



LIFE Project Number
LIFE09NAT/LV/000239

FINAL Report
Covering the project activities from 01/09/2010 to 31/08/2014

Reporting Date
10/03/2015

LIFE+ PROJECT NAME or Acronym
Conservation of Rare Reptiles and Amphibians in Latvia

Project Data

Project location	Latvia
Project start date:	01/09/2010
Project end date:	31/08/2014
Total Project duration (in months)	48 months
Total budget	772 400€
Total eligible budget	772 400€
EU contribution:	386 200€
(%) of total costs	50
(%) of eligible costs	50

Beneficiary Data

Name Beneficiary	Daugavpils Municipality
Contact person	Mr Mihails Pupi š
Postal address	Vien bas street, 27, LV 5401,Daugavpils, Latvia
Visit address	Vien bas street, 27, LV 5401,Daugavpils, Latvia
Telephone	+(371) 29621191
Fax:	+(371) 65426789
E-mail	mihails.pupins@gmail.com
Project Website	www.life-herpetolatvia.biology.lv

List of contents

1.List of abbreviations.....	3
2.Executive summary.....	4
3.Introduction.....	8
4.Administrative part.....	10
4.1.Description of the management system.....	10
4.2.Evaluation of the management system.....	12
5.Technical part.....	16
5.1.Technical progress.....	16
5.2.Dissemination actions.....	31
5.3.List of project deliverables.....	40
5.4.Evaluation of project implementation.....	41
5.5.Analysis of long-term benefits.....	42
6.Comments on the financial report.....	44
6.1.Summary of costs incurred.....	44
6.2.Accounting system.....	49
6.3.Partnership agreements.....	49
6.4.Auditors report/declaration.....	50
6.5.Summary of costs per action.....	51
7.Annexes.....	52

1. List of abbreviations

DM	– Daugavpils Municipality
DM LZ	– Daugavpils Municipality structural unit Latgale Zoo
DU	– Daugavpils University
KNP	– Kemeris National Park
LU	– University of Latvia
LEPF	– Latvian Environmental Protection Fund
LES	– Latgale Ecological Society
MEPRD	– Ministry of Environment Protection and Regional Development of Latvia
NCA	– Nature Conservation Agency
RRABC	– Rare Reptiles and Amphibian Breeding Centre
SFS	– State Forest Service
SNP	– Silene National Park
SPP	– Species Protection Plan for <i>Coronella austriaca</i>

2. Executive Summary

Project LIFE09NAT/LV/000239 “Conservation of Rare Reptiles and Amphibians in Latvia” (acronym LIFE HerpetoLatvia) started on 01.09.2010. and finished 31.08.2014. Project duration was 48 months, total budget 772 400 Euro (EU contribution 386 200 Euro). Project goal was to facilitate the enlargement of European Pond Turtle (*Emys orbicularis*), Smooth Snake (*Coronella austriaca*), and Fire-Bellied Toad (*Bombina bombina*) population and to ensure their long-time persistence in Latvia by combining in-situ, ex-situ methods, and legal protection improvement. All three species in Latvia are on the northern border of the species range. Main objectives were to create suitable habitat network in key site of one Natura 2000 territory for each species, establishing of new Natura 2000 for *Bombina bombina*, preparation of *Coronella austriaca* Species Protection Plan, *Emys orbicularis* and *Bombina bombina* population enforcements with captivity raised individuals, and raising of public awareness on species conservation problems. Project territories were Nature Park Silene for *Emys orbicularis*, Kemeru National Park for *Coronella austriaca*, and two newly established microreserves – Katriniski and Strauti for *Bombina bombina*.

The Project was implemented by the coordinating beneficiary Daugavpils Municipality Structural Unit Latgale Zoo (DMLZ), whose responsibilities were preliminary surveys, *Coronella* Species Protection Plan, establishing of new Natura 2000, habitat improvements, animal breeding and population enforcements, Project web-site, work with media, organization of local seminars and international meetings, Project management and monitoring of results. State institution – Nature Conservation Agency (NCA) had responsibility for developing of habitat improvement management plans, producing of notice boards and brochures, but Latgale Ecological Society (LES) responsibility was capacity enlargement for animal breeding works.

Summary on performed actions is following:

A1. Preliminary study. September 2010-September 2012. This was preparatory action for A2, A.3. (partially), C.1. Standard survey methods were used, 135 *Bombina* and 165 *Emys* waterbodies were researched, 55 field trips for *Coronella* survey were conducted. Three survey reports (one for each species) prepared and submitted with Mid-term Report.

A.2. Population management plans. October 2011-September 2012. Plans were based on data collected during A.1. Population management plans prepared in a form of technical documents with necessary habitat management works, their justifications, and detailed maps. Three survey reports (one for each species) prepared and submitted with Mid-term Report, improved *Bombina bombina* plan submitted with the Final Report.

A.3. Species Protection Plan for Coronella austriaca. October 2011-August 2014. Plan was approved by Ministry of Environment Protection and Regional Development (MEPRD), electronic version placed on NCA website, issued in 200 copies, and printed version submitted as deliverable with the Final Report.

A.4. Making agreements and signing of contracts for construction work for the Rare Reptile and Amphibian Breeding Centre. September 2010-June 2011. It was a preparatory phase – contract signing for action C4.

A.5. Making agreements and signing of contracts for habitat management technical work. September 2010-August 2014. Initially planned only for habitat management contracts, but latter agreements with land owners were also included upon EC LIFE Unit request. Such

agreements were signed for maintaining of the habitat improvement results 20 years after finishing of the Project.

C.1. Establishing of the new Natura 2000 site. Two microreserves – Natura 2000 territories were established for protection of important *Bombina bombina* population: Katriniski - 16.40 ha (established by SFS Ordinance Nr. VM4.7-4/452 from 08.08.2014. and NCA Ordinance Nr. 4.3/10/2014-N from 12.08.2014.) and Strauti - 17.78 ha (SFS Ordinance Nr. VM4.7-4/453 from 08.08.2014., NCA Ordinance Nr. 4.3/9/2014-N from 12.08.2014.). In the Letter 18-1e/8384 from 11.09.2014. MEPRD officially affirmed that these territories are established as Natura 2000 territories and will be included in Natura 2000 list with next amendments of the law “On Specially Protected Nature Territories” (see the Letter in Annex C.1.-2.)

C.2. Habitat management measures. November 2012-April 2014. Improvement works were creating more open habitats by shrub and small tree cutting, and creation of suitable waterbodies for two semi-aquatic species. A total of 78.2 ha of habitats improved for all Project species (38.6 ha for Emys, 36.3 ha for *Bombina*, 3.3 ha for *Coronella*), a total of 43 ponds were created or restored (27 for *Bombina*, 16 for Emys).

C.3. Bombina bombina and Emys orbicularis population enforcements. March 2012-August 2014. A total of 4 069 *Bombina* toadlets (136% from initially planned) were released in improved habitats of Katriniski and Strauti, and 42 young adult turtles (210 % from initially planned) were released in improved site of Nature Park Silene.

C.4. Capacity enlargement and equipment of the breeding facilities. September 2010-August 2014. Old LES building was restored and equipped for animal breeding for the Project purpose. All the main works were finished in August 2013. However, Emys and *Bombina* captive populations were moved there already on March 2013, and first animals raised were released for population enforcements in wild latter same year.

D1. Notice boards. September 2010-June 2011. Fourteen notice boards were placed in the Project areas in Natura 2000 territories, in headquarters of beneficiaries, and at renovated Breeding Centre.

D.2. Project Web-site. September 2010-August 2014. The web-site was created at the beginning of the Project (30.10.2010) and placed on the server of Daugavpils University. The web-site address is www.life-herpetolatvia.biology.lv. The web-site has 34 backlinks from other web-sites, has 10 unique visitors per day which look for 10 pages, 3650 per year and approximately 14 650 visitors for all the Project time. The site will be maintained at least 5 years after finishing of the Project.

D.3. Layman's report. January 2014-August 2014. *Layman's Report* contained 16 pages of bilingual text (English and Latvian) and 37 pictures. It has two ISBN numbers for printed and PDF issues, it was distributed among public libraries, electronic version placed on Project website; submitted as deliverable with the Final Report.

D.4. Work with media. A total of 32 press releases, 28 publications in magazines and newspapers, 29 participations in public events during the Project. Also many additional public appearances such as presentation of the Project to the President of Latvia Republic during national award ceremony, and selection of two Project animals as the animal of the year by Nature Museum of Latvia.

D.5. Local seminars and workshops. Two seminars for land-owners were held in December 2011 and August 2012 in Demene and Silene. In December 2012 an additional seminar was organized for Daugavpils municipality authorities and State environmental institutions. Two seminars for nature conservation authorities were held in Kemeru in January and September

2013. From the beginning of the Project, 30 additional small seminars, excursions, and workshops with no additional expenses from the Project were organized for land owners, environment protection authorities.

D.6. Writing and publishing of brochures. October 2012-July 2013. Three brochures – one for each Project species were produced, each in a form of two parts placed in a common cover. One part provided more specific conservation information and other was more popular. 200 printed copies of each brochure were issued. They were distributed mostly among libraries, participants of seminar events, guests and visitors to the project staff. In electronic form all the brochures available at Project web-site.

D.7. Project international presentation and LIFE networking activities. The Project organized two international workshops-seminars, both included presentation and poster sessions, discussion part, and visits to the Project sites. Both were named “Research and Conservation of European Herpetofauna and its Environment: *Bombina bombina*, *Emys orbicularis*, and *Coronella austriaca*”, and held in Daugavpils. First one in 14-15.08.2014., (24 presentations, 37 authors from 8 countries), second in 14-15.08.2014. (41 presentations, 64 authors from 11 countries). From the beginning of the Project it was presented in total in 29 scientific meetings, and 18 meetings organized by other LIFE projects.

E.1. Administration of the Project & E2. Establishing and Work of Steering Group were part of the Project managing process carried out by DMLZ during the project duration time.

E3. Monitoring of the habitat improvement actions. April 2013-August 2014. Monitoring was carried out in improved habitats, and confirmed presence of native *Coronella* and *Bombina* in newly established habitats, and using of improved site by newly created *Emys* population. Three monitoring reports submitted with the Final report.

E.4. External audit. Audit was carried out after the Project end date, finished in December 2014. Auditor confirmed that financial report has been prepared in accordance with the LIFE+ Programme Common Provisions, the national legislation and accounting rules. Audit report submitted with the Final Report.

E.5. After-LIFE Conservation Plan. August 2014. Prepared accordingly to the guidelines published on LIFE programme web-site, in Latvian language (accordingly with Project Proposal), with comprehensive English language summary; submitted with the Final report.

E.6. Off-road vehicle with a trailer lease or purchase. September 2010-August 2014. The tender and selection of bidders were organized in accordance with rules and regulations in Latvia, and LIFE Common Provisions. For the Project purpose, used Toyota RAV4 vehicle with KNAUS trailer for equipment transportation was acquired.

Project implementation can be regarded as fully successful, because all the tasks specified in the Proposal were fulfilled and quantifiable targets achieved. The Project has created core areas for conservation three rarest amphibian and reptile species in Latvia. Now these are territories with good and healthy populations in key places for species conservations. Main threats for species persistence here (shortage or lack of habitats, insufficient numbers of individuals for new habitat colonization) have been removed. Two new Natura 2000 sites have been established for *Bombina bombina*. All the protected territories supervised and monitored by conservation authorities, agreements with land owners assure the maintaining of improved habitats in state suitable for Project species. Of course it is necessary to expand conservation efforts to other territories from these core areas, because one of goals of the LIFE-HerpetoLatvia project was conservation of key populations and creation of bridge populations for contacts with stronger southern populations. Therefore distribution of network

of habitats and healthy populations are necessary nearby. Necessary actions are described in Project After-LIFE Conservation Plan, and in Species Protection Plans available at NCA.

3. Introduction

Project goal was to facilitate the enlargement of European Pond Turtle (*Emys orbicularis*), Smooth Snake (*Coronella austriaca*), and Fire-Bellied Toad (*Bombina bombina*) population and to ensure their long-time persistence in Latvia by combining in-situ, ex-situ methods, and legal protection improvement. All three species in Latvia are on the northern border of the species range. First two are extremely rare (several tens of individuals), the latter had estimated number of 300 vocalizing males in several populations of southern Latvia.

Main Project objectives were:

- ✓ Creation of a suitable habitat and corridor network for *Emys orbicularis*, *Coronella austriaca*, *Bombina bombina* key populations for one existing or proposed Natura 2000 site each species;
- ✓ Establishing of a new Natura 2000 site for main population of *Bombina bombina* in Latvia;
- ✓ Preparation and approval of the Species Protection Plan for *Coronella austriaca*;
- ✓ Breeding ex-situ for Habitat Directive Annex II species *Emys orbicularis* and *Bombina bombina* and their population enforcements in nature;
- ✓ Raising of public awareness of *Emys orbicularis*, *Coronella austriaca*, *Bombina bombina* conservation necessity.

Main targeted threats and conservation issues:

- ✓ Protection shortcomings. Main *Bombina bombina* population was discovered in mid-2000ties and was outside any protected territory. Establishment of new Natura 2000 territory was necessary. *Coronella austriaca* had no Species Protection Plan necessary for conservation planning.
- ✓ Insufficient habitat management. All three species have shortage of good habitats in Latvia, which is their main limiting factor. Only *Bombina* have had habitat improvement measures in a population, now considered as peripheral with low importance.
- ✓ Adverse effect of climate. All three species are on the northern border of the species range and have lowered tolerance to anthropogenic and natural pressures. Establishment of optimal conditions for population would reduce this effect.
- ✓ Slow natural reproduction rate. Hinders recover of the population and establishment into improved habitats.
- ✓ Population isolation. Characteristic for all species with isolated populations. Population connectivity issue is important for genetic diversity and population viability.
- ✓ Negative attitude from local people. Usual problem for amphibians and reptiles, especially for snakes.

Expected results were:

- ✓ New Natura 2000 territory for *Bombina bombina* established in Daugavpils District of Latvia;
- ✓ The Species Protection Plan for *Coronella austriaca* in Latvia;

- ✓ Habitat improvement for one key population of each target species in Natura 2000 sites – Nature Park Silene for *Emys orbicularis*, Kimeri national park for *Coronella austriaca*, new Natura 2000 site for *Bombina bombina*; improvements have to be done in key places important for population connectivity issue;
- ✓ Three thousands *Bombina bombina* juveniles raised in captivity and released for population enforcement; 20 young *Emys orbicularis* raised and released by the end of the Project;
- ✓ Establishment of the Rare Reptile and Amphibian Breeding Centre - renovated and equipped laboratory building with fenced outdoor basins, and breeding ex-situ populations of *Emys orbicularis* and *Bombina bombina*;
- ✓ Main quantifiable products for publicity and conservation promotion – project website, workshops and local seminars, Layman’s Report, brochures, After-LIFE Conservation Plan and notice-boards.

4. Administrative part

4.1 Description of the management system

Most of the project was implemented by the coordinating beneficiary – DM LZ, in cooperation with LES and NCA. Implementation of two objectives – i) habitat improvement and ii) breeding and population enforcements were done in several phases, implemented consecutively by several Project beneficiaries.

