation tower after the project is completed.

Photos from the implementation of particular educational tasks of ŁPKDN are attached to the Final Report (Annex 6. Action E1).

Action E.2. Creating a GIS database of White Stork nests and a project website.

Foreseen start date: III/2016 Actual start date: IV/2016

Foreseen end date: 12/2019 Actual end date: 07/2020

Planned scope: creation of the project website and keeping it updated, collection of data and creation of a database of Stork nests and conflicting elements of the power grid

Completed scope: accomplished

The project website was launched in November 2016 and acts as a subpage of the PTOp website at the following address www.bocian.ptop.org.pl and it is updated on an ongoing basis. Entries are made in Polish and in English. The website's layout, operation, security etc. are the responsibilities of the contractor selected in the procedure on 18 November 2016.

The database of conflict elements of the power grid was created as planned in March 2017. It was conducted in the form of a table, where new selected locations were added on an ongoing basis. During the project we inventoried 274 objects. The information collected includes: location (with GPS coordinates), type of object, its number, bird mortality data, priority. The base was completed on time in December 2019.

A GIS database in the form of a webmap has been in operation since 9 April 2018. It is available at the address: <https://mangomap.com/3bird-radar-system/maps/73890/lifeciconiapl-ochrona-bociana-bia-ego-w-dolinach-rzecznych-wschodniej-polski?preview=true#> or via a link on the project website. The database contains data collected during the implementation of the project such as the location of nests, their settlement, breeding success in particular years, threats. It also contains locations of network elements protected under the project. We indicate July 2020 as the actual date of completion of the task, because the data from the last monitoring and security measures were entered until the end of the project.

The task included the purchase of specialized software for statistical and spatial analyses. Due to the increased availability of free tools in recent years, we have resigned from the purchase in the favor of trainings. On 5-6 September 2019, 6 employees of the project were trained in the scope of the operation of the free QGIS program for spatial analysis. The knowledge gained during the training will enable the project staff to independently supplement the webmap with the results of the monitoring of the breeding success of Storks on set poles within the project during its lifetime.

After the completion of the project PTOp will maintain and update the project website and webmap for at least 5 years.

The following was attached to the Final Report (Annex 7. Action E2):

- database of conflict elements of the power grid
- photographs from the QGIS training

Action E.3. Trainings on protection of the White Stork

Foreseen start date: IV/2016 Actual start date: IV/2017

Foreseen end date: 12/2017 Actual end date: 12/2017

Planned scope: 5 trainings being carried out

Completed scope: accomplished

The task was completed within the planned scope. The total number of workshop participants was 124 people (60-90 people were planned). Invitations were sent to local government administration employees, power distribution companies, Regional Directorates of Environmental Protection, national and landscape parks and veterinarians within the project area.

Tab. 2. Location and dates of trainings

date	town	address	hours	number of participants
16/11/2017	Wyszków	Wyszków City Hall Aleja Róż 2	10-14	22
21/11/2017	Ostrołęka	Public Administration College in Ostrołęka Korczaka 73, lecture room no. 54, 1st floor	10-14	12
28/11/2017	Osowiec	Biebrzański National Park conference room Osowiec-Twierdza 8	10-14	59
01/12/2017	Białystok	University of Białystok, Faculty of Biology, ul. Konstantego Ciołkowskiego 1J, room no. 1003	10-14	17
15/12/2017	Siemiatycze	Siemiatycze Culture Center ul. ul. Legionów Piłsudskiego 1	10-14	14

Attendance lists, Minutes on the workshops and photographs were attached to PR1, and included in Annex no 7. Action E3.

Action E.4. International White Stork conference

Foreseen start date: IV/2019 Actual start date: IV/2019

Foreseen end date: 11/2019 Actual end date: 11/2019

Planned scope: conducting a conference

Completed scope: accomplished

On 16-17 November 2019, the "International conference on the protection of the White Stork" was held in Woźnawieś, which was attended by 58 people. During the conference we summarized the project and the latest knowledge about the White Stork, and in particular the issues related to the practical conservation of the species. Among the speakers, apart from the project workers, there were representatives of institutes and universities from Poland and abroad, as well as members of the White Stork Research Group. During the field part we presented some of the tasks completed within the project, such as nests moved from endangered locations, electrical equipment protected against electric shock, retrofitted and renovated Animal Rehabilitation Center in Grzędy in the Biebrza National Park.

We have resigned from printing post-conference materials. Nowadays, electronic versions of documents are more accessible and more willingly used. In return, we ordered large canvas bags in which we distributed our conference packages. All presentations have been published on our project website in a special tab concerning the conference.

The following was attached to the Final Report (Annex 8. Action E4):

- the attendance list,
- the minutes from the meeting,
- photos

Action E.5. Layman's report

Foreseen start date: I/2020 Actual start date: I/2020
Foreseen end date: 03/2020 Actual end date: 07/2020
Planned scope: preparing and publication of the Layman's report
Completed scope: accomplished with a delay

Today, the Internet is the largest source of information available to the public, however, in case of face-to-face meetings and conversations, brochures continue to be an indispensable tool for effective natural education, especially among the rural community. The layman's report was developed in the form of a color brochure with a large number of photographs, with short and factual information in a non-specialized language, available to the general public. It contains the most important issues of the implemented project, goals, activities, achieved results. People receiving the materials should be able to easily identify and establish contact with the entities implementing the project, find a website with more detailed information, and identify the sources of the project financing. The report was prepared in Polish and English. The publication was printed in 500 copies and the electronic version was placed on the project website in the PUBLICATIONS tab.

There was a certain delay in the implementation of the task, mainly due to the general obstruction of operations caused by the mandatory lockdown. The delay had no negative impact on the completion of the task. We received the finished brochures at the beginning of July, so we could distribute them directly to the inhabitants of the project area while monitoring the breeding success of the White Stork in the 2020 season.

The following was attached to the Final Report (Annex 9. Action E5):

- Layman's report.

Action F.1. Project management

Foreseen start date: III/2016 Actual start date: III/2016

Foreseen end date: III/2020 Actual end date: III/2020

Planned scope: effective project management

Completed scope: accomplished

PTOP staff

For the purpose of project implementation, PTOp has employed the following staff members:

- project director (1/4 time basis) – employed in the project from 1 August 2016 to 31 March 2017, since 1 April 2017 this position has been taken by other person,
- project coordinator – Biebrza Valley (full time basis),
- project coordinator – Narew Valley (full time basis) – employed from 1 August 2016 to 31 March 2017, since 1 April 2017 this position has been taken by other person,
- project coordinator – Bug Valley (full time basis),
- project coordinator – Omulew and Lower Narew Valley (full time basis),
- financial coordinator (full time basis),
- accountant (part-time basis).

The number of persons, scope of responsibilities, form and period of employment of the project staff on behalf of PTOp was compliant with the application. Work time settlement was made with the use of timesheet.

BbPN staff

According to the proposal, the BbPN staff was to consist of 2 people: a BbPN specialist and a financial coordinator, employed as additional staff. Consultations with legal counsel hired by BbPN, HR specialist, the management and accountancy on the possible ways of hiring people by BbPN were in progress until December. Finally, in March 2017, 3 people were employed for the project implementation on the basis of an increase of the scope of duties under the previous employment contract:

- BbPN specialist – responsible for coordinating the BbPN tasks in the project and implementation of public procurement associated with monitoring the project effects;
- BbPN specialist – responsible for the renovation and adaptation of the Animal Rehabilitation Centre in Grzędy until the end of 2017.
- financial specialist – responsible for accounting;

Work time settlement was made with the use of timesheet. Originally, it was planned to entrust major resources and responsibilities to the BbPN staff. Due to the fact that co-beneficiaries are involved in the 2% rule, the application envisages that one of the park's positions - accountant in ŁPKDN will be hired on employment contract. However, the employees of ŁPKDN decided that their staff would be employed as additional personnel. Therefore, BbPN employees had the possibility to be employed as permanent staff, provided that the amount of their remuneration in the project would not exceed EUR 6.300, i.e. the amount recorded in the project for the ŁPKDN accountant (according to the 2% rule). Obligations related to the monitoring of Stork nests and effectiveness of protection of power grid elements in 2017-2019 were outsourced. To this end, a tender procedure was carried out to select the service provider. As a result, a service agreement was signed. The hired contractor carried out field works and submitted reports.

ŁPKDN staff

According to the proposal, the ŁPKDN staff was to be made up of 2 people: a local coordinator as additional staff and an accountant – permanent staff of civil servant. After agreeing with the other beneficiaries, ŁPKDN decided to unify the form of employment in the

project in case of additional personnel in the form of mandate agreements. The remuneration and duties of the local coordinator were distributed into 2 persons:

- local coordinator – employed in the project in the period 3 November 2016 – 31 December 2018, in 1 March 2018 this local coordinator took over the duties of the second coordinator, since 12 June 2019 this position has been taken by other person,
- local coordinator – employed in the project in the period 3 November 2016 – 28 February 2018,
- accountant – employed in the project in the period 3 November 2016 – 30 November 2018, in the period 15 November – 31 December 2019 other person

Due to delays beyond the control of the beneficiary and the extension of the construction of the observation tower, it turned out to be necessary to slightly increase the number of the accountant's working hours. All three ladies worked full-time at ŁPKDN, but their duties did not correspond to the scope of works at LIFEciconiaPL project. The staff completed their work in the project at the end of 2019, the settlement of working time was made with the use of a timesheet.

Changes in the staff of the co-beneficiaries have been reported on an ongoing basis in subsequent reports. Despite the differences in relation to the application and some personnel changes during the project implementation, the employees of all the beneficiaries cooperated effectively and completed the tasks entrusted to them in the appropriate scope during the project. On 28-29 July 2020 we organized a working meeting summarizing the cooperation so far and concerning the division of work between individual employees in the preparation of the final report.

Kick-Off Meeting

On 4-8 October 2016, two PTOB employees took part in the International Kick-Off Meeting in Brussels. A presentation on our project was given at the meeting. It was also an opportunity to exchange experiences with representatives of other LIFE projects.

Conferences

A project opening meeting was organized on 24 November 2016. The meeting took place in Białystok in a rented conference room in one of the restaurants in the city center. At the meeting, we presented the project assumptions to the invited guests. Each of the beneficiaries gave a short speech, and RDOŚ representative for Białystok also spoke.

Two representatives of our project took part in the International seminar "Birds' protection practices on electricity grids", which took place in Vilnius on 28-29 June 2018. The meeting was organized as part of the project "Installation of the Bird protection measures on the high voltage electricity transmission grid in Lithuania" (LIFE13 BIO/LT/001303). The aim of the conference was to exchange experiences concerning the securing of power lines and solutions applied during the implementation of LIFE projects in various countries.

The project employees also actively participate in the work of the GBBB – a group of experts dealing with White Stork research in Poland and abroad. We participate in group meetings, where we present the results of monitoring and protective actions taken in the project, as well as we consult on various issues related to the protection of White Stork on the Group's Internet forum on an ongoing basis.

Steering Committee

In December 2016, the project Steering Committee was established, composed of representatives of PTOB, project partners as well as RDOŚ in Białystok, and from 2017 also PGE Branch in Białystok. SC meetings were held once a year, respectively on: 14 September 2017, 16 August 2018, 22 October 2019, 22 September 2020. The meetings discussed the

progress of the project implementation, current delays and difficulties, further plans and preparations for subsequent reports, including the final report. The meetings were attended by representatives of individual units, except for RDOŚ. The director of RDOŚ in Białystok became a member of the SC at the beginning of implementation of the project. Before each meeting of the SC or other project-related meetings (trainings, closing conference), invitations were sent to the director of RDOŚ. In connection with comments from the EC about the necessity to repeat the attempt of establishing the White Stork as a species subject of protection in Natura 2000 areas: the Marshy Valley of the Narew River, Lower Narew River Valley and Wizna Marsh, we made every effort to get the director of RDOŚ to participate in the meeting. The SC meeting on 22 October 2019 was attended by 2 representatives of RDOŚ delegated by a member of SC. In accordance with your comments, we kept correspondence and e-mails addressed to RDOŚ in Białystok regarding this issue and they were attached to the Final Report. The last SC meeting in connection with the quarantine of one of the participants was conducted in the form of a video conference, without the participation of the representatives of RDOŚ.

