

LIFE Project Number LIFE13 NAT/HU/000183

MIDTERM Report 2. Covering the project activities from 01/07/2014 to 31/10/2017

Reporting Date **15/11/2017**

LIFE+ PROJECT NAME or Acronym

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Beneficiary Data
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2. Executive Summary

2.1. Project objectives:

- 1. It aims to strengthen the European core populations of *Aquila heliaca* and *Falco cherrug*, by stopping the decline of their main food sources, the small mammals (*Spermophilus citellus*, *Cricetus cricetus*, and *Lepus europeus*).
- 2. The project aims to increase public awareness towards the birds of preys and especially their small mammals prey too.
- 3. The project also aims to demonstrate how to adjust different nature conservation priorities when we carefully consider the life style and habitat demand of *Sicista subtilis trizona* and *Nannospalax montanosyrmiensis*.

2.2. Deliverable and outputs:

Up-to-date distribution maps of S. citellus, C. cricetus, N. montanosyrmiensis and S. trizona were prepared for the entire area of Hungary, habitat suitability and the trend of target species were analysed (A1). Results of the genetic examination of Hungarian samples is ready (A2). The examination of the collected Hungarian stress hormone samples was ready (A3). Land Stewardship Advisory Service established (A4). Airport management guidelines ready for printing (A5). An up to date digital Reintroduction Protocol for S. citellus repatriation based on the latest developments was developed (A6). Recommendation for the flood and inland water prevention activities in the S. citellus habitat prepared and received by the concerned authorities (A7). Baseline data of public awareness available (A8). Multifunctional equipment purchased (A9). 103.9 ha grassland purchased and reconstructed, (B1, C4). Captive breeding facilities established and 13 animals were moved to there (C1). Careful health checks have been done and any serious epidemic were found (C2). 55 ha stepping stones among Natura 2,000 sites established and maintained (C4). 17 new S. citellus population, two new C. cricetus populations and N. montanosyrmiensis population was established (C5). Careful guarding and maintenance of repatriated populations (C6). Good cooperation established with hunters and reduced number of predators (C7). Essential data collection for further conservation measures (C8). Prey composition data by on-line video streaming and photo-trapping were collected (D1). Land use data of F. cherrug & A. heliaca were collected by PTTs (D2). Several forums were organised (E1), 1,000 logo stickers, 7,000 sticker of target species, 2,000 copies of leaflets on C. cricetus, 1,000 copies of brochures on C. cricetus and 2,000 copies of brochure on target species printed, 4,000 copies of educational exercise booklet prepared, 5,000 leaflets of the project was prepared, 4,000 copies of colouring book for children produced (E2), 2,000 pc of "Keep the dog closed" A2 size posters printed and displayed (E4). Project Web is functioning (E6). 22 information boards in Hungary and 10 pc in Romania prepared and erected. One roll-up got to produced and displayed in events (E7). 1,500 copies of B1 size posters in Hungary and 300 copies in Romania, 7x500 stickers and 7 magnetic boards are ready, 1,000 T-shirts were prepared (E8). Four TV and radio broadcast, 10 printed and 6 online articles and 6 scientific papers published (E9).

2.3 Summary of the project implementation:

During the implementation the project was facing several obstacles that led to delays in the implementations, such as the delays in gaining the permissions in Romania and during the

first year in Hungary. Due to the work of the project management this problem was later overcome in Hungary and the permissions were issued in time.

Also numerous changes were requested and implemented:

The reason of most of the changes was that as starting the preparatory actions previously unknown information became available and a better understanding of the need of actions favouring the protection of the target species were understood (e.g. repatriation of *C. cricetus*) Other changes were due to unexpected problems appearing during the project implementation and leaded to a situation which resulted in the implementation of previously unforeseen activities became necessary (e.g. repatriation of *N. montanosyrmiensis*) It also happened that the original activity had to be changed due to the results of a previously implemented activities. (e.g. the improving of genetic status of *S.citellus* population by mixing them with others). The modifications and originally not foreseen activities were implemented in order to be able to reach the original objectives of the project, to strengthen the population of small mammal species. Administrative changes became necessary due to the excessive bureaucracy of public organizations.

Apart of the changes and the delays the project is proceeding well to achieve the original objectives. Baseline survey regarding the populations of target species were implemented and the populations were monitored. With the use of the monitoring data and with the collection of former data the population trends of the species were analysed. Also the genetic, stress and health status of them was and is being assessed. Suitable habitats were purchased and reconstructed and stepping stones were created among Natura 2000 areas to provide the long-term survival of the species. *S. citellus C. cricetus* and *N.montanosyrmiensis* were relocated into suitable habitats. Facilities were prepared for indoor propagation of *S. citellus* and the breeding had begun. Mainly adult but some juvenile birds were tagged with PTT to collect information of land use and hunting habits. The prey assortment was identified by using video cameras and photo traps.

In most of the cases the planned result of the project had been partly or fully achieved, the implementation of the conservation and monitoring activities are ongoing. Only the captive breeding programme is in significant delay at the moment, but has been launched in 10/2017.

2.4. Summary of chapters:

2.3.1. Introduction:

Includes the overall objective and the specific objectives of the project, the sites are involved, the species are targeted, the main conservation issues being targeted (including threats), the socio-economic context and the expected long term results.

2.4.2. Administrative part

Includes the description of the management system, description and schematic presentation of working method, including overview of project phases, activities and planning, presentation of the beneficiaries, changes in the project management structure, partnership agreements status (incl. date of signature) and key content, evaluation of the management system, description of the project management, the project management process, the working method, the problems encountered, the partnerships and their added value, including comments on any significant deviations from the work plan, Communication with the Commission and Monitoring team.

2.4.3. Technical part

includes the technical progress

A: Preparatory actions (A1-A9),

B: Land purchase (B1)

C: Concrete conservation actions (C1-C8)

D: Monitoring of the impact of the project actions (D1-D5)

F5: Networking

and the dissemination progress E1-E10

2.4.4. Financial Part

The work was based on the annual work plans and budget. The project management follows the work and checked the expenses monthly and quarterly in case of foreign partners.

 $1,916,308 \in$, 66.51% of the planned total budget had been spent during the reporting period. There was some relocation among the cost categories in consultation with EC but within the 10% or $30,000 \in$ limit.

3. Introduction

3.1. Overall and specific objectives

3.1.1. Overall objectives

The project's overall objective to reinforce the on-going efforts to strengthen the European core populations of *Aquila heliaca* and *Falco cherrug*, globally threatened species on Annex I of the Birds Directive also identified as priority species for LIFE-Nature projects.

3.1.2. Specific objectives

- The project aims to stop the decline of the existing small mammals (*Spermophilus citellus*, *Cricetus cricetus*, and *Lepus europeus*) population as the essential food sources of *A. heliaca & F. cherrug* where they exist.
- The project works as a demonstration project in some actions to prepare the background scientifically for the possible future increase of those populations based on the best practices applied.
- The project aims to increase public awareness towards the birds of preys and especially their small mammals prey too.
- The project also aims to demonstrate how to adjust different nature conservation priorities when we carefully consider the life style and habitat demand of *Sicista trizona* and *Nannospalax montanosyrmiensis* strictly protected species in Hungary and adjusting our work for the benefit of all species.
- Strong, healthy genetically stable *S. citellus* population will provide suitable food for *A. heliaca* and *F. cherrug* population. *S. citellus, C. cricetus, N. montanosyrmiensis,* and *L. europeus* will increase in the Natura sites and around them within 10 km. *S. citellus, C. cricetus,* will increase in the food of *A. heliaca and F. cherrug.*
- More healthy and bigger *S. citellus* population.

3.2. Sites are involved

There are 27 Hungarian and 17 Romanian Natura 2000 areas involved in the project.

3.2.1. In Hungary

HUBF20003Kab-hegy; Grassland along HUBF20011Felső-Nyirádi-erdő és Meggyes-erdő, HUBF20031Szentkirályszabadja, HUBN10002, HUBN20034 Borsodi-Sík and Borsodi HUBN10003. HUBN20009Tard-környéki HUBN10007. Mezőség: erdőspuszta; HUAN20004Hernád-völgy és Sajóládi-erdő; HUDI10002, HUDI20039Pilis és Visegrádihegység (Strázsa hegy, Dömörkapu és Kesztölci dombok); HUDI20047 HUFH10001, HUFH20002Fertő-tó; HUFH10004Mosoni-sík; Szigeti homokok; HUFH20001Rábaköz; HUFH20007, HUFH20009Péri repülőtér & Gönyüi homokvidék; HUFH20011Rába; HUFH30004Szigetköz; HUFH30005Hanság; HUHN20144Kenderesilegelő; HUHN20145Kecskeri-puszta és környéke; HUKM10003, HUKM20014Csejt-puszta (Dévaványa környéki gyepek); HUKN20008Déli-Homokhátság; HUON10001, HUON20018 Örség (Szalafő and Csörötnek); HUON20011Kenyeri reptér.

3.2.2. In Romania

ROSPA0015, ROSCI0048, ROSCI0049, ROSCI0231, ROSCI0350Câmpia Crișurilor; ROSPA0016, ROSCI0021Câmpia Ierului; ROSPA0069, ROSCI0108Lunca Mureșului Inferior; ROSPA0078, ROSCI0115Mlaștina Satchinez; ROSPA0103, ROSCI0104Valea Alceului; ROSCI0068Diosig; ROSCI0287Comloșu Mare; ROSCI0345Pajiștea Cenad; ROSCI0349Bulgăruș.

3.3. Species are targeted

Imperial Eagle (Aquila heliaca), Saker (Falco cherrug), Ground-squirrel (Spermophilus citellus), European hamster (Cricetus cricetus), Hare (Lepus europeus), Hungarian birch mouse (Sicista trizona) and Lesser blind mole rat (Nannospalax montanosyrmiensis)

3.4. Main conservation issues being targeted (including threats)

The rodents population especially *S. citellus*, *N. montanosyrmiensis*, *C. cricetus*, *L. europaeus* are shrinking today. It means that the increasing birds of prey population facing decreasing rodents population that is resulting in / that results increasing conflict with fanciers and hunters. (D1, D2)

- Fragmentation of habitat and insulation of the probably inbred small mammals populations; (A1, A2, A4, A6, B1, C1, C3, C4, C5, C6, D3, D5, F7)
- Diseases of small mammals; (A3, C2, D3)
- Poisoning; (A4, A5, C6, D3)
- Loss of habitat; (A4, A5, A7, C4, D3, D5)
- Predators; (C7, D3)
- Lack of information; (A8, D3, D4, E1, E6, E7, E9, E10, F5, F6)
- Lack of public awareness; (A8, D3, D4, E1, E2, E3, E4, E5, E8, E10)
- Lack of food sources in the breeding period; (A3, C1, C5, D3)
- Conflict with hunters (A4, D3, D4).

3.5. Socio-economic context

Stakeholder groups and their likely attitude to the project: Governmental bodies:

- Nature conservation authorities: + promote species and habitat conservation, long-term nature conservation ensured.
- Agricultural and rural development authorities: + reconciling land-use priorities, long-term nature conservation ensured.

Regional and local municipalities: +/- eco-tourism, possible restrictions

<u>Land-owners</u>, <u>land-users</u>: +/- possible future funding and/or restrictions on agricultural activities in core areas.

<u>Tourists</u>, <u>travel agencies</u>: +/- possible future restrictions on tourism in nesting areas, increase in tourism potential of the area.

<u>MME/BirdLife Hungary:</u> + promote species and habitat conservation, long-term nature conservation ensured.

Other nature conservationists: + contribute to a long-term, realistic species and habitat conservation and management project.

<u>Scientific and educational institutes:</u> + directly and indirectly share the outcome of the project.

<u>Local people:</u> + increase in tourism potential of the area.

Hunters: -/+ increase of raptors, improved habitat

Social-economic impact of the project:

- 1. Land purchase provide income for landowners
- 2. Impact of the compensated set aside on bounds on the farmers' economy.
- 3. Impact of the compensated set aside on bounds on the hunters' economy.
- 4. Impact of assisted reduction of predators on the hunters' economy.
- 5. Impact of birds of prey on farmers' and hunters' economy.
- 6. Impact of extensive farming of the restored areas on the farmers' and hunters' economy.

The Agricultural Environmental Programme (AEP) came to existence to support sustainable agriculture and to aid the protection of the living environment. Zonal subsidies are available for ESAs (Environmental Sensitive Area) within the programme that aims to land use practices favourable for the target species (e.g. *A. heliaca & F. cherrug*).

3.6. Expected longer term results

As a result of the project the main reasons of the decrease of small mammals will be better understand and the decrease of these main food sources of *A. heliaca* and *F. cherrug* will be stopped.

- Strong, healthy genetically stable *S. citellus* population will provide suitable food for *A. heliaca* and *F. cherrug* population.
- S. citellus, C. cricetus, N. montanosyrmiensis, and L. europeus will increase in the Natura sites and around them within 10 km.
- S. citellus, C. cricetus, will increase in the food of A. heliaca and F. cherrug.
- Gene banks will be established and captivity breeding will provide sources for the improvement of fragmented small populations.
- Potential habitats will be reconstructed and about 2000 *S. citellus* will be reintroduced from strong viable populations.
- The fragmented populations will be connected by stepping stones.
- The public awareness would be increased towards these species.

4. Administrative part

4.1. Description of the management system

The project manager position was outsourced by tender to FENCON Ltd. A Project Manager together with the FHNPD staff Project Technical Coordinator and Project Administrator did the project management. Each of the associated beneficiaries appointed a coordinator as a contact person for the project management. Partnership agreements were signed. An electronic Project Hand Book was prepared and it was introduced to all staff and volunteers participating in the project by training. Annual work plans were prepared by the beneficiaries and approved by the project manager. A Steering Committee was formed to monitor the project implementation. The project managemet regularly visited the beneficiaries to ensure the smooth implementation of the project and prepared the scheduled reports to EC. The Project Administrator continuously checked the beneficiaries' financial reports and arranged the money transfer for the beneficiaries.

4.1.1. Description and schematic presentation of working method, including overview of project phases, activities and planning

In the *preparation phase* the project management started the work with work planning. The work was divided by years and the first year by months. The budget was also adjusted to the work plan. In the main time technical, communication and financial guidelines were prepared and an electronic Project Handbook were compiled including the Partnership Agreement, guidelines, work plans, budgets, common provisions etc. Training was organised for all staff involved in the project to standardise the implementation of the work. After the training the *implementation phase* started. The Project Manager tracked the progress by monthly reports provided by the partner coordinators and by visits to the project sites. The project management assisted the beneficiaries by all means through telephone, internet and personal visits. The Steering Committee followed up the work's progress annually.

4.1.1.1. Initial technical meeting

The Coordinating Beneficiary invited the Associated Beneficiaries for a technical preparation meeting on 12.09.2014. The meeting was held in the Budapest Zoo. (Refer to Annex F1/1 of IR).

4.1.1.2. Contracting Project Management

- Coordinating Beneficiary employed the Project Technical Coordinator and the Project Administrator from 01.11.2014. to speed up the work.
- This speed up the tender process also for the Project Manager who was contracted 12.12.2014.

4.1.1.3. Project management activities

- Partner co-ordinators were appointed by all partner organisations in September 2014.
- Detailed work plan and budget of all partners were divided for years and in 2015 for months and included in the Project Hand-book.
- The Technical Coordinator took part on the Kick of Meeting in Budapest on 11 November 2015 (Refer to Annex F1/2 of IR).
- Project Hand-book were prepared electronically for each project partners and introduced during the project training (Refer to Annex F1/3 of IR). It was

amended time by time with some up to date documents like "Permission to collect samples for evaluation of genetic status of *S. citellus*" (Refer to Annex A2/3 of MTR1), or with the Updated *S. citellus* Reintroduction Protocol (Refer to Annex A6/1 of MTR1) and the questionnaire for airport grassland management (Refer to Annex A5/1 of MTR1).

- Two days project training was organised in Királyrét in Hungary on 10-11 February 2015, where partners' team took part to learn about the technical, administrative and financial issues of the project implementation (Refer to Annex F3/2 of IR).
- Partnership Agreements and Financial Amendments were prepared, signed and submitted with the Inception Report (Refer to Annexes 7.1/1-7.1/13 of IR)
- The external auditor was selected and contracting in progress (Refer to Annex F4/1 of IR).
- Steering Committee was established. The first meeting was held in FHNPD in Sarród on 19 March 2015 (Refer to Annexes F2/1-F2/7 of IR). The second was held in FHNPD in Sarród on 23 March 2016 (Refer to Annexes F2/1-F2/5 of MTR1). The third was held in SASKÖZPONT in Jásberény on 29 March 2017 (Annexes F2/1-F2/5).
- Project Manager announced the project in a press conference together with the announcement of *Spermophillus citellus* as "the Mammal of the Year" in the Museum of Natural History on 27 March (Refer to Annexes E9/1-E9/7 of IR).
- The Project Manager establish hotline to the head of Dept. of the Nature Conservation Authority to speed up the permission process (Refer to Annex F1/1 of MTR1).
- The project management organised annual evaluation meeting in Budapest (FÁNK) on 04.09.2015. (Refer to Annexes F1/2-F1/4 of MTR1). The 2016 years' meeting was held in Kaposvár (Kaposvár University) on 11.10.2016 (Annexes F1/1-F1/2). The 2017 years' meeting was held in Sarród (FHNPD) on 26-27.10.2017 (Annexes F1/3-F1/4).
- The project management organised a coordination meeting for preparation of the implementation of A2 action what was in delay due to delaying permission- in Tihany (BfNPD) on 24.02.2016 (Refer to Annexes A2/5-A2/6 of MTR1).
- The Project Manager, the Technical Coordinator and the Project Administrator visited the project partners to assist them in the project start and follow up the work progress (Refer to Annexes F1/5-F1/7 of MTR1) (Annexes C2/4 & F1/5).
- Regular electronic communications (by emails and telephones) are going on between the project manager and administrator and the partner co-ordinators.
- Partners are submitting monthly progress and financial reports to the project management and the Project Manager to the External Monitoring team.
- The project management initiated a meeting among DINPD, the project partner MADÁRVILÁG and the project management, to discuss the cooperation among the parties. The meeting took part on 17.01.2017 (Annexes F1/6-F1/7).
- The project manager urged to set up a *S. citellus* advisory board to co-ordinate the assist the Ministry of Agriculture policy work and co-ordinate the work nationwide. The Ministry of Agriculture extended the existing Blind-mole rat Committee with suchlike (Annexes F1/8-F1/9).

	Tab		TIM	ET A			ropos	ed v			lule ar	nd ii			tation	!			
Action		2014	137			015	137			2016	137			2017	137			018	137
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7.	+		✓	 <mark> </mark>	 	 <mark>√</mark>	<u> </u>	V	✓	<u>✓</u>	<u> </u>	-	✓	<u> </u>	<u> </u>	✓	-	→	-
8.	+	-	<i>\</i>	-	→	-	-	<u> </u>	-	<u> </u>	✓	-	_	-	✓	✓		<u> </u>	├──
D. Monitor	ing o	 f the i	 mnact	of tl	he nr	l niect s	ctions	<u>. </u>		_			_	_	_				<u> </u>
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E. Public a	ware	ness ai	nd dis	semi	natio	n of re	sults:												
1.			✓	✓	✓	√	✓	✓	✓	✓	✓	~	✓	✓	✓	✓	✓		
2.			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	√
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8.				✓	✓	✓	<u> </u>	<u> </u>	✓	<u>✓</u>	✓	<u> </u>	✓	<u> </u>	✓	✓	√	<u>✓</u>	✓
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10.																✓	✓	<u>✓</u>	

	Tal	Table 1: TIMETABLE - Proposed work schedule and implementation																	
Action		2014			2	015				2016		2017			2018				
Number		III	IV	I	II	Ш	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
project		S		IR				MR1					MR2			•	•	FR	
schedule		prepa				M					M E	N	T	Α	T	I	O	N	
F. Overall	project operation and monitoring of the project progress:																		
1.		✓	✓	✓	✓	<u> </u>	✓	V	✓	✓	✓	V	✓	✓	✓	<u>✓</u>	✓	✓	✓
2.				√				✓				V				<u>✓</u>			
3.			✓	✓															
4.				√	√	✓													
5.		✓	√	✓	✓	✓	✓	V	✓	✓	✓	V	✓	<u> </u>	✓	<u>✓</u>	<u>✓</u>	✓	✓
6.														✓	✓	√	✓	✓	
7.																			✓

S=Start IR=Inception Report; MR=Mid-term Report; FR=Final Report

✓ planned but not implemented B2>C4

✓implemented as planned

✓implemented but not planned

✓scheduled for next phase

4.1.2. Presentation of the beneficiaries

<u>Co-ordinating beneficiary:</u> Fertő-Hanság National Park Directorate (FHNPD)_is responsible for 46,000 ha protected areas. There are about 10 pairs *F. cherrug* and 6-7 pairs *A. heliaca* within the national park

Associated beneficiaries:

In Hungary:

Balaton-felvidéki National Park Directorate (BfNPD), plays an important role in the conservation of *S. citellus* populations in Hungary. There are 48 ground squirrel colonies within its operational area.

Budapest Zoo & Botanical Garden (FANK) is more than 145-year-old and has long history in keeping, breeding and showing animals.

Bükk Mammalogical Society (BEKE) has been engaged in research and conservation of mammal species since more than a decade.

KAPOSVÁR University studying two of the target species, S citellus and L europeus, for over a decade and published a dozen research papers on topics related to their conservation.

Kiskunság National Park Directorate (KNPD) managing one of Hungary's most characteristic geological area is the Danube-Tisza Interfluve region.

MADÁRVILÁG Nonprofit Közhasznú Kft main activities are surveying and monitoring species and habitats, active conservation measures in the field.

MAVÍR Zrt. Is responsible for bird safety on high voltage electric power lines.

MME/BirdLife Hungary a member of BirdLife International was created to protect birds and their natural environment

NIMFEA Nature Conservation Society is engaged with nature conservation since many years, conserving biodiversity in local and regional level.

Örségi National Park Directorate (ÖNPD) controls and manages 50,000 ha nationally protected area and 70,000 ha Natura 2000 area. It carries out several species conservation programmes.

In Romania:

Association MILVUS Group is dedicated to bird and nature protection, acting in the fields of conservation, education, research and consultancy

Environmental Protection Agency of Satu Mare County (EPASM) is a provincial environment protection agency.

4.1.3. Changes in the project management structure

According to the new project management structure the project is managed by an external Project Manager who was selected by tender. The Project Manager has two assistants, a Technical Coordinator and a Project Administrator who are employed by the Coordinating Beneficiary specifically for the project work and for the project duration.

The Project Administrator is substituted from 15 May 2017 because of her maternity leave.

The Project Manager's tasks:

Administration

- Establish and get to maintain the administration system necessary for running the LIFE+ Project, particularly the reporting systems.
- Ensure that proper accounting and financial reporting system established and maintained what is necessary for running the LIFE+ Project, and monitoring of budget.
- Ensure that purchase of goods and services fully comply with the Hungarian and EU regulations.
- Inform and advise the project Steering Committee on project progress. Prepare reports for the project Steering Committee.
- Prepare reports for the European Commission.
- Ensure good communication between different partner organisations.

Co-ordination

- To deliver the project according to contractual terms or its amended variation approved by the European Commission, by planning and progressing the project tasks using suitable project management and monitoring techniques as necessary and appropriate. The Project Manager is expected to be fully aware of all deliverables, timing & resourcing; ensuring that they are implemented or a formal agreement is made with the European Commission for a contractual change.
- To ensure that suitable budgeting and resource planning is set up within each and all beneficiaries for the duration of the Project.
- Provide training for Beneficiaries' staff involved in the project's implementation.

Production of Project Handbook

 Prepare a Project Handbook for Project staff and other key people to set quality standard and ensure consistency across the Project.