Phase	Habitat management	Breeding and population enforcement
Preparatory phase 1	A1. Preliminary survey (DM LZ)	A1. Preliminary survey (DM LZ)
Preparatory phase 2	A2. Population management plans (NCA)	-
Contract signing	A5. Contracts for habitats management (DM LZ)	A4. Contracts for renovation & equipment (DM LZ)
Capacity enlargement	-	C4. RRABC renovation (LES)
Concrete conservation	C2. Habitat management (DM LZ)	C3. Breeding and population enforcement (DM LZ)
Monitoring	E3. Habitat monitoring (DM LZ)	No formal action; evaluated by DM LZ

During the whole project lifetime Project manager has organized 10 round-table meetings of the Steering Group, which included representatives from the beneficiaries involved in the Project (List of members, partners' contracts, and 7 Protocols were sent with previous Reports, see please last 4 Protocols in Annex 4.1.-1.). For carbon print reduction and faster permanent communication urgent issues concerning project activities were discussed via many cell-phone, e-mail or Skype contacts between the Project team of co-coordinating beneficiary and nominated representatives from associated beneficiaries.

Coordinating beneficiary – DM LZ had following staff employed in the Project:

- Project manager – Project managing & representing, coordination with LIFE, associated beneficiaries, co-financers, Steering Group, and subcontractors. In the Project he had 0.1 workload, because nominated manager was also a director of DM LZ.
- Project manager assistant/Financier – made all project reports including reports for Ministry of environment, made budget for each project year, made all necessary selection/procurement procedures and replaced project manager when it was needed; 0.8 workload.
- Accountant – project account, only person that had authorization for all necessary accounting programs. She couldn't work only for project that is why we needed to recruit accountant assistant. Part time - 0,3 workload, because she was accountant also in Latgales Zoo.
- Accountant assistant – all project documentation (made all accounting folders for the whole project period) these persons can't work with accounting programs because these programs were bought for DM LZ purposes and are under DM LZ accountant responsibility; 0,2 workload, but from 2014 the workload was 0,4.

- Project executor/expert – all the activities connected to the project species; one person for each species – 0.9 workloads for *Coronella* and *Bombina* experts, 0.8 workload for *Emys* expert.
- PC specialist/web-site administrator production and maintenance of web-site; 0,3 workload.
- Technician/laboratory worker – animal keeper duties for *Bombina bombina* and *Emys orbicularis* breeding, and assistance in other activities connected to these species; two persons 0,5 workload each.
- Technician/field workers – assisting surveys and animal keeping works; three persons because there was a need to be in several Project areas same time; two 0,5 and one 0,3 workload.

All the species experts do have Amphibian and reptiles expert certificate issued by competent authority – NCA (see under Nature Expert Register section at www.daba.gov.lv). There were changes in DM LZ workloads comparing with Project proposal. These changes were done in order to their workloads with their actual involvement in the project, and amount of salaries did not exceed amount defined in the Proposal.

NCA had single person - civil servant, having part time employment in the Project. He did all the work connected to the implementation of NCA actions and contacts to DM LZ. LES being non-government organization hasn't personal or employment for salary, only volunteers. The single person was nominated for the Project. For Project implementation, both contacted directly Project Manager at DM LZ.

Accountancy of the Project was managed accordingly to the legislation of Latvia and under strict control of Financial Department of DM, which controlled and verified every payment. Project finances have their own bank account in Latvia State Treasure. Accountancy of LZ DM is being audited once a year by the internal audit of DM.

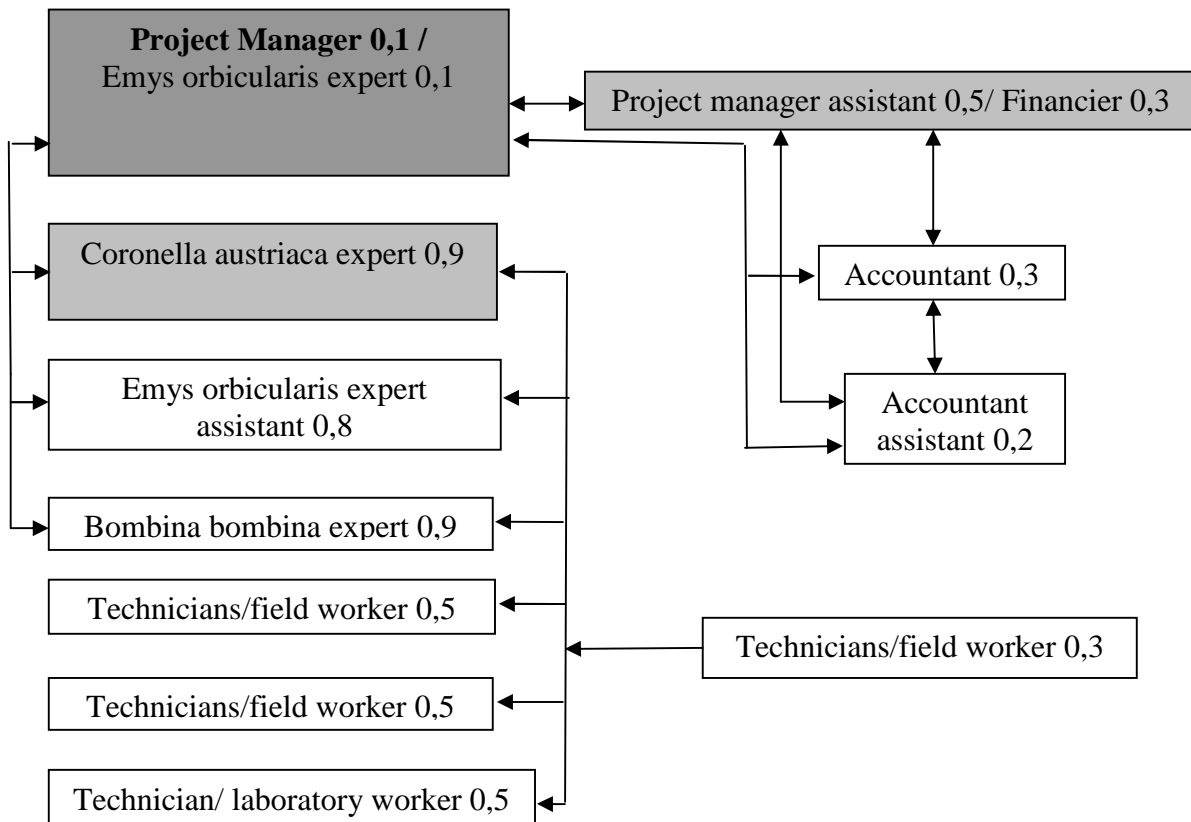
Contacts with co-financier – MEPRD and representatives from its financial instrument LEPPF have been done via e-mail correspondence. Following Reports have been sent to MEPRD: Final Report of a year 2010, two Quarter and a Final Report of a year 2011, in 2012-2014 three Quarter Reports and the Final Report each year.

Partner's responsibilities for implementation of Actions were different from their allocations in the Project Proposal.

Beneficiary	Actions in Proposal	Actions in Project
DM LZ	A4, A5, A6, C2, C3, C4, C5, E1, E2, E4	A1, A3, A4, A5, C1, C2, C3, D2, D3, D4, D5, D7, E1, E2, E3, E4, E5, E6
NCA	A2, A3, D1, D6	A2, D1, D6
LES	A1, C1, D2, D3, D4, D5, D7, E3, E5	C4

Argumentations for changes in responsibilities are following. LES in the Project proposal had Activities where a lots of personnel work was necessary. These were all Activities written in LES associated beneficiary declaration (form A4/1): A1, C1, D2, D3, D4, D5, D7, E3, and E5. However, LES does not have personnel employed specially for the Project, because it is a public, non-profit foundation. Therefore, these activities were moved to co-ordinating beneficiary which have a personnel hired for the Project. Other problem was concerning Activity C4 (Renovation of RRABC). The building of the RRABC and land there is owned by LEB, but DM LZ according the Project proposal was responsible for renovation works in Action C4. Therefore, the situation would be that part of RRABC (existing building and land) would be owned LES, but part (equipment, installations etc.) – by DM LZ. Therefore C4 was

moved from DM LZ to LES who will maintain the RRABC and continue the breeding works after the finishing of the Project. NCA in the Project proposal had activity A3 which was a Preparation of the *Coronella austriaca* Species Protection Plan. However, NCA did not have an expert in this field, but such expert was in the Project staff employed by DM LZ. Therefore this action was moved from NCA to DM LZ. These changes were accepted by EC in the letter ARES (2011) 762584-13.07.2011., and implemented in the partnership agreements between DM LZ and NCA (Nr.DAP-Partn-2011-001 from 19.05.2011.), and DM LZ and LES (Nr LEB-Partn-2010-001. from 15.09.2010.). Partnership agreements were submitted to the Commission with Inception Report. Organigram of the project team and the project management structure at the coordinating beneficiary – DM LZ, is given bellow.



Annexes:

Annex 4.1.-1. Protocols of Steering Group meetings in 2014.

4.2 Evaluation of the management system

Management system was appropriate for fulfilment of the Project tasks. There was not much need for often Steering Group meetings, because most of the associated beneficiaries' activities involved participation of DM LZ personnel – species experts, who communicated to NCA and LES contact persons upon the necessity via email, phone, skype, personal visits.

DM LZ cooperation with LES was fully successful. There were intense consultations during RRABC renovation process, which were possible because they are located in same city and had good contact already before onset of the Project.

Cooperation with NCA, however, was more complicated, and issues rose about its ability to realize their actions. Finally, parts of their Actions A.2. (management plans) and D.6.

(brochures) was done by DM LZ species experts (see action descriptions), without changing Project agreement with NCA.

Project had very good communication with LIFE External monitoring team Astrale GEIE-ELLE representative Mr. Rolands Ratfelders. His first visit to the Project was on 20th April 2011, next was on 28th June 2012, then was visit on 3rd July 2013 with European Commission representatives Ms. Rosemarie Hingsamer and Ms. Susan Brassart, and last one was visit on 19th August 2014. We have received letters with detailed recommendations and additional questions from European Commission LIFE team after each visit, and also after each submitted mandatory Project report – Inception (31.05.2011.), Mid-term (30.11.2012.), and Progress Report (19.01.2014.). The recommendations and questions were very helpful for Project team to improve the realization of the Project. Raised issues were taken into account for the subsequent Project work, questions answered in next Reports.

Tasks/Activities	2010				2011				2012				2013				2014			
	1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	
	Inception report				Mid-term report				Progress report				Final report							
D.7. Project international presentation and LIFE networking	Proposed																			
	Actual																			
E.1. Administration of the Project	Proposed																			
	Actual																			
E.2. Establishment and work of the Steering group	Proposed																			
	Actual																			
E.3. Monitoring of the habitat improvement actions	Proposed																			
	Actual																			
E.4. External audit	Proposed																			
	Actual																			
E.5. After-LIFE Conservation plan	Proposed																			
	Actual																			
E.6. Off-road vehicle with a trailer lease or purchase	Proposed																			
	Actual																			

5. Technical part

5.1. Technical progress

ACTION A.1: Preliminary study in *Emys orbicularis*, *Coronella austriaca*, *Bombina bombina* populations

Activities undertaken. This was preparatory action for A2, A3 (partially), C1. It started with planning phase during the preparatory stage in autumn 2010, during which literature resources and available cartographic materials of the study areas were studied, and visits to field sites planned. Field season started in the middle of April 2011, and field works were finished in September 2012. *Bombina bombina* field survey was waterbody research with counting of vocalizing males, tadpoles and toadlets, data about area, numbers, density and other parameters was collected accordingly to the standard methodology (Heyer W.R., Donnelly M.A., McDiarmid R.W., Hayek L.A.C., Mercedes S. (eds.): Measuring and Monitoring Biological Diversity Standard Methods for Amphibians. -Foster Smithsonian Institution Press: 115-117.). For *Emys orbicularis* waterbody and its adjacent terrestrial habitats in the project area in Silene Nature Park were described. For *Coronella* study Artificial Refugee (ATR) method was used in Kemeru national Park, where ATRs were placed in habitat and checked latter for presence of snakes using ATR as hiding place. *Coronella austriaca* habitats in surveyed sites were described using vegetation coverage estimations.

Amount of fieldworks in 2011 and 2012 is given bellow.

<i>Fieldworks</i>	<i>2011</i>	<i>2012</i>	<i>Total</i>	<i>Purpose</i>
Number of researched water bodies in Demene District (for <i>Bombina bombina</i>).	72	63	135	Detection of species and descriptions of water bodies
Number of researched water bodies Silene Nature park (for <i>Emys orbicularis</i>).	78	87	165	Evaluation of suitability of water bodies for species as permanent habitats or corridors for migration
Number of field trips for <i>Coronella austriaca</i> (Kemeru national park):	31	24	55	Tin-plate survey, plate checking

Accordance to planned time schedule. Started with the onset of the Project, initial end date was 01.11.2011., but latter it was postponed till 30.09.2012.

Indicators of success. No deliverables were planned initially. However, after EC request in the letter ARES (2012) 936398-02.08.2012., three survey reports about results of Action A1 were submitted to EC with the Mid-term Report (Mid-term Report: Annex A.1.1., Annex A.1.2., Annex A.1.3.) from 30.11.2012.

Problems & modifications. Initially it was planned to close this Action on 01.11.2011. However, we decided to go on this Action in a field season of 2012 to collect more information for Actions A2, A3, C1, because it would not cause delays in completing of these actions, and same time will significantly increase data quality. Works in 2012 were done with no additional costs or unplanned expenses from the Project. Delay was confirmed in the letter ARES (2012) 936398-02.08.2012., but the finishing of the Action and submitted survey reports were acknowledged in the EC letter ARES (2013) 724320-19.04.2013.

Continuing perspectives. Survey results will be used for many years for habitat monitoring after the finishing of the Project by experts and conservation authorities.

ACTION A.2: Population management plans for Emys orbicularis, Coronella austriaca, Bombina bombina

Activities undertaken. NCA was responsible beneficiary for this Action and their role was to supervise the work of the Project experts, who wrote these plans. Plans were based on data collected during Action A1. These data were analyzed and drafts of population management plans for each of the Project species in their Project areas have been prepared in a form of technical documents with necessary habitat management works, their justifications, and detailed maps.

First drafts were prepared after field season of 2011, but final versions – after field season of 2012, when new data were added. Drafts were prepared by DM LZ experts and verified by NCA for compliance with national legislation, allowances from State Forest Service authorities (when necessary) and nature conservation plans for protected areas. The final version was prepared in English language by the end of September 2012. After the submission to EC with the Mid-term Report, *Bombina bombina* management plan was revised due to the changes in area proposed for Natura 2000 site in Action C.1. (Annex A.2.-1.).

Accordance to planned time schedule. Started on 01.10.2011. and finished on 30.09.2012., in accordance with the Project Proposal.

Indicators of success. The Management Plans were submitted as Project deliverables with the Mid-term Report from 30.11.2012 (Mid-term Report: Annex A.2.1.; Annex A.2.2.; Annex A.2.3.). Revised *Bombina bombina* management plan is in Attachment of this Report (Annex A.2.-1.).

Problems & modifications. After the change of one initially selected future *Bombina* Natura 2000 site in Action C.1., we had to change management plans to fit this site. This issue was addressed in EC letter Ares (2014) 3566825-28.10.2014 with a request to submit revised *Bombina bombina* management plans. This revision did not cause any delays or additional expenses for next phase action – C.2. (Habitat management).

Continuing perspectives. Management plans will be used for management of the populations and nature conservation for many years after the finishing of the Project by experts and conservation authorities.

Annexes:

Annex A.2.-1. Revised *Bombina bombina* population management plan (PDF only)

ACTION A.3: Species Protection Plan for Coronella austriaca

Activities undertaken. SPP was prepared on accordingly to the Guidelines published on NCA homepage (<http://www.daba.gov.lv>), and consisted of chapters on Species description, Causes of the Changes in Species and its Habitats, Current Protection of Species and its Habitats, SPP Goal and Tasks, Species and Habitat Protection Actions, Implementation of SPP. Preparation of the draft started with available literature studies, and supplemented with information collected during Action A1.