Visits to the project co-funder

In March 2017, PTOP employees visited Linum, Germany to meet with representatives of Vogelschutz-Komitee e.V. During the meeting we discussed the progress of the project, the method of reporting and plans for the forthcoming period. We got acquainted with the method of securing power lines that is used in Germany and discussed the solutions that we want to apply in our project. During the second visit, in May 2019, we presented the progress of completion of the individual project tasks.

Other

The management process also included hiring a lawyer and an interpreter for the needs of the project. On the basis of a tender, public procurement specialists, that were selected and on 10 October 2016 agreement no. 01/BOCIAN2/16 for the provision of legal services was concluded. FATIX Translation Agency Mateusz Fatek Sp. z o.o. was also selected through a tender procedure and on 1 December 2016, agreement no. 04/BOCIAN2/16 for the provision of translation services as part of the project was concluded.

The following was attached to the Final Report (Annex 10. Action F1):

- photographs, lists of participants and protocols of meetings of SC on 22/10/2019 and 22/09/2020
- photographs, lists of participants of the working meeting on the Final Report
- e-mails to RDOŚ in Białystok regarding invitations to meetings of SC

The previous reports included respectively:

- MTR — Annex 2. List of participants and protocol from the meeting of SC on 14/09/2017,
- PR1 — Annex 8. Action F1 — photographs, list of participants and protocol from the meeting of SC on 16/08/2018, photographs from the “Birds” international seminar, GBBB meetings, photographs, list of participants and protocol from the inaugural conference.

Action F.2. Financial audit of the project

Foreseen start date: II/2018 Actual start date: II/2020

Foreseen end date: 07/2020 Actual end date: 08/2020

Planned scope: financial audit of the project

Completed scope: accomplished

The task consisted in carrying out an independent audit including an analysis of the documentation and procedures applied in relation to the transfer and settlement of received funds, procedures for eligible expenditures in terms of their validity and appropriate documentation, throughout the project duration. The audit was to verify the compliance of the spent funds with the national law and accounting principles, as well as with the co-financing agreement and general conditions of LIFE. Originally, it was planned to conduct a partial audit before the Mid-Term Report. Due to the rapid allocation of the first advance payment, we submitted the report much earlier than planned in the application. The reporting period covered only one year and costs characterized by low diversification, therefore we resigned from a partial financial audit. The audit certificate on the financial statement was carried out in relation to PTOp expenditure, the share in the project budget of the co-beneficiaries was below the value imposing this requirement. The audit report was prepared in Polish and English according to TERMS OF REFERENCE FOR THE CERTIFICATE ON THE FINANCIAL STATEMENTS available on the LIFE Program website.

The following was attached to the Final Report (Annex 19):

- financial audit of the project.

Action F.3. Final Report and After-Life Conservation Plan

Foreseen start date: I/ 2020 Actual start date: I/2020

Foreseen end date: 10/2020 Actual end date: 10/2020

Planned scope: preparing and publication of the After-Life Conservation Plan before 03.2020, submission of the Final Report

Completed scope: accomplished

The After-Life Conservation Plan is a summary of the project, together with the main objectives, the area, a concise description of the most important active protection tasks, an analysis of the current situation and, above all, a plan to continue the work after the project's completion. In order to assess the effects of the work undertaken after the project completion, indicators have been developed that will be monitored, entities responsible for their implementation, the cost of planned tasks and sources of financing. The After-Life Conservation Plan was summarized in Polish and English in the form of a short brochure available on the project website, it is an integral part of the Final Report and is attached to in the form of an annex (Annex 11. action F3). The document was prepared in June 2020, i.e. with a slight delay, which however, did not affect the project and the Final Report.

The Final Report was prepared by the coordinating beneficiary based on the cooperation of all beneficiaries implementing the project and submitted on time.

Action F.4. Networking with other projects

Foreseen start date: IV/2016 Actual start date: III/2017

Foreseen end date: IV/2019 Actual end date: IV/2019

Planned scope: organization of 3 trips

Completed scope: accomplished

The first of the three planned trips took place on 25–30 September 2017. Organization of the trip at a later date than planned in the application form (4th quarter of 2016) did not delay the whole task. 8 members of the project staff took part in the study trip, including 6 representatives of PTOp and one representative from each of the co-beneficiaries: BbPN and ŁPKDN. Three LIFE projects were visited in Bulgaria:

- Enhance conservation of globally threatened Imperial Eagle in Bulgaria by reducing mortality caused by power lines (LIFE12 NAT/BG/000572),
- Urgent measures to Restore and Secure Long-term Preservation of the Atanasovsko Lake Coastal Lagoon LIFE11 NAT/BG/000362,
- Life for the Bourgas Lakes (LIFE08 NAT/BG/000277),

and a Stork village in Belozen.

The second trip took place on 1–8 October 2018. The study trip included the participation of 9 members of the project staff, including 7 representatives of PTOp and 1 representative of each of the co-beneficiaries: BbPN and ŁPKDN. Three LIFE projects were visited in Portugal:

- LIFE Rupis - Egyptian Vulture and Bonelli's Eagle Conservation in Douro/Duero Canyon (LIFE14 NAT/PT/000855)
- LIFE Imperial - Conservation of the Spanish Imperial Eagle (*Aquila adalberti*) in Portugal (LIFE13 NAT/PT/001300)
- EstepÁrias — Conservation of Great Bustard, Little Bustard and Lesser Kestrel in the Baixo Alentejo cereal steppes (LIFE07 NAT/P/000654)

and the Stork village in the town of Malpartida de Cáceres in Spain. On 7 October we took part in The 9th Sagres Festival of Birdwatching & Nature Activities in Algarve, Portugal.

The third and last of the planned trips took place on 22–28 September 2019. The study trip included the participation of 7 members of the project staff, representatives of PTOp. Two LIFE projects were visited in Spain:

- AQUILA a-LIFE — Accomplish Western Mediterranean Bonelli's Eagle recovery by working together for an electricity grid suitable for birds (LIFE16 NAT/ES/000235)
- LIFE Bonelli-Integral Recovery of Bonelli's Eagle Population in Spain (LIFE12 NAT/ES/000701)

and project LINDUS — monitoring of the number of birds migrating through the Pyrenees.

Additionally, the contact with GREFA resulted in the inclusion of PTOp in the activities of a group of organizations that will lobby the EC for the establishment of the law in Europe, which will force electricity suppliers to secure transmission lines and power devices. This is the “Anti electrocution EU LIFE projects Network — AE-LIFE Network” project and the work of the team is supported by organizations from Bulgaria, Greece, Cyprus, Spain, Italy, France and Hungary. The trip to Bulgaria resulted in preparing a new application for the LIFE programme in 2020 in cooperation with the Bulgarian Society for Protection of Birds (BSPB). As part of the project we are planning to secure low and medium voltage electric lines in Poland and Bulgaria against electrocution on the east birds migratory route.

The following was attached to the Final Report (Annex 12. action F4):

- Photographs from Bulgaria and Spain (minutes from all visits are available on the project website in news)

The previous reports included respectively:

- PR1 — Annex 9. Action F4. Photographs from the second trip

6.2. Main deviations, problems and corrective actions implemented

1. Reduction of the number of Natura 2000 areas covered by the project

10 Natura 2000 areas were included in the project implementation territory based on current SDFs; these areas constitute refuges of the White Stork important in the country and region scale, where populations of this species are characterized by a high concentration, high stability of the population, and a proper state of preservation. According to the available data, the population of the species in the Upper Nurzec Valley Special Protection Area was supposed to be 22 couples. During the execution of task D.1. — monitoring of the breeding success, PTOF found the presence of only one White Stork breeding couple within this Natura 2000 area. We do not know the reason for this discrepancy. We assume that there has been an area border correction, because the current range of the Upper Nurca Valley SPA basically does not include residential or farming parts of the village where most often nests of the species are located. We have already suggested in the MTR that this area should be excluded from the project, as it is not currently an important refuge for the White Stork, what is more, the only nest within this Natura 2000 area is in good condition and does not require intervention. The change did not affect the achievement of the assumed project objectives negatively, which is described in detail in the section of the report on project evaluation.

2. Site Assessment in Standard Data Forms

A surprising difficulty was encountered during the project implementation, i.e. the increase in the protective status of the White Stork in the Standard Data Forms for 4 Natura 2000 areas: Ravine Valley of the Narew River, Lower Narew Valley, Marshy Valley of the Narew River and Wizna Marsh. Efforts of the main beneficiary made it possible to establish a White Stork as a species subject to protection in the Natura 2000 Area of Ravine Valley of the Narew River PLB200008. At the request of the PTOF of September 2014, in April 2019 the overall assessment for White Stork (from D to C) in the SDF for this area was changed. For reasons unknown to us, the legislative process took nearly 5 years. Applications for the remaining three Natura 2000 areas covered by the project, the overall assessment for which is D, were rejected by RDOŚ in Białystok despite earlier declarations of support. In accordance with EASME suggestion, we resubmitted a request to change the general assessment of the White Stork (from D to C) in the above mentioned Natura 2000 areas. The submission of the new document was preceded by a meeting at RDOŚ in Białystok, between the project director and the director of RDOŚ in Białystok, where prior to the submission of the second application we made an attempt to present directly the arguments for the proposed change and explain any doubts. In 2020 RDOŚ in Białystok started the consultation process, asking for opinions from other institutions. In the correspondence received for information we read that RDOŚ in Białystok gave a positive opinion on the proposed changes this time. In 28/10/2020 we received an information from RDOŚ in Białystok about a formal change in the overall assessment for the White Stork (from D to C) in the SDF for the Natura 2000 area of Marshy Valley of the Narew River PLB 200001. Due to the interest of the EC in the issue, we presented a detailed schedule of correspondence and events in the cover letter to the report.

3. Modifications

In the course of the project it turned out to be necessary to introduce some changes and modifications described in more detail in item 6.1. Technical progress for individual tasks. The applied solutions allowed to achieve the assumed goals.

The task C.1 included securing 400 White Stork breeding sites, including the transfer of 300 nests to free-standing poles, another 60 nests to roof platforms and 40 interventions using an aerial work platform. Due to the lack of interest of the residents of the project area in the installation of roof platforms, we proposed the installation of metal platforms on power poles. Stork nest located directly on the power lines pose a threat to the birds (danger of electric

shock) and are a hindrance to people (power cuts). The change in the type of platforms combined with an increased number of interventions made it possible to secure even more nests than it was originally assumed, i.e. 411, within the available financial resources. As part of task C.2 we decided to change the type of markers securing 110 kV lines from collisions with birds. After analyzing the latest information in the field of protection of birds from collisions with power lines, we replaced the marker balls with FireFly markers. The change required more commitment from PTOB because we had to secure the first section of the 110 kV line ourselves as part of the project. It was assumed that the cost of the project would only include the purchase of the security features and the installation would be carried out by PGE. Even with the order to secure a 700 m section of the line, the costs allocated to the task were not exceeded, and the effectiveness of the applied solution was confirmed by radar monitoring.

Based on the current needs, the list of purchases of equipment for bird rehabilitation centers and the scope of necessary repair works as part of task C.4 was modified. The changes and the justification for BbPN are detailed in the MTR. Part of the work and equipment originally planned in the project was financed with other funds. After obtaining the EC's approval, the beneficiary made purchases within the planned costs. ŁPKDN introduced minor equipment changes, decided to purchase a set of surgical instruments and a set of stainless steel cages instead of a suitcase ultrasound device. At the time of submitting the application, the beneficiary did not foresee the need to expand the center, which required the development of the project and made the task more complicated from the administrative perspective. The modification caused the budget for the task to be exceeded, but it did not significantly affect the entirety of the project's budget, which was described in more detail in Chapter 8 of the report. The renovations and new equipment (list updated to actual needs) covered the most important elements necessary to create centers that meet all basic standards and provided a comprehensive improvement in the quality of care in both centers.