Public Affairs and Communication

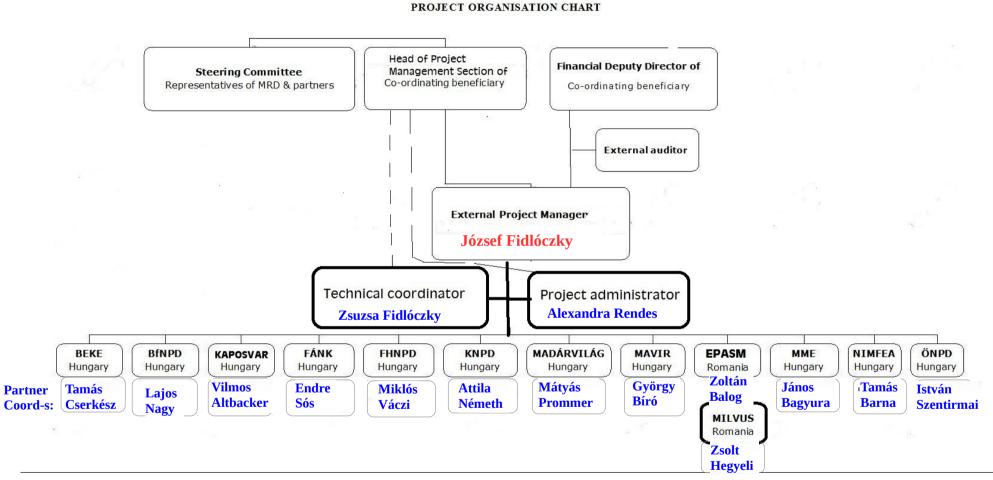
- Ensure that all dissemination tasks specified within the application document are completed.
- Respond to queries about the LIFE+ Project from press, media and general public as well as other similar projects.

Technical Coordinators' Tasks:

- 1. Assist the Project Manager in the management of all technical issues.
- 2. Coordinate the preparation of the technical guidelines of the Project Handbooks.
- 3. Assist the Project Manager in the training of project staff.
- 4. Prepare the Steering Committee meetings.
- 5. Coordinate the annual work planning of the beneficiaries.
- 6. To co-ordinate the Project Team to carry out project tasks as required, ensuring that they are aware of their roles, tasks and responsibilities within the team and they have a suitable overview of the whole project.
- 7. Follow up the implementation of the work plans.
- 8. Ensure that project web site set up and functioning properly.
- 9. Promote awareness of the aims, activities and results of the LIFE+ Project.
- 10. Ensure that project staff, project beneficiaries and all other interested parties kept informed of project progress.

Project Administrator's tasks: did not change comparing to the originally planned.

4.1.4. Up to date organigramme of the project team and the project management structure at the end of the project Names and functions of the participants is given in (Refer to Annex F1/8 of MTR1) (Annex F1/10)



4.1.5. Partnership agreements status (incl. date of signature) and key content

Partnership agreements were prepared according the "LIFE+ Guidelines for Partnership Agreements" and were signed on 09.01.2015 and submitted with the Inception Report. (Refer to Annexes 7.1/1-7.1/12 of IR).

A Modification was signed with NIMFEA due to transferred dissemination work and costs (Refer to Annex 7.1/13 of IR).

Modifications were signed with BfNPD, MME and NIMFEA due to reallocation of some work (Annexes 7.1/1-7.1/3).

Financial Amendments were signed with the Associated Beneficiaries as soon as the 2015 years budgets were approved (Refer to Annexes 7.1/14-7.1/18 of IR).

Amendments to Grant Agreement is foreseen according to Article 15 of the Common Provisions because the external assistance costs increased due to reallocation of cost by law.

4.2 Evaluation of the management system

4.2.1. Description of project management

The applied project management system functioned well. It has established an efficient cooperation and it built a good partnership among state nature conservation organisations, NGOs and corporate even among neighbouring countries.

4.2.2. The problems encountered

The main problem was the slow and very bureaucratic governmental system in both countries:

- It hampered the procurements and even the start of the project work.
- Lack of permissions in time delay some activities especially A2.
- The delay of C1 action due to unknown reasons. KAPORVÁR was referring to the low procedure for enquiring the necessary permissions but we did not get any evidence of it despite of multiplied requests.
- Communication activities have to be transferred from national parks to NGOs to keep schedule.
- Action B2 had to be converted to Action C4.
- Some adjustments were needed on the work and work schedule but it was not significant.

4.2.3. Communication with the Commission and Monitoring team

The project management has a good communication with the Monitoring team and the Commission. The Project Manager has informed the External Monitor about the monthly progress and escorted him during his project inspections. The External Monitor and the commission answered all questions promptly and helped to solve all problematic issues.

5. Technical part

Both *A. heliaca* and *F. cherrug* population is increasing in the Carpathian basin thanks to the conservation effort of the last decades and the valuable European Union' support in the last decade. While these endangered bird species populations are increasing their important food sources the small mammals like *S. citellus* and *C. cricetus* are decreasing. Our aim is to understand the present condition of these species and do all effort to stop this decrease.

5.1. Technical progress per task (actions)

5.1.1. Action A: Preparatory actions, elaboration of management plans and/or of action plans

<u>Action A1:</u> Baseline surveys of populations of target species for monitoring future trends and impacts of our actions October 2014-December 2016

Result planned	Result achieved
With these data, it will be possible to exactly identify the threats that local populations or colonies are facing, and these threats will be addressed through specific conservation measures.	have been preparedSurvey method tested and presented

Action status: ongoing

Measure	Original	Revised	Progress
	deadline	deadline	
• Actualized distribution map of <i>S. citellus</i> ,	31.07.2015	30.09.2016	completed
C. cricetus, L. europeus in standard digital			
format (D).			
 Baseline survey accomplished (M) 	30.06.2015	31.08.2016	completed
 Habitat suitability analysis (M) 	30.07.2015	30.09.2016	completed
• Trend analysis (M)	30.07.2015	31.12.2017	ongoing

Description of the progress and outputs during the reporting time:

Guidelines for the baseline surveys have been prepared and included in the Project Handbook (Refer to Annex F3/1 of IR). A. heliaca and F. cherrug breeding pairs' survey has been accomplished in 2015 (Refer to Annex A1/1 of MTR1). BEKE tested C. cricetus survey and presented the first result in a conference (Refer to Annex A1/1 of IR).

The baseline surveys were completed in 2015 and in 2016 (Annexes A1/1a-d). During the 3rd week of April, the National Biodiversity Monitoring (NBMR) was carried out in every year. An intensive survey was implemented at national level regarding *S. citellus*, to which the

partners contributed by implementing the survey on their areas. Besides, the partners also implemented a more precise and detailed survey based on GPS recording on their areas regarding *S. citellus* (Refer to Annexes A1/2-A1/3 of MTR1) and *C. cricetus*. A precise survey on *C. cricetus*, *N. montanosyrmiensis*, and *S. trizona* was implemented regarding the entire area of Hungary and up-to-date distribution maps were prepared (Refer to Annexes A1/4-A1/8 of MTR1). The detailed baseline survey highlighted that the NBMR method need to be revised. The project took this issue to the agenda of the first meeting of the recently extended Blind-mole rat & Suslik Advisory Board of the Ministry of Agriculture (Annex A1/2).

MME and BEKE implemented a survey on the distribution of *C. cricetus* linked to *A. heliaca* territories, based on the analyses of *A. heliaca* food remains to reconstruct *C. cricetus* population trend for the previous decades where data were missing according to **Annex A1/9** of MTR1. A preliminary report was prepared about the available data collection and entering a digitized database (Annex A1/3a). It was followed by the evaluation of samples from 2005-2015 and data were entered into the database. (Annex A1/3b).

A habitat survey sheet was designed to collect information about the habitat of the *S. citellus* populated areas (Annex A1/4a) and another for the habitat survey of the repatriation sites (Annex A1/4b). Based on the collected information habitat suitability analysis has been implemented (Annex A1/5).

We have prepared the trend analysis of A. heliaca & F. cherrug (Annex A1/6), C. cricetus (Annex A1/7), N. montanosyrmiensis (Annex A1/8), S. trizona (Annex A1/9), and L. europeus (Annex A1/10). We are still working on the S. citellus trend analysis. It is expected at the end of the year.

Indicators used to test the performance:

Number of sites surveyed and the % of the total population surveyed.

Problems and their impacts:

No

Modifications:

BEKE preferred to use ear tag to mark *C. cricetus* leaving inside the villages during the baseline survey, however the NEA did not permit it. *C. cricetus* usually are poisoned inside the villages. BEKE wanted to catch these *C. cricetus* and take them to an *A. heliaca* eyrie's as a food source of the bird.

Due to the initiative of partners the baseline survey was extended as the partners indicated that they would see it useful to go on with a precise baseline survey regarding the target species (highlighting *S. citellus*, at their project areas, *C. cricetus*, *N. leucodon* and *S. trizona* nationally in HU) The baseline survey was ongoing in 2016.

The activities (milestones) were rescheduled at the annual project evaluation meeting (04.09.2015).

MME and BEKE were implement a survey on the distribution of C. cricetus linked to A. heliaca territories, based on the analyse of A. heliaca food remains to reconstruct C. cricetus θ population trend for the previous decades where data were missing. (Refer to Annex A1/9 of MTR1)

Preliminary approved by the EC (in e-mail) on 30.03.2016.

Comments on Commission's requests:

"I approve Hamster *C. cricetus* ear-tags only if they are made of a digestible material, as this will avoid potential adverse effects on eagles and other protected predators."

Finally we did not use them because we did not get permission from the Nature Conservation Authority.

"I note that the trans-location of S. citellus and C. cricetus has been carried out without completing a habitat suitability or ecological niche factor analysis. Therefore, the related C4, C5 and C6 actions technically can be seriously questioned. Please submit a draft habitat suitability analysis and the results of the trend analysis with your second Mid-term Report."

The sites selections were base on the IUCN requirements (12 points initiated in the AF) in advanced. See in action C5. Please find habitat suitability analysis in Annex A1/5 and the trend analysis in Annexes A1/6-A1/10.

<u>Action A2:</u> Evaluation of the genetic status of the fragmented populations of S. citellus October 2014 – December 2016

Result planned	Result achieved
We will obtain a general knowledge of the genetic status of the <i>S. citellus</i> populations. This includes the assessment of heterozygocity as a measure of viability and the determination of the loss of genetic diversity due to isolation. Molecular methods can also be used to monitor the genetic status of repatriated populations to prevent bottlenecks. Such knowledge will be used to restore the genetic heterogeneity of the fragmented populations by planned reintroductions to increase the size and viability of target populations. The result of such analysis help us identifying and protecting populations that serve as a source for future colonisations and relocations, and to assess the potential risk of local extinctions. Describing the spatial and demographic structure of the populations will enable us to select the optimal strategy for <i>S. citellus</i> management in the following years.	 List of Potential colonies has been prepared. Genetic sample collection was implemented Genetic examination of the collected Hungarian samples was implemented Genetic examination of the collected Romanian samples is ongoing Results of the genetic examination of Hungarian samples is ready

Action status: ongoing

Measure	Original	Revised	Progress		
	deadline	deadline			
• Genetic sample collection (M)	30.04.2016	31.08.2016	completed		
• sequencing (M)	30.10.2016	31.12.2017	ongoing		
 evaluation and reporting (M) 	31.12.2016	31.12.2017	ongoing		

Description of the progress and outputs during the reporting time:

The guideline for sample collection has been prepared and included in the Project Handbook (Refer to Annex F3/1 of IR). List of Potential colonies were prepared (Refer to Annex A2/1 of IR).

In Hungary:

Procurements of 900 traps happened in the frame of C5 action but it was used for trapping for sampling. Sequencing methodologies studied and a meeting was held to select the best methods for the project. (Refer to Annex A2/1 of MTR1)

The request for permission to the National Environmental Authority (NEA) was submitted at the beginning of May 2015 (Refer to Annex A2/2 of MTR1). Questions for the completion of the request of the permission from the NEA arrived to FHNPD on 15th June and the answers with the clarifications were posted to the authority on 27th June. The permission was only issued in December 2015 by the NEA (Refer to Annex A2/3 of MTR1). The modification request to extend the sampling survey with invasive sampling methods (regarding blood check and biopsia) was prepared and submitted on 25th January, the permission regarding the extension of sampling survey with invasive sampling methods was issued on 31th March and arrived 1st April. (Refer to Annex A2/4 of MTR1).

A meeting was held in Tihany (BfNPD) (Refer to Annex A2/5 of MTR1) on 02.24.2016. with the participation of all partners involved in the filed sample collection. The list of selected sites and time schedule was finalized and the details and responsibilities were agreed (Refer to Annex A2/6 of MTR1).

S. citellus field sampling activities were implemented between 1-20th April, with the involvement of almost all project partners. Besides the coordinator of the activity, KAPOSVÁR, also KNPD and FANK took place in the sampling of the appointed population with the assistant of other partners (BEKE, BfNPD, EPASM, FHNPD, MADRVILAG, MME, MILVUS, NIMFEA and ÖNPD), helping in the trapping of S. citellus. The three groups collected 362 genetic samples from 32 sites all over Hungary (Refer to Annexes A2/7 and A2/10 of MTR1). The samples were handled over to the laboratory responsible for implementing the genetic analysis by 30.04.2016 (Refer to Annex A2/8 of MTR1).

The laboratory submitted the reports about the genetic analysis (Annexes A2/1-A2/2) at the end of 2016. An evaluation meeting was held in KNPD in Kecskemét on 19.01.2017 (Annexes A2/3-A2/6).

The participants of the evaluation meeting has agreed that:

The most divers populations should serve as donor populations.

S. citellus may not cross the Danube river during repatriation.

We do not need to add animals to the small populations because of the bottleneck system, but the new specimens may bring some diseases to the original population.

15 females and 5 males *S. citellus* should be moved from from Szentkirályszabadja to Kaposvár for captive breeding first time.

Additional 68 samples of 4 additional populations were collected. These will be analysed together with the Romanian samples. The sample collecting period finished in September (though the samples of the last site happened at the end of August, and further 2 populations were targeted, but due to technical and capacity problems, the sampling finally did not happen) (Annex A2/7).

Following that all the number of all collected samples was known, the subcontracting of the external expert in genetics could start. The contracting took place in October, the best offer and the subcontractor was appointed. The samples will be analysed and evaluated by 12.31.2017.

In Romania:

Due to late permission (Annex A2/8) the work just started on 04/04/2017.

Four sites were selected (Annex A2/9) just along the Natura 2000 sites in connection with the Natura 2000 sites what has assured that the collected samples will represent the populations of the Natura 2000 sites.

The genetic sample collection took part in April 2017. The sampling of the first 2 sites were done with the assistance of Hungarian partners (BfNPD, FHNPD, KAPOSVÁR) on 04-05/04/2017 (Annex A2/10). The second part of the sampling took part on the 3rd week of April.

Altogether 84 samples were collected (Annex A2/11) and is to be handed over to an institute of the Babes-Boyai University that is the Romanian cooperating partner of the external expert implementing the genetic examination of the samples, The Romanian partner will extract the DNA from the tissue samples and will forward the processed samples to the Hungarian subcontractor for further examination and evaluation.

The genetic sample collection took part in April 2017. The sampling of the first 2 sites were done with the assistance of Hungarian partners (BfNPD, FHNPD, KAPOSVÁR) on 04-05/04/2017 (Annex A2/10). The second part of the sampling took part on the 3rd week of April. Altogether 84 samples were collected (Annex A2/11) and sent to the lab.

Indicators used to test the performance:

Number of correctly collected samples and the number of <u>l</u>ocation from where those are collected.

Problems and their impacts:

In both countries the delay in issuing the permission resulted in delay of implementing the filed sampling activities.

In Hungary:

The sampling was implemented only between 1-20th April 2016.

In Romania:

The permission was issued too late in 2015. Romanian beneficiaries had to apply for new permission in 2016. The new permission was issued by the National Authority allowed the sample collection only at sites that are not protected and neither N2000 (Annex A2/12). Thus new sites had to be selected for the genetic sampling that are in connection with N2000 sites (Annex A2/9). The work was done in 2017.

Consequence in other actions:

It delayed of actions C1, C5, C6

Modifications:

In Hungary:

Due to the delay in the issuing of the permission the field sampling activity had to be postponed to April 2016, thus the prolongation of the activity with one year was necessary.

Besides the mapping of genetic variability of populations also another sampling is planned to be implemented to reveal the genetic relations of different *S. citellus* populations (3 individuals per populations). A proposal of this survey had been outlined by KNDP on 31/05/2015. Modification request was submitted in March 2016 and was approved by 06/04/2016 regarding the development of the schedule of the methodology. Before the end of April the contract was signed and the schedule was developed (**Refer to Annex A2/9 of MTR1**). The sample collection will continue until 31.08.2016.

In Romania:

Because of the delayed permission, as well as due to insufficient knowledge on the status of colonies before completion of action A1, a prolongation of the activity with one year is desired. Since the National Authority based on the recommendation of the Academy of Science allowed the sample collection only at sites that are not protected and neither N2000, (Annex A2/12), thus new sites had to be selected for the genetic sampling that are in connection with N2000 sites (Annex A2/9). The work was done in 2017.

Comments on Commission's requests:

"I approve the extension of deadline in these actions with one year, until December 2016."

We managed to complete the work until this deadline in Hungary, but unfortunately in Romania it will be completed only in December 2017.

"I acknowledge the information that the Romanian authority did not permit sample collection in protected areas or on Natura 2000 sites. Please explain in your next report how the original aim to evaluate the genetic status of the fragmented population can be achieved under these circumstances; and please remember that the action should mainly target the populations of Natura 2000 sites listed in the project document"

Four sites were selected (Annex A2/9) just along the Natura 2000 sites in connection with the Natura 2000 sites what has assured that the collected samples will represent the populations of the Natura 2000 sites.

"Please add an English summary to the research report on the genetic status of S. citellus populations and submit it with the second Mid-term Report."

The Annex A2/2 includes.

Action A3: Survey of the stress status of S. citellus colonies and its use to develop S. citellus welfare plan October 2014 – December 2016

Result planned	Result achieved
Describing the physiological status of animals helps us predicting the future diseases and thus preventing the lethal events leading to population decrease. As stress responsiveness plays a key role in allowing animals to cope with environmental challenges, measurement of glucocorticoid levels can give insight into an animal's wellbeing and can aid us solving conservation and management issues. We will prepare a suslik habitat management guideline summarizing the optimal conditions corresponding to minimal stress levels.	 has been prepared. List of Potential colonies are prepared Collection of samples for stress analyses was implemented together with the collection of genetic samples (in A2) The examination of the collected samples was done.

Action status: ongoing

Measure	Original deadline	Revised deadline	Progress
Sample collection (M)S. citellus welfare plan (D)	30.11.2015 31.12.2015.	30.04.2016 01.07.2018	completed ongoing

Description of the progress and outputs during the reporting time:

The sample collection of this action was done together with the A2 action. The guideline for sample collection has been prepared and included in the Project Handbook (Refer to Annex F3/1 of IR). List of Potential colonies are prepared (Refer to Annex A2/1 of IR).

In Hungary:

S. citellus field sampling activities were implemented between 1-20th April, with the involvement of almost all project partners during the sample collection in Action A2.

Some additional samples were collected by KAPOSVÁR at the beginning of June 2016 to reveal the seasonal difference of stress hormones. The three groups collected 401 samples for the analyses of stress status of *S. citellus* (Refer to Annex A3/1 of MTR1). The samples were handled over to the laboratories implementing the analysis 13.06.2016 (Refer to Annex A3/2 of MTR1). The laboratory did the examination of the samples (Annex A3/1). The results of the laboratory examination were evaluated and the findings were summarised in a report (Annex A3/2).

In Romania:

Due to late permission (Annex A2/8) the work just started in 04/04/2017.

Four sites were selected (Annex A2/9) just along the Natura 2000 sites in connection with the Natura 2000 sites what has assured that the collected samples will represent the populations of the Natura 2000 sites.

The sample collection took part together with the genetic sample collection in April 2017. The sampling of the first 2 sites were done with the assistance of Hungarian partners (BfNPD, FHNPD, KAPOSVÁR) on 04-05/04/2017 (Annex A2/10). The second part of the sampling took part on the 3rd week of April.

Altogether 84 samples were collected and sent to the lab.

Indicators used to test the performance:

Number of correctly collected samples and the number of <u>l</u>ocation from where those are collected.

Problems and their impacts:

In both countries the delay in issuing the permission resulted in delay of implementing the filed sampling activities.

In Hungary:

The original sampling in Hungary had only been implemented between 1-20th April 2016. *In Romania:*

The permission was issued too late in 2015. Romanian beneficiaries had to apply for new permission in 2016. The new permission was issued by the National Authority allowed the sample collection only at sites that are not protected and neither N2000 (Annex A2/12). Thus new sites had to be selected for the genetic sampling that are in connection with N2000 sites (Annex A2/9). The work was done in 2017.

Consequence in other actions:

It delayed of actions C1, C5, C6

Modifications:

In Hungary:

Due to the delay in the issuing of the permission the field sampling activity had to be postponed to April 2016, thus the prolongation of the activity with one year was necessary. Based on the results of the examinations an extended survey seemed necessary to identify the most sensitive period of the year when the disturbance may reduces the productivity of the susliks. A request was made to the Commission (Annex A3/3). The Commission approved it by the letter ENV-D-4 LB/PR on 22/08/2017.

The welfare plan will be ready when the extended examination is ready on 01.07.2018.

In Romania:

The permission was issued too late in 2015. Romanian beneficiaries had to apply for new permission in 2016. The new permission was issued by the National Authority allowed the sample collection only at sites that are not protected and neither N2000 (Annex A2/12). Thus new sites had to be selected for the genetic sampling that are in connection with N2000 sites (Annex A2/9). The work was done in 2017.

Comments on Commission's requests:

"I approve the extension of deadline in these actions with one year, until December 2016."

We managed the original sample collection and examination until this deadline in Hungary, but in Romania it was postponed to 2017, and in the main time the work was also extended with the approval of the Commission, therefore the welfare plan will be ready only on 01.07.2018.

"I acknowledge that you prepared the stress hormone research report. Please include an English summary in it and submit it with your second Mid-term Report."

Please find it in Annex A3/2

"I approve the extension of the stress hormone sample collection and analysis." *We are implementing it.*

We are working on it but waiting for the result of the Romanian samples examination and the extended work in Hungary. It will be ready on 31.06.2018.

Action A4: Set up the Land Stewardship Advisory Service

October 2014 – December 2016

Result planned	Result achieved
Land Stewardship Advisory Service established in the project areas that would provide regular advice for the farmers and hunters on the target species.	Advisory was prepared and included in the

Action status: completed

Measure	Original deadline	Revised deadline	Progress
LSAS established (M)Romanian best management guideline(D)	28.02.2014. 28.02.2014.	17.11.2015 31.12.2016	completed completed

<u>Description of the progress and outputs during the reporting time:</u>

In Hungary:

The manual of the Land Stewardship Advisory Service was developed and and included in the Project Handbook (Refer to Annex F3/1 of IR). It was introduced at the training of project participants (F3) at 10/2/2014. The partner coordinators selected the advisors in their area who have close contacts with the farmers in the project sites. Training was organized for the members together with the kick-off meeting of the LSAS on 17/11/2015 (Refer to Annex A4/1 of MTR1) about the project's requirements on land use.

In Romania:

During early 2015 MILVUS compiled a comprehensive document presenting the exact location (including maps and coordinates) of all *S. citellus* colonies identified so far within the project area (Satu Mare, Bihor, Arad and Timiş counties) (**Refer to Annex A4/2 of MTR1**). This document was sent to EPASM, which then officially forwarded it to all other Environmental Protection Agencies and competent agricultural authorities within the four counties. The aim of distributing such a document was to notify these institutions about the populations of this protected species, and warn them about considering this scientifically based information in cases of infrastructural or agricultural development, or any other case which might have the risk of destroying ground squirrel habitats. This document is considered one of the basic data necessary for compiling the "Best Management Guideline".

[&]quot;I encourage you to prepare a separate S. citellus welfare plan."