Two mandatory seminars with conservation authorities were conducted:

- 11.01.2013. Kemerī. “Smooth snake’s habitat improvement in the Kemerī National Park within frameworks of the Project LIFE HerpetoLatvia and development of the Species Protection Plan. Three presentations from the Project staff, discussions, 17 participants;

- 27.09.2013. Kemerī. “Discussion of the Smooth Snake Species Protection plan”. Two presentations from the Project staff, discussions, 9 participants.

First draft of the SPP was submitted to NCA on 07.10.2013., a total of four drafts have been submitted during NCA approval process, and final version was accepted by NCA in 2014. Then SPP was submitted to MERD where it was signed by the Minister of Environment and Regional Development of Latvia and approved 07.08.2014 by Ordinance Nr. 261 (Annex A.3.-1.).

Electronic version of approved SPP was officially placed on NCA website (<http://www.daba.gov.lv>) (Annex A.3.-2.).

A total of 200 copies of approved SPP with Paper ISBN 978-9934-8507-0-7 (Annex A.3.-3.; Annex A.3.-4.;;) and PDF ISBN 978-9934-8507-1-4 (Annex A.3.-5.) were printed by the end of August 2014. Having ISBN they are visible and available for the entire world.

Accordance to planned time schedule. Action started on 01.10.2011., end date in Proposal was 30.09.2013., but it delayed and finished with the end of the Project on 30.08.2014.

Indicators of success. MERD 07.08.2014. Ordinance Nr. 261 with final approval of SPP (Annex A.3.-1.); free access approved SPP official electronic issue on NCA website (http://www.daba.gov.lv/public/lat/dati1/sugu_aizsardzibas_plani11/) (Annex A.3.-2.); SPP paper issue with ISBN (Annex A.3.-3. (200 copies); Annex A.3.-4.) and PDF issue with ISBN (Annex A.3.-4.).

Problems & modifications. Main problem was delay of the action and risk not to finish the SPP formal approval procedure by the end of the Project. Initially this action was planned to be completed on 30.09.2013. However, during the development of SPP it was decided to go for additional field season of 2013 to gather more data. This issue was explained to Ms Rosemarie Hingsamer and Ms Susan Brassart of the Commission and the external monitor Mr Rolands Ratfelders during their visit on 3rd July 2013, and noted in the EC LIFE letter ARES (2013) 2850831-07.08.2013. SPP approval from NCA took more time than initially expected, and concerns about this action finishing in time were expressed in EC letter ARES (2014) 1032602-02.04.2014. However, approval from MEPRD did come before Project end data, and delay did not cause any changes of this action expenses.

Continuing perspectives. Accordingly to national Species and Habitats Protection Law Article 17, all the *Coronella austriaca* conservation measures in Latvia should be implemented in accordance of this SPP.

Annexes:

A.3.-1. Ordinance Nr. 261 (In Latvian) (PDF and Paper).

A.3.-2. PDF issue of approved SPP placed on NCA website (In Latvian) (PDF only)

A.3.-3. SPP paper issue with ISBN (In Latvian) (Paper).

A.3.-4. SPP paper issue with ISBN as PDF file (In Latvian) (PDF).

A.3.-5. SPP PDF issue with ISBN (In Latvian).

ACTION A.4: Making agreements and signing of contracts for construction work for the Rare Reptile and Amphibian Breeding Centre

Activities undertaken. The tender and selection of bidders were organized in accordance with rules and regulations in Latvia, and LIFE Common Provisions. Contract about the

construction works was signed with the selected bidder SIA „MGM PRO”, Reg. Nr. 51503050951, all the documents submitted with previous Reports (Inception Report: Annex 5.4.; Mid-term Report: Annex A.4.1.).

The contract included:

- the renovation of the building;
- installation of the water supply and sewerage systems;
- installation of the heating system;
- installation of the power supply system;
- installation of the ventilation system;
- installation of the security and fire security signalizations.

According to Cabinet of Ministers Regulation Nr. 112 of 1 April 1997 land and construction work production required the technical project. The basis of the technical project is the architectural-planning job given from the construction District Council, that is be received on 27 May 2011. Summary on permits and dates of receiving of permits is given bellow.

Title of permit	Organization (from which the permit will be received)	Necessary actions (for receiving of the permit)	Date (receiving of the permit)
1. Architectural-planning job	Construction District Council	Documents by requirement Description of the construction and land works	27 th of May 2011.
2. Approval of Sketch project	- „Latvenergo“ - „Lattelecom“ - Land amelioration - Civil parish council (specialists of water and sewerage system) - Construction District Council	1. The sketch of internal planning of the building agreement with the client and builders 2. The sketch of territorial planning of the building agreement with the client and builders 3. The sketch of territorial planning of the building agreement with the according institutions.	31 st of May 2011 31 st of May 2011 Till 3 rd of June 2011
3. Permit for construction works	Construction District Council	The approved sketch	6 th of June 2011

Accordance to planned time schedule. Started with the beginning of the project, initially planned to be finished on 01.03.2011., finished on 06.06.2011.

Indicators of success. All the necessary contracts for C.4. were signed.

Problems & modifications. During the Action evaluated total expenses for all planned renovation works exceeded the sum, planned in the Proposal, due to growing prices for building works in Latvia since the proposal was send in 2009. After an expertise done by an

independent building expert, we find out that some of the planned facilities were not best option also for using after the finishing of the Project due to the high prices for heating source (gas), or very high price for their installation. It was decided to cut-down some expenses in positions not important for animal breeding. Thus, we reduced the number of windows in building, earth thermal pump and gas heating system was changed to wood heating system (wood heating use natural and renovated resource in Latvia). The wood heating system is much cheaper, use renewable energy resource and has capacity sufficient for the needs of RRABC. These changes were accepted in EC letter ARES (2011) 762584-13.07.2011.

Continuing perspectives. This action was preparatory phase for C.4. (see Action C.4. Continuing perspectives).

ACTION A.5: Making agreements and signing of contracts for habitat management technical work

Activities undertaken. Contracts on habitat management technical works signed in winter 2012 – spring 2013. Agreements with NCA for SNP and KNP and final versions of agreements with land-owners were signed by the end of the Project (see also “Problems & Modifications” bellow).

Agreements with land-owners about Project conservation actions on their lands and their determination to sustain Project achievements here after the Project end date were also signed under this Action. There were two preliminary versions of these agreements (see Problems & modifications bellow) and their final version submitted with this report (Annex A.5.-1., Annex A.5.-2., Annex A.5.-3., Annex A.5.-4.). In these final agreements it is stated that landowners during at least 20 years from the signing data:

- agree with all the conservation actions, and will fulfil all the recommendations in management proposed by the Project staff;
- will not modify ponds created by LIFE and their banks within 10 m (*Bombina* ponds) or 20 m (*Emys* ponds) wide shoreline belt;
- will not use these ponds for fisheries, will not introduce fish;
- will not use agriculture or other chemicals within 50 m belt around ponds;
- will not use ponds and shoreline belt for agriculture or other activities harmful for *Bombina* and *Emys*;
- will not plant forest within *Emys* pond shoreline belt;
- will not do and will not allow third persons to do fishing in *Emys* ponds with any methods;
- will not do any activities in *Emys* egg-laying sites created by the Project, nor closer than 20 m to these sites;
- will not allow recreation activities, human or domestic dog movements in renovated *Emys* habitats, nor closer than 100 m to these sites;
- will not do any economic activities closer than 200 m to renovated *Emys* sites;
- agree with elimination of invasive species harmful for *Emys*, such as racoon dogs, and will not release harmful species there;
- any other actions within a distance of 10 (*Bombina*) or 100 (*Emys*) m from improved sites can be done only after written agreement from the Project staff.

Agreements state that in *Bomina* sites land owners have rights to:

- use renovated ponds for cattle drinking in a way that it does not cause habitat degradation;
- shoreline belt around ponds would be used for grass cutting and cattle pasturage in a way that it does not cause habitat degradation.

Before signing of agreements all the landowners got oral explanations from the Project staff about conservation and management requirements of respective species, and received Project brochures where written recommendations and explanations were given.

Agreements for habitats improvement works in SNP were received from NCA (Progress Report: Annex A.5.1.).

The tender and selection of bidders were organized in accordance with rules and regulations in Latvia, and LIFE Common Provisions. Contract about the construction works was signed with the selected bidder SIA “Bager”, all the documents submitted with previous Report (Progress Report: Annex A.5.8.). The subcontractor’s works included shrub cutting, waterbody restoration in two future Natura 2000 sites Katrinisku and Strauti under Bombina Expert supervision; *Emys orbicularis* habitat improvement under Emys expert supervision: shrub cutting and nesting site restoration, waterbody restoration works in four key sites of SNP.

NCA Regional Structural unit responsible for supervision of KNP, confirmed in a letter (see Progress Report: Annex C.2.8.) that they will announce a tender for forest care clearing necessary for further *Coronella austriaca* habitat improvement here. This will be done with the aim to improve habitat of this particular species in places specified in *Coronella austriaca* SPP developed by the Project; estimated area is ~20 ha. Although it will be done on the Project site and based on Project results, formally it is outside LIFE, because it will be done without direct involvement of the Project finances or personnel.

Accordance to planned time schedule. Initially contracts were planned to be subscribed till 01.11.2012., but during the Project last contracts were signed the beginning of May 2013. Final versions of agreements with land-owners were signed by the end of the Project.

Indicators of success. All the necessary contracts for Action C.2 were signed. Agreements with NCA submitted with the Progress Report. Final versions of agreements for 20 years with private land owners are in annexes (Annex A.5.-1., Annex A.5.-2., Annex A.5.-3., Annex A.5.-4.).

Problems & modifications. This Action was supposed to start with 01.01.2012, and contracts signed by 01.11.2012. However, habitat management plans (Action A.2.), necessary for habitat management work contract details, were completed only by the 30th September of 2012, what is in accordance with a time-table the Project Proposal (although initially we expected to finish them much earlier). Due to preparatory works and wait for financial resources requested by the Mid-term Report last contracts on habitat management technical works signed on very beginning of May 2013. The delay of this Action did not caused problems or substantial delays in planned habitat management activities.

Initially this was planned to be only a habitat modification technical work preparatory Action. However, after discussions with LIFE team, we also included in this action agreements with land-owners. Initial agreements with private land-owners were discussed with EC LIFE unit representatives Ms Rosemarie Hingsamer and Ms Susan Brassart and the external monitor Mr Rolands Ratfelders, during their visit on 3rd July 2013. They pointed in EC letter (ARES (2013) 285031), that the agreements were signed by landowners in the form of a delegation, where one landowner solely gives the rights to the representative of the coordinating beneficiary to represent the landowner in every aspect related to the conservation of the project target species, and included only a general statement that the landowner is aware of the conservation and management requirements for the project target species. New more detailed agreements were signed with land-owners by 10.07.2013 and their copies submitted to EC with the Progress Report (Progress Report: Annex A.5.5., Annex A.5.6., Annex A.5.7.).

In the next letter Ares (2014) 1032602-02.04.2014. there were concerns that agreements with land owners were limited only to 5 or 10 years, therefore new agreements were signed with duration of 20 years (Annex A.5.-1., Annex A.5.-2., Annex A.5.-3., Annex A.5.-4.). Another concern was that one of agreements was signed by land-owner Aija Pupina, who is also staff member of the Project, what could be considered as conflict of interest.

Hereby we explain the situation. Dr.biol. Aija Pupina worked for *Bombina bombina* conservation for many years before any projects and is leading specialist in *Bombina bombina* conservation in Latvia, NCA certified expert in Amphibians and Reptiles. In mid 2000ties, before the LIFE-HerpetoLatvia, during the work on her PhD Project expert Aija Pupina discovered in near Demene large, but unprotected *Bombina bombina* population. At that time former landowner offered the land for sale that was very serious potential threat for this population. Therefore for population protection aim Aija Pupina urgently purchased this land in 2008 (“Strauti”, cadastre register Nr. 4450 003 0241, purchase agreement from 21.05.2008), as a result this population was saved from any potentially destroying actions.

Initially selected in the Project site ‘Pumpuri’ had biggest population, but with no possibility to find land owners (many of them were died, or migrated to another countries etc.), and therefore according Latvian laws it was impossible to make habitat improvements and establish microreserve here, and therefore other territory was necessary. This issue was explained to LIFE Unit with Progress Report, and had no consequent comments from LIFE or external monitor.

After Preliminary survey of the Project, it was discovered that ‘Strauti’ is third best key *Bombina* territories in the whole area, and there is no problem to restore habitats and to establish legal protection, because there is no problem with finding real land owner, and no problem with land owner attitude (see “Activities undertaken” under Activity C.1.), because landowner’s goal is to preserve *Bombina bombina*.

NCA, SFS, and MEPRD received microreserve Strauti proposal with NCA certified expert Aija Pupina Expert estimation (Annex A.5.-5.). NCA, SFS, and MEPRD during the microreserve Strauti establishing procedure were well aware, that this land is a property of the estimating expert Aija Pupina, as it was clearly indicated in their official letter, sent to all landowners (Annex A.5.-6.). Thus, NCA, SFS, and MEPRD found not any interest conflict in the case and all the procedures are in accordance with Latvian laws.

The land is not being used for any commercial or agricultural activities, Aija Pupina is not registered as a businessman, this land is not rented to third person, and *Bombina* habitat improvements are not being used (and cannot be used) to gain any type of profit, therefore there is no conflict of interest. Oral agreement for LES to use the land for *Bombina* conservation was received from Aija Pupina many years before. Understanding concerns of the LIFE Unit, Aija Pupina have signed lending of this land to LES for free for 20 years for using in the nature conservation only (Annex A.5.-7.). Aija Pupina paid for all these years and will continue to pay state taxes for this land and regular governmental fines for non-using the land in agriculture.

Continuing perspectives. Agreements with land-owners for both territories and using of the Strauti by LES for nature conservation will be valid at last 20 years after finishing of the Project.

Annexes:

A.5.-1. Agreement for 20 years for Silene (In Latvian).

A.5.-2. Agreement for 20 years for Katriniski (In Latvian).

- A.5.-3. Agreement for 20 years for Strauti (In Latvian).
- A.5.-4. Agreement for 20 years for Strauti from LES (In Latvian).
- A.5.-5. Microreserve Strauti proposal and Expert estimation (In Latvian).
- A.5.-6. NCA, SFS, and MEPRD official letter to all landowners (In Latvian).
- A.5.-7. Contract on usage of Strauti for Nature conservation for 20 years (In Latvian).

ACTION C.1: Establishing of the new Natura 2000 site

Activities undertaken. The aim of this action was to establish new Natura 2000, which would be also the Project site, for largest, previously unprotected *Bombina bombina* population in Latvia.

Using data collected in Action A.1, two territories in the Demene district were selected for the microreserves: Katriniski and, initially, Pumpuri (Kumbuli). However, habitat management measures needed landowners' agreement, which was not possible for the latter site. Therefore, next best site – Strauti, was selected for *Bombina bombina* microreserve. This site has only one landowner (Aija Pupa, see also Action A.5. Problems & modifications) in central main habitat managed area, and has a bridge function to connect two larger *Bombina* populations Demene and Medumi. During the monitoring of habitat management results in 2013, it was confirmed that this was a good decision also due to additional positive effect from restored *Emys orbicularis* ponds in SNP. These *Emys* ponds were used already in 2013 by *Bombina bombina*, further improving their population Ilgas connectivity with population Demene. Proposals for two microreserves – new Natura 2000 sites for *Bombina bombina* were prepared accordingly to the legislation of Latvia, and submitted to NCA and SFS which is responsible for creating of microreserves in a forest lands. These organizations approved proposals and created the microreserves in Katriniski (Ordinances VM4.7-4/452 from 08.08.2014. and 4.3/10/2004-N from 12.08.2014) and Strauti (Ordinances VM4.7-4/453 from 08.08.2014. and 4.3/9/2004-N from 12.08.2014) (Annex C.1.-1.).