4. Delays in implementation of individual tasks

Though there were some delays during the implementation of the project, which ultimately did not affect the objectives of the project and the timely execution of the entire project. The reasons for the delays were quite varied, they resulted from the specificity of the tasks and are described in more detail in item 6.1. Technical progress. We kept everyone informed in subsequent reports. The situations causing the deadline for completion to be postponed by at least a quarter are summarized below.

The greatest delays in the case of tasks carried out by PTOB occurred in case of task C.2. The implementation of measures aimed at protecting the power grid against fatal electric shocks and collisions of birds was possible with the participation and cooperation of power engineers – PGE. The delays were largely influenced by the company's internal procedures at the stage of agreements and formalities, and were beyond the beneficiary's control. We had to meet all the operator's requirements, and the change in the type of protection and the need to develop a new device described in the previous item further extended the time of completion. From the moment when PGE commenced the actual execution of field works progress of the task completion was dynamic and occurred without any problems. 4 110 kV lines were scheduled to be secured by 30 June 2018, PTOB installed markers on 11 October 2018, PGE completed the task on 11 December 2019. 50% of the power grid elements was scheduled to be secured by 31 July 2018, another 50% by 31 March 2020. The process of securing 50% of the power grid elements was completed on 30 January 2020, and the remaining 50% by July 2020. The remaining delays were related to the occurrence of the boggy and flooded ground as a result of difficult weather conditions, which made it impossible to assemble the poles (C.1) in some locations and in the end fewer poles were placed in the first tender. Further proceedings were initiated earlier, so that the contractor had the entire winter period at their disposal to carry out

the work and the situation did not repeat itself. The task of securing 200 endangered nests was completed on 31 December 2018 instead of 31 March 2018, which did not affect the task of securing all 400 nests as planned by 31 March 2020. The car equipped with an aerial work platform (C.4) was delivered on 22 September 2017, instead of 31 March 2017 due to the long time of waiting for the chassis to be delivered by the manufacturer (Mercedes-Benz), the process of mounting the aerial work platform on the chassis and obtaining all necessary permits from the Office of Technical Inspection (UDT). The delay in the delivery of equipment did not negatively affect the implementation of protection tasks, we conducted 50% more interventions than originally assumed.

BbPN encountered difficulties with hiring staff. Consultations with the attorney-at-law hired by BbPN, the HR specialist, the management and accountancy on the possible ways of hiring people by BbPN were in progress until December 2016. Finally, in March 2017, 3 people were employed for the project implementation on the basis of an increase of the scope of duties under the previous employment contract. This delay had an impact on the timely completion of task C.4, which was to be completed by 31 March 2017. In addition, the needs for equipment of the center have changed from the moment of submission of the application to the actual implementation. In the MTR the beneficiary requested the EC to change the procurement list providing detailed justification for the purchase of individual devices and proceeded with the purchase after receiving approval from EASME. The delay in the implementation of the action, resulting from the change of the procurement list and involvement of BbPN employees to the project with a slight delay, was made up for. The center functioned continuously and provided care for injured birds.

During the investment activities carried out by ŁPKDN delays in developing the documentation and obtaining the necessary permits occurred. In the case of the bird rehabilitation center (C.4), it turned out to be necessary to extend the building, which prolonged and complicated the investment process, presented in detail in item 6.1. Technical progress. In the case of the observation tower (E.1), however, the works on technical documentation were prolonged due to the necessity to perform geotechnical surveys, which was not known at the beginning of these works. These delays were compounded by difficulties in selecting contractors for the construction works. In both cases, tenders were announced, however no contractor was awarded (lack of offers or offers exceeded the amount allocated to the task). The construction of the center was completed on 5 July 2018 and the equipped on 30 October 2018. The initial deadline for completion of the works was 31 March 2017, despite the delay, all the birds were provided help, those which required isolation were provided with a temporary place in the farm building. The remaining birds were placed in a large external aviary, which was the first to be prepared as part of the expansion of the center. The observation tower was supposed to be completed by 30 June 2018, as a result of the delays, it was completed on 29 November 2019. The tower is still accessible for naturalists and tourists. The park ran educational activities for children and youth from the local schools until the state of the epidemic was declared.

5. Costs not foreseen at the time of application preparation

The costs included in the financial statement, not foreseen in the application, resulting from and directly connected with the implementation of the project, were described in the breakdown into individual tasks in chapter 8 of the report. The new items in the financial schedule did not cause significant shifts between categories or within tasks, with the exception of task C.3. Costs related to the maintenance of the car with an aerial work platform, which were unforeseen in the application, resulted in exceeding the costs allocated for the task and slightly exceeding the costs in the other costs category — 101.01%. Insurance and technical or warranty tests added to the project are necessary to allow for further

operation of the equipment purchased and used as part of the project, and therefore constitute a direct cost associated with its implementation.

6. Covid-19 pandemic

At the time of the announcement of the state of the epidemic in Poland, the implementation of the project was at such an advanced stage that we did not foresee any difficulties in reaching the set indicators on time. There were some obstacles resulting from the restrictions, limited functioning of most institutions and companies. The layman's report was printed out in July 2020. and not as planned in March 2020. (E.5). The situation in July improved to a level allowing the travel restrictions to be lifted, which allowed us to monitor the breeding success of the White Stork and at the same time we distributed the publication directly to the inhabitants of the project area. The planned meetings took place: the visit of the Project Monitor and the meeting of the SC, although due to the fact that one of the participants of the meeting was under quarantine, the meeting of the SC was held in the form of a video conference. The difficulty that we were not able to overcome during the project implementation period was to hold meetings with the residents of "Busłowe łąpy" (E.1). We had 5 meetings arranged, but we were only able to conduct workshops in Sztabin on 9 March 2020, we were unable to carry on with the next session because of the restrictions. The decision to close the schools was made on 11 March 2020, followed by a ban on gatherings of more than 50 people from 21 March 2020, and from 24 March 2020 onwards, a lockdown during which citizens were only able to leave their homes in necessary situations. In the middle of April some restrictions began to be lifted, but the elderly and children (the most frequent participants of the meetings) remained in isolation. The schools were opened only with the beginning of the new school year, which occurred after the end of the project. Finally, as part of the project, we conducted 16 of the 20 planned "Busłowe łąpy" workshops. Our workshops were very popular and often became an inspiration for other individuals to cultivate this old tradition, e.g. since 2018 such meetings are held annually in the Narew Commune.

6.3.Evaluation of Project Implementation

Successes of the methodology applied

1. Protection of 411 nesting sites of the White Stork Transferring 301 nests to free-standing poles. Very large repopulation resulting from using such methods as liming the nests (around 80%). It is effective, though it is relatively expensive. It allows for long-term protection of Stork nesting sites.
2. Complete elimination of the problem of fatal electrocutions of Storks on 270 power line poles. On average, every year about 400 young Storks were killed on them. This was achieved with a new type of device constructed by PTOPI in cooperation with a company from the power industry. It allows for even a tenfold reduction of the cost of securing dangerous poles in comparison to standard methods (e.g. transferring disconnectors or isolating them). An additional advantage of this device is that it can be mounted and disassembled on poles from the ground without the need to disconnect the line leading to them, shortening the time needed to carry out the works. The device is also installed outside the scope of the project by other energy companies, which has already allowed to secure more than 500 poles throughout the country. The method is both cheap and very effective.
3. Development and introduction of a new method of mounting markers on a high voltage line (using a drone). Replacing the originally planned marker balls with FireFly type markers, significantly reduced installation costs (even 4 times) and proved to be safer for the power grid (lighter, having less wind resistance, no icing over).

4. Creation of a system of interim actions to solve potential man-Stork conflicts and to help Storks (e.g. reducing the weight of nests, trimming branches, saving young Storks which got caught in strings), thanks to the use of a car equipped with an aerial platform.
5. Raising standards of treatment and care for Storks in two rehabilitation centers.
6. Long-term tracking of trends in White Stork population and reproduction parameters in 9 Natura 2000 areas. It allows for a better understanding of the threats that affect these populations and for planning more effective protection measures.
7. Establishment of the White Stork as a species subject to protection in the Natura 2000 area of Ravine Valley of the Narew River and Marshy Valley of the Narew River. Commencement of the procedure aimed at changing the Standard Data Forms for the next 2 Natura 2000 sites (Wizna Marsh, Lower Narew River Valley).
8. Implementation of the developed actions in another project submitted to the EC (LIFE20 NAT/PL/001199). By establishing a network of cooperation with international organizations, including them as partners in the project.
9. Publication of the results of undertaken conservation activities in scientific journals (e.g. Acta Oecologica, Acta Ornithologica, Journal for Nature Conservation, Science of the Total Environment). This allows the conservation methods employed to be widely publicized as proven, effective and reliable. Further scientific articles are in review or in preparation (at least 7). Carrying out a number of additional studies related to the White Stork, its protection, biology and ecology. Wide cooperation with the scientific community.
10. Reaching a large audience with information about the project (about 5 million).

Failures of the methodology applied

1. As part of the process of completion of the conservation tasks for the Natura 2000 area of the Upper Narew Valley, 10 poles with platforms were set up in completely new places where Storks did not nest before, but were present in the area. Although nests built from the remains of other nests were laid on the platforms and limed, they were not occupied. It indicates that this method of protection, creating completely new breeding sites, is completely ineffective. In addition, the action is too expensive to be recommended. The results were published in the form of a scientific article.

Action	Foreseen in the revised proposal	Achieved	Evaluation
C1, D1	<p>Objectives: Conservation of the White Stork population in the eastern Polish river valleys (about 1600 pairs).</p> <p>Expected results: Protection of 400 conflicting and endangered nests of the White Stork.</p>	411 nesting sites of the White Stork were secured	Task was completed without any problems. 411 endangered nests were secured. The biggest problem was their location on roofs covered with asbestos. Replacement of the roofing would involve the complete liquidation of the nests. The loss of all these nesting sites could result in a population decrease of about 25% compared to the number indicated in the application. Monitoring of the breeding population and basic breeding parameters showed a slight decrease during the course of the project. This was due to the

		<p>fact that the output data were overestimated as they were taken from the SDF forms, which turned out to be outdated, often several years ago, or took into account pairs nesting at the border of a Natura 2000 area. In addition this was the time that saw the beginning of a drought period which lasted for a number of years, resulting in a decrease in the population of nests by Storks and in Stork breeding. This trend was observed throughout Poland, including the largest refuges (e.g. in fragments of the Warmia refuge PLB2800015 it decrease by about 30%). In the areas covered by the project, the decrease was the lowest in relation to other areas of Poland where observations were conducted. Despite these problems, the occupancy rate of the secured nests was very high (around 80%). The Survey run by PTOPI in cooperation with scientists from Poland has proven that within Stork population the new nests occupation rate depends on the water deficit and the soil moisture (submitted). The Period in which the project was developed, coincided with severe drought observed in Poland over the last few years (with beginning in 2016) (since 2016). This caused a drop in the number of occupied nests monitored annually in the project area. It is also confirmed by the observation of a huge fraction of non-breeding birds, occurring in many places in flocks of 100 and more birds.</p>
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			<p>Due to the fact that the White Stork is a long living bird – up to 30 years – the real decline in population is difficult to estimate during the 4-year lasting monitoring. It is possible that after improvement of moisture conditions (rainfalls, renaturalization, ditches covering, construction of artificial ponds) decline in population may be stopped and even reversed. Summarizing, the observed short period of decrease in number of breeding pairs doesn't reflect the long term decline but is rather a result of the lower rate of nest occupied by birds due to worse moisture conditions. The real situation may be estimated after long term breeding success monitoring and it may as well occur that the decline stopped or even the Stork population is in growth.</p>
C1, C3, E1, E2, E3, E4	<p>Objectives: Decreasing the decline in society's tolerance towards the White Stork.</p> <p>Expected results: Decreased decline in society's tolerance towards the White Stork.</p>	<p>Implementation of a series of training courses for various social groups, extensive educational action in the media, implementation of systemic interim interventions related to nests and Storks with the use of a car with an aerial work platform, solving several hundred man-nature conflicts.</p>	<p>Task was fully completed without any problems. Our actions met with full social acceptance. There were no obstacles when moving the nests. People begin to notice that the White Stork population is decreasing and on a declarative level they are ready to take actions to counteract this phenomenon. The range of recipients of information about the project was significantly exceeded. Research on ecosystem services has shown that people with Stork nests on their property have greater knowledge of nature, are more inclined to protect nature on a declarative level and allocate more resources to this activity.</p>
C2	Objectives:	283 devices, which	The set objectives were fully