During summer 2015 a national agri-environmental package proposal was developed for the conservation of dry grassland as habitats of European ground squirrel (S. citellus) and blind mole rats (several *Spalax* and *Nannospalax* species), partly using our results and experience from the present project. This proposal contains both general and specific recommendations of grassland management applicable in regions where no other grassland-based agrienvironmental measures are in place, and works as a starting point in compiling the "Best Management Guideline", which is still dependent on the final results of Action A.1. The proposal was forwarded to authorities in November 2015. (Refer to Annex A4/3 of MTR1). In September 2015, a large part (over 300 hectares) of one of our target areas (and incidentally the largest intact grassland habitat of the European ground squirrel in Western Romania), situated inside protected areas ROSCI0231 and ROSPA0015 was illegally ploughed. By conducting field surveys in the area, we managed to stop further destruction of this extremely valuable, protected habitat, and reported the case to authorities, (Refer to Annex A4/4 of MTR1) during September and October providing them with many scientifically founded data about the values of this protected habitat, among which the appearance of *S. citellus* is also listed. The case is currently being prosecuted.

In late 2015 and early 2016 we were actively involved in the Natura 2000 site designation process, by providing the scientific based for designations, as well as participating in related public debate. As a result, boundaries of some of our project sites are expected to be extended, however official decision is pending. This is expected to have important consequences on grassland management in our project areas, as legal status of some European ground squirrel habitats will be modified.

Based on the results of A1 Action the "Best Management Guideline" was prepared. (Annex A4/1)

Indicators used to test the performance:

Number of trained advisers.

Problems and their impacts:

<u>In Hungary:</u> none <u>In Romania</u>: none

Modifications:

In Romania:

The preparation of the Best Management Guidelines was postponed by 31.12.2016.

Comments on Commission's requests:

"Please publish the official list of Land Stewardship Advisers on the project website." *The list of LSAs is published on the website.*

"Please submit the best management guidelines for Romania with your second Mid-term Report. I may consider part of the related costs ineligible in case of further delay." *Please find it in Annex A4/1*

Action A5: Preparing airport's grassland management guideline

October 2014 – December 2016

Result planned	Result achieved
An airport management guideline what would enable the airport managers to manage the airport grassland to satisfy the air and <i>S. citellus</i> safety requirements in the same time.	in the Project Handbook.

Action status: ongoing

Measure	Original	Revised	Progress
	deadline	deadline	
Survey completed and airport management	31.12.2015.	30.09.2016	completed
guidelines ready (M)			
• workshop organised (M)	28.02.2016.	31.10.2016	completed
• 200 copies of adjusted airport management			
guideline prepared (D)	31.03.2016	31.12.2017	ongoing

Description of the progress and outputs during the reporting time:

The contacting of airport management personnel happened to start studying the implemented management practices.

The questionnaire had been prepared (Refer to Annex A5/1 of MTR1) and the survey is being implemented.

FHNPD held a meeting with the management of Péri Airport on 30/07/2015 regarding the appropriate management of the airport in order to maintain the *S. citellus* population of the airport (Refer to Annex A5/2 of MTR1).

KNPD collected the data of *S. citellus* populations at the 5 airports at the National Park area. Of these areas important populations are present at two areas, of two areas the population disappeared and there is one area where *S. citellus* is still present but the size of the population is critical and close to disappearing. Besides the characteristics of the areas and populations the threats were also identified and the recommendations regarding the appropriate management are to be prepared.

BfNPD held a meeting with the management of the Szentkirályszabadja airport on the nature conservation management of the airport (Annex A5/1).

Partners collected data by the designed questioner from the most important airports (Annex A5/2).

In the annual evaluation meeting in Sarród on 26 September 2017 the participants discussed the draft guidelines based on their experience with their negotiation with airport managers.

In 05/10/2017 the project manager and the technical coordinator presented the draft guideline for the audience of the general meeting of the Association of Rural Airports in Szolnok and distributed 20 copies for further comments. (Annex A5/3). The project manager negotiated also with Mr. Ferenc Kis the Environment Protection Manager of the Budapest Airport.

The collected information was used to revise the draft design what was brought to the agenda of the first meeting of the newly extended Blind-mole rat and Suslik Advisory Board of the Ministry of Agriculture on 25/10/2017 (Annex A1/2). The Guideline was finalised according

to the advise of the meeting (Annex A5/4). Designing of the print out of airport's grassland management guideline has started.

Indicators used to test the performance:

Nr. of Airports willing to apply the management guideline

Problems and their impacts:

None

Modifications:

None

Comments on Commission's requests:

"I acknowledge that you contacted the management of airports with abundant S. citellus colonies and launched a questionnaire survey. Please prepare and disseminate the guidelines for managing airport grasslands by 31/03/2017 at the latest, and submit them with your next report."

We has prepared the guidelines and consulted in many forums including the newly extended Blind-mole rat and Suslik Advisory Board of the Ministry of Agriculture (Annex A5/5). However we just start to design the printed version what will be ready at the end of 2017 or the very beginning of 2018 and will be distributed among the airport managers in 2018.

Action A6: Updating S. citellus Reintroduction Protocol

July 2014 – December 2015

Result planned	Result achieved
1	An up to date digital Reintroduction Protocol for <i>S. citellus</i> repatriation based on the latest developments was developed 15.2.2015 and was revised by 31.12.2015. and revised again by 31.01.2017.

Action status: completed

Measure	Original deadline	Revised deadline	Progress
Up to date Reintroduction Protocol (D)	31.12.2014	31.12.2015	completed

Description of the progress and outputs during the reporting time:

The *S. citellus* reintroduction protocol was updated (**Refer to Annex A6/1 of IR**), was discussed during the training of project participants (F3) and was finalized accordingly. The protocol was further revised upon the request of the EC. (**Refer to Annex A6/1 of MTR1**). Based on the result of the genetic survey and the habitat analyses it was updated again. (**Annex A6/1**).

Indicators used to test the performance:

Inclusion of EC's requirement

Problems and their impacts:

None

Modifications:

None

Comments on Commission's requests:

"Please compile a more comprehensive Spermophilus citellus reintroduction protocol that includes a risk assessment chapter and considers the application of the relevant principles of IUCN's Guidelines for Reintroductions and Other Conservation Trans-locations, e.g. regarding monitoring and adaptive management of the released individuals. Please submit the extended protocol with your next report."

The revised S. citellus reintroduction protocol includes a risk assessment chapter and considers the application of the relevant principles of IUCN's Guidelines for Reintroductions and Other Conservation Trans-locations, e.g. regarding monitoring and adaptive management of the released individuals was completed.

<u>Action A7:</u>: Evaluation of the water management system on S. citellus habitat and preparing recommendation how to improve it. July 2014 – December 2016

Result planned	Result achieved
	The protocol for the evaluation of the water management system on <i>S. citellus</i> habitat in favour of the <i>S. citellus</i> was prepared Project areas were assessed against flood danger Recommendation for the flood and inland water prevention activities in the <i>S. citellus</i> habitat prepared and handed over the concerned authorities

Action status: completed

Measure	Original	Revised	Progress
	deadline	deadline	
Identifying the potential risk of flood on	31.12.2015.	31.12.2015	completed
the S. citellus habitat (M)			
 Recommendations for Water Authority 	31.12.2016.	31.12.2016.	completed
for the required water management on <i>S</i> .			
citellus habitat (D)			

Description of the progress and outputs during the reporting time:

The protocol for the evaluation of the water management system on *S. citellus* habitat in favour of the *S. citellus* was prepared and included in the Project Handbook by 8/12/2014. The project areas were assessed fist according to it and it was realised that many of the selected project sites are located on potential flood plain therefore it was recommended to replace them (**Refer to Annex A7/1 of IR**). Details are given in C4. and C5.

FHNPD prepared a detailed study regarding the water management systems at the project areas of FHNPD that can be subject of repatriation of *S. citellus* (Refer to Annex A7/1 of MTR1).

BEKE has prepared a recommendation regarding favourable flood and inland water prevention activities for the habitats of the strictly protected susliks in their working areas (Annex A7/1) and submitted it to the responsible authorities. The authorities acknowledged the document in an official resolution stating to consider the recommendations during their activities. (Annex A7/2).

NIMFEA has also prepared a recommendation for the flood and inland water prevention activities for *S. citellus* habitat in their working area and submitted to the concerned authority. (Annex A7/3). The authorities acknowledged the document and promised to consider it in their work. (Annex A7/4).

Indicators used to test the performance:

Nr. of safe sites.

Problems and their impacts:

None

Modifications:

None

Comments on Commission's requests:

"I remind you that the project requires that water management recommendations are endorsed by the relevant authorities."

"Please submit your water management recommendations and the related endorsement letters of the authorities with your second Mid-term Report."

Please find it in the Annexes A7/1-A7/5

Action A8: : Baseline survey of the public awareness

July 2014 – March 2016

Result planned	Result achieved
Through the survey we will be able to maximise the effects of our program, and PR-campaign.	
	unloaded to the site.
	Data collection was implementedCollected data was analysed and
	evaluation was prepared

Action status: completed

Measure	Original	Revised	Progress
	deadline	deadline	
• Questionnaire (M)	31.12.2014.	29.05.2015.	completed
 Data collection completed (M) 	31.03.2015.	31.01.2016.	completed
Data processing ready (D)	01.12.2015	31.03.2016.	completed

Description of the progress and outputs during the reporting time:

The development of the questionnaire is coordinated by MME. A subcontractor was selected and the first sets of the questionnaires were developed by 30/3/2015 (Refer to Annex A8/1 of IR). The questionnaire was in testing-phase for one month and after this initial phase it was revised and finalized by 15.05.2015 according to the comments and experiences that were collected and sent to the external company. The questionnaires were finalized by 29.05.2015. Following some final corrections the final pdf and the online version of the questionnaires were also prepared and both of the versions were uploaded and available on the project website (Refer to Annex A8/1 of MTR1)

The questionnaire was adjusted to Romania and the Romanian version was translated and uploaded to the site (Refer to Annex A8/2 of MTR1).

The date collection was completed and the filled questionnaires sent to the company responsible for the evaluation by 31.01.2016. The evaluation was ready by 31.03.2016. The prepared questionnaires in case of the one targeting children in the lower grades of primary school consisted of 16 questions, while the one targeting the higher grades consisted of 18 questions (both 2 A4 pages). For adults a questionnaire of 31 questions (on 6 pages) was prepared. The one for farmers and hunters was made up of 30 questions (also on 6 pages).

At project level a total of 269 questionnaires were filled by adults, 19 by farmers and hunters, 223 by children at lower classes of primary schools and 279 by children in higher primary school classes. Summarizing the answers of the questionnaires the survey showed that among the target groups farmers and hunters and the age group of 18-29 and 50-59 should be targeted by more active communication in order to demolish the existing misbelieves regarding *S. citellus*. Besides the general knowledge of both the groups of school children and general public (adults) should be extended. The main aim of informing should be to improve the acceptance of the *S. citellus* as protected rodent species. The study had been uploaded to the website (**Refer to Annex A8/3 of MTR1**).

Indicators used to test the performance:

Nr. of field questionnaires and the identified background knowledge.

Problems and their impacts:

None

Modifications:

The data processing was ready by 31.03.2016

Comments on Commission's requests:

"I encourage you to complete the opinion poll as soon as possible since late completion may distort its results. Please submit the results with your next report."

It is completed. Results are submitted (Refer to Annex A8/3 of MTR1)

Action A9: Acquisition of equipment (in compliance with public-procurement regulations) July 2014 – March 2015

Result planned	Result achieved
Cost efficient procurement.	Multifunctional equipments purchaised

Action status: completed

Measure	Original deadline	Revised deadline	Progress
Tender process complete (M)	31.12.2014	31.05.2016	completed
• Multifunctional equipment purchased (M)	28.02.2015	31.09.2016	completed

Description of the progress and outputs during the reporting time:

All multiply use equipment what was needed for the project work have been purchased. LIFE and Natura 2000 logos are displayed on them (Annex A9/1).

Indicators used to test the performance:

Number of purchased equipment

Problems and their impacts:

In Hungary:

In the case of MME 25.862 € was budgeted for the purchase of a new car considering the income from selling an old car. However in the main time the old car of MME was needed for another LIFE project where another old car completely broken down.

In Romania:

In the case of Environmental Protection Agency of Satu Mare (EPASM) 50% of a car's cost were budgeted. However due to the strict regulation of the Romanian Government state agencies cannot buy an additional car. Therefore they cannot use state money to cover the other 50%-t of the car outside of the project only in case they cover the total cost of the car of project money. Without this car the project activities cannot be managed since the agency has only 3 cars that would be needed for their daily work.

Modifications:

Due to the necessary changed in the management structure of the project (change from externalized to personnel and externalized sources a car and two notebooks would be needed for the two employees (Technical Coordinator and Project Administrator). FHNPD had used about 15,600 € for the car and about 2,000 € for the notebooks from the spared VAT.

Due to the problem mentioned at MME it was necessary to buy a new Land Rower for the project that had cost about 35,000 €.

NIMFEA requested to purchase one binocular and one telescope instead of the two that was planned within the original budget.

Due to the problem mentioned at EPASM a second hand car was purchased for 6,500 € from the project budget that will be used only for the project work during the project duration.

KAPOSVÁR requested to shift 2,300 € for additional costs of equipment.

These modifications were already reported in the Inception Report.

Comments on Commission's requests:

"I remind you to use the LIFE and Natura 2000 logos on all pieces of equipment purchased in the framework of the project (for example information terminals and the soil hole driller machine), otherwise the relevant costs may be considered ineligible at the Final Report stage."

LIFE and Natura 2000 logos are displayed on the purchased equipments (Annex A9/1). "Please note that pieces of equipment purchased with significant delay may be considered ineligible at the stage of the Final Report if not justified."

All equipment was purchased in time. Some one might purchased in later phase of the project because it was necessary from that time.

5.1.2. Action B. Purchase/lease of land and/or compensation payments for use rights

Action B1: Purchase of land July 2014 – March 2016

Result planned	Result achieved			
58.6 ha grassland will be owned by the state and managed by the KNPD. It will serve for rehabilitation and sustainable management as a potential habitat for <i>S. citellus</i> repatriation and for feeding ground for <i>A. heliaca</i> and <i>F. cherrug</i> . Another10 abandoned farmlands about 2 ha will be purchased in HUKM20014.	against flood danger and the purchase plan has modified according to it. • 103.9 ha grassland was purchased by KNPD • 0.5 ha of farmhouse lands was			

Action status: ongoing

Measure	Original deadline	Revised dedline	Progress
6. 58.6 ha grassland purchased (D)7. 2 ha farmhouse land (D)	31.01.2016 31.01.2016.	31.12.2016 31.01.2017	completed onging

Description of the progress and outputs during the reporting time:

The target areas were checked also in the frame of A7 action and Öttömös found flood safe. KNPD was negotiated with the land owners and basically has agreed. The procurement process was completed and the purchase of the land happened by 11/2015 (Refer to Annexes B1/1-B1/2 of MTR1).

The procurement of the second part of the area (part of 0100/85 that is 0100/108) was completed by 07/2017. (Annex B1/1 - B1/2)

Regarding the farmhouse lands, so far 0.5 ha on two plots (0409/2 and 0409/3) were purchased and the purchase procedure of an additional plot (0120/6) is in progress of 1.6 ha area. (Annex B1/4 – B1/5) The intervention on these areas already started at the beginning of 2017.

Indicators used to be test the performance:

Nr. of ha purchased

Problems and their impacts:

The target areas were checked also in the frame of A7 action and it was found that the smaller area Kelebia 0169/1 (6,6 ha) is unsuitable for *S. citellus* because it is a very low area along a small creek and the rainwater is naturally gravitating to this area. In very rainy years the rainwater and the creek may flood the area what may kill the *S. citellus*.

The purchase of the 35.25 ha of 0100/85 was more complicated considering the more divers ownership of the area, thus the procurement needed longer time.

In case of the farmhouse lands the situation is more complex because within the Natura 2000 area the old farmhouse lands are included in the arable land around and the purchase is difficult due to the ownership of these lands.

Consequence in other actions:

It delays of actions C4 and C5

Modifications:

KNPD preferred to purchase land only in Öttömös but altogether more than it was originally planned. In the main time the land registration numbers have been changed due to some reorganisation of the ownership. (See Table 2 bellow.)

Table 2: Kiskunsági National Park Directorate's land purchase								
Settleme nt	Old land register numbers	New land register numbers	Total area in ha	Purchase d area in ha	price in HUF	Protect ed Natura 2000:	Reference	Source
Öttömös	0100/35	0100/59	37.9765	37.75	41,525,000	X	Refer to Annexes B1/1-B1/4 of MTR1	LIFE
							Refer to Annexes B1/1 & B1/4-B1/5	LIFE, MoA,
Öttömös	0100/85	0100/108	68.2064	35.25	31,725,000	X	of MTR1	KNPD
Öttömös Öttömös	0100/64 0100/77	0100/64	1.0581 7.8944	1.0581 7.8944		X X	Annex B1/3 Annex B1/3	KNPD KNPD
Öttömös	0100/79	0100/79	6.0912	6.0912		X	Annex B1/3	KNPD
Öttömös Total	0100/87 area:	0100/87	15.882 137.1086	15.882 103.9257	73,250,000	X X	Annex B1/3	KNPD

229 804 €

In the new reorganised set up it is important to purchase this quantity to have the majority role in these joint ownership areas. The original budget would be enough for these lands. Additional linking land plots (reg. no. 0100/64, 0100/77, 0100/79 and a share of 0100/87) to the site where the land purchase happened were available for KNPD and, following the preliminary consultations with the external monitor team and the approval of the Commission, KNPD purchased these additional land plots of non-LIFE own sources, that will not be accounted within the project budget, but it will be considered as a LIFE project land and the nature conservation use will be compulsory also in the case of this land. (Annex B1/3)

Comments on Commission's requests:

Registration of the management right of KNPD on the purchased land is in process.

"I acknowledge that 73.07 ha of agricultural land was purchased. Please submit the relevant documentation with your second Mid-term Report."

The relevant documents can be found in Annex B1/3.

"During his visit, the external monitor spot-checked and collected the land purchase contract (Contract No: S80027-00164, Date: 24/02/2017. Amount: HUF 1,958,531) concluded between Mrs. Lovászi and associated beneficiary KNPD. However, the referred land registration number of Öttömös 100/108 is not included in the list of purchased land reported so far. Please clarify this in your second Mid-term Report."

The reg. no. of Öttömös 0100/108 derived after the splitting up of the former reg. no. of Öttömös 0100/85. As the plot 0100/85 had to be expropriated by KNPD due to the complex ownership (was an undivided common property) of the site, the 0100/85 was split up into three reg numbers, to 0100/107, 0100/108 and 0100/109 (see the statement of the area and the map of expropriating in **Annex B1/1** and **Annex B1/2**) of which KNPD purchased the plot 0100/108.

"I approve linking land plots (reg. no. 100/64, 100/79, 100/87 and a share of 100/77) purchased from external, non-LIFE budget to the project. "

KNPD did it.

"Please note that costs of purchasing farm yards may be considered ineligible at the Final Report stage in case habitat management of the purchased sites is omitted."

In case of the farm yards the management of the purchased plots and of the plot where the purchase is in progress started at the beginning of 2017 (end January or first half of February 2017.) upon agreements and letter of intent of the purchase signed with the owners.

Action B2: Lease of land October 2014 – December 2018

Result planned	Result achieved
50 ha leased. Natura 2000 sites will be connected. The <i>S. citellus</i> , <i>C. cricetus</i> and <i>L. europeus</i> populations will be strengthened and spread over the area what would serve food source for the increasing <i>A. heliaca</i> and <i>F.cherrug</i> population and may reduce the pressure on other game species. It will reduce the conflict between hunters and nature conservationist.	

Action status: modified

Measure	Original	Revised	Progress
	deadline	deadline	
- First contract (M)	31.12.2014		Moved to C4.
- Cutting grass (M)	31.01.2016.		
- Planting Alfa alfa by farmers (M)	01.08.2015		
- Signing new contracts (M)	01.01.2016		

Description of the progress and outputs during the reporting time:

We were working hard to be able to overcome on the difficulties what the new legislation created for us (see bellow). Finally we developed a contract form for external assistance and a Proof form. The land owners were approached and the land management contracts with 6 owners for 20 pieces of land and for 30 ha signed (Refer to Annex B2/1 to IR).

Problems and their impacts:

Due to recent unexpected changes in the legislation we are facing some difficulties at the implementation of action B2 Lease of land that aims to establish strips of bounds on the leased areas. According to the Art. 25-26 and 39 of the new Land Law that came in effect by 1st January 2014 the official procedure of handing over arable land by selling and buying and also by leasing or /by other types of solutions for use became more complicated, given that every contracting and also every intent of contracting of this type has to be evaluated by the local land committees, which indeed has still not yet been established until now. Until these committees start to work – the date of this is still unknown – the local Chambers of Agriculture are entitled for realizing the procedure. But still the rules for land lease are so strict that there could be several (around 3-6 months) of delay in the administration.

The additional problem is that in 2014 the regional bodies of the government launched inspections at Győr-Moson-Sopron County regarding unusually high fees paid for land lease at new contracts. This has resulted in putting in focus all land related contracting.

Modifications:

Considering the above mentioned reasons, in order to avoid any kind of difficulties but most of all significant delays, we would like to realize the work planned in action 'B2 Lease of land' in the frames of action 'C4 Habitat reconstruction', where assignment contracts would be made with the land owners defining the activities to be implemented at the areas subject of the contract. The implemented activities would be paid as an assignment fee for the farmer from the external assistance costs. In practice the technical implementation and the objective would remain the same, only the way of financing would change. This modification was already reported in the Inception Report.

Comments on Commission's requests:

It is not possible to revert to the originally planed form of action since the Law did not change.

5.1.3. Action C. Concrete conservation actions

Action C1: Establishing captive breeding program for S. citellus and gene bank from captive and natural colonies

January 2016 – December 2018

Result planned	Result achieved
We establish the methodology of keeping and breeding <i>S. citellus</i> individuals in captivity. Such methodology will be transferred to keep the animals in the Education Centre (Action E5) and show the tame individuals to the public there. We expect to produce 50 captive bred animals by the end of the project. Captive bred and tamed animals will be used by FÁNK and NIMFEA to exhibit animals without capturing new individuals from the wild.	university premises and the establishment of the facilities and captive breeding conditions were developed. • Permissions were gained • 13 animals were captured and placed at the breeding place

Action status: ongoing

Measure	Original	Revised	Progress
	deadline	deadline	
Facilities and breeding conditions establishment (D)	31.12.2015	30.09.2016	completed
Captive breeding technology developed (M)			_
50 individuals produced in captivity (D)	31.12.2016		completed
	31.12.2018		ongoing

Description of the progress and outputs during the reporting time:

Location of the captive breeding of *S. citellus* at KAPOSVAR was selected within the university premises. The university started some site preparation out of the project. Procurement of necessary equipments and materials (cages, , etc.) happened. The building facilities and the climatization enabling the winter hibernation of *S. citellus* were developed by June 2016. (Refer to Annex C1/1 of MTR1). However the runs are still did not prepared. The beneficiary was waiting with its construction for the first *S. citellus* to accommodate. The captive breeding activity started only in October 2017 after capturing of 5 females and 8 males of S. citellus in Siófok Airport where animals were still available on 25-26/10/2017 and placed at the breeding facilities of KAPOSVÁR.(Annex C1/1)

Indicators used to test the performance:

Nr. of *S. citellus* produced in captivity.

Problems and their impacts:

When the breeding facilities were ready in 06/2016 the beneficiary had to request the permissions from two national authorities: From ÁNTSZ (National Public Health and Medical Officer Service) and from Environmental and Nature Conservation Department of Pest County Government Office. According to the beneficiary both authorities were claiming that their permission can only be issued when the other has already been issued. The project management offered their help to solved this issue but the beneficiary did not ask for it. The project management requested evidence for several times to understand the situation but the

beneficiary just provided the permission of the Environmental and Nature Conservation Department of Pest County Government Office (Annex C1/2). We understood that this permission was requested very late. It was dated 18 months after that the facility was ready only on 28/09/2017 and the permission of the Authority arrived to KAPOSVÁR on 24/10/2017. However we did not get any evidence about the reason of the permission's delay from ÁNTSZ.