MERD approved establishment of two new Natura 2000 sites Katriniski and Strauti at 11.09.2014 with the electronically signed letter 18-1e/8384 (Annex C.1.-2.).

Microreserve “Katriniski” has a total area of 16.40 ha, there are 10 land property units, two of them are owed by local municipality. Forbidden activities are draining of ponds, within 20 m belts around ponds – agriculture, habitat alteration, use of chemicals, in ponds – release of fish. Allowed and encouraged activities: mowing, shrub cutting, cattle pasturage, and other activities not in conflict with *Bombina* conservation. Location and microreserve borders indicated in establishment proposal (Annex C.1.-3.).

Microreserve “Strauti” has a total area of 17.78 ha, there are 7 land property units, all owned by private persons. Forbidden, allowed and encouraged activities are same that for “Katriniski”. Location and microreserve borders indicated in establishment proposal (Annex C.1.-4.).

Accordance to planned time schedule. According to the Proposal MERD should approve both proposals, established a new Natura 2000 territories – microreserves for *Bombina bombina*, and submitted a final proposal for a new specially protected nature territory to Cabinet of Ministry of the Republic of Latvia by the 31.07.2014. The final decision would be done by Prime Minister and Parliament, and hence completion of this process would be outside the Project competence and, probably, time schedule. However, the establishment of two microreserves instead of one microreserve and one specially protected area allowed us to

establish new Nature 2000 with MEPRD decision and therefore complete all the necessary procedures before the end of the Project.

Indicators of success. NCA, SFS, and MERD Ordinances about establishment of microreserves and Natura 2000 sites, maps and descriptions of microreserve borders (Annex C.1.-1.; Annex C.1.-2.; Annex C.1.-3.; Annex C.1.-4.).

Problems & modifications. Initially two types of proposals were planned – one for establishment of the nature reserve, and other for microreserve. However, after the preliminary research work and consultations with nature conservation authorities, international experts, and discussions in the Project Steering Group (Meeting on 26.07.2012.) we found out that establishment of two microreserves would be the best option for target territory Demene district from population protection, habitat management and establishment procedure point of views. This assertion was accepted in EC letter ARES (2013) 724320-19.04.2013.

Due to long time of microreserve proposal verification at NCA, there were concerns about establishment of microreserves and their inclusion in Natura 2000 territories before end of the Project, expressed in EC letters ARES (2014) 1032602-02.04.2014. and ARES (2014) 3566825-28.10.2014. However, approvals from MERD did come before Project end date. In the Letter 18-1e/8384 from 11.09.2014. MEPRD officially affirmed that these territories have Natura 2000 status and will be included in Natura 2000 list with next amendments of the law “On Specially Protected Nature Territories” (see the Letter in Annex C.1.-2.)

Continuing perspectives. Further legal protection of the population, microreserves and Natura 2000 territories accordingly to national and EU legislation.

Annexes:

Annex C.1.-1. Ordinances of NCA and SFS on creation of microreserves Katriniski and Strauti with official coordinates and maps (In Latvian).

Annex C.1.-2. MERD letter on Natura 2000 territories establishment in microreserves Katriniski and Strauti (In Latvian).

Annex C.1.-3. Proposal for Katriniski microreserve with official coordinates and maps (In Latvian).

Annex C.1.-4. Proposal for Strauti microreserve with official coordinates and maps (In Latvian).

ACTION C.2: Habitat management measures

Activities undertaken. Main management works were done by sub-contractors in areas specified by management plans developed in Action A.2. There were two types of main management actions: i) for all three species, we have cut shrubs to create more open, mosaic habitat, and ii) for two water species have dug and improved ponds as well.

In the March of 2013 habitat improvement measures were done for *Coronella austriaca* in KNP. These were 2.4 ha in a forest land young stands and 0.9 ha of shrub cutting in roadside belt. The area of habitat improvement works in KNP was **3.3** ha. *Bombina bombina* habitat improvement – shrub cutting, waterbody restoration, was done in two future Natura 2000 sites under Bombina Expert supervision: Katriniski (total area **17.6** ha), and Strauti (total area **18.7** ha). *Emys orbicularis* habitat improvement: shrub cutting (by subcontractor, landowner, project team) and nesting site restoration, waterbody restoration works covered a total area of **38,6** ha in four key sites of SNP (their areas – 6.3 ha; 15.4 ha; 16.4 ha; 0.5 ha). The works

(bush cutting) were completed by subcontractor, landowners and Project team in SNP. All these works were completed in 2013 with some Project team additional works in 2014.

For the *Bombina bombina* 27 ponds were created or restored in new Nature 2000 sites (14 in Katriniski and 13 in Strauti). Created ponds for *Bombina bombina* were shallow, with clay or peat ground, average depth was 0.5 m, with well insulated shores (Maps before and after habitats improvement and photos see in Annex C.2.-1.). For the *Emys orbicularis* 16 ponds were created or restored in SNP in four sites. The ponds for *Emys orbicularis* were deeper, with depth about 1 m, in shore zone depth about 0.5 m. The ponds had sun-basking places and eggs-laying places nearby. Some ponds were shallower; they were planned for juvenile *Emys orbicularis* (Maps before and after habitats improvement and photos see in Annex C.2.-2.).

All the works were supervised on site by the Project staffs. A total of 43 new or improved water bodies were created for *Emys orbicularis* and *Bombina bombina*. Their digging works were completed in Mid-June of 2013. Total area of sites where habitats were improved for all three species is 78,2 ha.

Minor works on improved sites (additional vegetation cutting, eggs-laying places, additional basking places for turtles etc.) were done by the project staffs, since it is cheaper and more operative option than using the external assistance. The total area of the additional minor works was 5 ha.

Accordance to planned time schedule. Efforts were planned mainly between 01.11.2012. and 31.04.2013., with some adjustment measures also later, till 31.04.2014. There were no deviations from this plan, since main works were completed in winter-early spring of 2013.

Indicators of success. Maps with locations of habitat improvement works, photo evidences, and work acceptance reports are submitted with the Report (Maps before and after habitats improvement and photos of created ponds see in: Annex C.2.-1., Annex C.2.-2., Annex C.2.-3.).

Problems & modifications. We improved and created more habitats than were planned in Project proposal. Planned 50 ha of the habitat improvement works were exceeded by 28.2 ha, and planned 30 new ponds were exceeded by 13 ponds. It was done with no additional costs nor caused any changes in the Project's budget.

Continuing perspectives. Improved habitats will be maintained 20 years by land owners accordingly to agreements signed in action A.5.

Annexes:

Annex C.2.-1. Maps before and after habitats improvement and photos of created ponds examples for *Bombina bombina*.

Annex C.2.-2. Maps before and after habitats improvement and photos of created ponds examples for *Emys orbicularis*.

Annex C.2.-3. Habitats improvement 80 photo-documents (JPEG only).

ACTION C.3: *Bombina bombina* and *Emys orbicularis* population enforcements.

Activities undertaken. From the beginning of the Project *Emys orbicularis* captive population (16 adults, 40 young) was bred in old facilities – laboratory of Latgale Zoo and in an old out-door basin of Latgale Ecological society (in the site of future Rare Reptile and Amphibian Breeding Centre).

Agreement from competent authority – NCA, was received for the *Bombina bombina* and *Emys orbicularis* population enforcements in wild (copy submitted with Progress Report: Annex A.5.1.).

In 2013 - 2014 *Bombina bombina* spawns were collected in wild, and tadpoles were reared till their metamorphose stage, and then released in back wild in the proposed Natura 2000 sites Katriniski (14 new ponds) and Strauti (13 new ponds). Number of released toadlets in 2013 was 1 021 (in Katriniski 563, Strauti 458) and in 2014 – 3 048 (in Katriniski 1 628, Strauti 1 420). A total of 4 069, what is 136% from planned in the proposal.

In 2013, after the finishing of main renovation works in action C.4, *Emys orbicularis* were moved to the new RRABC facilities, and numbers of young turtles increased till 92. 42 individuals had reached age and size suitable for their release in the wild, and other turtles will be released next years after finishing of the project. In the 15 July of 2014, 42 young adult and semi-adult turtles were released in SNP habitats improved during Action C.2 (Annex C.3.-1.). The number of released turtles increased more than twice comparing with original Proposal without any additional costs to the project (from 20 to 42, what is 210% from planned) (Annex C.3.-3.).

Accordance to planned time schedule. The Action was realized accordingly to the planned time schedule, with animal releases for population enforcements in 2013 and 2014.

Indicators of success. The progress of animal breeding and population enforcement was shown in news section of the Project website (<http://www.life-herpetolatvia.biology.lv/>) and confirmed by partners and independent expert Dr.biol. (Annex C.3.-3., Annex C.3.-4.). Some of photo documentation and certificate on releasing in 2013 were submitted with the Progress Report (Annex C.3.2., C.3.3.). Last group of 78 *Bombina bombina* was released in 18.08.2014, during the visit of LIFE External monitoring team representative Mr. Rolands Ratfelders (Annex C.3.-2.). Indicators of success are also the results of the monitoring in Daugavpils novads (Demene and Silene) (see in ACTION E.3).

Problems & modifications. None.

Continuing perspectives. Released *Bombina bombina* and *Emys orbicularis* created new populations in improved habitats and for many years will be the key populations for species conservation and distribution in Latvia. *Emys orbicularis* have permanent captive population in RRABC, and they will be used for future turtle conservation projects for many years.

Annexes:

Annex C.3.-1. Releasing of 42 young adults and semi adults turtles in SNP habitats improved during Action C.2.

Annex C.3.-2. Releasing of last group of *Bombina bombina* during the visit of LIFE External monitoring team representative Mr. Rolands Ratfelders.

Annex C.3.-3. Certificate of releasing of *Emys orbicularis* in 2014.

Annex C.3.-4. Certificate of releasing of *Bombina bombina* in 2014.

ACTION C.4: Capacity enlargement and equipment of the breeding facilities.

Activities undertaken. RRABC renovation works started with old building preparation for investigation and construction works by the volunteers from LES – clearing and small-scale dismantle works within the building (with no additional expenses).

Next step was investigation works by a sub-contractor SIA „MGM PRO” (contracted during action A.4.). Following jobs were done:

- Topographic plan of the land ordered for the General project plan development that was reconciled with all according institutions;
- Geological works – 3 pits to determine the condition of the basement construction and a well to determine the structure of the soil;
- The technical inspection of the building;
- The sketch of the internal planning of the building;
- The sketch of the territorial planning;
- The agreement of the whole sketch of the project with the construction District Council;

The permit for works was acquired, and construction renovation started in June of 2011. In 2011-2012 building was fully renovated and prepared for the installation of laboratory equipment. Walls and basement of the building were restored and roof was completely rebuilt.

Following systems were installed:

- water supply from sewerage systems (three systems - biological water, rain-water, and technical water);
- heating system - renewable resource (wood) system;
- power supply system (generator);
- ventilation system;
- security and fire security signalizations.

In 2013 last works were completed:

- Creation of six large outdoor basins (ponds), average depth 1 m (Maps and photo see in Annex C.4.-3.);
- Six small outdoor basins (72 m²) with removable fence for *Emys orbicularis* juveniles placed around the perimeter of laboratory external wall; these basins were covered with a glass-house with walls, roof, floor (Annex C.4.-1.).
- Equipment for small basins: 6 water filters, 12 water pumps, 6 heating systems, 6 air compressors, 3 water change time relays, 3 light sources, 3 UV light sources;
- Laboratory equipment installed inside the building: - 14 basins, 10 plastic tubs, 30 filters, 15 terrariums, 10 heaters, 20 air compressors, 10 light time relays, 5 water change time relays, 30 light sources, 8 UV light sources.

Accordance to planned time schedule. According to the Proposal, all the renovation and equipment work should be finished and RRABC ready to-work by 31.03.2013. This activity was planned for all the project time, with last year planned mostly as a safety margin for adjustment works. In spite of initial delay of RRABC renovation works that we indicated in our reports, facilities allowed us to place here captive population by 01.04.2013., before completing some remaining equipment works in August 2013.

Indicators of success. Final acceptance report has been signed (submitted with Progress Report, Annex C.4.1.), animals relocated to new facilities (Progress Report, Annex C.4.3.).

Problems & modifications. Due to rise of building expenses after the writing of the Project proposal and due to additional reparation works, whose necessity was found in the process of renovation (additional reparation of building base, full removing of some parts of walls etc.) we had to change some technical renovation options: we reduced the number of windows in

building, earth thermal pump and gas heating system was changed to wood heating system. These changes were described in the Inception Report, and accepted by EC in the letter ARES (2011) 762584-13.07.2011.

After that due to limits of financial resources available for renovation works, we decided to replace stationary outdoor basins with operative plastic net basins, which had been acquired with laboratory equipment. These changes were accepted in EC letter ARES (2013) 724320-19.04.2013. After finding new technologies, the basins were created as combination of plastic and concrete constructions. Such type of basins was sufficient for fulfillment of the Project tasks.

Due to shortage of financial resources before receiving a mid-term payment from EC, the finishing of main equipment works was delayed by more than 4 months. Works were finished in August 2013. Delay did not hinder other Actions, such as planned animal breeding works, which started in new facilities before all the equipment works were finished

Captive populations of *Bombina bombina* and *Emys orbicularis* were moved into new RRABC on 01.04.2013. already before completion of the equipment works, what was certified by independent commission and steering group members (acceptance report submitted with Progress Report: Annex C.4.3.).

EU LIFE unit visited the RRABC on 3rd July 2013, and encouraged to speed-up the finishing of smaller outdoor basins in EC letter ARES (2013) 2850831-07.08.2013. All the remaining basin works were completed in August (Annex C.4.-1.).

After the last visit of the External Monitoring Team, EC in the letter Ares (2014) 3566825-28.10.2014. requested to clarify the usage of renovated second floor which was without furniture due to lack of finances.

The second floor in spite of lack of the permanent furniture, during the Project was used as discussion place during meetings (last one big was International Workshop organized by Project on 14-15.08.2014), and as dormitory, place for hygienic procedures, eating, for technicians and volunteers who did animal breeding work in Action C3, because RRARBC is located about 5 km from the City of Daugavpils, and it does not have public transport connection nearby (Annex C.4.-2.).

Continuing perspectives. Presently RRABC has captive *Emys orbicularis* population, which is planned to use for future conservation projects. The population maintenance (animal feeding, basin and equipment cleaning) and all the expenses connected to maintenance of building and equipment (electricity, heating expenses, taxes) are being done by the LES. All the renovated facilities and equipment presently are sufficient for *Emys orbicularis* and *Bombina bombina* with only consumables necessary for continuation of work. There are plans to expand the breeding also to other reptile amphibian species for conservation Projects, and it is possible to arrange additional equipment in the centre. Presently LES is searching for opportunities to find finances for other species breeding programs. The second floor, which presently is lacking permanent furniture, will be equipped by LES in 2015 and 2016.

Annexes:

Annex C.4.-1. Renovation and equipment basin works in RRABC are completed.

Annex C.4.-2. Usage of second floor of RRABC.

Annex C.4.-3. Maps and photo of six large outdoor basins (ponds).

ACTIONS D.1.-D.7: For overviews of these actions see Chapter 5.2. Dissemination Actions (bellow).

ACTIONS E.1 (Administration of the Project) and E.2 (Establishment and work of the Steering group): See Chapter 4. Administrative part (above).