	<p>Reduction of White Stork mortality due to fatal electrocution and collisions with 110 kV power lines.</p> <p>Expected results: Reduction of White Stork mortality due to fatal electrocution by securing 270 devices and reduction of mortality due to collisions with 110 kV power lines by marking 4 sections of the lines.</p>	<p>were the cause of fatal electrocutions of Storks, were secured. This negative phenomenon occurring on these power grid elements has been completely eliminated. A new, inexpensive and simple type of device was created to secure the power poles. 4 sections of high-voltage power lines were marked. An innovative method — a drone — was used for this purpose.</p>	<p>achieved. Some of the tasks exceeded the scale assumed in the project. The new pole protection device is now widely used throughout the country (installed on over 500 devices). The good practices developed by PTOB in the project in the field of line protection against lethal electrocution are currently used by other NGOs and power grid operators in Poland.</p>
C3, E1, E2, E3	<p>Objectives: Increasing the effectiveness of intervention measures related to the protection of the White Stork nests.</p> <p>Expected results: Increasing the safety of people and the effectiveness of interventions related to the protection of White Stork nests, as a result of purchasing a specialist car equipped with an aerial work platform and implementation of a series of 5 training sessions.</p>	<p>Carrying out 69 interventions related to the reduction of the weight of Stork nests located on buildings, deteriorating poles, removal of branches that limit the access to the nests and actions to save nestlings that did not fly away for the winter or got tangled up in strings. Training courses featured a larger number of participants than originally planned were carried out.</p>	<p>A database of interventions planned for the next seasons has been created, which are carried out on an ongoing basis according to the adopted work schedule.</p>
C4, D1	<p>Objectives: Improvement of the standards of functioning of two rehabilitation centers specializing in treatment of Storks</p> <p>Expected results: Raising the standards of</p>	<p>Two rehabilitation centers (ŁPKND and BbPN) were renovated and retrofitted. This now allows to provide room for a larger number of Storks and better conditions.</p>	<p>The set objectives were fully achieved. Treatment and rehabilitation have improved significantly as a result of renovation and retrofitting of the centers. There are now better means of helping Storks recover full health. Monitoring of birds released from the</p>

	care and treatment of sick and injured Storks as a result of renovating and equipping two rehabilitation centers.		centers indicated their high mortality, thus it is in line with the overall high mortality of young Storks (over 80%)
C1, D1, D2, E2	<p>Objectives: Protecting biodiversity by protecting the umbrella species</p> <p>Expected results: Long-term monitoring of changes in the breeding population of the White Stork in the valleys of 7 largest rivers in eastern Poland</p>	411 White Stork nests were secured, many of which would soon fall due to the collapse of the roof, pole or decaying tree on which they were located. In most cases there would be no alternative breeding sites, e.g. specially constructed free-standing poles with platforms. Throughout the course of the project, changes in abundance and breeding parameters were monitored in all Natura 2000 areas where the project was implemented.	Studies being part of ecosystem services have shown that in places around active White Stork nests there are significantly more species and individuals of agricultural landscape birds than in random places or around abandoned nests. In addition, the soil sample tests carried out on Stork nests showed a huge number of insects and fungi. Moreover, our previous research indicated that Stork nests are important nesting sites for 3 species of birds: House Sparrows, Eurasian Tree Sparrows and Common Starlings. That is why 3 nest boxes were mounted under each pole to which the nest Stork was moved. This means that White Stork nests are hotspots of biodiversity. Their protection and preservation is connected with the protection of a whole range of other species. Tracking changes in the breeding population of the White Stork allows to assess the quality of the environment, as this species is a good bioindicator of its condition.

Project results immediately visible:

1. Securing 411 White Stork nests and their re-population by birds (or lack thereof). Protection of chimneys, roofs and power poles against the reconstruction of nests. Resolution of conflicts with the local community.
2. Reducing mortality of the White Stork on 283 power grid devices in the project area. Reduce the mortality of Storks and other birds on 4 high-voltage power lines.
3. 69 interventions using a car equipped with an aerial work platform.
4. Improving the quality of Stork care in 2 rehabilitation centers (285 White Storks were treated 2016-2019).
5. Establishing contact with other organizations met during networking. This resulted in the joint undertaking of the issue of drawing the EC's attention to more effective legal actions in

the field of reducing bird mortality on power lines, transferring the knowledge gained in the project for practical use (drones, ornithological radar), cooperation within the framework of subsequent Life projects (LIFE/20 NAT/PL/001199).

Project results that will become apparent after a certain time period:

1. Stopping the decline of the White Stork in 9 Natura 2000 areas.
2. Continue to limit the decline in tolerance towards the White Stork by resolving most conflicting situations and providing extensive education.
3. Developing better and more effective care of Storks in rehabilitation centers and their restoration to nature, due to the results of tracking individuals equipped with loggers.

Results of the replication efforts:

1. Moving Stork nests from roofs and chimneys of buildings, decaying trees or power poles to free-standing poles with platforms. The action was improved by introducing an element of carrying a larger layer of material and liming of the nests, which proved to be effective in repopulating them by Storks. Besides, each pole had 3 nesting boxes for House Sparrows and Eurasian Tree Sparrows to compensate for the loss of shelters in winter and nesting places in spring as a result of nest reduction (only part of the nest was moved). In addition, on the roofs and chimneys safeguards were installed to prevent Storks from rebuilding their nests and landing on them, which excluded the contamination of the roofing with feces.
2. Isolating power poles posing a threat of lethal electrocution is a standard method used in the protection of large and medium birds. In addition, we introduced a new type of device, which proved to be extremely effective, is cheap and quick to install. So far more than 500 dangerous power poles have been secured, including in areas not covered by the project, throughout the country.

The effectiveness of the dissemination activities

Activities related to the dissemination of information about the project were very effective. These appeared numerous times in mainstream media of all types (Internet, radio, television, newspapers). The number of recipients of the information related to the project exceeded 5 million people. Apart from promotion in the public media, articles about the project and its results appeared in specialized and scientific journals. The presentation of the achievements during the networking with other Life projects allowed to communicate the latest achievements in nature conservation (use of drones, ornithological radar, nest liming), which met with great interest. Some of the results were also presented during scientific conferences, including the International Ornithological Congress in 2018. Due to the fact that the number of recipients was significantly exceeded and the project has become widely known in the media, we do not find any disadvantages related to the dissemination of information. Non-governmental organizations such as OTOP, consulted with us on the tasks related to securing power lines, as part of the project being prepared for Life (in 2020).

Policy impact on regional level

1. Entering the White Stork into the Standard Data Form as a species subject to protection in the Natura 2000 area of Ravine Valley of the Narew River and Marshy Valley of the Narew River. Start of the procedure of establishing a White Stork to be protected in 2 more Natura 2000 areas (Lower Narew River Valley, Marsh Wizna).
2. Inclusion in the Plan of Conservation Tasks for the Natura 2000 area of Lower Bug River Valley PLB140001 of activities related to the protection of nests (installation of platforms and reduction of overly heavy nests) and White Stork breeding (insulation of electric wires).

Policy impact on national level

1. Attention is drawn to the incorrect methodology of the State Environmental Monitoring to track trends in the White Stork population. So far, the monitoring has been carried out on too small a number of trial areas, which results in a significant overestimation of the number (even by 10,000 breeding pairs) and an erroneous indication of the trend as stable or slightly increasing, which was reflected in the results of the last national report from Article 12, which is in fact declining. Therefore, from 2023 onwards, the tracking of the White Stork population will start with national monitoring on 100 trial areas, which will allow to estimate the population size with the accuracy of 1000 breeding pairs.
2. Showing all power grid operators throughout the country that the primary cause of mortality of young Storks are non-insulated power poles (60% of cases of young Storks fatalities is a result of an electrocution). This resulted in the start of the process of securing the most dangerous poles (currently over 500).

Policy impact on EU level

1. Appealing to the EC, the Bulgarian government, the Bulgarian ambassador to Poland and the Bulgarian Society for the Protection of Birds (BSPB), in connection with the discovery of a huge number of dead Storks in the vicinity of Burgas by the Black Sea (migration route), which died off electrocution by power poles, to draw attention to dealing with this huge problem. According to our information, at least part of the poles has been secured. Currently, we have submitted a Life application to the EC (LIFE20 NAT/PL/001199), in which we have established cooperation with the BSPB and the local power grid operator (EP Yug), and in which we planned to secure 1000 of the most dangerous power poles on Storks' migration route.
2. Joining the group of NGOs from all over Europe (GREFA Madrid, GAN-Gobierno de Navarra) dealing with nature conservation, whose task is to establish a dialog with the EC in order to implement the bird protection regulations on power lines more effectively.

The main barriers identified and the action undertaken to overcome them

The initial declaration of support for the change of the content of the Standard Data Forms for 3 Natura 2000 areas by the Regional Directorate for Environmental Protection (RDOŚ) in Białystok was rejected after the change of government in the country in 2015. After that time, the Director of RDOŚ did not appear at any of the later meetings despite being a member of the Steering Committee. Despite numerous attempts to make contact (telephone calls, e-mails, visits to the office) nothing changed. Only at the end of the course of the project, RDOŚ again supported the inclusion of the Stork into the SDF in 3 Natura 2000 areas as a species subject to protection.

EU ADDED VALUE OF THE PROJECT AND ITS ACTIONS

The added value of the project for the EU is the development and improvement of the existing best practices for the protection of the White Stork and their wide dissemination at nationwide and internationally through scientific articles and conferences at national, European and global levels. A few additional products, which were created as part of the project, have practical applications in other EU countries (e.g. new insulation device for power poles, online White Stork nest mass calculator translated into 5 languages). In addition, we were entered into the following important EU documents:

— Horizon 2020: The objectives of this EU framework program for research and innovation has been met by the implementation of monitoring of ecosystem services and other research whose results have been published so far (e.g. Journal of Insect Conservation, Acta Ornithologica, Acta Oecologica) or are in development.

— Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions entitled “Our life insurance, our natural capital” was realized by improving the state of protection of the White Stork in 9 Natura 2000 areas.

— The Biodiversity Strategy to 2020 has been fulfilled by applying best practices in the protection of the White Stork, making them effective, evaluating them and proposing new solutions that have been tested and gave positive results. In addition, the status of the population of this species has been tracked over a very large area for 4 years, thus improving the knowledge base for conservation purposes, and the results of this research are publicly available and can be used by nature managers to better assess the measures taken, their effectiveness and further planning.

6.4. Analysis of benefits

1. Environmental benefits

The project has secured the source breeding population of the White Stork in north-eastern Poland in a proper state of protection. New techniques for the protection of the species have been developed and worked out. The fact that their effects have been published in scientific journals raises their rank and importance. A number of them are already widely used by various interested social groups (energy companies, private property owners, nature conservation entities, NGOs dealing with bird protection), e.g. new manner of securing power poles, nest weight calculator or nest liming. The use of new techniques to protect birds from electrocution, such as devices securing power poles, significantly reduces the cost of such activities. This is expressed by the increasing use of devices securing power poles by energy companies throughout the country. Also, the project’s method of installing markers using a drone on high-voltage power lines significantly reduces the costs of protecting birds from collisions (it does not require a shutdown of the power and is much faster than the traditional installation methods).

1. Forecasting the breeding population of the White Stork in the area covered by the project and its trends was made possible on the basis of the conducted monitoring. A slight decrease was observed in all the refuges during the project. At the same time, the population rate of the nests secured within the project was very high (around 80%). The observed trend was probably the result of the ongoing deepening drought in recent years, which reached its peak in the spring of 2020. It is assumed that the trend may be stopped or even reversed once this factor ceases.