Unfortunately the few captured available animals would not make it possible to breed 50 juveniles as it was targeted especially because the first stock would be the breeding stock only.

Consequence in other actions:

Due to the delays in the captive breeding, captive bred and tamed animals cannot be placed, as was originally planned, at C5 by FÁNK and NIMFEA to exhibit these animals in their citellus shows without capturing new individuals from the wild.

Modifications:

Instead of 20 only 10 separate enclosures was planned but still has not been built yet. Some additional equipment: 5 surveillance cameras, a steamer cleaner and 10 metal shelf were purchased.

At the beginning it was estimated that much more nourishment (294 bags) and some nutritional supplement (30kg) may be needed. This was preliminary approved by the EC (in e-mail) on 30/03/2016. But as the breeding started in quite a delay, the requested increased number of feed will not be necessary. Thus further modifications were requested and the number of feed was reduced to 112 bags.

Comments on Commission's requests:

"Please submit the description of the captive breeding technology with your second Midterm Report. Please note that I accept no further delays and the eligible costs related to captive breeding may be decreased in proportion to the delay."

Please find the captive breeding technology in Annex C1/3

Action C2: Establishing veterinarian surveillance of potential food sauces of A. heliaca and F. cherrug i.e. S.citellus, C. cricetus, N. superspecies leucodon and L.europeus

October 2014 – December 2016

Result planned	Result achieved	
•	 Guideline for sample collectors has prepared and included in the Project Handbook Training for sample collectors was held Samples for veterinarian examination were collected during the filed sample collection activity 	

Action status: completed

Measure	Originale deadline	Revised deadline	Progress
- Guideline for sample collectors (M)	31.01.2015		completed
- Training for sample collectors (M)	28.02.2015		completed
- Functioning veterinarian surveillance	31.12.2016		completed
system(M)			-

Description of the progress and outputs during the reporting time:

Guideline for sample collectors was prepared and included in the Project Handbook (Refer to Annex F3/1 in IR)

In Hungary:

The permission to the National Authority was submitted at the beginning of May 2015. Questions for the completion of the request of the permission from the National Environmental Authority arrived to FHNPD on 15th June and the answers with the clarifications were posted to the authority on 27th June. The permission was only issued in December 2015 by the National Authority. The modification request to extend the sampling survey with invasive sampling methods (blood check and biopsy) was prepared and submitted on 25th January, the permission regarding the extension of sampling survey with invasive sampling methods was issued on 31th March and arrived 1st April.

In the frame of the project training (at 10-11/02/2015 of F3) the sample collection was introduced.

A meeting was held in Tihany (BfNPD) (Refer to Annex A2/5 of MTR1) on 02.24.2016. with the participation of all partners involved in the filed sample collection. The list of selected sites and time schedule was finalized and the details and responsibilities were agreed. (Refer to Annex A2/6 of MTR1)

S. citellus field sampling activities were implemented between 1-20th April 2016, with the involvement of almost all project partners. Besides the coordinator of the activity, KAPOSVÁR, also KNPD and FANK took place in the sampling of the appointed population with the assistant of other partners (BEKE, BfNPD, EPASM, FHNPD, MADRVILAG, MME, MILVUS, NIMFEA, and ÖNPD), helping in the trapping of S. citellus. The three groups collected 399 samples of excrement of S.citellus for the analyses of bacteriological and parasitologycal examination (this later was extended with the examination of protozoans and worms) completed by Duo-Bakt Veterinary Microbiological Laboratory (Refer to Annex C2/1 of MTR1). Upon the results of the laboratory tests it can be stated, that the presence of Salmonella cases need to be considered during the future activities when moving animals (Refer to Annex C2/2 of MTR1) and the further monitoring and investigation of Coccidiosis (Eimeria) is necessary.

Another important part of the veterinary surveillance and monitoring is to implement the veterinary examination and condition survey of rescued individuals, being wounded or for other reasons, as it happened to the *S. citellus* that was found during the sampling with paralysed back part. The animal was treated and the recovered animal was released at Malomházi Zoo of Hortobágy National Park Directorate (Refer to Annex C2/3 of MTR1).

The sampling was planned to be continued until 31/08/2016 with blood checks, implemented by the vets of FANK, to identify also the virological status of the most important *S. citellus* populations, that can be used as source populations for the reintroductions.

In 08/2016, during the preparation of repatriation activities serious decline was discovered in case of some source populations (Szolnok military airport, Kunpeszér) which at the end also

inhibited the repatriation activities. The same phenomenon was reported from another colony near Paks. The veterinary checks targeted the 3 populations (Szolnok, Kunpeszér, Paks – Hardi pasture) where rapid decline was noticed, to investigate whether or not infectious disease could be.

In Szolnok, no sousliks were captured (or seen) on the day of sampling. In Kunpeszér, 3 trapped individuals were sampled and a further 2 in Paks. The animals were anesthetized using a mobile anesthetic machine with isoflurane gas. Blood samples, oral and rectal swabs were also taken, as well as feces in those cases, where the sousliks produced them while they were captured. Blood samples, the oral and rectal swabs yielded negative results.

In this timeframe, 3 dead individuals were also brought to the Budapest Zoo (1 in Szolnok and 2 animals in Kunpeszér) and subsequently, necropsies were performed on the cadavers. The 1st individual, from Szolnok, yielded inconclusive results as the carcass was partially eaten by predators/scavengers. In case of the gross necropsy of the 2 animals from Kunpeszér the Lab found that one of the individuals to have died of shock based on the histopathological picture, however in the other individual, a viral infection could have been suspected based on the findings seen microscopically. However, further toxicological examinations were not performed owing to financial constraints. Furthermore, the samples that were sent for bacteriological examination did not find any infectious agents and the virological testing did not yield positive results either.

Sampling of 2017 took place in August and targeted a decreasing population of a colony near Fertőújlak. 2 individuals were captured and blood samples were taken under anesthesia using mobile anesthetic machine with isoflurane as in 2016. Fecal samples/rectal swabs were also obtained. (Annex C2/1). All examination yielded negative results. (Annex C2/2)

Detailed description of the veterinary checks can be found in Annex C2/3. An evaluation meeting was held (Annex C2/4).

In Romania

Due to late permission (Annex A2/8) the work could just start in April 2017.

Four sites were selected (Annex A2/9) just along the Natura 2000 sites in connection with the Natura 2000 sites that assured that the collected samples will represent the populations of the Natura 2000 sites.

The excrement sample collection took part in 04/2017. The sampling of the first 2 sites were done with the assistance of Hungarian partners (BfNPI, FHNPI, KAPOSVÁR) on 04-05/04/2017. The ssecond part of the sampling took part in the 3rd week of April.

Altogether 84 samples of excrement were collected (Annex A2/11) and were handed over to FANK.

Indicators used to be test the performance:

Nr. of colonies tested.

Problems and their impacts:

The permission was issued too late in 2015. Romanian beneficiaries had to apply for new permission in 2016. The new permission was issued by the National Authority allowed the sample collection only at sites that are not protected and neither N2000. Thus new sites had to be selected for the genetic sampling that are in connection with N2000 sites (Refer to Annex A2/10 of MTR1).

Consequence in other actions:

No.

Modifications:

Instead of purchasing a mobile anaesthetic machine, FANK converted an anaesthetic machine, the one that they have at the moment.

Instead of purchasing the microscope, that at the end FANK managed to purchased from other sources, the planned cost of the equipment was allocated to the development of the citelllus show (action E5), where the expenses were higher than it was expected.

<u>Action C3:</u> Improving the genetic status of target populations by planned introductions of animals of known allelic composition

January 2016 – September 2018

j = v = v = - v =			
Result planned	Result achieved		
10 S. citellus colonies genetic status will be improved and higher overall genetic variance	·		
and viability of the populations.			

Action status: abandoned

Measure	Original	Revised	Progress
	deadline	deadline	
Source population of high genetic variability selected (M)	31.12.2015	31.12.2016	moved to C5
Performing the translocation of 10x50 individuals (M)	31.05.2016	31.05.2018	

<u>Description of the progress and outputs during the reporting time:</u>

The results of the genetic examinations, revealing that the genetics of *S. citellus* populations can easily recover from bottleneck effects suggested that the advantage of introducing additional genetic alleles in certain populations is respectively low. While the results of the veterinary surveys concluded that this kind of mixing of *S. citellus* populations might have rather high risk of transporting sicknesses and diseases between populations. This could also result in causing bigger damages in the base population compared to the advantages achieved by the introduction of new alleles.

Considering these reasons our experts assumed that the health risks of these kind of translocations is higher than their advantages in the improvement of the genetic status of the populations.

Indicators used to be test the performance:

Nr. of trans-location

Problems and their impacts:

No

Modifications:

Considering the above mention reasons and upon the recommendations of our experts, we skipped this action and instead we are doing some additional translocation under C5 action.

Comments on Commission's requests:

"I was informed that the transfer of potential diseases poses higher risks to S. citellus colonies than poor genetic diversity. Please continue establishing new S. citellus populations but avoid mixing up individuals from different populations if there is a risk of transferring diseases."

We avoid mixing up individuals from different populations.

Action C4: Habitat reconstruction to improve the carrying capacity for prey species_January 2015 – June 2017

Result planned

The potential future hunting areas of A. • Habitat reconstructions were ongoing on the heliaca and F. cherrug will be converted to 103,9 ha purchased area of KNPD suitable habitat for prey species including • The nature conservation maintenance of 55 of the project. Total area and carrying supervision of FHNPD. capacity of grasslands for S. citellus and L. • 20 ha of grassland were reconstructed by areas. (KNPD)

cricetus and L. europeus on the reconstructed ha where the purchase is in progress abandoned farmhouses' lands and 100 ha • 52 ha bounds along dirt roads in the Great area. (NIMFEA)

Another 70 ha will be reconstructed in FHNPD area.

Removal of invasive allergenic plants like ragweed would reduce health problems of local people.

The current trend of the small mammals' population decline will be prevented by our specific actions. The decline will slow down and hopefully stop after five years. We expect about 10% increase after a 10 years period. The proportion of small mammals among the preys of the increasing A. heliaca and F. cherrug would not be further reduced what would reduce the conflict with hunters. In case of S. citellus based on previous similar actions when half of the introduced animals survived and integrated to the local population, we expect similar outcome after the planned action. Therefore it is foreseen that about in 28 locations which were inhabited sometimes in the past the S.

Result achieved

- those 58.6 ha, what is purchased in the frame ha stepping stones were carried out under the
- europeus will increase in the purchased FHNPD, 15 ha was fenced around and reconstructed, 5 ha under-sown
- The grassland composition will be more The reconstruction of 2.1 ha area farmhouse natural dominated by plant species preferred lands was done by NIMFEA, both on the 0.5 by S. citellus. 2 ha suitable habitat for C. ha already purchased plot and also on the 1.6
- bounds along dirt roads in the Great Plain Plain (in 7 areas) were reconstructed by **NIMFEA**

citellus population will be restored. In case of *S. substilis trizona* it is foreseen that the known 20 ha habitat will be doubled or it will be justified that there is not any other localities in Hungary. The existing and potential habitats will be properly maintained without any conflict with *S. citellus* interest. In case of *C. cricetus* we expect better information about the size of the existing population.

Action status: ongoing

Measure	Original	Revised	Progress
	deadline	deadline	
• 200 ha reconstructed (M)	01.04.2017.	30.06.2018	ongoing
• First contract (M)		10.03.2015	completed
• Cutting grass (M)		15.07.2015	completed
• Planting Alfa alfa by farmers (M)		01.08.2015	completed
• Signing new contracts (M)		01.01.2016	completed

Description of the progress and outputs during the reporting time:

In Hungary:

The sites for habitat reconstruction were checked and some sites were changed. (See in modification bellow.) Land use contracts were signed with land owners (See Action B2.)

1. Reconstruction of purchased land by KNPD

In 2016 reconstruction of 37,75 ha purchased site (Öttömös 100/59) started, with the elimination of invasive *Eleagnus angustifolia*, targeting small size plants, (**Refer to Annex C4/1 of MTR1**) and grazing of the area by a temporary arrangement until KNPD would be able to make a long term arrangement as the official land manager of the area.

In 2017 the reconstruction was extended to the entire 103,9 ha purchased area and is targeting small and big size, singles plants and also groups of *E. angustifolia* with poisoning and cutting. The works started in October and will be ongoing by end of 2017. (Annexes C4/1). In Spring of 2018 the after-care of the site with elimination of offshoots will happen.

2. Maintaining stepping stones among Natura 2000 sites

FHNPD has contracted 11 landowners during 2015 to maintain the stepping stones among Natura 2000 sites on almost 55 ha and a company (Lajta-Hanság) for the reconstruction of additional 15 ha (Refer to Annex C4/2 of MTR1). Unfortunately the company with 15 ha went bankrupt so eventually no reconstruction was done on the area. The landowners of other plots planted alfalfa on the land strips and cut it according to the national park's requirement set in the contract. The managements of sites were constantly checked by FHNPD during 2016 (Refer to Annex C4/3 of MTR1) and in 2017 to know if the management is done according to the requirements (Annexes C4/2 – C4/4).

- 3. The installation of electrical fence and reconstruction of grassland was completed at Osli-Hany project site (c.a. 15 ha) in March 2016 (Refer to Annex C4/4 of MTR1).
- 4. The reconstruction of 5 ha area of Péri airport was done by FHNPD in cooperation with the airport. The permission of the regional authority arrived in 10/2016 (Annex C4/5), approving the under sowing of 5 ha area at Péri airport. The reconstruction works started in

11/2016 by mowing to clean the site, that was followed by under sowing with mix of native grass species (Annex C4/6).

5. The reconstruction of 2.1 ha farmhouse land was done by NIMFEA. 0.5 ha of already purchased farmhouse land and also 1.6 ha of the plot under purchase was reconstructed (Annex C4/7).

<u>6.</u> Altogether <u>52 ha was reconstructed</u> by grassing on 7 sites, of which 38 ha were bounds along dirt roads and 14 ha arable land (3 sites) was reconstructed (re-sown) as grassland by NIMFEA (Annexes C4/8 - C4/9).

In Romania:

It took more time to make all arrangement and to gain permissions than was expected. In 07/2017 two plots of 1540 m² and 1250 m² were reconstructed at ROSCI0021 Câmpia Ierului (Érmellék) site, on the pasture near the municipality of Ottomány (Otomani) by mowing. As the grazing with sheep seems possible the areas can be transformed to be suitable for *S. citellus*. In case it is necessary, the mowing will be repeated in Spring 2018 (Annexes C4/10 – C4/11).

Indicators used to-test the performance:

Size of reconstructed sites

Problems and their impacts:

- 1. Land purchase changes in KNPD area in HUKN10008 needs changes in rehabilitation target site too.
- 2. In FHNPD area in HUHF30005 the selected sites ("Illetményföldek") were completely destroyed by wild boars which ransacked the area so heavily during last year that the reconstruction of the site would be very costly and very time consuming (Refer to Annex C4/1 of IR).
- 3. Unfortunately the Lajta-Hanság company with 15 ha went bankrupt so eventually no reconstruction were done on their area.

Modifications:

- In case of reconstruction of *S. citellus* habitats by KNPD since the planned land purchase has to be changed (refer to B1) therefore the habitat reconstruction will be done on the finally purchased land (**Refer to Annex B1/1 of IR**).
- Instead of leasing lands (B2) land use contracts were prepared and some already has signed to create "stepping stones" among Natura 2000 sites (Refer to Annex B2/1 of IR).
- The rehabilitation of "Illetményföldek" HUHF30005 was given up and the planned *S. citellus* repatriation will be done in a new place (See in Action C5) (Annex C4/4).

These changes were reported in the Inception Report.

Comments on Commission's requests:

We are working only in the Öttömös site.

"Please submit maps showing the locations of habitat reconstruction sites including the reconstructed field margins with your second Mid-term Report and put a focus on sustainability of results as farmers reportedly destroy field margins during soil-preparation work."

Please find the maps in Annexes B1/3, C4/3, C4/7, C4/9, C4/10

Sustainability of the reconstruction works was fostered by the information and awareness raising activities implemented within E1 action by printing and disseminating leaflets and posters about

the importance of the maintenance of bounds and by posting announcements for farmers and sending them to the town councils, that are the owners of the bounds, regarding the issue.

Reintroduction of S. citellus to reconstructed areas Action C5:

April 2016 – September 2018

Result planned

Such interventions will enrich the food • Potential sites are checked and unsuitable supply of local breeding pairs of A. heliaca were replaced. population is expected to grow and where citellus was issued by they mostly predate small game. Reduction in Environmental Authority in Hungary. easier to incorporate local hunters to our cricetus was issued by the National conservation efforts. We expect a general Environmental Authority. increase of S. citellus habitat especially in • 1.220 (478+742) S. citellus were repatriated regions where A. heliaca and F. cherrug feed. and 18 new colonies were established Buffer zones with special water management • 45 C. cricetus were repatriated and 2 new events like flooding.

Due to repatriation, the number of colonies areas. and their density will increase. Such changes • 9 N. montanosyrmiensis were repatriated raptors. Based on previous similar actions when half of the introduced animals survived and integrated to the local population, we expect similar outcome after the planned action. Therefore it is foreseen that about in locations which were inhabited sometimes in the past the S. citellus population will be restore

Result achieved

- and F. cherrug in a region where their Permission regarding repatriation of S.
- the predation on game animals would make it Permission regarding the repatriation of C.
- would reduce the impact of catastrophic populations were established at in areas where A. heliaca and F. cherrug home range
- will positively affect the breeding success of from the border-zone to Öttömös project site.

Action status: ongoing

Measure	Original deadline	Revised deadline	Progress
20 established <i>S. citellus</i> colonies (M)	30.08.2018		ongoing

Description of the progress and outputs during the reporting time:

The selected sites for S. citellus reintroduction were checked and some sites had to be changed. (See in modification bellow.)

In Hungary:

The reintroduction activities were scheduled to start after 15/07/2016 in order to have the preliminary result of the genetic examination of Action A2 (sequencing).

A tentative plan for reintroduction, regarding source populations for each targeted site were prepared (Refer to Annex C5/1 of MTR1). A request for permission for reintroduction of S. citellus, based on the reintroduction plan was submitted to the NEA on 01/10/2015 and the permission was issued on 04/02/2016 (Refer to Annex C5/2 of MTR1). A request for

modification was issued by 03/04/2016 and the permissions, one regarding the modification of repatriation (Refer to Annex C5/3 of MTR1) and a new permission regarding the use of microchips (Refer to Annex C5/4 of MTR1) arrived on 24/06/2016.

The sites in every case were checked in advance base on the 12 points initiated in the AF, that are the requirements of IUCN.

During the repatriation activities of 2016, 478 *S. citellus* were repatriated and 8 new populations were established:

- BEKE reintroduced 150 animals; 50 to Felső-Kéked (Hernád-valley); 50 to Perei pasture (Hernád-valley) and another 37 to near Batúz-tanya (to Borsodi-Mezőség) (Annex C5/1).
- BfNPD moved 107 *S. citellus* from Belső-tó to the Külső-tó (to Vadparlag site) in Tihany on 27.07.2016. (Annex C5/2).
- FHNPI repatriated 83 animals to Osli-Hany site from Szentkirályszabadja-airport. (Annex C5/3).
- MADÁRVILÁG moved 51 animals from Solymár (from the parking areas of the supermarket) to Esztergom (Annex C5/4).
- ÖNPD repatriated 100 animals to two sites: 50 to Kenyeri airport, 50 to the pasture of Kemenessömjén. The repatriation to Őrség site had to be postponed to 2017 due to not sufficient number of animals in the source population at Szentkirályszabadja airport (Annex C5/5).

The repatriation attempt of KNPD (from Kunpeszér to Öttömös) and of NIMFEA (from Szolnok to Túrkeve) failed due to the lack of source populations.

During 2016 also 9 *N. montanosyrmiensis* were repatriated from the border-zone to Öttömös project-site (Annex C5/6).

During the repatriation activities of 2017, 645 S. citellus were repatriated and 8 new populations were established.

- BfNPD repatriated 197 animals from Tihany Belső-tó, 105 to Pécselyi-medence 92 to Nyírád (Annex C5/2).
- FHNPD moved 44 animals from Szentkirályszabadja to Várbalog (Annex C5/3).
- KNPD relocated 73 animals from Kecskemét, 58 animals to Öttömös and 15 to the citellus show of FÁNK (Annex C5/7).
- MADÁRVILÁG relocated 75 animals from Solymár of the parking of a supermarket near Tahitótfalu, on Szentendre-island (Annex C5/4).
- NIMFEA reintroduced 45 animals to Csudabala site from Budapest International Airport and 37 animals from Kecskemét airport to Kecskeri-puszta site (near Karcag) (Annex C5/8).
- ÖNPD reintroduced 189 *S.citellus* from Szentkirályszabadja, 90 to Öriszentpéter and 99 to Kenyeri airport (Annex C5/5).

In case of *C. cricetus* 45 animals were repatriated and 2 new colonies were established in 2017.

-BEKE moved 20 animals from the down-town of Szihalom village near the Eagle-centre at Jászberény; and 25 animals form Szentistván to Túrkeve (Annex C5/9).

In Romania:

Due to the lack of permissions, the repatriation activities could only start in 2017.

In 2017 97 S. citellus were relocated and 2 colonies were established.

- MILVUS repatriated 63 animals from Arad to Újszentanna (ROSPA0015); and 34 animals from Zsomboly near Nagyszentmiklós (ROSCI0345) (Annex C5/10).

Indicators used to test the performance:

Nr. of new population.

Problems and their impacts:

Many of the originally selected area for repatriation have to be changed due to different reasons:

- The target areas were checked first in the frame of A7 action and became evident that some of the selected areas are in a flood hazard area therefore these areas have to be changed. (See bellow in modifications.) (Refer to Annex A7/1 of IR).
- In case of KNPD since the planned land purchase has to be changed (refer to B1) therefore
 the habitat reconstruction has to be done on the finally purchased land (Refer to Annex
 B1/1 of IR).
- Some area was destroyed either by land owner or by wild boars therefore those must be replaced (Refer to Annexes A7/1 and C4/1 of IR).
- The Audi Co. the owner of the area did not agree to reintroduce *S. citellus* to its area at Péri Repülőtér HUFH20007. However we discovered some surviving animals there and by the habitat rehabilitation (C4) those hopefully will form a viable population.
- More suitable area was found in ÖNPD area.

The National Environmental Authority did not give the permission or limited the number of individuals that can be removed from the source populations in case of some requested sites. This might effect the volume of the reintroduction activities or may lead to further modifications regarding the source populations.

Due to the problems in source populations at some parts of the Great Plan the repatriation activities of NIMFEA and KNPD in 2016 failed. The source population of NIMFEA would have been Szolnok airport, from where the *S. citellus* seemed to have completely disappeared for yet unknown reasons. Than we tried to change to have additional animals from Kunpeszér for the repatriations of NIMFEA, that was estimated as the largest population of Hungary, where also KNPD would have capture animals for trans-location. Unfortunately at that time the animals of Kunpeszér site were probably in a summer dormant phase due to the hot dry weather, thus hardly any animals were moving so the capturing could not be implemented.

Due to the unsuccessful repatriations of 2016 there are still some trans-locations to be done. These should took place in early Spring of 2018.

Modifications:

- The following sites on flood hazard area has to be changed to safer sites:
- In HUBN10007-HUAN20004 (Refer to Annex A7/1 of IR):
 - Göncruszka site has to be cancelled and replaced by **Pere** site.
 - Hernádbüd site has to be cancelled and replaced by **Bekecs North** site.

In HUKN10008 Kelebia site has to be cancelled since the area will not be purchase due to flood risk.