ACTION E.3: Monitoring of the habitat improvement actions

Activities undertaken. Monitoring of habitat improvement actions was carried out two consecutive field seasons of 2013 and 2014. Methods applied for monitoring of populations were basically same as survey methods in Action A.1, but vegetation renewal in improved sites evaluated visually. Next few years usually are not enough for population establishments in new or strongly altered sites, because some time is necessary to establish ecosystem after disturbances caused by habitat improvement measures such as digging of ponds or shrub cutting. However, we observed first success already in final years of the Project.

Coronella austriaca monitoring showed increase of the snake population in one improved site with the area of 0.8 ha, and the first appearance in other site with area of 0.2 ha, which was previously unsuitable for the snake. Presence in the last site was especially encouraging from population connectivity point-a-view, because it is located between two previously isolated sub-populations.

Bombina bombina monitoring in Katriniski and Strauti showed success of project actions: 1) high level of restoration of *Bombina bombina* ecosystems in both territories Katriniski and Strauti; 2) presence of vocalizing males and juveniles *Bombina bombina* in both territories; 3) additional success: new record of *Emys orbicularis* in Demene between project sites,

Emys orbicularis monitoring showed success of project actions: 1) high level of restoration of *Emys orbicularis* pond ecosystems in four territories in SNP; 2) good restoration of *Emys orbicularis* eggs laying ecosystems in three territories in SNP; 3) additional success for other target species: presence of vocalizing males *Bombina bombina* in restored ponds 1 and 2.; 4) registration of new *Emys orbicularis* finding in SNP near to project sites; 5) first registration of *Emys orbicularis* bridge population in Belarus near to Project site in SNP.

Accordance to planned time schedule. Action started in 01.04.2013, and finished with the end of the project, accordingly to the Proposal.

Indicators of success. Three detailed monitoring reports submitted with the present Report (Annex E.3.-1.; Annex E.3.-2.; Annex E.3.-3.).

Problems & modifications. None.

Continuing perspectives. Results can be used for further habitat monitoring after the finishing of the Project by experts and conservation authorities.

Annexes:

Annex E.3.-1. Results of monitoring of *Coronella austriaca* habitat improvement actions.

Annex E.3.-2. Results of monitoring of *Bombina bombina* habitat improvement actions.

Annex E.3.-3. Results of monitoring of *Emys orbicularis* habitat improvement actions.

ACTION E.4: External audit

Activities undertaken. The commission from 3 persons was established, whose responsibility was to prepare regulation for open tender in accordance to Latvian legislation, and to evaluate proposals. There were 3 applicants, from which company with best price in accordance with regulation was selected. Winner was company KPMG Baltics, who did full financial audit for whole Project at DMLZ, from 30.09.2014. till 18.12.2014.

They also audited financial report of the Project Final report, verified all the expenses, income and investments incurred/made by Municipality of the Daugavpils City, the Latgale Ecological Society and the Nature Conservation Agency of the Republic of Latvia for accordance with the LIFE+ Programme Common Provisions, the national legislation and accounting rules, and with the standard LIFE audit model. Results of the audit were submitted in a form of Independent Audit Report, which is compiled according to the EC guidelines for LIFE audit reports (Annex E.4.-1.) and as a PDF copy (Annex E.4.-2.).

Accordance to planned time schedule. Action started in September 2014, after the Project end date. Due to large amount of work, external audit report was prepared on 19.12.2014.

Indicators of success. Independent Audit Report (Annex E.4.-1.).

Problems & modifications. During the audit no substantial problems were discovered. Auditor stated that the financial report has been prepared in accordance with the LIFE+ Programme Common Provisions, LIFE audit report guidelines, the national legislation and accounting rules.

Continuing perspectives. None

Annexes:

Annex E.4.-1. Independent Audit Report (in Paper only).

Annex E.4.-2. Independent Audit Report (PDF copy).

ACTION E.5: After-LIFE Conservation Plan

Activities undertaken. After-LIFE Conservation Plan was prepared accordingly to the guidelines published on LIFE programme web-site (<http://ec.europa.eu/environment/life/>). It was written in Latvian language, with comprehensive English language summary.

Accordance to planned time schedule. Accordingly to the Proposal produced by the end of the Project.

Indicators of success. After-LIFE Conservation printed plan submitted with the present Report (Annex E.5.-1.) and published in PDF (Annex E.5.-2.) in a free access on Project web-site www.life-herpetolatvia.biology.lv.

Problems & modifications. None.

Continuing perspectives. Species conservation activities carried out accordingly to this plan.

Annexes:

Annex E.5.-1. After-LIFE Conservation plan (in paper).

Annex E.5.-2. After-LIFE Conservation plan (PDF).

ACTION E.6: Off-road vehicle with a trailer lease or purchase

Activities undertaken. The tender and selection of bidders were organized in accordance with rules and regulations in Latvia, and LIFE Common Provisions. The company SIA “Konsultant” won the tender for the car purchase, and the contract was signed on 8th March 2011. The used car - Toyota RAV 4 (first registered on 2005, Registration nr. HO4822) was bought for the project purposes and it had the warranty period for 6 months. For trailer purchase price inquiry (in accordance with Latvian legislation for purchases below 4 000 Euro) was done in 10 companies. Trailer KNAUS (Registration number S5549) was purchased for equipment transportation for project activities (surveys, habitat improvements, monitoring).

Accordance to planned time schedule. Vehicle and trailer were used for fulfillment of the Project tasks during the whole Project, accordingly to the Proposal.

Indicators of success. One off-road vehicle with LIFE logo and Natura 2000 logo and one trailer with LIFE logo and Natura 2000 logo in DM LZ balance (Annex E.6.-1.; Annex E.6.-2.).

Problems & modifications. The first tender in 2010 was unsuccessful; we hadn't received any request from candidates. Therefore second tender was organized in 2011 and it was successful.

Continuing perspectives. The car, trailer and other goods will be used for nature conservation goals, what is certified by Daugavpils city council.

Annexes:

Annex E.6.-1. Copies of documents on the one off-road vehicle and one trailer in DM LZ balance.

Annex E.6.-2. Photos of the off-road vehicle with LIFE logo and of the trailer with LIFE logo.

5.2 Dissemination actions

5.2.1 Objectives

In the Project Proposal, there was no joint dissemination plan set out since main focus of the Project was concrete conservation actions. Nevertheless, raising of the public awareness of *Emys orbicularis*, *Coronella austriaca*, *Bombina bombina* conservation necessity was one of main Project objectives (Form B.1. of the Proposal), with seven dissemination activities covering species conservation and Project dissemination using electronic, paper, personal communication tools.

5.2.2 Dissemination: overview per activity

ACTION D.1: Notice boards

Description. This was NCA action. It was completed accordingly to timetable, in 2nd quarter of 2011. Ten bilingual (Latvian and English) notice boards were placed in the Project areas in Natura 2000 territories, in headquarters of beneficiaries, and at RRABC. Each had site map, project description, photos, LIFE and Natura 2000 logos.

Four additional notice boards with no additional expenses were placed at DM LZ and LES. A map and table of locations and photos of notice boards are submitted with the Report (Annex D.1.-1.).

Evaluation of success. It is difficult to evaluate success of these boards because there is not much feedback. However, it is been precisely calculated, that more than 32 000 DM LZ visitors per year have read these boards; and approximately 128 000 visitors for all the Project time. For 4 years 426 organized visitors of SNP in many seminars have read these boards under circuit of Project experts. Thus, in total at least 128 426 visitors (students, landowners, Zoo visitors, scholars, scientists etc.) have read the boards for the Project time.

Continuing perspectives. Notice boards at Natura 2000 sites will remain in their places until their quality will became poor during weather conditions or vandals. Notice boards at RRABC and beneficiaries headquarters will remain in their places.

Deliverables. There were 14 notice boards with the information about the Project and LIFE logos set in Project sites and at beneficiaries.

Annexes

Annex D.1.-1. Map of locations, table, and photos of notice boards.

ACTION D.2: Project web-site

Description. The web-site was created at the beginning of the Project (30.10.2010) and placed on the server of DU. The web-site address is www.life-herpetolatvia.biology.lv. Website has brief descriptions of Project Species and actions, sections for press releases, e-library with all of the Project brochures, Project news section (updated several times a month), and also section for kids, where everybody can put together puzzle from pictures of Project animals. Site languages are Latvian and in English, news is in Latvian with inbuilt Google service translation to 90 languages.

Evaluation of success. The site has been important for project dissemination. According the estimation of service www.siteprice.com, the web-site has 34 backlinks from other web-sites, has 10 unique visitors per day which look for 10 pages; 3 650 per year and approximately **14 650** visitors for all the Project time.

Continuing perspectives. Web site will be maintained at least 10 years after finishing of the Project – till 2024.

Deliverables. A web-site with LIFE and Natura 2000 logos www.life-herpetolatvia.biology.lv (Mid-term Reports, Annex D.2.-1.).

ACTION D.3: Layman's report

Description. Project *Layman's Report* was published by the end of the Project in English and Latvian languages, and contained sections about Project species conservation problems, Project tasks and achievements. *Layman's Report* contained 16 pages and 37 pictures. It has two ISBN numbers: for printed and PDF issues, and was published in paper 200 copies and according Latvian rules was distributed to National Library, libraries of University of Latvia and Daugavpils University, all Latvian biggest libraries; was distributed to visitors of Latgales Zoo, landowners and specialists (Annex D.3.-3.). Electronic PDF version is placed on Project web-site in a free access.

Evaluation of success. Like with notice boards, it is difficult to evaluate the success of this action, due to lack of feedback. Most of its dissemination effect will be after the finishing of the Project. The *Layman's Report* was published on project web-site with 10 unique visitors per day and 3 650 per year.

Continuing perspectives. *Layman's Report* is a popular story about rare reptile and amphibian conservation, and the Project; it will be available years after finishing of the Project.

Deliverables. *Layman's Report* with LIFE and Natura 2000 logos. (Annex D.3.-1., Annex D.3.-2.).

Annexes:

Annex D.3.-1. *Layman's Report* PDF ISBN with LIFE and Natura 2000 logos.

Annex D.3.-2. *Layman's Report* Paper ISBN with LIFE and Natura 2000 logos (Paper format only).

Annex D.3.-3. *Layman's Report* recipients.

ACTION D.4: Work with media

Description. Numbers of press-releases, mass-media publications and related public events during various stages of the project is given in a table below.

<i>Events</i>	<i>By Inception Report</i>	<i>Between Inception and Mid-term Rts</i>	<i>Between Mid-term and Progress Rts</i>	<i>Between Progress and Final Rts</i>	Total
Press releases	4	12	8	8	32
Publications about the Project (in newspapers, magazines, web-media)	5	12	7	6	30
Total edition of these publications about the Project	164 000	138 650	10 000	486 000	698 650
Participated public events	18	7	3	1	29
Audience of the public events	36 118	33 941	35 042	2000	107 101

The Project was presented to the President of Latvia, Mr. Valdis Zatlers during the *Latvia's Pride* audience on December 13 in 2010. It was presented during several TV interviews, including most popular TV show *Latvia's Pride* awarding ceremony, which was reflected by most popular mass-media nationwide.

The information about the project has been given in local TV (*Dautkom*), *Latgales* and *Latvian TV 12* interviews, filmed also by visitors, and published on youtube.com: <https://www.youtube.com/watch?v=iqvVE6sLiAQ>; <https://www.youtube.com/watch?v=ebLOjkAv2sQ>; <https://www.youtube.com/watch?v=60zYEpQ6Z1U>; etc.

and during 8 interviews to main public radio *Latvijas Radio*, *Latgales Radio* and others.

In June 2012, the Project was visited by LIFE filming group, who did *Coronella austriaca* filming in Project site emer National Park, *Bombina bombina* in Demene, visited RRABC, and interviewed head of Daugavpils Municipality. The filming group was accompanied by the Project staffs during three day long filming process.

Brief short information on the Project was published in special booklet on Latgale Zoo, issued by DM with no additional costs and distributed to visitors of Daugavpils city (See Progress report Annex D.4.3.). LIFE-HerpetoLatvia staff are authors of “Field Guide of Reptiles of Latvia” and “Field Guide of Turtles found in Latvia”, published by DU with no additional costs in 2013, with LIFE, Natura 2000 and Project logos; the PDF version of the Guide is placed on Project web-site (see Progress Report Annex D.4.4.; Annex D.4.5).

Two of the Project species have been nominated as the animal of the year by Nature Museum of Latvia (Riga) – *Emys orbicularis* in 2013, and *Coronella austriaca* in 2012. Project experts helped to prepare notice boards with descriptions of these animals and participated in their opening events with presentations. In all cases LIFE and Project logos were placed on notice boards and in presentations (photos submitted with Progress Report: Annex D.4.6.). Publicly available information (<http://www.dabasmuzejs.gov.lv>) declared 100 743 visitors in 2012, and more than 105 000 visitors in 2013, who had possibility to read this information.

Bombina bombina and the Project were presented as a main hero during very popular in Latvia public event “Nature Concert Hall” which took place in 30th June 2012 in Demene. It was prepared in cooperation with Project experts, and performed by group of well-known Latvian musicians and filmed by TV and published widely and on *Youtube* (<https://www.youtube.com/watch?v=28LwUAF573o>; <https://www.youtube.com/watch?v=2m2OeEkKDTA>; <https://www.youtube.com/watch?v=28LwUAF573o>; <https://www.youtube.com/watch?v=3IsZC0BUffg> etc.).

The Project had been presented for visitors of Latgale Zoo by staff in lectures, discussions, by presentation of brochures, written information, and notice boards with total audience of more than 32 000 visitors per year, **128 000** in total.

Evaluation of success. During the whole Project, it has been presented in **29** public events (see Inception Report Annex 5.9.; Mid-term Report Annex D.4.3.; Progress Report Annex D.4.6.), with total estimated audience of **107 101** people. A total of **30** publications (Annex D.4.-2.) with information about the project were published in popular paper and electronic journals and newspapers in Latvia and in USA (*Diena, Seichas, Nasha Gazeta, Dinaburg, Privetik, Ilustreta zinatne, Dienvidkalifornijas Latviesu Informacijas Biletens (USA)* etc.) (see Mid-term Report Annex D.4.1.; Progress Report Annex D.4.2.), their total edition of issues (calculated from available information about sizes from editions of these newspapers and magazines) was more than **698 650**. **Thirty-two** press releases about Project news (Annex D.4.-1.) were prepared instead of 12 scheduled in the proposal and are available at Project web-site www.life-herpetolatvia.biology.lv.

Continuing perspectives. Information about the Project will be given to journalists and visitors during their future visits to RRABC, DM LZ, or Project sites with Experts, not least as **32 000** visitors per year.

Deliverables. Documents, print-screens and annexes were sent in previous Reports (Inception Report Annex 5.9.; Mid-term Report Annex D.4.3., Annex D.4.1.; Progress Report Annex D.4.6., Annex D.4.2.). Thirty-two press releases are available at Project web-site (<http://www.life-herpetolatvia.biology.lv/>) (all press releases see in Annex D.4.-1.). Copies of the publications (if possible) (Annex D.4.-2.).

Annexes:

Annex D.4.-1. All 32 Press releases (PDF only).

Annex D.4.-2. Copies of the all publications (if possible) (PDF only).

ACTION D.5: Local seminars and workshops

Description. Four local seminars were held accordingly to the Project proposal. – two for local land-owners and two for conservation authorities.

Seminars with local land owners were conducted in 2011-2012, and used for explanation the role of the LIFE and the Project in target species conservation in Latvia, and achieving agreements with them (for agendas and list of participants see Mid-terms Report's Annexes D.5.1., D.5.2.):

1. Demene, 21.12.2011., for land-owners of Demene District – future Nature 2000 territory, discussions mostly about Bombina conservation;
2. Silene, 30.08.2012., for land-owners of Nature Park Silene, discussions mostly about Emys conservation. These seminars were necessary for explanation the role of the LIFE and the Project in target species conservation in Latvia, and achieving agreements with them.