2. During the project, a system of interim actions using a car with an aerial work platform was developed. This allowed to carry out a multitude of actions on ongoing bases, such as reducing overly large and heavy Stork nests, cutting down the branches that make it difficult for birds to enter the nests, taking young Storks that did not fly away to the wintering grounds or were entangled in strings and transporting them to rehabilitation centers. Since the project consisted mainly of 4 basic tasks, their long-term maintenance is relatively easy. One of them related to the car equipped with an aerial work platform has already been discussed. Another was to protect 400 endangered and conflicting Storks’ nests. 301 of these was moved to free-standing poles with platforms. The poles are covered by a 25-year warranty period, which ensures long-term maintenance of the project. In addition, agreements were signed with the property owners, obliging them to maintain them during that time. Having a car with an aerial work platform additionally helps to protect the nests (weight reduction, helping young birds, etc.). The next task was to protect 270 elements of the power grid, which were the cause of fatal electrocutions of Storks. Maintaining this effect is ensured by the durability of the new device constructed as part of the project and the ongoing process of reconstruction of the

power grid by its operators (isolation and transferring the lines underground). This task is currently being developed by installing insulators on a number of power poles throughout the country (currently over 500). The last task was the renovation of rehabilitation centers. Thanks to their retrofitting and expansion, better standard of care of injured and sick Storks is ensured. Their long-term maintenance will be ensured by the fact that they are managed by state entities, which are guaranteed annual funding from the state budget.

3. The project has eliminated all the threats identified in the B2d form, the solution to which was indicated as crucial for the population covered by the project before it started. These included: (1) collisions with power lines, (2) electrocution on low- and medium-voltage power lines, (3) loss of nesting places as a result of roof repairs, elimination of nest platforms, branch regrowth, etc., and (4) predation of stone martens. The reduction of the last threat was not planned directly in the project, but was achieved by moving nests to free-standing poles. Their smooth surface prevents martens from climbing into the nests, completely eliminating the problem, which is often encountered in the case of nests located on the roofs of buildings. The other threats to the White Stork population in Poland identified in the application are: (1) reduction of the area of the feeding grounds and reduction of the number of potential victims, which was not yet a problem for the local White Stork population during the project implementation. In spite of this, we have started research aimed at recognizing the food composition of Storks in the area covered by the project. The results confirmed that the diet of Storks in north-eastern Poland is much richer and more complex than that of the birds from the western part of the country, which confirms the high quality of the feeding grounds. However, periodically during the project, the quality of feeding grounds decreased as a result of the drought lasting a number of years, especially at the end of the rearing period (July–August). Our research has shown that birds try to compensate for this by increasing the proportion of orthopteras in their diet and we have investigated the role of free grazing of cows in maintaining high quality Stork feeding grounds (results were published). This knowledge was used in another Life project concerning the White Stork all over Poland. Recent research with the use of loggers, carried out both by us and other Polish scientists, revealed how high the mortality of young Storks is during their first migration. Power lines located on their migration route were identified as the greatest threat to the population, the scale of which was completely unknown thus far. Cooperation was established with the Bulgarian Society for the Protection of Birds (BSPB) and the local network operator (EP Yug) for the next Life project (LIFE20 NAT/PL/001199), where 1000 of the most dangerous power poles on the Stork migration route (“Via Pontica” migration route) are to be secured. It is urgent that they are secured in the next 5 years, as the high mortality rate of young Storks (80% in the first year of life) does not ensure a stable population. Poland has one of the most numerous and important breeding populations of this species in the world. The current downward trend in the population of White Stork observed throughout the country (locally exceeding even 40% over 10 years), despite still quite high productivity, may be the result. The White Stork is a long-lived species, for this reason the decline is slow and extended over time.

2. Economic benefits

1. The biggest economic benefits come from creating a new type of device, which is cheap and fast to install on medium voltage lines. First of all, they reduce the cost of securing disconnector poles and electrical substations almost tenfold from approx. EUR 1600 to EUR 160. Secondly, by completely eliminating the incidence of electrocution, they influence the indicators concerning the duration of power outages (SAIDI, SAIFI). Their reduction results in savings for power grid operators up to several hundred thousand Polish zlotys per year. This device has gained great recognition among power engineers, winning a distinction in the

“Best Innovative Product or Technology in Electrical Engineering” (orig. *Najlepszy innowacyjny produkt lub technologia elektrotechniczna*) competition, organized during the 10th Jubilee Scientific and Technical Conference. Innovative Materials and Technologies in Electrical Engineering (orig. *X Jubileuszowej Konferencji Naukowo-Technicznej. Innowacyjne Materiały i Technologie w Elektrotechnice*). The device designed by PTOB was manufactured by a local company (Hubix Sp. z o.o.) and is currently installed on over 500 power poles across the country. It is an important product in this manufacturer’s product catalog.

2. Another solution that has a very positive impact on the functioning of the line, which we have developed in the project is the use of a new type of FireFly markers, instead of marker balls, which is lighter thus causing less stress on the power lines and extending their service life. Moreover, their installation can be done without the need to power the line down, as a drone is used for this purpose, which involves savings of several dozen to several hundred thousand Polish zlotys. The marking of 4 sections of high-voltage power lines carried out as part of the project could have generated significant costs of this action if the markers had not been changed and new installation technique had not been employed.

3. In addition, the protective measure of moving conflicting and endangered Stork nests to free-standing poles has been developed further. So far, the effectiveness of this solution has not exceeded 50%. The application of the method of transferring a larger layer of material and a very simple procedure in the form of liming the edges of the nest using agricultural lime has increased the re-population of nests to around 80%, which is the highest rate achieved to date with this type of action in the world. Its effectiveness was confirmed in a methodical manner and a scientific article on the subject is in the review. Such a simple procedure allows to significantly increase the re-population of nests by Storks (by 20%).

4. An online calculator created to determine the weight of White Stork nests allows to assess the risk (load on the roof or the pole) and take appropriate steps to eliminate it (reduce or move the nest). According to the available information, it is already being used by engineers to the design of new types of more durable poles and platforms and for analysis of loads on already existing power poles.

3. Social benefits

The project contributed to the construction of a new type of device, which is manufactured by a local company and is now installed by power grid operators throughout the country. At least 2 people are involved in its development, production and marketing. As part of monitoring the effects of the project, the effectiveness of markers on high-voltage power lines with the use of an ornithological radar, a master’s thesis at the University of Bialystok was developed. The most expensive action, i.e. moving nests to free-standing poles, involved local companies, for which these were very important tasks. In the project area we stopped the decline of tolerance towards the White Stork by solving man-nature conflicts. A lot of the nests we secured would have been lost forever, because when they were located on the roofs of buildings, building owners did not plan to install a nest platform after roofing replacement. All the roofs on which the Stork nests were located were roofed with asbestos. In Poland, the existing regulations require the removal of asbestos by 2032. This process is already underway, and since it is expensive, and there is a need to buy a new roofing, building owners usually do not have additional funds to set up a pole for the Stork nest. In almost all cases it would mean a permanent loss of Stork nesting sites. In addition, a number of the transferred endangered nests posed a threat to cause the roof on which they were located to collapse (in two cases they fell and damaged the roof before being moved) or to break the pole. The cost of repairing the roof in this case often exceeds several thousand Polish zlotys. In connection with the promotion of the project, the forgotten custom of “busłowych łap” was recreated. It consisted

in baking Stork buns shaped as a Stork's foot ("busiol" is an old folk name for a White Stork) and placing them before the Storks arrive to their nests. This was to encourage the birds to settle on the roofs of the farmer's houses, because it was believed that the bird brings luck. The reminder of this tradition met with great enthusiasm among local communities and then continued in some places (cyclically), regardless of the project.

4. Replicability, transferability, cooperation

The probability of project replication is high. This is confirmed by the PTOp, in cooperation with BSPB and EP Yug (power grid operator from Bulgaria), submitting the Life project (LIFE20 NAT/PL/001199) in many aspects consistent with this one (protection of nesting sites and protection of the power grid). Moreover, the tasks and good practices developed in this project have been implemented in the Life project submitted in 2020 by the National Society for the Protection of Birds (OTOP), in the field of securing power lines (a new type of device protecting against electric shocks and the installation of markers using a drone). So far, we have consulted at least 4 ideas for bird protection against collisions with high-voltage lines, based on our experience from the project, both with state entities and NGOs. Since the new device created to protect large and medium-sized birds is not covered by a patent, it can be reproduced and used in other EU countries by other manufacturers. This is an attractive solution as its application significantly reduces the cost of securing the poles by up to ten times and shortens the time needed to perform this action.

5. Best Practice lessons

1. Best practices used in the project were to protect endangered and conflicting nests by moving them to free-standing poles with platforms. This method was developed in the project by carrying a larger (30 cm) layer of nesting material. In addition, agricultural lime was applied on the nests, which increased the re-population of the nests compared to those not limed by 72–92%. The verification of the method was based on scientific standards (control group + experimental group). This allowed for a clear confirmation of the effectiveness of this method, and the results were developed in the form of a scientific article, which was submitted for review. Its additional advantage is that this solution is very inexpensive, it costs approx EUR 1.5 per nest. The reinforced concrete poles used are more durable than the wooden and telecommunication open-work poles used so far. Taking into account that Stork nests often reach up to 1 ton in weight, the stronger construction used in the design guarantees their long life.

2. Nesting boxes for House Sparrows and Eurasian Tree Sparrows were installed under each nest moved on a free-standing pole. They were all occupied, most of them within the first 2–3 weeks. The relocation of nests was associated with the reduction of their volume, which sometimes resulted in the loss of shelters and nesting places for small birds (Starlings, House Sparrows, Eurasian Tree Sparrows). Earlier PTOp studies have shown that in north-eastern Poland, on average 3.5 pairs of small singing birds nest in Stork nests. Hence the decision to mount 3 nesting boxes underneath each Stork nest moved.

3. Markers installed on high- and medium-voltage power lines are common practice in protecting birds from collisions. Marker balls were originally planned. Due to the emergence of new research proving that the marker balls are heavy, allow for ice accumulation and cause high wind resistance, which is unfavorable for the line, it was decided to use a better solutions — FireFly type markers, therefore we have made a change with regards to this element in the project. (Bernardino et al. 2018. Bird collisions with power lines: State of the art and priority areas for research. *Biological Conservation*, 222: 1–13.).

4. The use of GPS-GSM transmitters to track young Storks, which nowadays is common practice in animal migration studies, has revealed low effectiveness of restoring to the birds

treated in rehabilitation centers back to nature. Most of them die in the first weeks of life as a result of predation or electrocution. This confirmed the high mortality rate of young Storks in the first year of life. This action showed, however, that the birds, after being released from the centers, migrate via the appropriate routes.

6. Innovation and demonstration value

1. An ornithological radar was used for the first time in the world to evaluate the effectiveness of installation of markers on high-voltage lines. Previous methods assumed visual observations of bird flights made by an ornithologist. The use of radar allowed for extremely precise visualization of flight routes and birds' reactions to the line before and after mounting the markers and correct evaluation of the method. Thanks to this, the conclusions drawn are of great importance and provide some unique data. It is planned to publish these data. This innovative solution has been highly appreciated during the exchange of information and experience with other Life projects. The method is of great replication potential in a number of countries.

2. The drone purchased as part of the project was used to compare the quality of data obtained on counting the number of young Storks in the nest with this device and from the ground. The results indicate that both methods are comparable in terms of the quality of the data obtained. However, the traditional method (installation from the ground level), is cheaper and faster. The reaction of Storks to drones during the breeding period was also checked. This was done to assess how safe drones are in research and protection of the White Stork. The publication on this subject was accepted for printing in a scientific journal (Zbyryt et al. Behavioural responses of breeding White Storks *Ciconia ciconia* to an Unmanned Aerial Vehicle. in press). This device proved to be a very minimally invasive method of observing Storks in nests. We have also established that the drone is well suited for assessing the hazards in the nest (garbage, cords) and the condition of young birds. The use of the drone in nature conservation has great potential for replication and transfer in other countries and in other aspects of nature conservation.

3. The drone used for mounting markers on high-voltage power lines is a completely new system that allows to save both time and money and is much safer for people. It can be used without the need to de-energize power lines, which generates savings of several dozen to several hundred Polish zlotys. This is another activity that met with great interest during the exchange of information and experience with other Life projects. The method has great replication potential.