- Destroyed areas had to be replaced:
- In HUBN10007-HUAN20004 (Refer to Annex A7/1 of IR):
 - The ploughed Garadna site has to be cancelled and replaced by Hollóháza site.
 - The Onga South site planted with trees has to be cancelled and replaced by **Bekecs South** site.

- "Illetményföldek" in HUFH30005 destroyed by wild boars has to be cancelled and replaced by LIFE08NAT/HU/000289 project rehabilitated area in HUFH20009 (Refer to Annex C5/1 of IR).
- Péri Repülőtér (Pér Airport) abandoned as repatriation site because we discovered some remaining population there.
- ÖNPD replaced Csikólegelő in HUON10001 by Kemenessömjén 0237/1 and 0234 areas in HUON20012. The new area is better for *S. citellus*, which was occurring there in the past. The new owner of the area is willing to maintain the area properly for *S. citellus* (Refer to Annex C5/2 of IR).
- Repatriation of *C. cricetus* from urban areas to natural sites was requested as a modification. Request for permission regarding the repatriation of *C. cricetus* was submitted to the NEA by BEKE (Refer to Annex C5/5 of MTR1) and the permission was issues on 08/03/2017 (Annex C5/11).
- Based on the findings of the genetic examination we skipped the C3 action and instead we are doing some additional trans-location under C5 action. BfNPD selected a site just along the Felső-Nyirádi-erdő and Meggyes-erdő (HUBF20011) Natura 2000 site which is state property and managed by the national park (Annex C5/13). After the approval of the changes by the TDO on 31 July 2017 BfNPD repatriated 92 *S. citellus* from Tihany Belső-tó there (Annex C5/2).
- BfNPD also selected another new site at Pécsely (Annex C5/14). The area is a part of the Balaton-felvidéki National Park and it is regularly grazing by Grey cattles. The trans-location is planned for July 2018 from Szentkirályszabadja or Tihany.
- A management plan will be developed by the end of the project (based on the inception protocol (Refer to Annex C5/6 of MTR1) that was prepared on the base of "Office National de la Chasse et de la Faune Sauvage: "Implementation and evaluation in situ of restocking operations of *C. cricetus* populations in the departments of Haut-Rhin and Bas-Rhinfrom 2013 to 2017" and on own experiences) including reintroduction protocol for the Hungarian *C. cricetus* population which will be useful in the future in case of the radical decrease of *C. cricetus*.
- In Jászság an agreement was signed by the local farmers and competent nature conservation authority (Hortobágy National Park Dir.) (Refer to Annexes C5/7-C5/8 of MTR1) which lay a charge on the responsible for the action (BEKE). This action will be achieved in cooperation with HELICON LIFE and its Eagle Centre. In case of Túrkeve project sites, NIMFEA arranged the declarations with the farmers (Refer to Annex C5/9 of MTR1).

Comments on Commission's requests:

We are working on the changed target sites.

"S. citellus should be trans-located in early 2017 and followed up in 2018. Please carefully consider the number of individuals to be trans-located to guarantee that the source meta-populations are not threatened by the action. Their survival rate should be reported annually, and fully in the Final Report."

The genetic examination highlighted that trans-location hardly can endanger the metapopulation but we ensured that not more than 10% of them were trans-located. 2016 years survival rates are given in *Annex C5/12*.

"Please ensure sufficient and efficient coordination of parallel trans-location efforts in Hungary; preferably by one of the project beneficiaries."

We achieved that the Blind-mole rat Advisory Board was enlarged to the Blind-mole rat & Suslik Advisory Board and this board will coordinate this work in the future (Annex A1/2).

"1 remind you that the trans-location of urbanised *C. cricetus* to agricultural habitats is approved only on condition that proper documentation is in place. This includes site specific restocking plans, certificates from the relevant authorities and written agreements from the landowners concerned."

Please see Annex C5/9 of MTR1 & Annex C5/11.

Action C6: Protection of short term survival and evaluation of long term success of reintroduced and natural prey populations

July 2017 – September 2018

Result planned	Result achieved
Measurably higher success of reintroductions with reduced number of repatriated animals	It is too early to justify.

Action status: ongoing

Measure	Deadline	Progress
Measurable higher success (M)	30.09.2018	ongoing

Description of the progress and outputs during the reporting time:

As stated in the reintroduction protocol guarding and feeding animals is an important part of the repatriation activities assuring the short term survival of the new colonies released at the new sites.

The areas where the holes were prepared for animals to be released are being fenced around and the animals are released in these fenced-around areas, inhibiting them from running away when being stressed during their release. It is important as if they run away on the surface they can easily be prey of predators, as the animals can be safe only underground so it is important that they stay in the prepared area and continue to dig the prepared holes and develop them into tunnels. After a few days the animals were digging out of the fenced-around-area and spread on the sites. The fences were used in case of all reintroduction activities, but different solutions were used. Usually the area of release was bordered with one fence, but in case of the Romanian repatriation, each hole had it's own small fence (Annex C6/1). The fences were left on the repatriation sites for at least one week.

Guarding the newly relocated animals is also an important part for increasing the success of reintroduction. Given that the recently placed animals are vulnerable for predation they can be easily captured and the entire reintroduction can be destroyed by a few predators. Besides the preliminary trapping of predators, during the first week the new colonies were guarded in case of every repatriation (Annex C6/2).

The other important task in order to keep the recently moved animals at the repatriation site is to feed them. This way they are not forced to leave the holes for long distances to collect food and they can turn more time on preparing their new tunnel systems. Feeding was continued for weeks, after the repatriation (Annex C6/3).

Indicators used to test the performance:

Number of survived animals.

Problems and their impacts:

No

Modifications:

<u>No</u>

Action C7: Encouraging hunters to catch predators the competitors of A. heliaca and F. cherrug around the habitat of S. citellus, C. cricetus, and L. europeus by distribution of traps for them.

April 2015 – September 2018

Result planned	Result achieved
Predators' number in the reintroduction areas will be reduced therefore the reintroduction success will considerably increase.	1 1

Action status: ongoing

Measure	Original deadline	Revised deadline	Progress
• Procurement of trap (M)	31.12.2014	30.06.2016	completed
Contracts with hunters(M)	28.02.2015 31.12.2015	30.06.2016 31.12.2016	completed completed
• Hunters report (D)			

<u>Description of the progress and outputs during the reporting time:</u>

In Hungary:

Traps were purchased by FHNPD, ÖNPD, BfNPD, MADÁRVILÁG and NIMFEA. Agreements and records of handover were signed with hunters regarding traps and trapping (Refer to Annex C7/1 of MTR1). Traps were handed over and it was agreed that hunters will submit a report by the end of every year. In 2016 BfNPD is implementing the trapping by themselves, but it was not successful so far (Refer to Annex C7/2 of MTR1).

The trapping activities were ongoing by the partners. Annual reports of trapping for 2016 are attached (Annexes C7/1 - C7/5).

In Romania:

The permissions for trapping were requested from the managers of areas affected by trapping and from local Environmental Authorities.

Before handing over the traps, county hunting organizations in Szatmár, Bihar, Arad and Temes county had been contacted that are mainly covering the targeted grassland of *S. citellus*.

The official documents of the traps had to be translated as the certified translation was necessary in order to be able to convince the hunters of the traps being suitable for the Romanian legislation.

Traps were handled over for four hunting associations that were contracted for trapping (Annex C7/3 MTR1). The appropriate use and setting of the traps was introduced for the hunters. Hunters will submit a report with the results of trapping by the end of every year.

In 2016 EPASM contracted 5 hunting association for trapping of Szatmár (2), Bihar (2) and Arad (1) counties.

Annual report of trapping for 2016 is attached of Szatmár, Bihar and Arad county. (Annex C7/6)

Indicators used to test the performance:

Trapping report of the hunters

Problems and their impacts:

No

Modifications:

Some traps were planned with GSM control but finally ordinary traps were purchased.

Comments on Commission's requests:

"I expect you to accelerate this action and prepare the first hunters' reports by 03/2017 at the latest."

See the reports in Annexes (C7/1-C7/6).

Action C8: Mapping the movements of S. citellus

October 2014 - March 2018

Result planned	Result achieved
species that will contribute to prepare and	 Two types of tags (collar and internal tag) was selected. 4 animals were tagged and followed in 2016 and the system was tested 6 animals were tagged and being followed in 2017

Action status: ongoing

Measure	Original	Revised	Progress
	deadline	deadline	
• Deploying first tags (M)	30.06.2015	31.08.2016	completed
• Following the tagged animals & tagging	31.05.2016	31.05.2017	completed
new individuals (M) • Detailed report on the movements and	31.01.2017	31.10.2018	in progress
population dynamics of the species (D)Follow up of tagged animals (M)	31.05.2017	30.09.2018	ongoing

Description of the progress and outputs during the reporting time:

Two type of tagging will be implemented, the use of collars (Refer to Annex C8/1 of MTR1) will be used in general, and some individuals will be tagged by placing internal tags in the animals. Request for permission was submitted to NEA on 03/04/2016 regarding the methods of tagging with collars and was received on 24/06/2016. (Refer to Annex C8/2 of MTR1). The other method using internal tags is still to be developed.

Due to the delay in Action A2 and A3 the tagging of *S. citellus* was postponed. In the period covered by the report the preparatory activities of tagging was ongoing, studying the alternative tagging methods (implant transmitter, collar, harness), collecting the references and descriptions of products (opportunities, constraints, prices) of different producers, articles about the necessary technology and negotiations and meetings were held with producers (Biotrack, ATS, Telenax, Lotek, etc.) by MADÁRVILÁG, to find the necessary and appropriate technology and tags for mapping *S. citellus*. The investigation revealed that only one system, produced by a Hungarian developer, is able to automatically log and follow the movements of the animal in space (the other type of automatic transmitters are only able to record certain parameters but not able to track movement in space).

The parts of the system are the tags, the transmitters and a central receiver tower with a special software, which processes and visualizes the signs of the towers. The transmitter itself is cylinder shaped and c.a 1 cm long and wide, with the weight of 3-4 grams and can be attached to the animal with collars. The range of the transmitter is several kilometres, the frequency of the signs can be programmed and can be working for more than a year with built in battery. The system is able to track 32 animals at the same time.

The procurement of the equipments happened by 07/2016. First the central receiver tower and the 10 transmitters were produced by 06/2016. The first 4 individuals of *S. citellus* were tagged during the reintroduction activity of MADÁRVILÁG to the project site near Esztergom, at the beginning of 08/2016. This was functioning as a test phase of the system and the settings. VHF collars stopped working during the dormant phase of the animals, when we did not disturb them to take off the collars. The removal of the collars was planned to be done in spring 2017. Unfortunately the central administration of Danube-Ipoly National Park Directorate prevented us to enter to the site in 2017 to find and re-trap the collared animals. (An agreement was finally signed by the Directorate only in September 2017.) That unfortunately, prevented us also from continuing the second phase of the tracking in the same site. Instead the action was moved to the project site in the Szentendrei island where the private landowner was very helpful. In the second phase 6 individuals were tagged at the end 07/2017 during the reintroduction activity of MADÁRVILÁG to the project site on Szentendrei island. List of tagged animals can be found in Annex C8/1.

A summary report regarding the details of the tagging activity and the first results, maps and pictures can be found in Annex C8/2.

Indicators used to test the performance:

Nr. of *S. citellus* tagged and information collected.

Problems and their impacts:

The delay is due to the difficulties in finding appropriate method for tagging, which took respectively more time than it was foreseen.

The cooperation with the Duna-Ipoly National Park Directorate had some bureaucratic difficulties what forced us to move the action to the other site.

Consequence in other actions:

No.

Modifications:

Madárvilág Nonprofit Kft. requested changes in the budget for 2017-2018 as a result of the evaluation of work experience in 2015-2016. Due to the delay in project start, action C5 and therefore C8 could not be carried out in 2015 as it was planned originally. Effective start of

tracking part of the project was postponed to 2016, only preparatory actions were done in 2015.

In 2016, the tracking started and resulted in the following conclusions:

was planned to use a GPS/VHF tag for *S. citellus*, but it is still not available on the market, tags do not yet exist in that size; instead a new system tracking and positioning automatically (VHF) tagged animals became available in 2016, was purchased and works well;

tracking animals with simple hand-held devices provides significantly less information than automatic tracking,

the originally planned PIT tagging and reading would make sense only if was done by all participants in the project (in large numbers) - is not feasible so was deleted;

Due to the above mentioned reasons, the following changes in the project (budget) were requested:

to upgrade and continue working with the new system expanding it to two more receiver stations to increase sensitivity and accuracy;

as the system can track a maximum of 16 animals at the same time, and as the recovered tags can be re-used, the number of VHF tags was reduced (to 30 from 80)

in order to collect background variables in local scale, we requested to purchase equipment that was originally not planned: DJI Phantom 4 agro drone to calculate NDVIA values and a mini meteo stations to record local meteorological data

The requested modification was approved by the Commission on 31/03/2017.

5.1.4. Action D. Monitoring of the impact of the project actions (obligatory only if there are concrete conservation actions)

Action D1: Monitoring of the impact of the project actions by video record and photo traps in A. heliaca and F. cherrug nests.

January 2015 – September 2018

Result planned	Result achieved
the project areas will document the preys	• The guideline for video- and photo-trapping was developed and was included in the Project
used to feed the juveniles. The evaluation of	Handbook.
the pictures will confirm the presence and	• Pictures are continuously recorded for later
possible increase of the S.citellus, C. cricetus	evaluation
and <i>L. europeus</i> among the preys.	• On-line video streaming is presented on the website of the project

Action status: ongoing

Measure	Original	Revised	Progress
	deadline	deadline	
• Web camera installed (M)	28.02.2015.	28.02.2016	completed
 Photo-traps purchased (M) 	31.03.2015	21.12.2015	completed
 Photo-traps installed in F. cherrug nests(M) 	15.05.2015	15.05.2018	ongoing
 Photo-traps installed in <i>A.heliaca</i> nests(M) 10 photo-traps recorded pictures and lists of identified preys (M) 	01.06.2015 30.09.2018	01.06.2018	ongoing ongoing

Description of the progress and outputs during the reporting time:

The guideline for video- and photo-trapping was finalized by 15/1/2015 by MME and MADÁRVILÁG and was presented at the training. The guideline was included in the Project Handbook (Refer to Annex F1/3 of IR).

In Hungary:

<u>Video trapping:</u> At the beginning of 2015 the tendering of the streaming activity had been conducted and the supplier had been selected. The selected supplier has installed the system and the pictures continuously recorded since the *F. cherrug* pair started to breed. Due to some technical errors of the accumulator and the accelerator in the first days the streaming was only functioning during daytime. In a few days the problem was recovered and since then the streaming was continuous. At the end of March 2015 the streaming was linked to and can be followed on the website of the project (**Refer to Annex D1/1 of IR**).

In 2015 in the nest targeted by the camera a pair of *F. cherrug* is was nesting and incubating 5 eggs but unfortunately the nesting was not successful. The 5 rotten eggs were removed from and were sent for laboratory examination to find out the reason of the unsuccessfulness of the breeding. The eggs were found infertile (**Refer to Annex D1/1 of MTR1**).

In 2016 although the female occupied the nest and laid one egg but unfortunately there was no breeding in the nest observed by the camera as the male *F. cherrug* of the pair died.

In 2017 a new male joined to the female and they had a successful breading 4 juveniles fledged successfully (Annex D1/1).

Photo-trapping:

The nests of *A. heliaca* and *F. cherrug* were surveyed in order to find the appropriate place for photo trapping and satellite tagging both in 2015 and in 2016.

In 2015, 4 photo-traps were purchased by MME in April and 15 by MAVIR in December.

In May 2015 7 photo-traps (4 new and 3 old) were installed to monitor *F. cherrug* nests (3 in Győr-Moson-Sopron county, 3 in Borsod-Abaúj-Zemplén county, and 1 in Jász-Nagykun-Szolnok county)(**Refer to Annex D1/2 of MTR1**). In June 2015, photo traps were removed from the monitored nests of *F. cherrug* nests and one was re-installed to a late breading. 2 cameras were re-installed at nests of *A. heliaca* by FHNPD, but one had to be removed because it disturbed the adults. Data from memory cards were downloaded to the computer and was evaluated (**Refer to Annexes D1/3-D1/4 of MTR1 and Annex D1/5**).

A preparation meeting was held on 02/05/2016 (Annex D1/2). In 2016 19 photo-traps were installed and recorded pictures(Annex D1/3). In June 2016, photo traps were removed from the monitored nests of *F. cherrug* nests and three were reinstalled at *A. heliaca* nests. Data from memory cards were downloaded to the computer and was evaluated. At *F. cherrug* nests 717 food items were observed: 49% birds, 31% mammals and 20% unidentifiable (Annex D1/4). At *A. heliaca* nests 60 food items were observed: 7% birds, 76% mammals and 12% unidentifiable. Most of the prey was *L. europeus* 72% (Annex D1/5). An evaluation meeting was held on 12/10/2016 where we discussed the gained experiences and worked to prepare the survey next year (Annex D1/6). Based on this MAVIR produced a special arm to be able to adjust the photo-trap on the pylons (Annex D1/7). 19 photo-traps were installed at *F. cherrug* nests in 2017 and 18 were working. Thanks to the careful evaluation of the previous experiences and for the proper adjustment 662 676 pictures were taken. One photo-traps was installed at *A. helica* nest and 3 237 pictures were recorded (Annex D1/8). Evaluation of the recorded pictures are going on.

In Romania

Sine more and more *F. cherrug* are nesting in Romania in the nest boxes installed by the former LIFE project therefore seven photo-traps were installed in 2017 and 179 836 pictures were recorded (Annex D1/9). Evaluation of the recorded pictures are going on.

Indicators used to test the performance:

Nr. of data recorded.

Problems and their impacts:

In 2015 Pirate users had overtaken the streaming and were using it unauthorized on different sites. Due to this activity the streaming was switched off but the pictures were continuously recorded for evaluation. After some security measures the streaming was restarted.

The male falcon became old and died in the Video monitored nest therefore we could not record successful breeding there in 2015 and 2016.

The GSM system installed by MAVIR for the photo-traps reduce the duration of the butteries therefore less picture were taken in 2016 than in 2017 when GSM was switched off.

Modifications:

No necessary modifications.

Action D2: Monitoring of the impact of the project actions by satellite tagged adult birds October 2014 – September 2018

Result planned	Result achieved
The land use of the breeding birds can be identified. The impact of the different project action can be justified by the satellite tagged birds.	birds was developed and was included in

Action status: ongoing

Measure	Original	Revised	Progress
	deadline	deadline	
• Transmitters delivered (M)	28.02.2015	28.02.2016	completed
• Transmitters installed (M)	15.05.2015	30.06.2016	completed
Data evaluated (M)	30.09.2015	30.09.2018	ongoing
 Digital maps with the birds locations on 	30.09.2018		ongoing
the sites (D)			

Description of the progress and outputs during the reporting time:

The guideline for satellite tagging of adult birds was finalized by 15/1/2015 by MME and MADÁRVILÁG and was presented at the training. The guideline was included in the Project Handbook (Refer to Annex F1/3 of IR).

The purchase of 20 transmitters was completed by MAVIR mid February 2016. The first transmitter was installed on *F. cherrug* by FHNPD on 02/03/2016 (Refer to Annexes D2/1-D2/2 of MTR1).

16 transmitters were used to tag F. cherrug and 4 to tag A. heliaca (Annexes D2/1-D2/5).

<u>In Hungary:</u> We decided to tag only adult *F. cherrug* because we got enough information about the roaming of juveniles during the former project but we prefer to study the land use of the adults during breeding and try to build connection with the photo-traps data. 12 adults were tagged and there were 4 adults from the former project which could be used also. Out of them 11 are still working. 2 juvenile *A. heliaca* were tagged also but unfortunately they may died.

One 2 cy male *F. cherrug* was found in Serbia which became too weak to be able to fly. When he recovered his condition he was released with transmitter, but it was later killed by electric shock around Szolnok in Hungary.

One adult male got electric shock in Slovakia. We asked our Slovak colleagues to search for it. They were searching but could not find it. Than we asked for help of Helicon LIFE project. "Falco" the detection dog find it very quickly, so the transmitter is recovered (Annex D2/6).

<u>In Romania:</u> Mainly juveniles were tagged since the birds just start to occupy Romanian territories and we want to know more about where they are roaming. On adult and four juvenile *F. cherrug* were tagged and out of them two juveniles died. One had some developmental disorder and the other was killed by electric shock. There were two juvenile *A. heliaca* tagged and one of them are still alive.

Indicators used to test the performance:

Nr. of tagged birds and nr. of data received.

Problems and their impacts:

The delay in the purchase of the transmitters was due to the complex and rather bureaucratic procurement rules of MAVIR.

Modifications:

No necessary modifications.

Action D3: Monitoring of the project actions

January 2015 – December 2018

Result planned	Result achieved
The project's impact on the target species will be easily monitored by the management team.	

Action status: ongoing

Measure	Deadline	Progress
Annual monitoring (M)		ongoing
Annual monitoring report (D)	31.12.of each year from 2016	ongoing

Description of the progress and outputs during the reporting time:

For the monitoring of the impacts the 5 guidelines that were prepared also for the baseline surveys (A1) (Refer to Annex F3/1 of IR) for each target species will be used to monitor the development of the populations of targeted species with the same tool to provide comparable data. The monitoring actions can only start after the baseline survey had been implemented. Given that the baseline survey regarding *S. citellus* was extended by 31/08/2016, and that the direct conservation actions regarding *S. citellus* will only start in 2017, the monitoring of the species can only start in 2017. The monitoring of the other targeted species is ongoing according to the protocols and the 1st monitoring report will be prepared by 31/12/2016. The annual monitoring was implemented in 2016 and the results is presented in Annexes D3/1-D3/5. The monitoring is going on in 2017 too.

BfNPD started to survey the potential habitats to search for unknown *S. citellus* populations in 2017. They already found two populations (Annex D3/6).

Indicators used to be test the performance:

Annual population data is available in the Annual Monitoring Reports.

Problems and their impacts:

No problem

Modifications:

Based on the baseline survey results four *A. heliaca* nests were selected in every 5 regions covering all four density categories (4*5=20 nests in total) for special monitoring what enabled us to identify *C. cricetus* population density from food remains (Annex A1/9).

BEKE did the C. cricetus population survey on the 20 sites in a 3-4 km circle around the nests. MME did the a) collection of food remains from A. heliaca nests during the breeding season, b) the collection food remains second time from 20 selected A. heliaca nests after fledging, between 2016-2018 and c) the analyses of collected food samples. As a result we expected to find C. cricetus populations within the hunting area of A. heliaca pairs and to ensure their protection and monitor their population dynamics. Besides, it was possible to calibrate the result of food remain analysis by field surveys and an index, showing the relation between population density and C. cricetus frequency in prey, was defined. The detailed analyses of food remains prior and during the project would serve the largest objective database for C. cricetus distribution and densities in a large spatial scale, almost covering the whole Great and Little Plain areas of Hungary. Based on the previous analyses (mostly from 1995-2004 period) we estimate that during the 24 years (1995-2018) we have gained more than 2000 occurrence data for the species, which can be compared with the occurrence of ca 10000 other prey items. Therefore the ratio of the species within the diet serves an accurate estimation for the local trends of the (sub)populations as well (Annex A1/3 a-b).

Comments on Commission's requests

"Please test the hypothesis of the comparative C. cricetus trend analysis in the archive database (1995-2004) and present the results to the external monitoring team. I will approve the continuation of the study based on the quality of preliminary results." We submitted the result from the first period on 3 March 2017 and we got the permission to continue the work on 23 March. 2017. The result is presented in (Annex A1/3 a-b) in the frame of A1 action and included in the trend evaluation of C. cricetus (Annex A1/8). "Please submit the 2016 monitoring report with your second Mid-term Report." Please find them in Annexes D3/1-D3/5.

Assessment of the social-economic impact October 2015 – December 2018

Result planned	Result achieved
A study will be prepared and delivered with the Final Report.	Data collection is ongoing.