Seminars for conservation authorities were organized as a part of *Coronella austriaca* SPP acceptance procedure, where SPP was discussed (for agendas and list of participants see Progress Report's Annex D.5.1.):

1. Kemeru.11.01.2013. "Smooth snake's habitat improvement in the Kemeru National Park within frameworks of the Project LIFE HerpetoLatvia and development of the Species Protection Plan with three presentations from the Project staff, discussions part, 17 participants;
2. Kemeru 27.09.2013. "Discussion of the Smooth Snake Species Protection plan", with two presentations from the Project staff, discussions, 9 participants.

An additional **fifth** seminar was organized with no additional expenses from the LIFE project for Daugavpils municipality authorities and State environmental institutions (9 participants) at Daugavpils Municipality with the Project staff presentations and discussions about LIFE role in nature conservation in Europe and in Latvia, and about perspectives of Daugavpils Municipality participation in future LIFE programs.

From the beginning of the Project, **36** additional small seminars, field excursions, and workshops with no additional expenses from the project were organized by Project experts for land owners, environment protection authorities, students, scientists (Inception Report Annex 5.9.; Mid-term Report Annex D.5.2.; Progress Report Annex D.5.2.) a total of **714** participants.

Evaluation of success. Accordingly to the Project Proposal, this Action had to be finished by the end of 2012. However, it was continued till September of 2013, because it was more appropriate time for discussions on *Coronella austriaca* – at that time the draft of SPP has been prepared and management plans and management actions worked out. After that, this Action was finished. The change of time schedule did not increase expenses planned for this Action in the Project Proposal.

Dissemination Action D.5. was integral part of other Project actions, such as C.1. (Natura 2000) and A.5. (agreements) for land owner seminars, and A.3. (*Coronella* SPP) for conservation authority seminars. Tasks of these actions were fulfilled – all agreements were received; two Natura 2000 sites established and *Coronella austriaca* SPP approved. Therefore, this Action also can be evaluated as fully successful.

Continuing perspectives. After finishing of the Project, small seminars, field excursions, and workshops will be organized by LES and DM LZ Project experts for land owners, environment protection authorities, students, scientists if need.

Deliverables. Agendas, photos and lists of participants for four seminars submitted with Mid-term and Progress reports (Mid-term Report Annex D.5.1.; Progress Report Annex D.5.1.). Photo-documents and annexes on additional seminars sent in previous Reports (Inception Report Annex 5.9.; Mid-term Report Annex D.5.2.; Progress Report Annex D.5.2.).

ACTION D.6: Writing and publishing of brochures

Description. This was NCA activity, which in large part was done by DM LZ staff (structure, text, photos) – three species experts. Three brochures – one for each Project species were produced, each in a form of two parts placed in a common cover. One part provided more specific conservation information and other was more popular and practical. Two hundred printed copies of each brochure were issued; they were distributed mostly among libraries, participants of seminar events, international workshop, guests and visitors to the project staff.

List of brochures recipients

Recipient	Number of distributed brochures			
	<i>Coronella austriaca</i>	<i>Bombina bombina</i>	<i>Emys orbicularis</i>	In total
National Library of Latvia (for 5 biggest libraries of Latvia)	8	8	8	24
University of Latvia (students biologists, lecturers)	10	10	8	28
Daugavpils University (students biologists, lecturers)	10	10	10	30
LIFE-Eremita meadows (Project staff and visitors)	1	1	1	3
Latvian Fund for Nature (staff, partners, and visitors)	1	1	1	3
Landowners	10	10	10	30
Participants of LIFE-HerpetoLatvia <i>Coronella austriaca</i> workshops (scientists, nature conservation workers, landowners)	9	9	9	27
Participants of small seminars, events and workshops (local people, local authorities, scientists, nature conservation staff, landowners, teachers, nature friends, children, students)	40	40	40	120
International scientific meetings (scientists, biologists, students)	20	20	20	60
Kraslava school library and participants of seminar (teachers, children, parents, landowners)	10	10	10	30
NCA (staff, partners and visitors)	20	20	20	60

LZD (for partners and visitors)	20	20	20	60
LEB (for partners and members)	20	20	20	60
KNP (for staff, landowners, partners, and visitors)	7	7	6	20
Demene authorities (staff, local landowners, and visitors)	2	2	1	5
SNP (local landowners and visitors)	6	6	8	20
Daugavpils (authorities and staff)	6	6	8	20
In total	200	200	200	600

None was sold in any form. All brochures have International Standard Book Number ISBN numbers and are visible entire world, and are available for free download in as PDF files at Project web-site (<http://www.life-herpetolatvia.biology.lv/>).

Brochures do have ISBN, issued by the National Library of Latvia, and therefore they were distributed by Latvian National Library among five biggest public libraries of Latvia in Riga, Jelgava, Liepaja, and Daugavpils.

The brochures were presented to local authorities of Project territories, target landowners, staff of Nature Conservation Agency; presented to non-governmental institutions such as Latvian Fund for Nature, Latgale Ecological Society; presented to scientists and students of Daugavpils University and Latvian University; presented to staff and visitors of Latgales Zoo, Daugavpils municipality; to schoolchildren and teachers at Science Days in Daugavpils University at 14.12.2013. The brochures were also presented and donated to local School library in Kraslava (neighboring territory to Daugavpils district important for target species corridors) at Book Days and to its students and teachers (42 people) at 01.11.2013.

The brochures were internationally presented and donated to leading European experts and scientists in small water bodies conservation at WFD Workshop on the Protection and Management of Small Water Bodies, which took place on 14 November 2013 in Brussels, Belgium; the brochures were presented to well known scientist on small water bodies Dr. Jeremy Biggs (leader of world organization Freshwater Habitats Trust); presented to staff of LIFE project Eremita Meadows; to Dr. Jean-Yves Georges in Strasbourg, France, which implements Emys programs in France; to all scientists – participants of International Workshop in 2014.

Evaluation of success. Action started on 01.10.2012. and had to be finished on 31.12.2012. It was completed only in July of 2013. The finishing of the Action was delayed by 7 months due to longer than expected time of tender procedures necessary for governmental institutions. Concerns about delay of this action had been expressed in EC letter ARES 724320-19.04.2013. However, the delay did not affect the quality of the brochures, their expenses or distribution. Therefore this Action can be regarded as fully successful.

Continuing perspectives. Brochures are available at public and scientific libraries, but PDF electronic version will be available at next years in the Project website for 3 650 visitors per year.

Deliverables. Three brochures with LIFE and Project logos were submitted to EC with the Progress Report (Annexes D.6.4.; D.6.5.; D.6.6.). Their electronic versions available at <http://www.life-herpetolatvia.biology.lv/>.

ACTION D.7: Project international presentation and LIFE networking activities

Description. The Project organized two international workshops-seminars, both included presentation and poster sessions, discussion part, and visits to the Project sites. Both were named “Research and Conservation of European Herpetofauna and its Environment: *Bombina bombina*, *Emys orbicularis*, and *Coronella austriaca*”.

1st workshop held in Daugavpils, 08-09.10.2012. it had **24** presentations of **37** authors from **8** countries (Germany, Poland, Lithuania, Latvia, Netherlands, Latvia, Belarus, and Estonia), which were presented in a form of oral presentation or poster by **21** participants in person. Schedule, list of participants, Book of abstracts, photo-documents on 1st workshop sent in Mid-term Report (Annex D.7.1.).

2nd workshop held in Daugavpils, 14-15.08.2014., it had **41** presentations of **64** authors from **11** countries (Annex D.7.-6.) (Belarus, Belgium, Denmark, France, Germany, Italy, Latvia, Poland, Russia, Spain, Ukraine, and USA) and **21** participants in person (Annex D.7.-7.). All the participants received special workshop bag with LIFE and Natura 2000 logos, three Project brochures and materials (Annex D.7.-1., Annex D.7.-8.). Materials of the workshop were published in cooperation with DU in a Book of abstracts (Annex D.7.-2.) in a paper format and in PDF format and as Proceedings in Herpetology Facts Journal with ISSN (Annex D.7.-3.) on Project and DU web-sites.

The aim of the workshops was experience exchange over different aspects of research, management of populations, and conservation in-situ and ex-situ of three project species, meeting with other LIFE projects’ representatives. Participants were species and nature conservation European experts, other LIFE projects’ representatives, scientists and students.

From the beginning of the Project it was presented in total in **29** scientific meetings (**14** visits financed from the Project) in **11** countries (Latvia, Russia, Poland, Belarus, Italy, Germany, Luxembourg, Belgium, Czech Republic, Ukraine, Portugal) with **79** oral presentations and posters; **38** scientific articles and conference materials, and **46** abstracts were published (Annex D.7.-4.; Annex D.7.-5.).

The team of LIFE-HerpetoLatvia was among 20 winners in LIFE 20-years anniversary competition in both nominations: 20 Best LIFE Photos and 20 Best 20-Words Poetry about LIFE.

The staff of LIFE-HerpetoLatvia participated in total in 18 meetings and events (8 with no additional costs) organized by LIFE or other LIFE projects in Latvia and in other countries, and one LIFE kick-off meeting was visited in Finland, Helsinki. Summary is given in a table below.

#	Date	Place	Event	Participants	Total number of participants
1.	27.08.2014.	Lithuania, Vilnius	Visit to ECONAT - Development of Pilot Ecological Network through Nature Frame Areas in Southern Lithuania” LIFE09 NAT/LT/000581	LIFE Projects staff, scientists, conservationists	32
2.	18.08.2014.	Daugavpils	Visit of the LIFE Commission External monitor	LIFE Project staff, LIFE external monitor	4
3.	14-15.08.2014.	Daugavpils	LHL Project 2 nd Conference-Workshop. Meeting with experts from LIFE Project LIFE EMYS (LIFE12NAT/IT/000395)	LIFE project staff, scientists	28
4.	28.07.2014	Italy, Albenga	Work seminar with LIFE Project LIFE EMYS	LIFE Projects teams	5

			(LIFE12NAT/IT/000395)		
5.	10.02.2014.	Lithuania: Alytus, Lazdijai districts	Field visit to ECONAT - Development of Pilot Ecological Network through Nature Frame Areas in Southern Lithuania” LIFE09 NAT/LT/000581	LIFE Projects team	2
6.	07.11.2013.	Daugavpils	Presentation of Project brochures and work meeting with staff of LIFE project Eremita Meadows (LIFE09/NAT/LV/000240)	LIFE Projects staff, scientists, conservationists	6
7.	03.07.2013.	Daugavpils	Visit of the LIFE Commission	LIFE Project staff, EC LIFE unit and external monitor	7
8.	13.06.2013.	Daugavpils	Estimation of children works and work meeting with staff of Eremita LIFE project Meadows (LIFE09/NAT/LV/000240).	LIFE Projects staff, scientists, conservationists	6
9.	01.06.2013.	Lithuania: Alytus, Lazdijai districts	Work meeting with staff of LIFE project „ECONAT - Development of Pilot Ecological Network through Nature Frame Areas in Southern Lithuania” LIFE09 NAT/LT/000581	LIFE Projects staff, scientists, conservationists	4
10.	22.- 24.05.2013.	Portugal, Porto, Vila Nova de Gaia	LIFE-Trachemys project Life Trachemys (LIFE09/NAT/ES/000529) International Symposium on Freshwater Turtles Conservation	LIFE projects staffs, scientists, conservationists	67
11.	24.04.2013.	Aglona, Daugavpils district	Work meeting with Aglona municipality staff on writing LIFE Project, which will be partly continued the LIFE-HerpetoLatvia Project.	LIFE project staff, scientists, local authorities, landowners	7
12.	08.- 09.10.2012.	Daugavpils	LHL Project Conference-Workshop. Meeting with experts from LIFE Project “Protection of Emys orbicularis and amphibians in the North European lowlands” (LIFE05NAT/LT/000094); ECONAT – “Development of Pilot Ecological Network through Nature Frame Areas in Southern Lithuania”, (LIFE09 NAT/LT/000581).	LIFE project staff, scientists	21
13.	04.06.2012.	Demene	Filming of Project activities for LIFE. Filming group from LIFE, Brussels.	LIFE project staff	15
14.	15.05.2012.	Daugavpils Universit te	LIFE-20. Children draw LIFE. LIFE Eremita Meadows Project (LIFE09/NAT/LV/000240)	LIFE project staff, scientists	
15.	27.05.2011.	Daugavpils Universit te	Kick-off meeting, LIFE Eremita Meadows Project (LIFE09/NAT/LV/000240)	LIFE project staff, scientists, students	21
16.	10.05.2011.	Daugavpils, Latgales Zoo, Ainavas	Work meeting with LIFE project “Restoration of Raised Bog Habitats in the Especially Protected Nature Areas of Latvia” (LIFE08/NAT/LV/000449) staff	LIFE project staff	10
17.	13.01.2011.	Finland, Helsinki	LIFE+ Project’s starting in 2010 kick off meeting	LIFE officers, projects staff	not estimated
18.	25.10.2010.	Riga, Nature Museum	Kick-off meeting, LIFE Project "Dviete" (LIFE09/NAT/LV/000237)	LIFE project staff, scientists	21

Evaluation of success. All the networking and both organized meetings were very successful, with almost double increase of authors - participants in second seminar comparing with first one.

Continuing perspectives. DM LZ will try to found finances for continuing such meetings biannually. Abstract books and Proceedings will be available at least 5 years in the Project web-site.

Deliverables. Organized meetings lists of participants, agendas and abstract books with LIFE and Project logos are available at Project website, in section E-Library (<http://www.life-herpetolatvia.biology.lv/>); visited meeting list of titles, posters, articles and abstracts in Attachment (Annex D.7.-1.; Annex D.7.-2.; Annex D.7.-3.; Annex D.7.-4.; Annex D.7.-5. Annex D.7.-6.; Annex D.7.-7.; Annex D.7.-8.).

Annexes:

Annex D.7.-1. Workshop bag of 2nd international workshop (PDF and real).

Annex D.7.-2. Book of abstracts of 2nd international workshop (PDF only).

Annex D.7.-3. Proceedings of 2nd international workshop (PDF only).

Annex D.7.-4. List of scientific articles, scientific meetings presentations and abstracts.

Annex D.7.-5. Articles, abstracts and materials of scientific meetings (PDF only).

Annex D.7.-6. List of authors of International Workshop.

Annex D.7.-7. List of participants of International Workshop in person.

Annex D.7.-8. Schedule of International Workshop.