4. The new device, designed as part of the project to protect large and medium birds from fatal electric shocks is an innovative solution on a national scale. It can be mounted without de-energize power lines (saving time and money) using a specially designed telescopic arm. In case of line liquidation, it is possible to dismantle the device and move it to another pole (reusable device). This device has gained recognition among power engineers, winning a distinction in the "Best Innovative Product or Technology in Electrical Engineering" (orig. *Najlepszy innowacyjny produkt lub technologia elektrotechniczna*) competition, organized during the 10th Jubilee Scientific and Technical Conference. Innovative Materials and Technologies in Electrical Engineering (orig. *X Jubileuszowej Konferencji Naukowo-Technicznej. Innowacyjne Materiały i Technologie w Elektrotechnice*). Modification of the mounts for its installation allows for its introduction to the line in different countries, beyond Poland. In the country it is already widely used outside the project (over 500 secured devices).

5. Online White Stork nest weight calculator (<http://gniazdo.ptop.org.pl/index.html>) created on the basis of the first measurement of these structures on such a large scale (147 nests). Until now, there was very little data on the subject from Poland and Germany. The calculator

features instructions in five languages (Polish, English, Spanish, French, Russian), which guarantees its wide dissemination and use by many entities.

6. As part of the project, we have analyzed the soil, the species composition of insects and Stork nest fungi, which allowed us to reveal that these structures have enormous biodiversity and also behave like soil. This is the first time in the world that animals have created soil completely without the parent rock. These results can be found in a review in a scientific journal. We hope that they will have practical implications in terms of qualifying Stork nests as waste.

7. Policy implications

1. Currently the new agri-environmental programme (RDP 2021-2027) is being consulted. Our comments concern, among other things, the relationship we discovered between more effective Stork feeding and cow grazing in order to implement co-financing promoting free-range grazing, due to its great importance in nature conservation (Zbyryt et al. 2018. Foraging efficiency of White Stork *Ciconia ciconia* significantly increases in pastures containing cows. Acta Oecologica, 104: 103544.).

2. We drew the attention of the Regional Directorate for Environmental Protection (RDOŚ) in Lublin to the importance of the White Stork population in the Natura 2000 area of Central Bug Valley PLB060003 (area not covered by the project), which is an integral part of the Stork population in the Lower Bug Valley PLB140001 (area covered by the project). The number of breeding population and densities found in it reach the highest known values in Poland. An application was sent to RDOŚ to establish a White Stork to be protected in this area. After the institution expressed their positive opinion, the procedure of changing the SDF has gone underway.

3. Establishment of cooperation in a group of European NGOs dealing with bird protection on power lines (e.g. GREFA Madrit, GAN-Gobierno de Navarra). This action aims to establish a dialog with the EC aimed achieving a more effective process of implementation of bird protection legislation on power lines across the EU.

4. During the project it was noticed that the methodology used to estimate the breeding population of the White Stork in Poland is erroneous, which results in a significant overestimation of the population (even by 10 000 pairs) and incorrect indication of the population trend (stable/growing), which was reflected in the last report of Poland in Article 12 of the Birds Directive. However, the data collected both during the monitoring carried out as part of the project and by other ornithologists in other parts of the country, indicate a progressive decline in the number of White Stork in Poland. Incorrectly obtained data are reported to the EC as part of the assessment of conservation objects in Natura 2000 areas. This has serious consequences related to the assessment of conservation needs of this species (e.g. as part of the Life projects). We drew attention to this problem to the coordinator of the Monitoring of Birds in Poland. The monitoring methodology of this species will be changed in 2023 from 49 research areas to 150, which will allow to estimate the breeding population with the accuracy of 1000 pairs.

5. There are no regulations forcing EU countries to immediately eliminate the threat posed by uninsulated power lines. This causes that the activities aimed at solving this burning problem (6 out of 10 young Storks die on the power lines during their first migration), is stretched over time, requires most often a grassroots initiative of non-governmental organizations or private individuals, including raising external funds.

7. Key Project-level Indicators

The implementation of the indicators was not at risk and went on as planned. More significant deviations are discussed below. One Natura 2000 area was excluded from the project — the

Upper Nurzec River Valley. However, due to the fact that activities were also carried out directly outside the borders of Natura 2000 areas, the area of project implementation remained unchanged. The indicator in part 7.4 — number of nesting females decreased slightly. The weather conditions in years 2019 and 2020 were exceptionally dry, which affected the breeding effectiveness. It is worth mentioning that in the Stork breeding areas outside the project's reach, these falls were much more drastic. Also the initial value of the number of populated nests, determined on the basis of the SDF data, turned out to be overestimated. The interest in the project has far exceeded expectations, which is reflected in high indicators describing website traffic and media presence, including in radio and television programs with a very large coverage. The table presenting activity of the project in the media was attached to the Final Report in Annex no. 18.

8. Comments on the financial report

1. Increase of the Commission funding for one of the beneficiaries with appropriate proportions for the entire project

Originally, in the application we applied a proportional distribution of the co-financing to all beneficiaries, i.e. EU Contribution requested 60%, Co-financer contribution 30%, Beneficiaries' contribution 10%. Initially, the project was to be co-financed by a public financial institution, the NFOŚiGW. NFOŚiGW unexpectedly withdrew the declaration at the stage of preparing the agreement with the Commission. However, we managed to obtain another co-financing partner – the German foundation Vogelschutz Komitee (VsK), exactly in the same proportion as NFOŚiGW. We applied a new allocation of funds and the agreement with the Commission was concluded. The implementation of the project has started according to the schedule.

The change in co-financing caused a complication for one of the beneficiaries. The ŁPKDN was unable to accept funding from VsK. It has no legal personality, it is a budgetary unit of the Podlaskie Voivodeship government with specific sources of funding. The ŁPKDN has made efforts to raise more funds to provide its own contribution, eventually securing an own contribution of 22%, which increases the EU contribution to 78% in their case. The changes do not affect the 2% rule, because in the case of ŁPKDN, the project employees are only additional staff and this provision does not apply to them. On the other hand, in the case of the second partner, there were no percentage changes in the contribution of individual entities with regards to the agreement, so the 2% rule is maintained.

In order to maintain the funding proportions, PTOPI reduced the EU funding in its costs and we took advantage of a larger funding from VsK. Despite the differences in the proportions of co-financing in the case of the ŁPKDN and, in consequence, PTOPI, when consolidating the costs of all beneficiaries, we maintain proportions consistent with the agreement, i.e. the requested EU contribution of 60%.

After the end of ŁPKDN's activities, when the final proportions of funding were already known, we asked for an interpretation from financial monitor, whether in this case filing a Request for an amendment is necessary. We have received an answer that if the 2% rule is observed, we are not obliged to carry out this procedure.

2. Adding another co-financing partner

At the beginning of 2020, there were some information about the possibility of financing LIFE projects by the NFOŚiGW, even during their implementation (additional call for applications). The call for applications was published on 4 May 2020. We immediately applied for funding. On 15 June 2020 we received information about the successful

completion of the formal assessment and the substantive assessment began. Considering how long the formal assessment took, it was very probable that we will not receive the decision on co-financing by the end of June, i.e. within the deadline formally required for the request for an amendment. We asked the financial monitor for an interpretation, whether Request for an amendment is necessary in this case. At the moment of applying for funding by PTOp, the project partners have mostly completed their tasks. We applied only for reimbursement of costs incurred by PTOp. The addition of a new co-financing partner reduced the % of the own contribution only for PTOp, which is an NGO and has no impact on the 2% rule for other beneficiaries. In connection with the explanation provided, we have again received an answer that there is no need to submit the Request for an amendment. We received Declaration A6 from NFOŚiGW on 22 July 2020, while the grant agreement was signed after the completion of the project on 10 August 2020. The support of the project consists in the reimbursement of selected costs arising after 16 April 2020 in the amount of EUR 34 857.56. Declaration A6 and the grant agreement no. 1496/2020/Wn50/OP-WK-If/D dated 10 August 2020 are attached to the Final Report in the Annex 16.

3. Cost overruns in the other costs category

Within the other costs category, 101.01% of the planned funds were used. The fact of exceeding costs is due to the unplanned costs of maintaining the car equipped with an aerial work platform (C.3. PTOp). The equipment requires an obligatory annual test performed by UDT (Technical Supervision Office), technical inspection of the platform, technical inspection of the car, regular maintenance of the platform and warranty inspections. In addition, the obligatory insurance of a specialized car is significantly more expensive than in the case of a passenger car. Due to the above, the cost of task C.3 in the other costs category was increased by EUR 10116.41:

the insurance of the car equipped with an aerial work platform: policy no. 1024790796 (2017, 2018, 2019, 2020)

tests performed by UDT: bills no. 01310428, R337278/2019,

technical inspection of the car: invoices no. D/01082/2018, D/01209/2019

warranty inspections: invoices no. 2019/0001/FKS, 2019/0107/FVS, 2019/0147/FVS, 2020/0095/FVS

maintenance of the platform: invoices no. FS 2018/10/000013, FS 2019/01/000067, FS 2019/02/000104, FS 2019/04/000101, FS 2019/05/000087, FS 2019/06/000068, FS 2019/07/000029, FS 2019/08/000028, FS 2019/09/000038, FS 2019/10/000062, FS 2019/10/000033, FS 2019/11/000064, FS 2019/12/000053, FS 2020/01/000077, FS 2020/02/000102, FS 2020/03/000073, FS 2020/04/000082, FS 2020/05/000074, FS 2020/06/000078

The above costs refer to the equipment purchased and used within the framework of the project, what is more, they are necessary to allow for further operation of the equipment, so they constitute a direct cost related to its implementation.

4. Exceeding of the budget for the implementation of LPKDN activities

The budget of the co-beneficiary in the application was EUR 125 825, while the actual costs incurred reached EUR 132 552.80. LPKDN has planned relatively high investment costs in its tasks. In recent years there has been an increase in prices on the construction market, only in the period from December 2018 to August 2020 the increase was 4.8% (source GUS, price index of construction and assembly production). LPKDN encountered the greatest difficulties in the implementation of task C.4, renovation and equipment of the bird rehabilitation center. In addition to the increase in prices, a thorough analysis of the current needs and outlays

necessary in order to ensure that the center fully meets the assumed objectives and maintain sustainability has shown that the financial resources assumed for the tasks were insufficient. Due to the potential threat of budget overruns and difficulties described in point 8.1, ŁPKDN has taken corrective actions and obtained funding for the implementation of works to the necessary extent, thus increasing its own contribution. Finally, ŁPKDN organized its own contribution of 22%. Due to the savings generated by the other beneficiaries, exceeding the ŁPKDN budget by EUR 6727.80 does not have a significant impact on the budget of the whole project.

5. The costs included in the financial statement, not provided for in the application or amended, resulting from and directly related to the implementation of the project. The new financial schedule items which did not cause significant shifts between categories or within tasks:

Action A1 – PTOp Consumables:

invoice no. 12/5/2017 – DISTO D210 laser distance meter for determining the height of posts during selection of nests requiring intervention – relocation, the costs of EUR 113.20. With the aid of the device, the second tender has already involved a different height of posts adjusted to the needs, and the purchase increased the economic efficiency of task C.1. Securing 400 nesting sites.

Action C1 – PTOp Consumables:

As a result of circumstances beyond the control of the PTOp, we had to replace the roof platforms with metal platforms for installation on power poles, the change was carried out within the available resources:

invoice no. FA/5080/2019/A purchase of platforms for Stork nests for the installation on power poles – 36 pcs, agreement no. 10/BOCIAN2/2019 of 15 November 2019.

During the task, the costs planned in the Consumables category were exceeded by EUR 3637.75 as a result of the need to purchase additional security devices:

invoice no. F/1H/17/002049 Deterrent platform HPONA1000 – 60 pcs. - protection for power poles to prevent Storks from rebuilding the nest after dismantling and moving the nest to a conflict-free location, order 27/BOCIAN2/2018 from 20 September 2018.

invoice no. F 0201/2019 Protection against Storks sitting on the ridge and chimneys of buildings in Drozdowo

We did not exceed the funds allocated for the task. The substantive justification for the above costs is contained in point 6.1 of the report, description of task C1.