Action status: ongoing

Measure	Deadline	Progress
A study prepared (D)	31.12.2018	ongoing

Description of the progress and outputs during the reporting time:

Data collection is going on in the frame of the other actions

Indicators used to test the performance:

Problems and their impacts:

No problems appeared.

Modifications:

No necessary modifications.

Comments on Commission's requests

"Please put more effort in these actions so as to deliver comprehensive studies by the end of the project period."

We are working on it.

Action D5: Assessment of ecosystem functions restoration

October 2015 – December 2018

Result planned	Result achieved
A study will be prepared and delivered with	1 1
the Final Report.	10/2/2015

Action status: ongoing

Measure	Deadline	Progress
A study prepared (D)	31.12.2018	ongoing

Description of the progress and outputs during the reporting time:

The guideline of the assessment of ecosystem functions restoration of the project was prepared by NIMFEA and was presented and accepted on the training of project participants (Refer to Annex F3/1 of IR).

NIMFEA has prepared the first draft of the report (Annex D5/1) outlining the main chapters of the report and consulted with partners regarding their input to certain chapters. Data collection is going on.

Indicators used to test the performance:

Problems and their impacts:

No problems appeared.

Modifications:

No necessary modifications.

Comments on Commission's requests

"Please put more effort in these actions so as to deliver comprehensive studies by the end of the project period."

We are working on it.

5.2. Dissemination actions

5.2.1. Objectives

- E1: To increase the awareness of the stakeholders and their tolerance towards the target species.
- **E2:** To improve the habitat management in favour of the target species by improving the knowledge of the stakeholders
- E3: S. citellus habitats will be considered and protected from flood water
- E4: Less dogs will hunt outside of the settlement
- **E5:** Annually at least 100.000 people will learn about the animals and related nature conservation problems and the work of the project
- **E6:** An accessible and up-to-date web site will inform the general public and technical staff working on similar projects about the project.
- E7: There will be large scale publicity of the project aims and activities and its support by LIFE.
- E8: To secure public support for conservation efforts by producing and disseminating different materials.
- **E9:** Adequate public support will be attracted to the necessary conservation measures.
- **E10:** To disseminate the result of the project by a Layman's report.

5.2.2. Dissemination overview per activity

Action E1: Organising forums for stakeholders

October 2014 - March 2018

Results planned	Results achieved
The awareness of the stakeholders and	Awareness raising of stakeholders is ongoing on
their tolerance towards the target species	project areas. (See details bellow)
will increase. Less conflict will risk these	
species	

Action status: ongoing

Measure	Deadline	Progress
Minutes of the meetings.	28.02.2018	ongoing

Description of the progress and outputs during the reporting time:

In Hungary:

BEKE:

Regular on site advising on areas affected by down town invasion of *C. cricetus* by listening the complaints of the population and assured them that nature conservation is aware of the problem and a solution is being developed (**Refer to Annex E/1 of MTR1**).

The advisors of BEKE consulted with the inhabitants of the villages affected by *C. cricetus* (at Szihalom, Szentistván, Mezőszemere and Átány villages during the relocation activities). The advisors listened to the complains and opinions of the inhabitants and introduced the work of the advisory body, distributed the brochures and leaflets regarding hamsters and introduced the alternative solutions and importance of the protection of the species for the villagers. (Annex E1/1)

BfNPD:

During the estimation of shrub control activities the requirements of *S. citellus* habitats are being considered. In favour of the protection of the *S. citellus* population at Gyulai-domb, a site under the management of Veszprém Zoo, the habitats used by *S. citellus* were marked off. (Refer to Annex E/1 of MTR1). The citellus show is also used as forum for advisory activities in the Levendula ház.

FHNPD:

Providing guidance during personal meetings or through phone regarding the necessary and possible tasks, through being in constant contact with them (Refer to Annex E/1 of MTR1). FHNPD constantly consulted with farmers contracted to maintain demonstration areas. A demonstration filed visit was held on 27/09/2017 for the members of the advisory body to introduce the demonstration sites and the works, the contacting and convincing of farmers. (Annexes E1/2-E1/3)

A forum was planed for 10/2017 but due to the favourable weather conditions the farmers were busy and the advisers decided to postpone the meeting to the 2nd half of November. KNPD:

Given that the NP has no livestock the maintenance of the project site is planned to be solved by providing the site as a common pasture for the habitats of the nearby village of sheep and cattle. Personal negotiations were already held regarding this issue with the municipality and with the owners of livestock of the village (Refer to Annex E/1 of MTR1).

Regarding *N. montanosyrmiensis* forums will be organized for the public and another one for the managers of the lands owned by the municipalities.

The advisor, the species coordinator of *N. montanosyrmiensis/ground mole-rat* of the project, of KNPD participated at the repatriation activities of HNPD near Debrecen at the end 09/2017 to give advise during the repatriation activities (Annex E1/4). Also took part at the relocation activities of the species near Baja where animals had to be moved from the development area to the Ground Mole-rat Reserve between in 10/2017 (Annex E1/5) NIMFEA:

In the office, at Fekete István Education Centre, experts are available for personal consultation, furthermore they are available on phone and by email. The Advisory Service was advertised on the website of the organization at the offices of farm advisor's' network and in local newspapers (Annex E1/6). Personal consultations took place for farmers and hunters regarding different issues. (Annex E1/20)

Forum was organized for local people and farmers before the repatriation activities of *S. citellus* took place. On the event the status of *S. citellus* and the importance of the protection of the species and introducing the repatriation activities were presented. (Annex E1/7)

As a part of the work of the LSAS NIMFEA worked on improving the sustainability of the reconstructions works of bounds by raising awareness of farmers and of the landowners of the bounds, that are the councils of municipalities. NIMFEA printed a leaflet (Annex E1/8) and posters (Annex E1/9) using own sources but with the visual identity of the project raising awareness regarding the importance of the protection of bounds. The materials were distributed at the farm advisor offices and public areas. NIMFEA also prepared and distributed announcements regarding the reconstruction works and their importance at farm advisor offices and sent it also to the town councils. (Annex E1/10).

The advisory body also exhibited the resolution of the project regarding the use of redendin at farmers' shop. (Annex E1/11) ÖNPD:

The forums were held before the repatriation activities were implemented.

The Advisory Service conducting intensive and continuous informing activity on the N2000 sites involved in the project. In the frames of this activity every farmer involved in the management of the targeted sites (Kenyeri airport and Kemenessömjén pasture) were contacted and informed of the project and of the habitat needs and environmental importance of *S. citellus*. They were continuous consulted regarding the grazing of pastures inhabited by *S. citellus*, recommendations regarding the change of methods (e.g pressure of grazing) were made. Besides the appropriate management of grasslands the service also consulted with the users of the target areas of the repatriation of *S. citellus*, in order to have the grasslands in appropriate status for the species.

The hunting organizations of the sites were also informed regarding the need of reducing the number of predators. The advisers of the service attended the annual training of professional hunters of Vas county where the aims and activities of the project were introduced and the importance of trapping of predators was highlighted. (Annex E1/12)

A forum was organized before the repatriation activities on 20/07/2017 at Öriszentpéter where the project and the status of *S. citellus* in Vas county was introduced. The importance of the reintroduction activities of Őrség and the role of the public in the survival of the colony were highlighted. 15 persons participated at the forum. (Annexes E1/13-14)

In Romania:

EPASM:

In the first part of 2016 EPASM started building the cooperation with the agricultural policy officers of the municipalities of Érmellék area. This cooperation was based on the activities of 2015, during which the representatives of municipalities were contacted personally and the contacts of agricultural policy officers were collected (**Refer to Annex E1/2 of MTR1**)

As the first step of consultations with the farmers the agricultural policy officers of some municipalities of Érmellék (ROSCI0021) were contacted on phone and personal meetings were initiated and organized. From the point of farmers the period of early spring and early summer, thus the forums were scheduled for winter time.

According to the guidance of the policy officers of the contacted municipalities (Mezőpetri - Petresti, Érendréd - Andrid, Érszalacs - Salacea, Székelyhíd - Sacueni) the shepherds of these areas were contacted on site. During the field-consultations with the shepherds their attention were called on the importance of the target species of the certain areas and also on the laws and possible subsidies regarding grasslands. (**Refer to Annex E1/3 of MTR1**)

In 03/2017 forums were organized in the municipalities of Bánság, Temes (Timis county), Szentpéter (Sânpetru Mare), Zsombolya (Jimbolia), Sárafalva (Saravale) (Annexes E1/15-E1/16 & E1/19)

In 10/2017 the municipalities of Partium were targeted, visiting the north-eastern area of Érmellék, Satu Mare county, Érszakácsi (Săcășeni), Mezőpetri (Petresti), Szaniszló (Sanislău), Csanálos (Urziceni), Érkávás (Căuaș) municipalities. (Annexes E1/17-E1/19) During the forums the project and it's aims, the target species were introduced, the importance of the protection of the *S. citellus* habitats were highlighted. The services of the advisory body was introduced and the contact of the advisers was shared.

Indicators used to test the performance:

Persons/farmers informed

Problems and their impacts:

No problems appeared

Modifications:

In many cases individual consultations with farmers, landowner were found more useful than to organize forums (Refer to Annexes E1/1-E1/3 of MTR1).

Comments on Commission's requests:

"Please proceed with the organisation of forums for Stakeholders, even if individual communication is more effective in some cases. The forums should be properly documented with the agenda, the list of participants and a brief summary of conclusions together with photos. Individual consultations should also be registered; including contact data. Please provide these data in your next report."

Some forums were organised mostly in Romania. Unfortunately it is difficult to organising forums in Hungary because there are very few farmers who has livestock and grassing land. It is more easy to approach them personally. To invite farmers for a regional meeting does not work. They even did not go for the meeting of Chamber of Agriculture because they did not considering that forum useful for them.

Action E2: Production and distribution information materials about the target species, their habitat requirement and management.

October 2014 – December 2018

Results planned	Results achieved
Improved knowledge of the stakeholders	• 1,000 logo stickers produced
will improve the habitat management in	• 7,000 sticker of target species prepared
favour of the target species	• 2,000 copied of leaflets on <i>C. cricetus</i> printed
	• 1,000 copies of brochures on <i>C. cricetus</i> printed
	• 2,000 copies of brochure on target species
	printed
	• 4,000 copies of educational exercise booklet
	prepared
	• 5,000 leaflets of the project was prepared
	• 4,000 copies of colouring book for children
	produced

Action status: completed

Measure	Original	Revised	Progress
	deadline	deadline	
• 2000 copies of colour brochures (1)	31.12.2014	30.06.2015	completed
• 4000 copies of coloring books (2)	31.12.2014	30.06.2016	completed
• 7000 stickers (3)	31.12.2014	30.06.2015	completed
• 7000 memory cards (4)	31.12.2014	30.06.2016	completed
• 4000 brochures(5)	31.12.2014	30.06.2016	completed

Description of the progress and outputs during the reporting time:

1,000 project logo stickers were produced in 3 different sizes (15 cm, 10 cm and 5 cm diameter) by 9/6/2015 and the stickers were distributed among beneficiaries. (Refer to Annex E2/1 of MTR1) (For details see below at point 1.) of Modifications)

7*1,000 stickers (3) of targeted species was prepared by 31/7/2015 (Refer to Annex E2/2 of MTR1)

2,000 copies of LA4 size 3-side-folded leaflet regarding *C. cricetus* (Refer to Annex E2/3 of MTR1) was printed by 15/9/2015 and

1,000 copies of A5 size brochures on *C. cricetus* was printed by 16/9/2015. (**Refer to Annex E2/4 of MTR1**) (For details see below at point 2.) of Modifications)

2,000 copies of brochure (1) introducing the target species was prepared by 01/11/2015 and had been distributed among Beneficiaries (Refer to Annex E2/5 of MTR1)

4,000 copies of educational exercise booklet (5) was printed by 31/7/2016. (Refer to Annex E2/6 of MTR1) (See details below at point 4.) of Modification)

5,000 copies of LA4 size 3-side-folded leaflet regarding the project was printed by 31/10/2016 (Annex E2/1) (See details below at point 3.) of Modification)

4,000 copies of colouring books were ready by 30/06/2017 (Annex E2/2) (See details below at point 4.) of Modification) (Annex E2/3)

7,000 memory cards were ready by 30/06/2017 (Annex E2/4) (Annex E2/3)

Indicators used to test the performance:

copies of materials produced number of materials distributed (Annex E2/5)

Problems and their impacts:

No

Modifications:

The preparation of the materials (2000 copies of colour brochures, 7000 stickers, 2000 brochures) started by 1/5/2015 and planned to be ready by 30/6/2015.

The production of the 6.000 copies of colouring books and 7.000 memory cards for children that will be distributed for children visiting the exhibition centres is rescheduled by 30/6/2016 to be ready by the opening of the centres.

- 1.) The production of 1.000 pieces of not scheduled <u>project logo stickers</u> were produced in 3 different sizes (request was approved by the EC by)
- 2.) Production of not planned 2.000 copies of <u>LA4 size 3-side-folded leaflet</u> and 1.000 copies of <u>A5 size brochures</u> regarding *C. cricetus* was requested (request was approved by the EC by 30/3/2016)
- 3.) 5.000 copies of A4 leaflets about the project by 30/9/2016:

For the introduction of the project to general public, the project has no 'simple' materials that could be distributed at events, etc. Additional costs needed is: 250 € of External assistance and 700 € of Consumables that will reallocated from our reserve found saved during the former modifications. It is important given that the project had already used most of the materials that had been printed. Even is a project brochure is existing, but only printed in 2.000 copies and due to the content it is more serious (also expensive) to be suitable for broader distribution. These, the project would like to keep for distribution on conferences, technical workshops, etc. The rest of the awareness raising materials are targeting kids with more specific content – not with general information about the project. For this reason a shorter, more brief and more general introduction of the project – a simple, 3-times folded LA4, leaflet was produced, that could be distributed to the general public (kids, parents, etc.)

on public awareness raising events. (modification preliminary approved by the EC by email on 30/3/2016)

4.) Changes regarding two originally planned awareness raising materials

Instead the originally planned 6.000, only 4.000 copies of A/4 size 16 pages educational colouring tale book for kids was produced. The cost in Consumables budget line of printing the 4.000 copies is lower, $3310 \in$ (compared to $4.966 \in$ of the cost of printing 6.000 pieces). Instead of the planned 2.000 copies of A/5 size 12 pages brochures 4.000 copies was printed and the extent of the brochure was extended to a 20+4 (cover) pages educational exercise booklet. Regarding the preparation of the booklet a working group had been set up within the partnership and continued to develop the booklet. Given that it is a respectively more complex_output, the extension of the deadline of the delivery by 30/06/2016 was approved. The layout is ready, it was printed by 31/7/2016.

Regarding the expenses, the cost of External assistance increased from $345 \in$ to $1.400 \in$ (cost of design and graphics: design $800 \in$, illustrations/graphics $600 \in$), the cost of Consumables increased from $2.345 \in$ to $4.800 \in$ (printing of 4.000 copies 20+4 pages booklet instead of 2.000 pc of 12 pages brochure.).

In total the production of the two brochures resulted in additional cost of $1.055 \in \text{External}$ assistance (extra cost of design $455 \in$, and cost of illustrations/graphics $600 \in$) and $800 \in$ of Consumables cost (extra cost of printing 2.000 copies of the exercise booklet: $2.455 \in \text{minus}$ the $-1.655 \in \text{savings}$ of printing 4.000 copies instead of 6.000 of the colouring booklet). In total: $1.855 \in$, which was reallocated from the reserve saved during the former modifications. The reason of the change is to keep the original number of these two outputs (total of 8.000 copies of the two brochures) – from 6.000+2.000 the number of copies was changed to 4.000+4.000. One reason is that the A/5 size brochure, that was developed into an educational exercise book will receive more emphasize and we expected to have a quality output and would have liked to have a higher number of copies. The other reason is an economic reason, as in case of 4.000 copies the exercise booklet can be printed at a more reasonable price, compared to 2.000. Given that the exercise booklet would be a more complex material with more complex design, in this case it is more important than in the case of the other (colouring) brochure, where the production price is lower.

Modification preliminary approved by the EC by email on 30/3/2016

5.) We would like to prepare 1.000 copies of A4 leaflets about the project in English by 31/12/2017 to use it on international networking events and also for the final conference of the project. Would be important given that the project has no materials in English that could be used on international occasions. Additional costs needed is: $250 \in$ of External assistance for the design and $300 \in$ of Consumables that will reallocated from our reserve found saved during the former modifications.

Comments on Commission's requests:

"Please produce the remaining information materials of 4,000 colouring books, 7,000 memory cards and 4,000 brochures no later than 31/12/2016, and submit them with your next report."

The colouring book and the memory cards are needed for the citellus show and were ready for the opening of the shows.

"I remind you to use the LIFE and Natura 2000 logos in all documents and electronic materials produced in the framework of the project, including your studies and research reports, otherwise the relevant costs may be considered ineligible at the Final Report stage."

We take care to include the logos on all materials.

<u>Action E3:</u> Raising awareness measures to convince the water management bodies to protect habitats by nature friendly water management

October 2014 – October 2018

Results planned	Results achieved
S. citellus habitats will be considered and	No achievements yet
protected from flood water	

Action status: ongoing

Measure	Original deadline	Revised deadline	Progress
Minutes of meeting	31.12.2016	31.12.2017	ongoing

Description of the progress and outputs during the reporting time:

The document prepared under action A7 was handed over the concerned water management authorities who acknowledged it and promised to consider it but they did not find time for meeting on this subject. We still try to find some occasion to meet them and discuss it.

Indicators used to test the performance:

Problems and their impacts:

The water management authorities did not find time for a meeting yet.

Modifications:

BEKE contacted the Water Authority in 10/2016.

Comments on Commission's requests:

"Please submit meeting minutes and summaries of the consultations with authorities." Consultations were not yet held because the water management authorities did not find time for it.

Action E4: Producing and displaying "Keep the dog closed" posters

October 2014 – December 2018

Results planned	Results achieved
Less dogs and cats will hunt outside of the	• 2.000 copies of the poster was printed in
settlement	English-Hungarian
	• 500 copies of the English-Romanian layout
	was printed

Action status: ongoing

Measure	Original deadline	Revised deadline	Progress
2000 pieces of A2 size poster	31.12.2014	30.04.2015	completed

Description of the progress and outputs during the reporting time:

2000 Hungarian posters were prepared by 31/8/2015 in Hungarian and were distributed to partners. 500 Romanian posters were printed by 01/12/2016 and handed over to the Romanian partners. (Annex E4/1) Posters were installed at project areas, repatriation sites and other relevant areas (Refer to Annex E4/1 – E4/2 of MTR1) (Annex E4/2 & E4/3) of partners and installation will continue in the future. Also the replacement of the destroyed posters is happening.

The installations of posters is happening until the end of the project.

Indicators used to test the performance:

Number of posters printed.

Number of posters exhibited.

Problems and their impacts:

No problems appeared

Modifications:

There will also be a Romanian version of the poster prepared due to the initiation of the Romanian partners. Given that on their project areas, even if those are Hungarian speaking parts, it is not appreciated to install Hungarian posters if parallel a Romanian version cannot be found. The Romanian layout was prepared by 15/04/2016 and was printed by 12/2016 in 500 copies together with the posters of E4.

<u>Action E5:</u> S. citellus show (Introduction of the target species for the general public)

October 2014 – October 2015

Results planned	Results achieved
Three exhibition centre will be developed	 The citellus show at BfNPD is ready and
and annually at least 100.000 people will	functioning
learn about the animals and related nature	• 6000 copies of B/5 size guide booklets was
conservation problems and the work of the	printed
project	• The citellus show at FANK is ready and
	functioning with 15 animals
	• The citellus show is ready by NIMFEA

Action status: in progress

Measure	Original deadline	Revised deadline	Progress
• 6000 copies of B/5 size guide booklets	31.07.2016	31.03.2017.	completed
 Three exhibition centres ready 	31.07.2016	31.03.2017.	completed

Description of the progress and outputs during the reporting time:

The three citellus shows were developed:

1.) BfNPD prepared the documentation and requested the approval of the Ministry in 01/2016. The approval arrived in 07/2016, and the procurement procedure started immediately. Thus the procedure could be closed by 31/08/2016 and the installation of the system could start after.

The citellus show is located at the plot of Tihany 087/1 parcel number which is a pasture grazed by Hungarian grey cattle with a significant population of *S. citellus* and this citellus show is aiming to introduce the life of this colony on a high quality for the public. The show is aiming to achieve this with the use of 4 large resolutions outdoor cameras installed on the site to provide high quality live broadcasting to the 4 information terminals (kiosks). There are 3 weatherproof outdoor terminals, 2 placed in the garden of the Lavender House visitor centre and one at the edge of the site, and an indoor terminal placed inside the visitor centre. (Annexes E5/1-2)The show was ready by 28/02/2017 and following a kind of test-phase the official opening ceremony of the show took place on 15/06/2017 (Annex E5/3)

The guide booklets was printed in 6,000 copies by 31/03/2017 and besides being an information material introducing the show, at the same time it is also an education booklet for kids introducing not only the species of *S. citellus*, but also the needs of the species and related conservation activities. (Annex E5/4)

2.) At NIMFEA the establishment of the citellus show happened at Fekete István Education Centre. The production of panes/elements happened and were delivered to Nimfea by 31/06/2016.

The citellus show of NIMFEA (citellarium) is a fenced-around area where the animals are exhibited for the public. A dense fence of 10*10 m was immersed 0.8 m deep in the soil that is 1.7 m high over the surface. Due to the extreme weather conditions of the former years security solutions were implemented, as the installation of drainage tubes and an open rainwater drainage ditch was also developed (Annex E5/5). It was prepared by 30/03/2017 but as due to the delays in the breeding, no *S. citellus* were placed in it therefore some *C. cricetus* and *L. europeus* were introduced to the public. Next year if there will be some *S. citellus available* over the quantity what will be needed for repatriation than we will take them from the wild.

3.) The establishment of the citellus show at FANK started on 13/02/2017 and the show was ready by 31/03/2017. The citellus show was developed at the paddock formerly used for N. nutria. This show is placed in a place so-called "Budapest House' showing the wildlife of Budapest and its close neighbourhood. The concrete wall of the paddock is painted to symbolize an airport (of Budaörs) near Budapest that is an important S.citellus habitat. (Annex E5/6) Due to the delay of the breeding the animals could only be captured from natural populations. The permission could have been requested only after knowing the source population. The first attempt was to place that 11 animals that had to moved due to construction works from Budapest International Airport, but the Duna-Ipoly National Park Directorate did not agree and placed these animals to a natural site. Finally the animals were relocated from a natural site near Kecskemét where the habitat was no longer suitable for the long term survival of the population. The permission for keeping 15 S.citellus was issued on 21/06/2017 by the Environmental and Nature Conservation Department of Pest County Government Office (Annex E5/7). 6 animals were captured and placed 22/06/2017 in the show other 9 were placed during 07/2017 that were captured from the same source population near Kecskemét.

Problems and their impacts:

BfNPD was facing problems with the overcomplicated bureaucracy of procurement process, that was taking really long time. The procedure was launched in 01/2016 by the Directorate and it was completed by 31/8/2016. This led to delays in the implementation.

During the night of 27-28/08/2017 the solar panes and the batteries enabling the broadcasting were stolen from the site. BfNPD made the police report and the investigation started. Replacement batteries were placed to enable the functioning of the system until the closing of the police investigation procedure.

At FANK the reason of the delay was that tamed individuals born in captivity at the breeding of KAPOSVAR were planned to be placed in the show, that was in delay, thus FANK was expecting the animals in 2017 and the management of the zoo did not allow to set the show before the animals were foreseen to arrive. The other problem was that the permission for placing wild animals could only have been requested after knowing the source population. This leaded to further delays.