5.3 List of Project Deliverables

Action	Description	Submission date in Proposal	Actual submission date	Available at
A.1.	Three species survey reports	Not foreseen	30.11.2012.	Mid-term Report Annexes A.1.1, A.1.2, A.1.3
A.2.	Three species management plans	30.09.2012.	30.11.2012.; 10.03.2015. (updated <i>Bombina</i>)	Mid-term Report Annexes A.2.2 (<i>Emys</i>), A.2.3 (<i>Coronella</i>), Final Report Annex A.2.-1. (<i>Bombina</i>)
A.3.	<i>Coronella austriaca</i> Species Protection Plan	30.09.2013.	10.03.2015.	Printed version submitted with the Final Report, electronic version available at NCA website (http://www.daba.gov.lv)
A.5.	Agreements with land owners	Not foreseen	10.03.2015. (final versions)	Final Report Annexes Annex A.5.-1.; Annex A.5.-2.; Annex A.5.-3.; Annex_A.5.-4..
C.1.	Description of established Natura 2000 borders with establishment confirmation letters from MERD (copies, in Latvian)	Not foreseen	10.03.2015.	Final Report Annexes: Annex C.1.-1.; Annex C.1.-2.; Annex C.1.-3.; Annex C.1.-4..
C.2.	Maps with locations of habitat improvement works, photo evidences, and work acceptance reports (in Latvian)	Not foreseen	19.01.2014. 10.03.2015.	Progress Report Annexes C.2.1.-C.2.7. Final Report: Annex C.2.-1.; Annex C.2.-2.
C.3.	Photos and acts of animal releasing for population enforcements	Not foreseen	19.01.2014. 10.03.2015.	Progress Report Annexes C.3.3., C.3.4, and Project web-site News section; Final Report Photo-documents and acts: Annex C.3.-1.; Annex C.3.-2.; Annex

				C.3.-3.; Annex C.3.-4.
C.4.	Final acceptance report for building works (copy, in Latvian), and photos of facilities with relocated animals	Not foreseen	19.01.2014.	Progress Report Annexes C.4.1., C.4.2, and Project web-site News section
D.2.	Project web-site	Not foreseen	Created in September 2010	Available at http://www.life-herpetolatvia.biology.lv/
D.3.	Layman's Report	31.08.2014.	10.03.2015.	Submitted with the Final Report Annex D.3.-1., electronic version available at Project website.
D.4.	Press cuttings about the Project	Not foreseen	10.03.2015.	Final Report Annexes: Annex D.4.-1.; Annex D.4.-2.
D.6.	Three brochures about Project species	31.12.2012.	19.01.2014.	Annex_D.7.-1.; submitted also with the Progress Report, electronic versions available at Project website E-Library section.
D.7.	Abstract books of two international seminars organized by the Project	Not foreseen	19.01.2014. 10.03.2015.	Both books electronic versions available at Project website E-Library section, in paper 1 st was submitted with the Mid-term Report (Annex D.7.1.), 2 nd - Annex D.7.-2. submitted with the Final Report .
E.3.	Three species monitoring reports	Not foreseen	10.03.2015.	Final Report Annexes: Annex E.3.-1.; Annex E.3.-2.; Annex E.3.-3.
E.4.	External audit report	Not foreseen	10.03.2015.	Printed version submitted with the Final Report Annex E.4.-1., PDF Final Report: Annex E.4.-2.
E.5.	After-LIFE Conservation Plan	31.08.2014.	10.03.2015.	Printed version submitted with the Final Report Annex E.5.-2., for electronic version see Final Report Annex E.5.-1.

5.4 Evaluation of Project Implementation

The Project used best practice approach for implementation of concrete conservation actions, with well-known practices of target species habitat improvement techniques such as creating more open habitats by thinning or removing tree and shrub stands, and creating of new ponds for semi-aquatic species. Reproduction of project species was done using approved zooculture technologies by competent personnel. Therefore all these actions were fully successful, which was confirmed by monitoring results in the last year of the Project.

More difficult was establishment of new Natura 2000 territory for *Bombina bombina*, because there were problems to find real land owners, and we had to substitute one of initially selected territory with different one. This problem, however, was identified early in the Project, and it did not cause eligibility issues, what may rise if habitat improvement would be done in initially selected one. Another issue was agreements with land owners for sites with habitat improvement. These agreements were re-signed several times due to request for their improvement by EC LIFE unit.

Project achievements against objectives indicated in Project Proposal are summarized in a table below (only for measurable tasks in concrete conservation and dissemination actions, if exceeded, then with no additional cost).

Action	Task	Foreseen in Proposal	Achieved	Evaluation (if exceeded, then with no additional cost)
C.2.	Habitat improvement by tree and shrub cuttings (total for all species)	50 ha	78.2 ha	Exceeded (156% from foreseen)
C.2.	Digging new ponds (for <i>Bombina</i> and <i>Emys</i>)	30 ponds	43 ponds	Exceeded (143% from foreseen)
C.3.	Captive raised <i>Bombina bombina</i> individuals released for population enforcements	3 000	4 069	Exceeded (136% from foreseen)
C.3.	Captive raised <i>Emys orbicularis</i> individuals released for population enforcements	20	42	Exceeded (210% from foreseen)
D.1.	Notice boards	10	14	Exceeded (140% from foreseen)
D.2.	Laymans Report (in paper)	200 copies	200 copies	Achieved
D.4.	Press releases	12	32	Exceeded (267% from foreseen)
D.4.	TV interviews	8	10	Achieved
D.4.	Radio interviews	8	10	Achieved
D.5.	Local seminars/workshops	4	5	Exceeded
D.6.	3 brochures	200 copies each	200 copies each	Achieved
D.7.	Organization of International Workshops	2	2	Achieved
D.7.	Visits to international events (meetings, seminars etc)	6 events	35	Exceeded (583% from foreseen)

Dissemination actions can be regarded as very successful with more and more people recognized the LIFE, European Commission, and Project and its role in nature conservation in Europe and in Latvia; role of European amphibian and reptile conservation. Good example is attendance at International Workshops organized by the Project, when the second meeting almost doubled number of authors - participants and articles and presentations of the first meeting.

5.5 Analysis of long-term benefits

5.5.1. Direct Nature & Conservation

Project has improved habitats and populations in three Natura 2000 territories, - one for each of the Project Species. For *Emys orbicularis* 38.6 ha of habitats have been improved and 16 new ponds created/restored in Nature Park Silene, and a new population established from 42 young turtles raised in captivity.

For *Coronella austriaca* there were 3.3 ha of habitats improved in Kemeru National Park. NCA Regional Structural unit responsible for supervision of KNP, confirmed in a letter (see Progress Report Annex C.2.8.) that they will announce a tender for forest care clearing necessary for further *Coronella austriaca* habitat improvement here. This will be done with the aim to improve habitat of this particular species in places specified in *Coronella austriaca*

SPP developed by the Project; estimated area is ~20 ha. Although it will be done on the Project site and based on Project results, formally it is outside LIFE, because it will be done without direct involvement of the Project finances or personnel. Initially these measures were planned in 2014, but latter were postponed till 2015.

For *Bombina bombina* there were 26.3 ha of habitats improved in Natura 2000 microreserves Katriniski and Strauti, (whole territories of these microreserves), and 27 new ponds were created/restored here. *Bombina bombina* populations here have been enforced in these sites with 4 069 captivity raised toadlets.

Two new Natura 2000 territories were established for protection of previously unprotected key population of *Bombina bombina* – Katriniski (17.6 ha) and Strauti (18.7 ha).

5.5.2. Long-term Nature & Conservation

The Project has created core areas for conservation of the three rarest amphibian and reptile species in Latvia. Now these are territories with good and healthy populations in key places for species conservation. Main threats for species persistence here (shortage or lack of habitats, insufficient numbers of individuals for new habitat colonization) have been removed. Two new Natura 2000 sites have been established for *Bombina bombina*. All the protected territories supervised and monitored by conservation authorities, agreements with land owners assure the maintaining of improved habitats in state suitable for Project species. However it is necessary to expand conservation efforts to other territories from these core areas, because these are relatively small territories, which need for network of habitats and healthy populations nearby. Necessary actions are described in Project After-LIFE Conservation Plan, and in Species Protection Plans available at NCA.

During the Project *Coronella austriaca* SPP has been prepared, and it is guidance for this species conservation in Latvia. Accordingly to Latvia Species and Habitats Protection Law Article 17 species conservation measures have to be realized in accordance with such plan which is now available.

All three Project species in Latvia are extremely rare, and are on northern limits of their whole species ranges, therefore their conservation here is important effort against whole species range shrinking in EU.

5.5.3. Captivity Breeding Potential

During the Project, RRABC was renovated and fully equipped, and it is being maintained by LES. It has permanent *Emys orbicularis* population, which can be used for population enforcements not only in Latvia, but also in neighbouring countries. It will be used for future *Bombina bombina* population enforcements as well. RRABC has great potential for other reptile and amphibian species breeding programmes, which could be realized here with small investments for additional equipment. Presently LES is searching for funding for breeding of two more endangered species – Great Crested newt (*Triturus cristatus*) and Smooth Snake (*Coronella austriaca*). The RRABC has large potential for conferences, research and training works, which will be done after the finishing of RRABC equipping with furniture.

5.5.4. Dissemination & Cooperation Potential

There have been many dissemination activities during the Project with some of them being starting point for cooperation after the Project. During the International Workshops organized

by the Project, international expert group has been established which was named “Herpetology at Borders of Species Range”. This group consist of 12 experts from 7 countries, who are authorities in different fields of reptile and amphibian research and conservation. It is decided to do regular meetings within this group for experience exchange, training and cooperation in research and conservation. There is also a mailing list for communication via e-mails and skype.

The other result of LIFE organized workshops is establishment of “Herpetology Facts Journal”, where experts can submit their short communications which usually do not fall within the scope of full articles of scientific journals (such as occasional observations, interesting records, brief reports on limited scientific studies or project reports etc.). First issue has been published by DU and it has received ISSN number I2256-0327, and has periodicity twice a year. First issue is based on articles submitted after Projects 2nd International Workshop “Research and Conservation of European Herpetofauna and its Environment: *Bombina bombina*, *Emys orbicularis*, and *Coronella austriaca*”, held in August 2014 in Daugavpils.

6. Comments on the financial report

6.1. Summary of Costs Incurred

PROJECT COSTS INCURRED			
Cost category	Budget according to the grant agreement*	Costs incurred within the project duration	% **
1. Personnel	358 060	354 865,90	99,11%
2. Travel	29 200	24 551,65	84,08%
3. External assistance	184 000	173 702,29	94,40%
4. Durables: total <u>non-depreciated</u> cost			
- <i>Infrastructure sub-tot.</i>	91 000	91 000,01	100,00%
- <i>Equipment sub-tot.</i>	60 300	62 301,64	103,32%
- <i>Prototypes sub-tot.</i>	-	-	-
5. Consumables	10 400	7 426,88	71,41%
6. Other costs	-	-	-
7. Overheads	39 440	48 032,94	121,78%
TOTAL	772 400	761 881,31	98,64%

*) If the Commission has officially approved a budget modification 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

Personnel

Total personnel expenses were 354 865,90 Euro, where 347 916,10 Euro were salaries for 12 employees in DN LZ, and 6 949,80 Euro – one NCA employee salary.

LIFE wages were calculated in accordance with Latvian legislation and circular note on timesheets of 8th December 2010 from LIFE website. Annual Gross Salary was calculated as follows - Salary, personal income tax (25% 2010-2013.07.) (24% from 2013.07.) and social security taxes (Employer's social insurance tax 24,09% (2010-2013), 23,59%(2014) and Employees' social contribution tax 11%(2010-2013), 9%(2014)), non-taxable minimum (64 Euros(2010-2013), 75 Euros (2014) and 100 Euros (2010-2013.07.) 115 Euros (2013.07.-2014) 165 Euros (from 2014) if person have someone dependent), but the project salary did not include vacation pay or sick leave pay. Most of employees (10 persons in DM LZ) signed separate contracts for the work on LIFE project in temporary positions, and their positions were terminated with the finishing of the Project. Only three persons were permanent staffs – Mihails Pupi š, Irina Si ava (both from DM LZ), and Valdis Pil ts (NCA). Some other permanent employees from beneficiaries (accountants and department or institution heads) were also involved into management of the Project as decision makers and finance flow supervisors. However, their involvements were an insignificant part from their regular duties; therefore they cannot be considered as the Project staffs.

For permanent staffs three persons indicated above, annual gross salary consisted of LIFE project salary and salary from organization in which person is working for. During the Project all the beneficiaries fulfilled 2% rule – in DM LZ sum of permanent staff salaries (Mihails Pupi š, Irina Si ava) was 14 044,04 Euro, compared with 111 198,99 Euro part of its total contribution to the Project, but NCA direct investments were 11 107, 73 Euro compared with 6949,80 Euro total salary of its permanent staff Valdis Pil ts.

Personnel working time tables were prepared by the end of each month for each person, they were signed and used for salary calculation. Time tables counted working hours per day and Project Action.

Personal costs were less than it was indicated in the Proposal due to state tax change in year 2014, and because NCA spent less money for their employee than it was planned.

Total amount of personnel costs per position was approximately same as planned in the Proposal. In 2010, after the first Project month and analyzes of the results and work efficiency, DM LZ decided to change contracts and sign new ones with same employees because it was discovered that there is necessity to change responsibilities for more efficient work. DM LZ also increased hourly wages and reduced number of working hours in Project, because employees had part time duties in also other activities.

Travel and subsistence costs

There were 14 international travels during the Project; and also many trips to Project areas with the Project car, whose fuel expenses were 3 875,81 Euro.

Payments for traveling to international conferences were made fully when traveled person submitted report with all invoices and other appropriate documents. In these costs were included: daily allowance, traveling expenses (fuel, ferryboat and plane tickets etc.), hotel expenses and other with conference related payments (such as a conference fee).

Fuel costs were calculated based on the amount of kilometers traveled and project purchases car average fuel consumption (9l/per 100 km). All the spent fuel expenses were covered only for the project purchased car. Each visit to project area was recorded in the log-books, in which were stated car number and model, travel purpose, travel place and kilometers traveled. Fuel was purchased in Statoil service stations and at the end of each month we received bills with amount of fuel purchased and the fuel price. There had been no changes with travel costs.

In last accommodation (21.07.14-04.08.14) V.Vahruševs took hotel out of Latvian legislation allowed sum, but it wasn't done on purpose, because in August in Croatia is a touristic season and all hotels are a bit expensive than it is normally. As it was very late and V.Vahruševs needed to rest he took hotel (this hotel was not luxury class) and later, according to rules of Latvia, write explanation to project manager about this accident.

All the money provided for local travels were used. But for international travels we spent less money than expected, although we did complete all the necessary Project tasks. It was so because in same trip several conferences were visited thereby we saved some of our funds.

External assistance

Total Project external assistance expenses were 173 702,29 Euro (22.8% from the Project's total budget). NCA expenses were 6% from this sum, and these were expenses connected to production of notice boards and brochures. LES expenses composed 42.61 % of this sum (RRABC renovation works). DM LZ had rest of the external assistance expenses (51.39%), and these were external assistance for shrub cutting, pond digging, producing of Coronella species protection plan and Layman's Report, creation of maps, organization of workshops and seminars.

In all the beneficiaries all the procedures connected to purchase of goods or services were done accordingly to the Latvian "Public Purchase Law". In NCA actions for external assistance selected applicants with cheapest price offer.

Largest expenses were RRABC renovation works (Action C.4). DM LZ organized public tender "Rare Reptiles and Amphibian Breeding Centre" building renovation for LIFE-NATURA 2000 project "Conservation of rare reptiles and amphibians in Latvia" purposes" for the renovation works in RRABC. In Latvian legislation it is allowed to realize public tender procedure for other organization, in this case DM LZ carried out tender for LES. Tender announcement was placed on home pages of State Procurement Monitoring Bureau and Daugavpils Municipality. The Procurement Bureau evaluated submitted offer for accordance to legislation, and confirmed it. Accordingly to the regulation for this tender, it was allowed for applicants to inspect the object to be renovated and it was done by several companies. However, only one company prepared application (SIA "MGM PRO"), which met all the criteria, and was signed for the renovation contract. From the Project side, the contract was signed by LES, who was responsible for RRABC renovation Action.

In RRABC renovation works there were separate invoices for infrastructure (materials) and external assistance (works) expenses. It was done because these in the Project Proposal RRABC renovation works were split between external assistance and infrastructure financial forms, and counting all the RRABC renovation expenses under infrastructure costs formally would cause substantial budget modification.

For Project external audit, open tender was announced accordingly to Public Purchase Law Article 8. Tender announcement was placed on home pages of State Procurement Monitoring Bureau and Daugavpils Municipality. There were 3 applicants, from which applicant who met all the criteria and had lowest cost offer was selected. It was auditor company SIA KPMG.