Action C2 PTOp

Consumables: A different type of markers were purchased than originally planned.

Invoice number: FSRZ201800455 Delivery of 151 reflective markers on 110 kv overhead lines, contract no. 08/BOCIAN2/2018 of 19 July 2018.

External assistance: The installation of markers on the first section of lines to be secured required the employment of an external contractor with appropriate rights and the introduction of cost in the category of external assistance.

Invoice number: FSRZ201800455 Installation of 71 reflective markers on 110 kv overhead lines, contract no. 08/BOCIAN2/2018 of 19 July 2018.

We did not exceed the funds allocated for the task. The substantive justification for the above changes is contained in point 6.1, description of task C2.

Action C3 PTOB Consumables:

The equipment necessary for safe use of the car with an aerial work platform was purchased: Invoice No. F/1H/17/001885 – purchase of work safety equipment for the use of the car with an aerial work platform (harness, cord, helmets, gloves), amount of EUR 450.23.

Other costs added in connection with the implementation of the task are justified in point 8.3 Cost overrun in the other costs category.

Action C4

BbPN: After the EC accepted the application for changing the list of equipment presented in MTR, the beneficiary purchased equipment appropriate to the current needs of the center within the funds allocated for the task.

Equipment: Invoice F03555/18 – Purchase of veterinary equipment (hematological and biochemical analyzer) and Invoice no. 1/07/2018 – Purchase of veterinary equipment (treatment lamp, ultrasonic cleaner)

Consumables: Invoice No. 1/07/2018 – Purchase of the equipment (magnetic stirrer, incubator, washing and drying machine, dishwasher, microscope camera, mini-centrifuge)

ŁPKDN: The calculation presented in the application did not take into account the necessary increase in the volume of the building, the costs of the renovated center turned out to be much higher than originally planned, which was already reported in MTR. The list of the purchased equipment has been slightly changed within the funds allocated for the task, so as to optimally meet the needs of the center's patients. The beneficiary exceeded the funds allocated for the task, the cost of task C4 increased by EUR 10725.05.

Infrastructure: Invoice no. FV/16/18 – renovation of the rehabilitation center in ŁPKDN – expansion and reconstruction of the animal rehabilitation center

Equipment: Invoice no. 18-FVS/3277 renovation and adaptation of the rehabilitation center to take care of Storks – equipment of the veterinary office

The substantive justification for the above changes and the increase of the scope is contained in point 6.1, description of task C4.

Action D1

BbPN: It turned out that the transmitters, accessories for placing them on birds and a subscription for their service are sold independently and belong to different cost categories. Such a solution enables reuse of loggers, which were used in the project:

BbPN Consumables: Invoice no. FA/119/06/2016 – purchase of materials necessary to install telemetric transmitters

BbPN External assistance: Invoices no. FA/38/07/2018 and FA/118/06/2019 – purchase of subscription for telemetric transmitters

PTOB Consumables: Additional equipment for more efficient drone operation was purchased and the camera was adjusted to the needs of the monitoring teams, as explained below.

invoice no. FV/272/PL/1704 Task D1. Purchase of a training drone for flying lessons before commencing the course, in order to avoid damages to professional equipment – Quadrocopter SYMA X5SC drone with HD camera +2 batteries, 2 sets of propellers

invoice no. FAV/350835 Task D1. Case for disc HD01 ARKAS, DISC 2TB 2,5'SEAG.Backup Plus USB3.0BLACK - for storage of photos and videos shot with the use of the drone purchased as part of the project.

invoice no. 7/05/2017 Task D1. DJI Phantom 4 battery - 4 pcs, BW case for PHANTOM 4/4PRO - 1 pc - additional equipment for more efficient operation of drone purchased under the project for monitoring purposes

invoice no. 33/SP/2017 Task D1. Sony DSC-HX60 camera – 3 pcs, Esperanza case ET144 – 3 pcs, GoodrammicroSD 64GB memory card – 3 pcs, purchase of 3 compact cameras to keep photographic documentation of the project – instead of purchasing 1 digital SLR camera for use by 3 monitoring teams

PTOP Other costs: The insurance was intended to ensure the durability of the drone and optical equipment in the event of unforeseen circumstances; it concerns equipment purchased and used within the framework of the project and therefore constitutes a direct cost related to its implementation.

invoice FV/037/03/2017 Extension of warranty for DJI Phantom 4 drone (serial no.: 07DJD8HC11235) – 12 months

policies no. 903012150750, 903012633325, 903013024022 (2019, 2020) Insurance of the drone purchased for monitoring in the project

policies no. FB 6776304, 1035195896 Insurance of the optical equipment purchased for monitoring in the project

The introduced changes did not result in exceeding the funds provided for the task.

Action D2 PTOPT Travel

The application did not assume delegation costs within task D2. The project staff, however, took business trips in order to carry out surveys with residents of Natura 2000 and to perform bird counts in the surroundings of Stork nests as part of the monitoring of ecosystem services, resulting from the methodology of the research, in the amount of EUR 1428.50. Due to the additional element, the costs allocated for the task were insignificantly exceeded in the amount of EUR 346.37.

Action E1 PTOPT

The costs which were unforeseen in the application and are directly related to the implementation of the project and justified in point 6.1, description of task E1:

Travel: an international delegation of project worker 1/BOCIAN2/2018 to Vancouver, Canada, to present the project at the International Ornithological Congress

External assistance invoice no. 15R/2020 Catering service during the meeting promoting the project – ceremonial opening of the observation tower made within the project

Consumables: Accessories necessary to carry out “Busłowe łapy” workshops and provide coffee breaks during meetings, invoices no: 426/2017, 13/2017, 569/2017, 25-WSK-00141273, 02/2017, 751/2017, F/0144/11/2017, FAV/3566, 9/18/26, 11/18/26, S290/F002946/04/2018, SPR/F/C6 001018, 12/18/26, 3048/AD/2019, 5/19/26, 6/19/26, FAV/1021, 34/12/2019, 6/20/26; invoice no. FV no. 66 – delivery of promotional and informational materials – within the scope of: stickers for cartons for transporting Storks 500 pcs., agreement no. 02/BOCIAN2/2017 dated 8 February 2017.

The funds allocated for the task were not exceeded.

Action E2 PTOPT

Training of project staff in the use of the free QGIS program for spatial analysis instead of purchasing software and data archiving:

External assistance:

invoices no. 5528/2019, 5297/2019 Rental of a training room to carry out training for the project staff in the use of GIS together with catering; 6/07/2020 Archiving of data from the project LIFE15 NAT/PL/000728 – LIFEciconiaPL

bill no. 1/6/2020 Design of the application for calculating the weight of the Storks nest, as an added value of the project - the justification is contained in point 6.4. (economic benefits and innovation and demonstration value)

Other costs: 10/9/2019 Conducting QGIS training – basic level

The substantive justification for the above changes is contained in point 6.1, description of task E2. The funds allocated for the task were not exceeded.

Action E3 PTOP Consumables:

With the justification analogous to that of the meetings in task E1, coffee breaks during the workshop were provided by the organizer, invoices no.: F/0144/11/2017, 4/17/26, 3/17/26, 26145, 5/17/26, 6/17/26, 0518/2017, 7/17/26, 8/17/26.

The funds allocated for the task were not exceeded.

Action E4 PTOP

Travel: The application did not assume delegation costs within task E4. The project staff realized business trips in order to organize and transport guests to the conference. The funds allocated for the task were not exceeded.

Consumables: invoice no. FS/19/11/40 Production of conference materials for the White Stork protection conference summarizing the project, contract no. 09/BOCIAN2/2019 of 12.08.2019 – the justification is included in point 6.1, description of task E4.

Action E5 PTOP Other costs

Invoice no. 11/07/2020 Production and delivery of the brochure – layman's report, 500 copies, contract no. 1/BOCIAN2/2020 of 28 April 2020

The funds allocated for the implementation of the task were exceeded by EUR 846, which is an insignificant difference in the scale of the project.

Action F1:

PTOP Personnel: There was a significant difference in the hourly rate of the PTOP accountant in relation to the planned one. The funds planned for the implementation of the task were not exceeded. The rates applied in the application resulted from the restrictions imposed by NFOŚiGW. The above limitations in the case of funds allocated for accountancy services forced the introduction of remuneration in the amount inadequate to the entrusted duties and workload. Accounting duties include keeping separate accounting records of documents confirming the project expenditures, account assignment of invoices, bills and other accounting documents relating to commitments, financial control of contracts and bills with contractors of specific tasks, payments for the works performed, preparation of cash and bank reports, banking services (printing bank statements for project accounts and printing receipts of payments made concerning costs incurred from the basic account) and assistance to coordinators in preparing financial reports. The PTOP budget in LIFE15 NAT/PL/000728 represents 85% of the total eligible costs, which translates into a large number of financial documents. In addition, PTOP as the coordinating beneficiary is obliged to verify documents of other beneficiaries. The above duties and the related responsibility rested with the PTOP accountant require appropriate professional qualifications and an appropriate remuneration. The PTOP accountant has many years of experience in providing accounting services for projects co-financed from EU funds, the currently implemented project is the third Life project in which she serves as an accountant. The application of an adequate remuneration in LIFE15 NAT/PL/000728 is evidenced by a uniform approach in all the projects implemented, which does not raise any doubts among the other financing parties. Currently, the PTOP accountant is still employed in 3 projects co-financed from EU funds on part-time basis. Working hours in individual projects are shown on time sheets. With uniform rates, the number of working hours in Life project is lower than originally planned. At the same time, while maintaining the amount allocated for the implementation of the action, an hour of

accountant's work turned out to be worth more than planned in LIFE15 NAT/PL/000728, but at the same time it was worth the same amount in each of the projects in which the PTOp accountant participates. Despite fewer working hours than planned, all the accounting services were performed by the PTOp accountant in a reliable and timely manner.

ŁPKDN Personnel: Due to delays beyond the control of the beneficiary and the extension of the construction of the observation tower, it turned out to be necessary to slightly increase the number of the accountant's working hours.

There have been changes in the forms of employment with the co-beneficiaries, which have already been described in detail in point 6.1, description of task F1.

BbPN External assistance: Monitoring of Stork nests and power grid protection devices in 2017-2019 were outsourced from the pool of funds earmarked for the remuneration of the BbPN specialist, who was to monitor the effects of the project.

Bill no. 1, Bill no. 2, Accounting Note 22/2018, Bill no. 5 – Monitoring of the project results PTOp costs which were unforeseen in the application and are directly related to the implementation of the project and justified in point 6.1, description of task F1:

Travel: international assignment 1/BOCIAN/2017 and 1/BOCIAN2/2019 Participation of employees in the meeting on the project implementation with the co-financing institution Vogelschtz Komitee e.v.

External assistance: invoices 00201/16/BK, 00222/16/BK – cost of room rental and catering during the project inauguration conference on 24 November 2016; FV/2020/52, FV/8/20 – cost of accommodation, boarding and rental of the conference room during the meeting of the project staff and members of the Steering Committee concerning the final report.

We did not exceed the funds allocated for the task.

Action F4 PTOp Travel:

The funds allocated for the implementation of the task were exceeded by EUR 2170.31, due to savings in the category in other tasks, this is an insignificant difference in the scale of the project.