At NIMFEA after the production of the panels, there were difficulties with the purchase of soil, that was necessary to fill the citellarium, and only when the place is ready the permission can be requested, that could take 3-4 months. Due to the delays in the breeding, no *S. citellus* were placed in it therefore some *C. cricetus* and *L. europeus* were introduced to the public.

Modifications:

Due to the delay at KAPOSVÁR in the starting of the breeding programme the citellus shows at NIMFEA and FANK were also delayed given that originally it was planned that captive bred and tamed animals will be used by FÁNK and NIMFEA to exhibit animals without capturing new individuals from the wild. Due to the further delays at KAPOSVÁR at the end the animals had to be captured from the wild in case FÁNK. In case of NIMFEA there was not enough *S. citellus* available even for repatriation therefore some *C. cricetus* and *L. europeus* were introduced to the public as a temporarily solution.

The preparation of the booklet of BfNPD and the cost of printing and design was shifter to MME due to the overcomplicated bureaucracy of national parks in Hungary to be able to produce the material in time. MME and BfNPD worked together on the preparation of the booklet.

Comments on Commission's requests:

"Please accelerate this action and fully establish the exhibition facilities by 02/2017. Further delays will cause the relevant cost items to be considered ineligible at the final report stage." The cellulite shows are working and they are very popular although in NIMFEA it is still a temporary solution.

Action E6: Design and operate project web site

October 2014 – December 2018

Results planned	Results achieved
An accessible and up-to-date web site will	• The website of the project has been
inform the general public and technical	launched by 10/3/2015
staff working on similar projects about the	• F. cherrug breeding can be monitored there
project. Hence, it will promote networking	continuously in breading seasons
with past and future LIFE projects dealing	• Continuously being updated, news and
with the conservation of the target species.	outcomes/deliverables uploaded.

Action status: ongoing

Measure	Deadline	Progress
• Functioning Webpage	31.12.2014	completed

Description of the progress and outputs during the reporting time:

The preparation of the project website began by the beginning of 2015 by the beneficiary responsible for the maintenance, MME, and the project coordinator. The website was launched during the 2nd week of March 2015 and can be reached at the following direct link: http://sakerlife3.mme.hu. (Refer to Annex E6/1 of IR). The website was linked to the common website for previous Saker LIFE project as a 3rd 'menu point' (http://www.sakerlife.mme.hu/intro.html) by 31/3/2015 in order to reach higher publicity be reaching the audience of the two previous well-known projects. (Refer to Annex E6/2 of IR). The site can be reached in three languages (English, Hungarian and Romanian). The streaming of the webcam of Action D1 was linked to the website by 31/3/2015. (Refer to Annex D1/1 of IR). And the streaming is working from 01/03 to 31/10 every year.

The site is under constant development and the uploading of the content is in progress, news and results/outcomes of the projects are being uploaded when being ready. The site had 24,746 visitors from 106 countries who visited the site 104,207 times (Refer to Annex E6/1 of MTR1) until 06/2016 and had 17,423 visitors with 118,802 site visits from 89 countries between 06/2016 and 10/2016 (Annex E6/1). Via MAVIR website 34,881 visitors made 348,985 site visits.

<u>Indicators used to test the performance:</u>

Number of visitors of the site:

Problems and their impacts:

To avoid pirate sites overtaking the streaming a disclaimer had been developed and uploaded to the site together with the streaming. This took some times to finalise by the lawyer of MAVIR therefore the streaming started 2 weeks later.

Modifications:

No necessary modifications.

Comments on Commission's requests:

"I acknowledge that you uploaded the PDF copies of the leaflet and brochure education materials and the research papers to the website. Nevertheless, please extend the website information in general; especially on the biology and conservation of the target species." The website information regarding the target species was updated and the results of the project upload.

"I repeatedly encourage you to update the content (news, species description, S. citellus display sites & galleries) of the website, especially in the English and Romanian versions by the submission of your second Mid-term Report."

The updates were done and uploaded.

Action E7: Erecting information signs at project site

October 2014 – March 2015

Results planned	Results achieved
There will be large scale publicity of the	• The design of the draft layout has been
project aims and activities and its support	prepared by 31/3/2015
by LIFE+.	• 23 Hungrian/English and 10
	Romanian/English boards had been prepared
	and installed

Action status: completed

Measure	Original deadline	Revised deadline	Progress
• 23+10 information boards ready	31.12.2014	31.05.2015	completed
Boards erected	31.03.2015	30.06.2015	completed

Description of the progress and outputs during the reporting time:

In Hungary:

The subcontractor was selected, and the text of the signboards was prepared. The boards are bilingual, in Hungary the text is visible in English/Hungarian, the boards that are erected in Romania are English/Romanian. (Refer to Annex E7/1 of IR). The 22 Hungarian boards were prepared in B1 size (Refer to Annex E7/1 of MTR1) and a roll-up (Refer to Annex E7/2 of MTR1) was also produced. The boards were placed by the project sites or by more frequently visited areas near the project sites (Refer to Annex E7/3 of MTR1).

In Romania:

The 10 Romanian boards were prepared in B2 size (Refer to Annex E7/4 of MTR1). All information boards were placed in the central/focal places of settlements; near schools, municipalities, town centres, parks, tourist information centres (Refer to E7/5 of MTR1).

<u>Indicators used to test the performance:</u>

Nr. of information sign displayed.

Problems and their impacts:

No problems appeared

Modifications:

In Hungary:

Instead of 23 information board 22 were prepared and one roll-up. The roll up were displayed in many places during meetings and different evens.

Problems and their impacts:

No problems appeared

<u>Action E8:</u> Secure public support for conservation efforts

January 2015 – December 2018

Results planned	Results achieved
• 1500 copies of B1 size posters in	• 1500 copies of B1 size posters in Hungarian
Hungarian and 300 copies in Romanian	are ready
languages	• 300 copies of B1 posters in Romanian
• 1000 T-shirts prepared	language are ready
• 500 copies of DVD in English,	• 1000 T-shirts were prepared
Hungarian, and Romanian languages	• the preparation of the film is in progress
produced, distributed and broadcasted in	
national channels.	

Action status: ongoing

Measure		Original	Revised	Progress
		deadline	deadline	
•	1500 + 300 copies of A2 size posters	30.09.2015	31.07.2016	completed
•	1000 T-shirts	31.03.2016	31.07.2016	completed
•	500 copies of DVD	01.07.2018	01.07.2018	ongoing

Description of the progress and outputs during the reporting time:

<u>Posters:</u> Final layout of the poster Hungarian (3rd version) was prepared by 30/4/2016 and was ready by 18/06/2016 (**Refer to Annex E8/1 of MTR1**). For the Romanian version the basic and also distribution maps had to be changed in order to include the areas of Romania. The Romanian version was printed together with the poster of action E4 by 05/12/2016 in 500 copies (Annex E8/1).

In Hungary posters were exhibited at schools, public areas, local government offices and were exhibited and distributed also on events.

In Romania posters were posted at public areas – highlighted local informations points of municipalities, local government offices, public institutions and bus stops – and were exhibited at events (e.g. at Caravan LIFE event at Bucharest, organized by the Romanian Ministry of Environment in 06/2017; at Romenvirotec Expo, international exhibition of environmental protection technologies in 10/2017) (Annex E8/2).

T-shirts: Two type of T-shirts were prepared: 1.) T-shirt for project staff (with project logo and the name of the project) (Refer to Annex E8/2 of MTR1) and 2.) T-shirt for public for adults and also for children (with the drawings of the targeted species) (Refer to Annex E8/3 of MTR1). Both includes LIFE and Natura 2000 logo as well. Layouts were ready by 31/7/2016 and the selection of supplier started. In the meantime the layouts were also discussed on the annual evaluation meeting of 2016 (at Kaposvár on 11/10/2016) and the partners requested to change the design of the version prepared for the public (version 2.) and use a figure where all the target species were indicated. For this reason an illustration of one of the booklets was chosen to be used on the T-shirts for adults. (The design of the T-shirt for children remained unchanged) Following this change new layouts of the T-shirts were prepared, already with the selected colours (Annex E8/3). The ordering of the T-shirts continued with the new layout, but finally the T-shirts were ready only by 31/01/2017. Also gym bags were prepared by own sources of MME, in 3 versions, using the formerly prepared graphics of the project (Annex E8/4). The posters were distributed between beneficiaries. Film: Film producer company – NATFILM – had been contracted by 12/2015.

The production of the film had started, the film troop took shots of the field-sample collecting at Tihany site and at the installation of a camera trap at a nest of saker near

Dévaványa (Refer to Annex E8/4 of MTR1) in Spring 2016 (Annex E8/5).

During the summer of 2016 the film troop took part and shots at the repatriation and tagging of *S.citellus* at Solymár and Esztergom site. In Autumn 2016 the relocation of *N.montanosyrmiensis* was also filmed.

In 2017 the media event of ringing the chicks of *F.cherrug* nest monitored with web-cam and the relocation of *C. cricetus* was recorded.

The project work was introduced at several events:

In Hungary:

Presentations:

- 1.) Presentation by the Project Manager on the 'Mammal of The Year' of 2015 in the National History Museum in Budapest on 27/3/2015. (Refer to Annexes E9/1-E9/2 of IR)
- 2.) Presentation by the Project Manager in the "Ürgekutatás Konferencia" organised in the frame of "The mammal of the year 2015, the souslik." events during the year: The project took part in the organization of the final scientific conference of the event on 03/11/2015 at Budapest Zoo (FANK) (Refer to Annex E8/5 of MTR1).
- 3.) The project participated at the final closing event, the "Ürgegála" 13-16/11/2015 at Natural History Museum (MTM) where the project appeared with the didactic materials for children (Refer to Annex E8/6 of MTR1).
- 4.) Presentation by Project Technical Coordinator at the VI.th Bird Protection Conference (VI. Madárvédelmi Konferencia) on 18/11/2015 (Refer to Annexes E8/7- E8/8 of MTR1).
- 5.) Presentation of the project work by the Project Manager in the 10th Hungarian Conservation Biological Conference (X. MTBK at Mórahalom, on 1-3/4/2016. BEKE introduced the activities regarding the protection of *C. cricetus* and presented a poster regarding the project-related activities (Refer to Annexes E8/11-E8/12 MTR1).

Abstracts were submitted and 4 were selected for presentation at the 11th Hungarian Conservation Biological Conference (XI. MTBK at Eger in 11/2017)
Public events:

1.) Participation on the "Family Day" events of MME in 2015 (19/9/2015) and in 2016 (14/5/2016) where the project appeared with didactic and awareness raising materials (Refer to Annexes E8/9-E8/10 of MTR1).

The project was presented on several public events between 07/2016 and 10/2017:

- 2.) The project participated at the 'Tatai vadlúd sokadalom' event in 11/2015 and 18-19/11/2016. Information materials were distributed and the boards of target species were used for entertaining and education children.
- 3.) MME participated at the 'Művészetek völgye' festival at Kapolcs on 28-31/07/2016 with the magnetic boards and the tunnel system. Information materials were also distributed.
- 4.) MME participated at the 'Gyüttment' festival (about environment consciousness) at Csobánkapuszta on 26-28/08/2016 with the magnetic boards and the tunnel system. Information materials were also distributed.
- 5.) MME participated at the Day of Earth at Farmos on 21/04/2017 and Normafa on 23/04/2017 to introduce the project.
- 6.) Participation on the "Family Day" events of MME in 2017 on 04/06/2017 and on 16/09/2017 held in Jókai-garden at Budapest.
- 7.) Participation at the Day of Hungarian Nature (Magyar Természet Napja) on 21/05/2017 in Budapest, Csillebérc.
- 8.) Project was introduced and materials were distributed for visitors at Örségi Lepkekaland on 22-24/07/2016 and in 2017 on 12-14/05/2017, Őrségi Tökfesztivál in 2016 (24/09/2016) and 2017(23/09/2017) by ÖNPD.

9.) MME presented the project at OMÉK (National Agricultural Exhibition and Fair) on 20-24/09/2017 at FEHOVA (Fair for hunting and fishing) 09/02/2017 in Budapest.

(Annex E8/6)

Educational programs:

Several presentations were held by beneficiaries (BEKE, MAVIR, NIMFEA, ÖNPD) about the project and the importance of the protection of the target species. (Annex E8/7)

In Romania:

On 9/4/2015 EPASM and MILVUS organized a presentation at Szaniszló (in Satu Mare County) to introduced the project and it's aims to local students, teachers and representatives of the municipality. Besides the presentation a file trip was organized for the participants where *S. citellus* could be showed to the participants.

On 24/8/2015 the project was represented by EPASM at the cultural event of 14th Patrium Hungarian Day at the Kossuth Garden in Szatmárnémeti (Satu Mare) through an information stand where the project itself, it's aims and target species was introduced to the participants of the event.

On 14-16/12/2015 EPASM gave presentations about the project at the 3 most significant Hungarian schools (Kölcsey Ferenc Main Gymnasium, Szatmárnémeti Reformat Gymnasium and Hám János Roman-Catholic Lyceum) to secondary and primary school children. At the presentations the project and the target species were introduced to call the attention of students on the importance of the protection of the species. (Refer to Annex E8/12 of MTR1)

In 12/2016 the project was presented for the students of Mihai Eminescu National College of Szatmárnémeti (Satu Mare). A local TV broadcast a short summary of the event. The project was presented at the Info-life Day organized for the 25th anniversary of LIFE in

Szászka on 21-23/05/2017 (Annexes E8/8-E/9).

Indicators used to test the performance:

Nr. of sort of material produced

Nr. of materials distributed.

Nr. of people participated at the events/ were informed by the project.

Problems and their impacts:

<u>Poster:</u> The distribution data in Hungary and Romania were differently detailed. The synchronization of the distribution data took quite some time to be able to generate the up-to date maps for the poster. The Romanian version was ready by 05/12/2016.

<u>T-shirt:</u> The prices of the production of 1.000 T-shirts is higher than that was budgeted, searching for cheaper possibilities (different suppliers and solutions) was time-consuming. The cheapest offer was selected but this resulted further delays, as some of the T-shirt materials took even one months to arrive and also the production took quite a while as the supplier had not a big-scale printing capacity (actually the T-shirts were made one-by-one).

Modifications:

<u>Poster</u>: Instead of 300 copies 500 were be printed of the Romanian version due to more cost-effective production costs (as the price of 300 would be the same as of 500 copies). Additional materials produced:

1.) 7*500 pieces of stickers: stickers with drawings of the target species for children were produced by 15/09/2015 (Refer to Annex E8/13 of MTR1) (modification approved by the EC on 09/10/2015)

- 2.) <u>Production of 8 magnetic boards</u> of the very popular game (B1 size) with illustration of the target species of plastic: the 7 already existing paper boards (**Refer to Annex E8/14 of MTR1**) (and an additional one about the habitat of the species) were produced of plastic (that is more suitable for outdoor use on events, as the previous ones that were made of paper are respectively destroyed) and metal (for the magnetic effect). <u>Additional costs</u>: $1.000 \in$ of Consumables cost, that can be reallocated from our reserve found saved during the former modifications. (modification was approved by the EC by 30/3/2016).
- 3.) Production of toy tunnel system of mole-rat with explanation boards: A mobile game tunnel system and other material (explanation boards, etc) made by MME to illustrate mole-rat life and explain the life of the other target species. Additional costs: about 1.700 € of External Assistance (1.500 € for the design of 20pcs of A2-size plastic boards explaining the station and exercises of the tube system; 200 € for designing paper masks of the target species that kids can colour and wear these in the tube system while doing the exercises as mole-rats and ground squirrels) about 1800 € of Consumables cost (500 € for the purchase of the materials of the tube system (tubes, chambers and other materials- balls and plastic vegetables, etc), 350 € for the production of 20pcs of A2-size plastic board; 350 € for the frames of the plastic boards and 600 € for printing of (3*500pcs) paper masks. The cost can be reallocated from the reserve saved during the former modifications. (modification was preliminary approved by the EC by email on 30/3/2016).
- 4.) 2 roll-ups regarding *S.trizona* were prepared by BEKE, one will be place at Batúz-tanya at the most important habitat of the species. The other will be exhibited at the 11th Hungarian Conservation Biology Conference (XI. MTBK at Eger) and will be used for other occasions. (Annex E8/10)

<u>Action E9:</u> Informing media about project's aims, activities and achievements

June 2014 – December 2018

Results	planned

The conservation problems and the results of the LIFE project will be brought to the attention of the general public, decision-makers and interest groups. As a result, adequate public support will be attracted to the necessary conservation measures, and information on subsidies available through CAP and the Natura 2000 network will be widely distributed.

- Two Press Conferences will be organised one at the start and one at the end of the project.
- At least two press releases will be circulated annually to local & national newspapers.
- Two articles will be submitted annually to local & national newspapers to magazines for farmers and on the main web sites of relevant hunters associations.
- Two scientific papers will be produced

Results achieved

- Launch Press Conference was held on 27/3/2015 and press release was launched
- Scientific article was published
- Articles in newspapers were launched
- Site visit for media was organized on 16/05/2017

during the project period. • Two site visits will be organised for the	
media.	

Action status: pending

Measure	Original deadline	Revised deadline	Progress
Press releases, articles, scientific papers	01.10.2014	25.03.2015	completed
First Press Conference	01.10.2014	27.03.2015	completed

<u>Description of the progress and outputs during the reporting time:</u> In Hungary:

The fist **press conference** was held at 27/3/2015 at the National History Museum in Budapest, together with the announcement of the *S. citellus* as the 'Mammal of The Year' of 2015. The event was organized in cooperation with the MoA and the NHM. (Refer to Annexes E9/1-E9/3 of IR).

A background material was prepared about the project and **press release** was launched by MME and NHM to introduce the project and its aims to the media. (**Refer to Annex E9/4 of IR**). The national media was represented at the event of and two radio interviews were made with the Project Manager (Oxigen environmental programme of Radio Kossuth and Radio Katolikus).

Three online media published news about it: MTI/Dióhéj Kiadó Kft. (Refer to Annex E9/5 of IR), National Geographic (Refer to Annex E9/6 of IR), and Greenfo (Refer to Annex E9/7 of IR).

The project was also presented in the MAVIR magazine (Refer to Annex E9/8 of IR). Printed Media:

Articles regarding *C. cricetus* were published in 1/2016 in 'Kistermelők Lapja' magazine (**Refer to Annex E9/1 of MTR1**) and in 19/2015 in 'Alkony' magazine (**Refer to Annex E9/2 of MTR1**) initiated by BEKE.

Articles regarding *N.montanosyrmiensis* initiated by KNPD, were published in 2/2016 in 'Túrista Magazin' magazine (**Refer to Annex E9/3 of MTR1**), in 3/2016 an article in 'Madártávlat' magazine (**Refer to Annex E9/4 of MTR1**) and in 4/2016 an article in 'Élet és Tudomány' magazine (**Refer to Annex E9/5 of MTR1**) was published regarding the baseline survey of *N.montanosyrmiensis* initiated by KNPD.

In 05/2017 an article was published about the citellus show in Tihany in the monthly journal of Tihany municipality, the 'Tihanyi Visszhang' (Annex E9/1)

On 06/10/2017 an article was published about relocation of *C.cricetus* in the daily newspaper of Heves county, in the 'Heves Megyei Hírlap. (Annex E9/2) Scientific papers:

In 2/2016 an article in 'Természet Búvár' magazine was published regarding the *N.montanosyrmiensis* initiated by KNPD (Refert of Annex E9/6 of MTR1).

In 07/2016 an article in 'Élet és Tudomány' magazine was published regarding *S.trizona* initiated by BEKE (Annex E9/3).

Online articles:

In 3/2016 an article at 'Greenfo' was published regarding the baseline survey of *N.montanosyrmiensis* initiated by KNPD (Refer to Annex E9/7 of MTR1)

In 10/2017 an article was published about relocation of *C. cricetus* on the online news portal of Heves county (Annex E9/4).

In 06/2017 an article was published about the citellus show in Tihany on the online Nők lapja magazin, the NLCafé (Annex E9/5).

Site visit for media:

On 16/05/2017 site visit for media was organized by MAVIR to the nest with web-camera to ring the chick of *F. cherrug*. (Annexes E9/6-E9/7)

TV and radio interviews:

The project manager had an interview about the project work for the TV News of MTV1 on 22/09/2017.

The project manager had a presentation about the three Saker LIFE project in the Ozon TV on 06/10/2017 in relation the 25 years anniversary of LIFE. It was bradcasted on 19/10/2017. https://videa.hu/videok/ozonetv/emberek-vlogok/10.19-life-projekt-l4Xw1ciRgtMqKULI

In Romania:

7 articles were published, 1 at a national weekly and 6 at regional daily newspapers regarding the project, introducing the aims and targeted species in 12/2015. Articles in seven on-line sites were published, 2 in Romanian sites and 5 in Hungarian language (Refer to Annexes E9/9 of MTR1).

Several on-line articles and news were prepared by MILVUS. (Annex E9/8)

An interview with the coordinator of EPASM was made and was broadcasted in a regional television related to the Infolife Day event organized for the 25th anniversary of LIFE in Szászka on 21-23/05/2017. The interview can be found at: http://www.btv.ro/de-25-de-anilife/, the relevant part starting from 1:32.

Indicators used to test the performance:

Number of articles published in printed (national, local, regional) and in online media.

Problems and their impacts:

Site visit for media:

In 2016 it was also planned to organize the site visit for the representatives of media, but given that the laying of *F. cherrug* was not successful, the visit had to be omitted.

Modifications:

No necessary modifications.

Action E10: Layman's report

October 2017 – October 2018

Results planned	Results achieved
4000 copies of 20 pages hard copy report	No achievements yet
and PDF format on the web in English,	
Hungarian, and Romanian languages	

Action status: pending

Measure	Deadline	Progress
• 2000+1000+1000 copies of the Layman's report	30.08.2018	pending

<u>Description of the progress and outputs during the reporting time:</u> Only in 2018.

Indicators used to test the performance:

Problems and their impacts:

No problems

Modifications: No necessary modifications.

5.1.5. Action F. Overall project operation and monitoring of the project progress

Actions F1-F4 is discussed in part 3, Administrative part.

Action F5: Networking June 2014 – December 2018

Result planned	Result achieved
Efficient project implementation due to intensive networking	The project has been presented on a several events.

Action status: ongoing

Measure	Original deadline	Revised deadline	Progress
4. Reports of visits	31.12.2015		completed
5. Memos of meetings	31.12.2016	31.12.2018	ongoing

Description of the progress and outputs during the reporting time:

The partners participated at several networking activities to exchange knowledge regarding the target species and project activities (e.g repatriation, tagging, etc.) that can be categorized as follows

Networking on technical events

Networking meetings between partners

Networking meetings with other projects

Networking with other institutions

The meetings can be found, as was requested, in the summary table at Annex F5/1

Indicators used to be test the performance:

Number of networking occasion

Problems and their impacts:

No problems appeared

Comments on Commission's requests

"Please submit a summary table of networking events and meeting memos with your second Mid-term Report"

Summary table can be found at Annex F5/1 and memos can be found at Annexes F5/2-F5/12.

Memos are not available from networking field works/trips and neither when networking on technical events happened.

5.3. Evaluation of Project Implementation

5.3.1. Methodology applied

Since the main objective of the project to secure the prey sources of the endangered *A. heliaca* and *F. cherrug* therefore a baseline survey of the target species' population and the stakeholders knowledge was conducted; Also the genetic, stress and health status of them was assessed; Suitable habitat was purchased and reconstructed; Stepping stones were created among Natura 2000 areas; Facilities has prepared for indoor propagation of *S. citellus*; *S. citellus C. cricetus* and *N.montanosyrmiensis* were relocated into suitable habitats; Mainly adult but some juvenile birds are tagged with PTT to collect information of land use and hunting habit; The prey assortment was identified by using video cameras and photo traps.