External assistance expenses were less than planned in the Proposal, because tenders for external audit and production of brochures won companies that announced price less than we had expected.

Infrastructure

Infrastructure expenses were 91 000,01 Euro, or 11,94 % of Project total budget. All the infrastructure expenses were done by LES for RRABC renovation.

There was only one tender for infrastructure (RRABC renovation), it is described above under “External assistance”. In the Project Proposal, RRABC renovation works were split between external assistance and infrastructure financial forms, but in reality they were carried out by same company, who won single tender prepared for both, external assistance and infrastructure works (see comments under “External assistance”).

The renovation tender (for action C.4) winner company (SIA “MGM PRO”) purchased everything that was needed for construction works. They purchased all the systems (heating system, water supply and sewerage system, ventilation system, electricity system element, electricity sources – generator) and other materials for renovation of building and construction work.

Payments for infrastructure were divided in two invoices. First invoice was received when construction company did 50 % of contract amount of work. This invoice was fully paid.

First invoice covered: heating system (a wood-heated furnace and 23 radiators with the connecting pipes, stovepipe), ventilation system (in the building was installed all with ventilation connected tubing) and other materials used for renovation of building and construction work (Roof mulch – 200 tin sheets, timber for roof construction and screws as supplement; Building inner walls – concrete, 127 m² plasterboard sheets, screws, plaster, wall joint tape; Floor – tiles, Sound and insulating materials, linoleum and the necessary materials; Windows and door – 28 windows, 6 wooden door; Facade - external wall insulating material (Rockwool), plaster, paint, 14 sill; Stairs; Ceiling - plasterboard sheets in first and second floor, plastic; other supplements – screws, wooden planks, cement mixtures etc.) corresponding to the construction contract estimate.

After all construction works finished we received second invoice for remaining amount of money. By mutually agreement invoice was paid partly. Payment was made partly for water supply system (1 toilet bowl, 1 shower stall, sewage and rainwater pipes), electricity system elements (fire alarm, outlets and the power cords), Electricity sources - generator (diesel generator 7,5 kw).

In both invoices it is clearly indicated that amount of money paid for infrastructure work is separate from payment for external assistance.

Renovated infrastructure is suitable only for nature conservation purposes, and is being used for rare and endangered animal breeding after the finishing of the Project.

Equipment

For the equipment a total of 62 301,64 Euro (or 8,18% from the Project total budget) were spent. A total of 13 purchases were done, DM LZ was the only beneficiary who purchased all the necessary equipment for the Project needs. Before purchasing equipment price inquiries were done to find cheapest available equipment in cases when accordingly to legislation there was no need for open tender.

For purchasing Off-road vehicle there was announced tender “One used car purchase for LIFE-NATURA 2000 project “Conservation of rare reptiles and amphibians in Latvia” needs”. Tender was conducted accordingly to procedure prescribed in Latvian legislation. For tender applied two participants, from who only one was adequate to the tender specification (SIA”KONSULTANT) and later on there were signed contract with tender winner. There was purchased used Toyota Rav 4 car with 6 month guarantee. We chose to buy used car because new off-road vehicle was too expensive and this solution was more cheaper than rent a car.

DM LZ organized single public tender for all necessary RRABC equipment during a similar procedure like it is described under “External assistance”, accordingly to Public Purchase Law Article 8¹. Only applicant was SIA “Salmars”, who met all the criteria and won the contract.

Table with amounts of equipment foreseen in the Proposal and purchased one is given bellow.

Action number	Description	Predicted amount	Actual Amount	Predicted Cost	Actual Cost
A.1	Inflatable boat with electromotor for aquatic species surveys	1	1	1 500	1 500
C.2	Grass and shrub cutter	1	2	2 500	5 368
C.2	Trimmer for grass and shrubs	1	1	700	
E.1	Printer	1	1	200	127
E.1	3 laptop computers with Windows Office programme package	3	3	2 100	2 295
E.1	3 GPS recievers compatable with laptop computers	3	2	600	602
C.4	Projector for overhead presentations in new Amphibian and reptile breeding centre	1	1	700	567
C.4	Equipment for laboratory (for details see form C1c)	-	-	35 000	34 991
E.6	Off-road vehicle for project purposes	1	1	15 000	14 852
E.6	Vehicle trailer for equipment moving	1	1	2 000	2 000

It is impossible to plan every expense correct during the Project preparatory phase; therefore there were deviations from equipment purchases planned in the Proposal. Thus we purchased two grass and shrub cutters instead of the one. During the Project we discovered large amount of adjustment works necessary for habitat improvement, and we purchased two cutters: one grass cutter was small and mobile for cutting small mozaic areas between bushes, threes or for irregular landscape, the other grass cutter was large for cutting in wide, big and more regular areas. The latter was used for Emys site, but former – Bombina and Coronella sites. Transortation of large cutter is problematic. The distance between Bombina sites and Emys sites was 40 km on asphalt road, but distance between Coronella site and Emys / Bombina sites was 270 km. It was faster and much cheaper way to use two different grass cutters same time instead one. Purchase of 2 cutters instead of one did not increase Project total expenses.

We purchased 2 GPS receivers instead of 3, because they were more expensive than evaluated during the Proposal preparation phase. However, it did not cause problems for Project, because of using additional GPS purchased from personal money.

All the purchased equipment is property DM LZ, who is small municipal zoo with mission is nature conservation and ecological education. It is being used only for activities related to this goal (e.g. equipment for rare animal breeding, vehicle for traveling to nature sites).

Consumables

A total of 7 426,88 Euro were spend by DM LZ for consumables. These were:

- 100 tinplates for *Coronella austriaca* survey were purchased. Tinplates were needed to study *Coronella austriaca* placement and check if *Coronella austriaca* is hiding underneath it (Actions A1, E3).
- 100 PIT (passive integrated transponders) sets were used for animal marking. It was used to mark turtles released in wild and their monitoring and to mark snakes for preliminary study and monitoring (Actions A1, E3).
- A total of 20 turtle traps were bought and used in *Emys orbicularis* survey and monitoring (Actions A1, E3).
- Animal food that was used only for turtles kept in LES RRABC for Project purpose and not used for exotic animals kept in Latgale Zoo building. Hence we could ensure that this food was used only for Project animals.

Finances for office consumables from the Proposal were transferred under “Overheads”, because we could not control that they were used only for the Project.

Overheads

Overheads were 48 032,94 Euro (or 6,4% from the budget). In overheads there were all the payments that were not included in project proposal but are associated with the project and its progress. These were:

- Payment for electricity and heating bills for the Latgale Zoo rooms where animals for the Project purposes were kept and for working rooms for Project employees (main part of expenses);
- Office consumables used for Project purpose (minor part).

6.2. Accounting system

The Project was accounted at accountancy of DMLZ. Special bank account was created for the Project, and all the payments were done from this account. This account was used only for the Project, and hence Project expenditures were separated from the budget. All the Project accountancy was realized in accordance with lists of codes specified in Latvian legislation.

All the expenses were covered accordingly to signed contracts (employment contracts, purchase contracts, service contracts etc). Bills with the Project ID (Project full name or acronym) were received from companies, and were paid from the Project account. Bills with no Project ID were not accepted. In some cases (renovation and equipment works etc.) payments were done after signing of work acceptance agreement.

The time, which employee spends working on the project, was recorded and specified per day using timesheets, which were signed by employee and approved by project manager (or by representative of the Municipality for project director's timesheet). Timesheets provided information for each employee by day about total hours worked, hours worked on the project and on other activities.

6.3. Partnership agreements

Each partner opened separate account especially for the Project. All the financial transactions from coordinating beneficiary to associated beneficiaries were done after receiving their financial reports. Partnership agreements had respective articles that determined submission

of quarter and yearly reports to coordinating beneficiary, with Project expenses indicated and supplemented by copies of payment documents. For Partnership Agreements see Inception Report Annexes 5.1. and 5.2.

6.4. Auditor's report/declaration

External auditor: KPMG Baltics SIA, address: Vesetas iela 7, Rīga, LV-1013, LATVIA, web site: <http://www.kpmg.lv>.

Audit Report Conclusions are positive (page 17): “On the basis of the financial control, in accordance with the programme described above, we consider that we have obtained reasonable assurance that the financial report of project no LIFE09 NAT/LV/000239 title: Conservation of rare reptiles and amphibians in Latvia, start date 1 September 2010, end date 31 August 2014, of the expenses, income and investments incurred/made by Municipality of the Daugavpils City, the Latgale Ecological Society and the Nature Conservation Agency of the Republic of Latvia in connection with the abovementioned project within the time limit laid down by the Commission have been prepared in accordance with the LIFE+ Programme Common Provisions, the national legislation and accounting rules.”

For Audit Report see Annex E.4.-2.

6.5 Summary of costs per action

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
A1	Preliminary survey	34 440	2 000	0	0	1 500	0	0	3 427	0	41 367
A2	Management plans	34 740	0	0	0	0	0	0	0	0	34 740
A3	Coronella SPP	19 420	0	3 000	0	0	0	0	0	0	22 420
A4	Agreements I	0	0	0	0	0	0	0	0	0	0
A5	Agreements II	0	0	0	0	0	0	0	0	0	0
C1	Natura 2000	3 360	0	0	0	0	0	0	0	0	3 360
C2	Habitat management	25 200	1 000	32 655	0	5368	0	0	0	0	64 223
C3	Population enforcement	53 480	200	0	0	0	0	0	4 000	0	57 680
C4	RRABC capacity	0	0	107 004	91 000	35 000	0	0	0	0	233 004
D1	Notice boards	4 950	0	2970	0	0	0	0	0	0	7 920
D2	Website	21 880	0	1 500	0	0	0	0	0	0	23 380
D3	Layman's Report	6 400	0	1900	0	0	0	0	0	0	8 300
D4	Media work	6 400	0	0	0	0	0	0	0	0	6 400
D5	Local seminars	19 200	0	3960	0	0	0	0	0	0	23 160
D6	Brochures	6 000	0	7 453	0	0	0	0	0	0	13 453
D7	Networking	19 200	19 204	6 000	0	0	0	0	0	0	44 404
E1	Management	83 673	0	0	0	3591	0	0	0	0	87 264
E2	Steering groups	1 600	0	0	0	0	0	0	0	0	1 600
E3	Monitoring	15 120	1941	0	0	0	0	0	0	0	17 061
E4	External audit	0	0	7 260	0	0	0	0	0	0	7 260
E5	After-LIFE	0	0	0	0	0	0	0	0	0	0
E6	Vehicle	0	0	0	0	16 852	0	0	0	0	16 852
Over-heads											48 033
	TOTAL	354 866	24 552	173 702	91 000	62 302	0	0	7 427	0	761 881

7. Annexes

7.1 Administrative annexes

Partnership agreements: see Inception Report: Annex 5.1.; Annex 5.2.

Agreement with co-financer: see Inception Report: Annex 5.3.1.

Annex 4.1.-1. Protocols of Steering Group meetings in 2014.

Annex E.6.-1. Copies of documents on the one off-road vehicle and one trailer in DM LZ balance.

Annex E.6.-2. Photos of the off-road vehicle with LIFE logo and of the trailer with LIFE logo.

7.2 Technical annexes

Annex A.2.-1. Revised *Bombina bombina* population management plan (PDF only)

Annex A.3.-1. Ordinance Nr. 261 (In Latvian) (PDF and Paper).

Annex A.3.-2. PDF issue of approved SPP placed on NCA website (In Latvian) (PDF only)

Annex A.3.-3. SPP paper issue with ISBN (In Latvian) (Paper).

Annex A.3.-4. SPP paper issue with ISBN as PDF file (In Latvian) (PDF).

Annex A.3.-5. SPP PDF issue with ISBN (In Latvian).

Annex A.5.-1. Agreement for 20 years for Silene (In Latvian).

Annex A.5.-2. Agreement for 20 years for Katriniski (In Latvian).

Annex A.5.-3. Agreement for 20 years for Strauti (In Latvian).

Annex A.5.-4. Agreement for 20 years for Strauti from LES (In Latvian).

Annex A.5.-5. Microreserve Strauti proposal and Expert estimation (In Latvian).

Annex A.5.-6. NCA, SFS, and MEPRD official letter to all landowners (In Latvian).

Annex A.5.-7. Contract on usage of Strauti for Nature conservation for 20 years (In Latvian).

Annex C.1.-1. Ordinances of NCA and SFS on creation of microreserves Katriniski and Strauti with official coordinates and maps (In Latvian).

Annex C.1.-2. MERD letter on Natura 2000 territories establishment in microreserves Katriniski and Strauti (In Latvian).

Annex C.1.-3. Proposal for Katriniski microreserve with official coordinates and maps (In Latvian).

Annex C.1.-4. Proposal for Strauti microreserve with official coordinates and maps (In Latvian).

Annex C.2.-1. Maps before and after habitats improvement and photos of created ponds examples for *Bombina bombina*.

Annex C.2.-2. Maps before and after habitats improvement and photos of created ponds examples for *Emys orbicularis*.

Annex C.2.-3. Habitats improvement photos (JPEG only).

Annex C.3.-1. Releasing of 42 young adults and semi adults turtles in SNP habitats improved during Action C.2.

Annex C.3.-2. Releasing of last group of *Bombina bombina* during the visit of LIFE External monitoring team representative Mr. Rolands Ratfelders.

Annex C.3.-3. Certificate of releasing of *Emys orbicularis* in 2014.

Annex C.3.-4. Certificate of releasing of *Bombina bombina* in 2014.

Annex C.4.-1. Renovation and equipment basin works in RRABC are completed.

Annex C.4.-2. Usage of second floor of RRABC.

Annex C.4.-3. Maps and photo of six large outdoor basins (ponds).

Annex E.3.-1. Results of monitoring of *Coronella austriaca* habitat improvement actions (PDF).

Annex E.3.-2. Results of monitoring of (*Bombina bombina* habitat improvement actions (PDF).

Annex E.3.-3. Results of monitoring of *Emys orbicularis* habitat improvement actions (PDF).

Annex E.5.-1. After-LIFE Conservation plan (in paper).

Annex E.5.-2. After-LIFE Conservation plan (PDF).

7.3 Dissemination annexes

7.3.1 Layman's report

Annex D.3.-1. *Layman's Report* PDF ISBN with LIFE and Natura 2000 logos.

Annex D.3.-2. *Layman's Report* Paper ISBN with LIFE and Natura 2000 logos (Paper format only).

Annex D.3.-3. *Layman's Report* recipients.

7.3.3 Other dissemination annexes

Annex D.1.-1. Map of locations, table, and photos of notice boards.

Annex D.4.-1. All 32 Press releases (PDF only).

Annex D.4.-2. Copies of the all publications (if possible) (PDF only).

Annex D.7.-1. Workshop bag of 2nd international workshop (PDF and real).
Annex D.7.-2. Book of abstracts of 2nd international workshop (PDF only).
Annex D.7.-3. Proceedings of 2nd international workshop (PDF only).
Annex D.7.-4. List of scientific articles, scientific meetings presentations and abstracts.
Annex D.7.-5. Articles, abstracts and materials of scientific meetings (PDF only).
Annex D.7.-6. List of authors of International Workshop.
Annex D.7.-7. List of participants of International Workshop in person.
Annex D.7.-8. Schedule of International Workshop.
Annex 7.3.3.1. Photos of the Project.

7.4 Final table of indicators

8. Financial report and annexes

Annex E.4.-1. Independent Audit Report (in Paper).
Annex E.4.-2. Independent Audit Report (PDF copy).
Standard Payment Request and Beneficiary's Certificate
Beneficiary's Certificate for Nature Projects
Consolidated Cost Statement for the Project
Financial Statement of the Individual Beneficiaries