Action no.	Short name of action	1. Personnel	2. Travel and subsistence	3. External assistance	4.a Infrastructure	4.b Equipment	4.c Prototype	5. Purchase or lease of land	6. Consumables	7. Other costs	TOTAL
A.1.	Selection of nests to be secured		4228.39						113.20		4341.59
C.1.	Securing 400 nesting sites		5305.99		321535.54				22959.75		349801.27
C.2.	Securing power grids		1364.83	2960.59					45242.32		49567.74
C.3.	Purchase of a vehicle with a basket crane					92918.55			450.23	10334.41	103703.20
C.4.	Renovation and adaptation of rehabilitation centers				32940.11	37537.03			11431.91		81909.05
D.1.	Monitoring of the results of the project		11440.54	14033.51		17705.08			7868.65	1472.37	52520.14
D.2.	Assessment of the social and economic impact		1428.50	11569.87							12998.37
E.1.	Promotional and educational activities		3326.34	29182.01	37420.63				14194.94	21063.60	105187.52

E.2.	Creation of GIS database and website			20614.23					950.54	21564.77	
E.3.	Trainings on protection of the White Stork		649.53	653.36				417.49		1720.38	
E.4.	International conference		243.46	5695.25				2447.15		8385.86	
E.5.	Layman's report								1451.00	1451.00	
F.1.	Project management	400374.08	3191.38	14591.88					3832.74	421990.08	
F.2.	Financial audit								1779.71	1779.71	
F.4.	Creating networks with other projects		19153.31							19153.31	
Over-heads										84340.00	
	TOTAL	400374.08	50332.26	99300.71	391896.28	148160.66			105125.65	40884.37	1320414

Other remarks:

In a few cases, in the Financial Statement of the Individual Beneficiary of PTO, the payment date is earlier than the invoice date. This is due to the presentation of a supplementary financial document, i.e. pro forma. Pro forma invoices were issued in the event when it was necessary to make an advance payment in connection with the execution of the order. Pro forma invoices are not recorded in the accounting books and have therefore not been included in the cost statement. After receiving an advance payment, the sellers issued VAT invoices, constituting an accounting document, which are subject to recording for accounting and tax purpose. Appropriate accounting and design descriptions were introduced on the relevant invoices and evidenced in the cost statement.

The differences between the calculations from the application and the actual costs incurred have not been commented on, if these changes have not caused the budget for the whole task to be exceeded.

Financial Statement of the Individual Beneficiary and consolidation tables include eligible costs including VAT. Each beneficiary obtained an individual interpretation of the impossibility of recovering VAT in the project, which was attached to MTR Annex 8 (PTOP), Annex 9 (ŁPKDN), Annex 10. (BbPN).

8.1. Summary of Costs Incurred

PROJECT COSTS INCURRED				
Cost category	Budget according to the grant agreement in €*	Costs incurred within the reporting period in €	% **	
1. Personnel	432 288.00	400374.08	92.62	
2. Travel and subsistence	79 818.00	50332.26	63.06	
3. External assistance	101 339.00	99300.71	97.99	
4. Durables: total <u>non-depreciated</u> cost				

- Infrastructure sub-tot.	397182.00	391896.28	98.67
- Equipment sub-tot.	154792.00	148160.66	95.72
- Prototype sub-tot.			
5. Consumables	120 723.00	105125.65	87.08
6. Other costs	40476	40884.37	101.01
7. Overheads	92850	84340.00	90.83
TOTAL	1419468.00	1320414.00	93.02

*) If the EASME has officially approved a budget modification through an amendment, indicate the breakdown of the revised budget. Otherwise this should be the budget in the original grant agreement.

***) Calculate the percentages by budget lines: e.g. the % of the budgeted personnel costs that were actually incurred

8.2. Accounting system

PTOP

The books of account in the unit are kept in accordance with the Accounting Act adopted by the Management Board of PTOp by Resolution No. 08/2014 dated 30 December 2014, as amended by the Accounting Policy.

The books of account are kept at the PTOp Secretariat in Białystok at 17 Ciepła Street, in the Polish language and in the Polish currency using licensed ADVANTEC SOFTWARE ITC software.

The Corporate Chart of Accounts contains a list of synthetic accounts at which analytical accounts are created as needed.

For the purposes of the project entitled "Protection of the White Stork in the river valleys of eastern Poland" LIFE15 NAT/PL/000728, in accordance with the Order of the Director of the Secretariat of 8 July 2016, a synthetic account 523, used to group the project costs in the accounting system, has been separated and separate code 033 has been implemented, which is related to all the bookkeeping accounts.

The entries in the books of account are based on accounting documents proving that the economic operations have been carried out. Acceptance of an accounting document as the basis for the entry in the PTOp books of account takes place after it has been verified in terms of its substantive, as well as formal and accounting aspects by persons specified in the Accounting Policy, who confirm the inspection with their signature and date of execution.

All accounting documents related to the project are assigned unique symbols as defined in the Order of the PTOp Director:

- B3 bank account statements of PLN funds
- BA bank account statements of EUR EC funds
- BV bank account statements of EUR VsK funds
- D3 project delegations
- F3 shopping invoices and bills
- O3 invoices, bills and other documents concerning overheads
- L3 project payrolls
- U3 bills for civil-law contracts

The system for the protection of data and data sets, including accounting documents, books of account and other documents constituting the basis for the entries made in them, is maintained on the basis of appendix No. 2 to the PTOp Accounting Policy.

ŁPKDN

The accounting principles in ŁPKDN are determined by the order of the Director No. 3 dated 1 July 2015 as amended on the introduction of accounting principles (policy). The policy also contains provisions concerning the archiving and security of accounting data.

The books of account are kept at the ŁPKDN seat, in a manner specified in the aforementioned order. The books of account are kept using a computer in Tytan SQL-FK program, for which we have a license No. 32/2011 from 3 October 2011. Entering the accounting documents into the books of account is made on the basis of record-assignment placed on the document by the accountant and approved by the director or their deputies. Each accounting document is verified, checked and described by the project staff.

The classification of events occurring in the unit is broken down into paragraphs. For events related to the entity's core business, paragraphs with fourth digit 0 apply and for LIFE15 NAT/PL/000728 project operations - with fourth digit 7 for EU funded events and fourth digit 9 for self-financed events. The funds used to implement the project are kept in a separate bank account. Separate accounting is also in place in off-balance-sheet accounts related to the plan - No. 982 and to the involvement - No. 983 with the relevant paragraphs of the generic classification that illustrate the nature of expenses, e.g. 983-4117 - involvement of LIFE social security contribution. Copies of the documents related to the task implementation are collected in a separate binder with task breakdown.

BbPN

Accounting rules in BbPN are determined by Regulation No. 31/2018 dated 28 December 2018, on principles (policy) of accounting in BbPN. The books of account are kept at the BbPN seat, in a manner specified in the aforementioned order.

The books of account are kept with the use of a computer, maintaining separate accounting records for the project in the Finanse i Księgowość software by TG SOFT. Entering the accounting documents into the books of account is made on the basis of record-assignment placed on the document by the project accountant. For the LIFE15 NAT/PL/00728 project, separate accounting records are kept in the generic accounts to which analytical classification has been assigned:

I segment - indicates the account symbol,

II segment - symbol with contract number - 728 for the purposes of LIFE15 NAT/PL/000728 project, code 728 has been adopted, which is used to mark all accounting documents concerning this project),

III segment - indicates the business for the purpose of separating tax deductible expenses,

IV segment - symbol indicating breakdown of generic costs,

V segment - symbol indicating breakdown by source of financing

For example 414-0728-2-1-1 (414 salaries, 728 contract number code, 2 activities exempt from income tax, 1 personal payroll, 1 funding from the European Commission).

Analytical accounts of the project were also distinguished in the scope of bank accounts and settlements on which the funds received in the form of an advance payment are settled.

Each accounting document is verified and checked by persons employed in the project. The documents are verified in terms of their substantive, as well as formal and accounting aspects and for compliance with the financial plan, and then approved by the Director or the Deputy Director of BbPN. On the basis of a correct and approved document, the project's accountant carries out a payment.

For proper protection of books of account, the following activities are performed: periodic archiving of data by means of an appropriate function in the financial and accounting system, periodical print-outs of the logbook - the general ledger and trial balances, anti-virus care - anti-virus programs, power supply backup systems (UPS) and an appropriate level of

management of access to employee data in various positions. Complete accounting books are printed at the end of each month and backup copies are made on CDs to ensure that the information is kept for a minimum period of 5 years.

For all beneficiaries, the books of account of each unit include the sets of accounting entries and trial balances that create: the general ledger, auxiliary books, trial balance of general ledger accounts and auxiliary accounts balances. The fiscal year is the period of the financial year, i.e. the calendar year from 1 January to 31 December. The accounting documents concerning the project bear additional stamps and endorsements resulting from the financing agreement and the guidelines in force. Moreover, on invoices related to the implementation of the project, the beneficiaries make reference to the project, i.e. its number and acronym or title. The working time recording system is operated by means of time sheets in accordance with the models available on the official website of the LIFE program. The time sheets are filled on an ongoing basis in electronic form, printed and signed by the project staff members. The signed document is then approved by the head of the unit.

8.3. Partnership arrangements

The first partnership agreement was signed with BbPN on 30 September 2016. The second partner to the project - ŁPKDN does not have a legal personality, therefore the partnership agreement was signed on 3 November 2016 with the Podlaskie Voivodeship, address: 15-888 Białystok, ul. Kardynała Stefana Wyszyńskiego 1, on behalf of whom ŁPKDN operates on 3 November 2016. The agency of an additional unit in approving the content of the agreement and opening a bank account influenced the extension of the deadline for signing the document. The Local Government Assembly of the Podlaskie Voivodeship by way of resolutions approves the expenditures of the budget of ŁPKDN at each change, which caused additional delays. PTOB received the first advance on 1 September 2016, after receiving the signed contracts, PTOB transferred the funds to the partners: BbPN on 7 October 2016 and ŁPKDN 4 November 2016. The Coordinating Beneficiary received the second advance payment on 14 February 2018 and the funds were transferred to both co-beneficiaries on 20 February 2018.

The partnership agreement have been developed on the basis of a model published on the official website of LIFE program. The grant agreement together with the Special Conditions, General Conditions, a full application with appendices and forms, constitute an integral part of the agreements with the co-beneficiaries. The agreements include, among others records concerning the role and responsibilities of individual beneficiaries, description of eligible costs and financial contribution to the project, conditions for payment and reporting to the coordinating beneficiary.

Co-beneficiaries regularly informed the coordinating beneficiary of the progress made and achievements of the project by submitting quarterly reports on their activities, including statements of expenditure and income, copies of financial documents necessary for the preparation by the coordinating beneficiary of the reports required by the Commission in accordance with the grant agreement. The reports of the co-beneficiaries were submitted on the model financial statement and model technical report, available on the LIFE Program website. Consolidated cost statements are prepared on the basis of materials provided by co-beneficiaries. On 28-29 July 2020 a working meeting of the project staff and members of the Steering Committee took place, during which the division of work on preparation of the final report, including financial issues, was discussed.

In the course of the project implementation, it was decided to use, for the settlements with the Commission, the reporting rates, i.e. those published on the first working day of the month following the period covered by a given financial statement. Due to the fact that the reporting

ratio will only be known at the time of submission of the report to the Commission, annexes no. 1 of 24 February 2017 to the partnership agreements were concluded with BbPN and ŁPKDN. For quarterly accounts presented exclusively to the Coordinating Beneficiary in the statement of expenditure and income, the Co-beneficiaries converted the costs incurred into Euro using the exchange rate applied by the European Central Bank on the first working day of the year in which the expenditure was incurred.

Partnership agreements with annexes are attached to MTR – Annex and Annex 12.

8.4. Certificate on the financial statement

The audit certificate on the financial statement was carried out by: Audit Lab Sp. z o. o. with its seat at ul. Armii Krajowej 15/7, 45-071 Opole. The audit team consisted of the people with following licenses:

- 1) Lead auditor: license no. 1243
- 2) Auditor: license no. 005074
- 3) Auditor: license no 1063/2004, CFE certificate
- 4) Auditor: license no. 149/2004

The audit report was prepared in Polish and English according to TERMS OF REFERENCE FOR THE CERTIFICATE ON THE FINANCIAL STATEMENTS available on the LIFE Program website and is attached to the financial statement in the form of an appendix. The auditor confirmed that the Beneficiary's expenses were registered in the Beneficiary's accounting system and meet the eligibility criteria in accordance with Art. II.19 of the Grant Agreement and stated that no ineligible items specified in Art. II.19.4 were reported. The auditor verified the above information for all items in the sample within each cost category. The audit covered 68.35 % of the costs incurred by PTOp.

8.5. Estimation of person-days used per action

Due to the lack in the application of hourly division of work of the project staff for individual tasks and the fact that the application does include all the coordination in task F.1, the table recommended in this chapter does not apply to the implemented project.