5.3.2. Results achieved

Table 3: Results achieved and evaluated

Task	Foreseen in the revised proposal	Achieved	Evaluation
A1. Baseline surveys of populations	With these data, it will be possible	• Guidelines for the baseline	Result mostly achieved.
of target species for monitoring	to exactly identify the threats that	surveys have been prepared	S. citellus trend analysis is going
future trends and impacts of our	local populations or colonies are	• Survey method tested and	on but it is extended to get more
actions.	facing, and these threats will be	presented	precise information than was
	addressed through specific	• Baseline survey was	expected.
	conservation measures.	implemented in 2015 and was	It is foreseen that the action will be
		going on in 2016	fully completed by end 2017 and
		• Reports on the results/distribution	results will be entirely achieved.
		maps of the results of the baseline	
		survey was prepared	
		Habitat suitability was analysed	
		• Trend of target species were	
		analysed	
A2. Evaluation of the genetic status	We will obtain a general knowledge	• The guideline for sample	In progress
of the fragmented populations of S .	of the genetic status of the S.	collection has been prepared.	Due to late permission the action
citellus	citellus populations. This includes	• List of Potential colonies are	was delayed.
	the assessment of heterozygocity as	prepared.	In Hungary the results are
	a measure of viability and the	Genetic sample collection was	basically achieved, the Romanian
	determination of the loss of genetic	implemented	examination is still going on.
	diversity due to isolation.	Genetic examination of the	The results of the genetic
		collected samples is ongoing	examinations, revealing that the
		Genetic examination of the	genetics of S. citellus populations
		collected Hungarian samples was	can easily recover from bottleneck
		implemented	effects suggested that the
		• Genetic examination of the	advantage of introducing
		collected Romanian samples is	additional genetic alleles in certain
		ongoing	populations is respectively low.
		• Results of the genetic	It is foreseen that the action will be
		examination of Hungarian samples	fully completed by end 01/2018

Task	Foreseen in the revised proposal	Achieved	Evaluation
		is ready	and results will be entirely achieved.
A3. Survey of the stress status of <i>S. citellus</i> colonies and its use to develop <i>S. citellus</i> welfare plan	Describing the physiological status of animals helps us predicting the future diseases and thus preventing the lethal events leading to population decrease. As stress responsiveness plays a key role in allowing animals to cope with environmental challenges, measurement of glucocorticoid levels can give insight into an animal's well-being and can aid us solving conservation and management issues. We will prepare a suslik habitat management guideline summarizing the optimal conditions corresponding to minimal stress levels.	 The guideline for sample collection has been prepared. List of Potential colonies are prepared Collection of samples for stress analyses was implemented together with the collection of genetic samples (in A2) The examination of the collected samples was done 	In progress It is going parallel with A2. In Hungary the results are basically achieved, the Romanian examination is still going on. It is foreseen that the original tasks planned within the action will be fully completed by end 2017 and results will be entirely achieved. Thought the survey was extended and additional samples and colonies will be examined.
A4. Set up the Land Stewardship Advisory Service	Land Stewardship Advisory Service established in the project areas that would provide regular advice for the farmers and hunters on the target species.	 The manual for the Land Stewardship Advisory was prepared and included in the Project Handbook. It was introduced on the training of project participants on 10/2/2015 The kick-off meeting of the Advisory Service was held on 17/11/2015 in Budapest together with the training of the members of the Service. The Romanian Best Management Guideline is ready 	Result partly achieved LSAS has established. The Romanian best management guideline is ready and was submitted for the relevant authorities. It is foreseen that the action will be fully completed by end 2017 and results will be entirely achieved.

Task	Foreseen in the revised proposal	Achieved	Evaluation
A5. Preparing airport's grassland management guideline	An airport management guideline what would enable the airport managers to manage the airport grassland to satisfy the air and <i>S. citellus</i> safety requirements in the same time.	 A protocol was prepared and included in the Project Handbook. The questionnaire was prepared and finalized and is in use by the partners during the consultations with airport managers. Final version of the guideline was prepared and introduced to the airport managers. It was endorsed by the new governmental advisory board. 	In progress The designing and editing of the of the guideline is in progress. The printing of the guideline is foreseen to be completed by end 2017 and the printed guidelines will be distributed to stakeholders. By the first quarter of 2018 the results of the action will by entirely achieved.
A6. Updating S. citellus Reintroduction Protocol	An up to date digital Reintroduction Protocol for <i>S. citellus</i> repatriation based on the latest developments.	An up to date digital Reintroduction Protocol for <i>S. citellus</i> repatriation based on the latest developments was prepared by 15.2.2015 and was revised by 31.12.2015 and revised again by 31.01.2017.	Result achieved Based on the result of the genetic survey and the habitat analyses the protocol was further updated.
A7. Evaluation of the water management system on <i>S. citellus</i> habitat and preparing recommendation how to improve it.	Mortality due to flood will be reduced and repatriation would not be done on area endangered by flood.	 The protocol for the evaluation of the water management system on S. citellus habitat in favour of the S. citellus was prepared Project areas were assessed against flood danger Recommendation for the flood and inland water prevention activities in the S. citellus habitat prepared and handed over the concerned authorities 	Result achieved
A8. Baseline survey of the public awareness	Through the survey we will be able to maximise the effects of our	• The first test version of the questionnaire was developed.	Result achieved

Task	Foreseen in the revised proposal	Achieved	Evaluation
A9. Acquisition of equipment (in	program, and PR-campaign. Cost efficient procurement.	 Online and PDF. version of the finalized questionnaire was developed and unloaded to the site. Data collection was implemented Collected data was analysed and evaluation was prepared cars and all other equipment were 	Result achieved
compliance with public-procurement regulations)	Parameter Parame	ordered or purchased	3.502.503.50
B1. Purchase of land	58,6 ha grassland will be owned by the state and managed by the KNPD. It will serve for rehabilitation and sustainable management as a potential habitat for <i>S. citellus</i> repatriation and for feeding ground for <i>A. heliaca</i> and <i>F. cherrug</i> . Another10 abandoned farmlands about 2 ha will be purchased in HUKM20014.	 The proposed areas were checked against flood danger and the purchase plan has modified according to it. 103.9 ha grassland was purchased by KNPD 0.5 ha of farmhouse lands was purchased and 1.6 ha is in progress 	Result mostly achieved. By completing the purchase of 1.6 ha farmhouse land, the result will be overfulfilled by purchase of an extra 45 ha land.
B2. Lease of land	50 ha leased. Natura 2000 sites will be connected. The S. citellus, C. cricetus and L. europeus populations will be strengthened and spread over the area what would serve food source for the increasing A. heliaca and F. cherrug population and may reduce the pressure on other game species. It will reduce the conflict between hunters and nature conservationist.	The activity is moved to C4 action.	See in C4 Action
C1. Establishing captive breeding		1	,
program for S. citellus and genebank	keeping and breeding S. Chellus	of S.citellus was selected within	racinities were ready to start the

Task	Foreseen in the revised proposal	Achieved	Evaluation
from captive and natural colonies	individuals in captivity. Such methodology will be transferred to keep the animals in the Education Centre (Action E5) and show the tame individuals to the public there. We expect to produce 50 captive bred animals by the end of the project. Captive bred and tamed animals will be used by FÁNK and NIMFEA to exhibit animals without capturing new individuals from the wild.	the university premises and the establishment of the facilities and captive breeding conditions were developed. • Permissions were gained • 13 animals were captured and placed at the breeding place	breeding activities but the permissions were gained late. The animals were captured and placed in the breeding in October 2017, breeding will start with 13 animals (5 females). The results can be achieved in case the animals will engender in Spring 2018.
C2. Establishing veterinarian surveillance of potential food sauces of A. heliaca and F. cherrug i.e. S.citellus, C. cricetus, N. superspecies leucodon and L. europeus	Veterinarian surveillance of potential food sauces of <i>A. heliaca</i> and <i>F. cherrug</i> is established.	 Guideline for sample collectors has prepared and included in the Project Handbook Training for sample collectors was held 399 samples for veterinarian examination were collected during the filed sample collection activity in HU in 2016 and 84 in RO in 2017 Additional samples were collected at colonies where the possibility of disease was noticed 	In Progress / Result achieved Veterinarian surveillance was established and is functioning. The results of the veterinary surveys concluded that the mixing of <i>S. citellus</i> populations might have rather high risk of transporting sicknesses and diseases between populations.
C3. Improving the genetic status of target populations by planned introductions of animals of known allelic composition	10 <i>S. citellus</i> colonies genetic status will be improved and higher overall genetic variance and viability of the populations.	The activity is moved to C5	Considering the results of genetic examination our experts assumed that the health risks of the translocations of <i>S.citellus</i> into different colonies is higher than their advantages in the improvement of the genetic status of the populations.

Task	Foreseen in the revised proposal	Achieved	Evaluation
C4. Habitat reconstruction to	The potential future hunting areas	Habitat reconstructions were	In Progress
improve the carrying capacity for	of A. heliaca and F. cherrug will be	ongoing on the 103,9 ha the	Habitat reconstruction is going on
prey species	converted to suitable habitat for	purchased area of KNPD	larger area compared to as it was
	prey species including those 58,6	• The nature conservation	originally planned. As the
	ha, what is purchased in the frame	maintenance of 55 ha stepping	reconstruction activities will by
	of the project. Total area and	stones were carried out under the	completed, the results will be
	carrying capacity of grasslands for	supervision of FHNPD.	achieved and will the original
	S. citellus and L. europeus will	• 20 ha of grassland were	objectives will be overfulfiled.
	increase in the purchased areas.	reconstructed by FHNPD, 15 ha	
	The grassland composition will be	was fenced around and	
	more natural dominated by plant	reconstructed, 5 ha under-sown	
	species preferred by S. citellus. 2 ha	• The reconstruction of 2.1 ha area	
	suitable habitat for <i>C. cricetus</i> and	farmhouse lands was done by	
	L. europeus on the reconstructed	NIMFEA, both on the 0.5 ha	
	abandoned farmhouses' lands and	already purchased plot and also on	
	100 ha bounds along dirt roads in	the 1.6 ha where the purchase is in	
	the Great Plain area.	progress	
	Another 70 ha will be reconstructed	• 52 ha bounds along dirt roads in	
	in FHNPD area. Removal of	the Great Plain (in 7 areas)	
	invasive allergenic plants like	• 0,279 ha was reconstructed by	
	ragweed would reduce health	MILVUS at ROSCI0021	
	problems of local people. The current trend of the small		
	mammals' population decline will		
	be prevented by our specific		
	actions. The decline will slow down		
	and hopefully stop after five years.		
	We expect about 10% increase after		
	a 10 years period. The proportion of		
	small mammals among the preys of		
	the increasing A . heliaca and F .		
	cherrug would not be further		
	reduced what would reduce the		

LIFE13 NAT/HU/000183 RAPTORSPREYLIFE

Task	Foreseen in the revised proposal	Achieved	Evaluation
	conflict with hunters. In case of S.		
	citellus based on previous similar		
	actions when half of the introduced		
	animals survived and integrated to		
	the local population, we expect		
	similar outcome after the planned		
	action. Therefore it is foreseen that		
	about in 28 locations which were		
	inhabited sometimes in the past the		
	S. citellus population will be		
	restored. In case of S. substilis		
	trizona it is foreseen that the known		
	20 ha habitat will be doubled or it		
	will be justified that there is not any		
	other localities in Hungary. The		
	existing and potential habitats will		
	be properly maintained without any		
	conflict with S. citellus interest. In		
	case of <i>C. cricetus</i> we expect better		
	information about the size of the		
	existing		-
C5. Reintroduction of S. citellus to	Such interventions will enrich the	• Potential sites are checked and	In progress
reconstructed areas	food supply of local breeding pairs	unsuitable were replaced.	Due to the problems in source
	of A. heliaca and F. cherrug in a	• Permission regarding repatriation	populations at some parts of the
	region where their population is	of S. citellus was issued by the	Great Plan the repatriation
	expected to grow and where they	National Environmental Authority	activities in 2016 failed. The
	mostly predate small game.	in Hungary.	availability of source population is
	Reduction in the predation on game	• Permission regarding the	limiting the possibilities and
	animals would make it easier to	repatriation of <i>C. cricetus</i> was issued by the National	success of the action.
	incorporate local hunters to our conservation efforts. We expect a	issued by the National Environmental Authority.	The repatriation activities will continue in Spring 2018.
	general increase of <i>S. citellus</i> habitat	• 1.220 (478+742) <i>S. citellus</i> were	C. cricetus & N.
	especially in regions where A.	repatriated and 18 new colonies	montanosyrmiensis repatriation
	cspecially in regions where A.	repairated and to new colonies	moniunosyi miensis repairiation

Task	Foreseen in the revised proposal	Achieved	Evaluation
	heliaca and F. cherrug feed. Buffer	were established	was not planned but were
	zones with special water	• 45 <i>C. cricetus</i> were repatriated	implemented as were important
	management would reduce the	and 2 new populations were	and necessary activities from the
	impact of catastrophic events like	established at in areas where A .	point of the conservation of the
	flooding.	heliaca and F. cherrug home range	species.
	Due to repatriation, the number of	areas.	
	colonies and their density will	• 9 N. montanosyrmiensis were	
	increase. Such changes will	repatriated from the border-zone to	
	positively affect the breeding	Öttömös project site.	
	success of raptors. Based on		
	previous similar actions when half		
	of the introduced animals survived		
	and integrated to the local		
	population, we expect similar		
	outcome after the planned action.		
	Therefore it is foreseen that about		
	in 28 locations which were		
	inhabited sometimes in the past the		
	S. citellus population will be		
	restored.		
C6. Protection of short term survival	, ,		In progress
and evaluation of long term success	reintroductions with reduced	done in 2016 with high survival	The activity will continue in
of reintroduced and natural prey	number of repatriated animals	rates.	Spring 2018.
populations			The objective will be achieved as
			the survival of the newly
			established populations seems
G 7		400	promising.
C7. Encouraging hunters to catch		• 400 traps were purchased and	In Progress
predators the competitors of A.	reintroduction areas will be reduced	handed over to hunting	The objectives are foreseen to be
heliaca and F. cherrug around the	therefore the reintroduction success	organizations	achieved as predators are being
habitat of S. citellus, C. cricetus, and	will considerably increase.	• Trapping is ongoing	reduced at S. citellus, C. cricetus,
L. europeus by distribution of traps		• Annual reports of trapping	and L. europeus habitats.
for them.		activities of 2016 were submitted	

Task	Foreseen in the revised proposal	Achieved	Evaluation
C8. Mapping the movements of <i>S</i> .	New and practical information on	• Two types of tags (collar and	In Progress
citellus	the two species that will contribute	internal tag) was selected.	The evaluation of the results is in
	to prepare and carry out more	• 4 animals were tagged and	progress. The system works well
	conservation measures more	followed in 2016 and the system	and provided lot of useful and
	efficiently.	was tested	unexpected information so far.
		• 6 animals were tagged and being	The result are partly achieved and
		followed in 2017	foreseen to fully be achieved.
D1. Monitoring of the impact of the	Pictures of the photo traps at the	• The guideline for video- and	In Progress,
project actions by video record and	nests along the project areas will	photo-trapping was developed	Evaluation of pictures taken by
photo traps in A. heliaca and F.	document the preys used to feed the	and was included in the Project	photo-traps in 2016 was completed
cherrug nests.	juveniles. The evaluation of the	Handbook.	and list of food source/prey was
	pictures will confirm the presence	Pictures are continuously	prepared.
	and possible increase of the	recorded for later evaluation	The result are partly achieved and
	S.citellus, C. cricetus and L.	• On-line video streaming is	foreseen to fully be achieved.
	europeus among the preys.	presented on the website of the	
D2 14 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		project	Y D
D2. Monitoring of the impact of the	The land use of the breeding birds	• The guideline for satellite tagging	In Progress
project actions by satellite tagged	can be identified. The impact of the	of adult birds was developed	The result are partly achieved and
adult birds.	different project action can be	and was included in the Project Handbook.	foreseen to fully be achieved.
	justified by the satellite tagged birds.		
	birds.	• 20 transmitters were purchased by 28.02.2016 by MAVIR	
		• 12 F. cherrug and 2 A. heliaca	
		was tagged in were tagged in	
		Hungary	
		• 5 F. cherrug and 2 A. heliaca was	
		tagged in Romania	
D3. Monitoring of the project actions	The project's impact on the target	• 5 guidelines of the monitoring	In Progress
	species will be easily monitored by	methodology of the target species	0
	the management team.	were prepared and were included	
		in the Project Handbook.	
		• Annual monitoring reports were	
		prepared	

Task	Foreseen in the revised proposal	Achieved	Evaluation
D4. Assessment of the social-economic impact	A study will be prepared and delivered with the Final Report.	No achievements yet.	In Progress Data collection is ongoing The planned results will be achieved by the preparation of the study.
D5. Assessment of ecosystem functions restoration	delivered with the Final Report.	Draft of the study was prepared	In Progress Data collection is ongoing The planned results will be achieved by the preparation of the study.
E1. Organising forums for stakeholders	The awareness of the stakeholders and their tolerance towards the target species will increase. Less conflict will risk these species	 Awareness raising of stakeholders is ongoing on project areas. 8 beneficiaries provided advises on sites. 	In Progress Besides organizing forums also individual consultations and advising is also done by the advisers of the LSAS as in many cases it was found more effective.
E2. Production and distribution information materials about the target species, their habitat requirement and management.	Improved knowledge of the stakeholders will improve the habitat management in favour of the target specie	 1.000 logo stickers produced 7.000 sticker of target species prepared 2.000 copied of leaflets on <i>C. cricetus</i> printed 1.000 copies of brochures on <i>C. cricetus</i> printed 2.000 copies of brochure on target species printed 4.000 copies of educational exercise booklet prepared 5.000 leaflets of the project was prepared 4.000 copies of colouring book for children produced 	In Progress All materials were produced and distributed to partners. Partners used most of the materials during their activities. Planned results partly achieved and are foreseen to be achieved by the end of the project.
E3. Raising awareness measures to	S. citellus habitats will be considered and protected from	Results of Action A7 was handed	In Progress
convince the water management	considered and protected from	over to the water authority and	

Task	Foreseen in the revised proposal	Achieved	Evaluation
bodies to protect habitats by nature	flood water	was welcomed but to meet and	
friendly water management		discuss was not yet possible.	
E4. Producing and displaying "Keep	Less dogs will hunt outside of the	• 2.000 copies of the poster was	In Progress
the dog closed" posters	settlements	printed in English-Hungarian	Production of the posters
		• 500 copies of the English-	completed.
		Romanian layout was printed	Installation and replacing of the
			posters is continuous.
			Awareness regarding the threat
			caused by cats is also being raised
	7791 1 21 22 2 211 1	TI : 11 1 (DOIDD:	among cat keepers.
E5. S. citellus show (Introduction of	Three exhibition centre will be		In Progress
the target species for the general	developed and annually at least		The exhibition centres are
public)	100.000 people will learn about the animals and related nature	• 6000 copies of B/5 size guide booklets was printed	welcoming the visitors.
		*	
	of the project	ready and functioning with 15	
	of the project	animals	
		• The citellus show is ready by	
		NIMFEA	
E6. Design and operate project web	An accessible and up-to-date web	• The website of the project has	In operation
site	site will inform the general public	been launched by 10/3/2015	The streaming of the breeding of
	and technical staff working on	• F. cherrug breeding can be	F. cherrug is the most popular part
	similar projects about the project.	monitored there continuously in	of the site.
	Hence, it will promote networking	breading seasons	The site had 24,746 visitors until
	with past and future LIFE projects	• Continuously being updated,	06/2016 and had 17,423 visitors
	dealing with the conservation of the	news and outcomes/deliverables	between 06/2016 and 10/2017,
	target species. We expect 20,000	uploaded.	thus altogether 42,169 visitors by
	visitors over the project period to		10/2017.
	visit the site.		The targeted results are already
DE D	TDI 111 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	TTI 1 : C1 1 C1	partly achieved.
E7. Erecting information signs at	There will be large scale publicity of	• The design of the draft layout has	Result achieved
project site	the project aims and activities and	been prepared by 31/3/2015	
	its support by LIFE+.	• 22 Hungarian/English and 10	

Task	Foreseen in the revised proposal	Achieved	Evaluation
		Romanian/English boards had	
		been prepared and installed	
		one roll up produced and used	
E8. Secure public support for	• 1500 copies of A2 size posters in	• 1500 copies of B1 size posters in	In Progress
conservation effort	Hungarian and 300 copies in	Hungarian are ready	The results will be achieved with
	Romanian languages	• 300 copies of B1 posters in	the preparation of the film.
	• 1000 T-shirts	Romanian language are ready	
	• 500 copies of DVD in English,	• 1000 T-shirts were prepared	
	Hungarian, and Romanian	• the preparation of the film is in	
	languages produced, distributed and	progress	
	broadcasted in national channels.		
E9. Informing media about project's	The conservation problems and the	• Launch Press Conference was	In Progress
aims, activities and achievements	results of the LIFE project will be	held on 27/3/2015 and press	
	brought to the attention of the	release was launched	
	general public, decision-makers and	Scientific article was published	
	interest groups. As a result, adequate	• Articles in newspapers were	
	public support will be attracted to	launched	
	the necessary conservation	• Site visit for media was organized	
	measures, and information on	on 16/05/2017	
	subsidies available through CAP		
	and the Natura 2000 network will be		
	widely distributed.		
	• Two Press Conferences will be		
	organised one at the start and one at		
	the end of the project.		
	• At least two press releases will be		
	circulated annually to local &		
	national newspapers.		
	• Two articles will be submitted		
	annually to local & national		
	newspapers to magazines for farmers and on the main web sites		
	of relevant hunters associations.		

Task	Foreseen in the revised proposal	Achieved	Evaluation
	• Two scientific papers will be		
	produced during the project period.		
	• Two site visits will be organised		
	for the media.		
E10. Layman's report	4000 copies of 20 pages hard copy		Pending
	report and PDF format on the web		
	in English, Hungarian, and		
	Romanian languages		
F1. Project management	Technical, Administrative and	Technical, Administrative and	Working
	financial arrangements and	financial arrangements and	
	mechanisms are in place to enable	mechanisms are in place to enable	
	the smooth and accurate running of	the smooth and accurate running of	
	the project. All project staff is	the project. All project staff is	
	appointed and aware of their roles	appointed and aware of their roles	
	and obligations for completing the	and obligations for completing the	
	project. High quality technical	project.	
	reports and appropriate financial		
	reports produced on time, correctly		
	and to budget, accompanied by		
	report(s) from independent auditor		
	and submitted on time.		
F2. Held Steernig Committee	Regular, timely, scheduled	Annual Steering Committee	Functioning
Meeting	meetings, held with good	Meeting held	
	attendance, which will help secure		
	the high priority of the project work		
F2 F : : : : : : : : : : : : : : : : : :	for project staff and their leaders.	D :	D 1. 1.
F3. Training of project staff	The training will be completed by	Project staff trained and Project	Result achieved
	31.11.2014 latest, with the	Handbook was prepared. All	
	attendance of all project participants. A uniform	contributors got it.	
	1		
	methodology will be ensured as the		
	result of the training. Monitoring		
	data will be comparable and suitable		

Task	Foreseen in the revised proposal	Achieved	Evaluation
	for statistical analysis. Earlier		
	experiences will be utilised in the		
	project execution and will be		
	available for all project participants.		
	Smooth rendering of accounts and		
	compliance with national and EU		
	financial regulations throughout the		
	duration of the project.		
F4. Independent financial audit	Audited Financial Report	External auditor contracted. She is	Functioning
	_	checking the financial documents	_
		regularly.	
F5. Networking	Efficient project implementation	Intensive networking going on	In Progress
	due to intensive networking		G
F6. International conference to share	Evaluation of the work and	Preparation for organisation has	Pending
and evaluate results and experience	achievements of the project with the	started.	_
of the project	participation of international experts		
	will contribute to the global success		
	of A. heliaca, F. cherrug and the		
	food sources species conservation.		
	The personal contacts established at		
	the conference will improve future		
	conservation activities of these		
	species.		
F7. After LIFE conservation Plan	After-LIFE Conservation Plan		Pending
	delivered with the final report.		

5.4 Analysis of long-term benefits

5.4.1. Environmental benefits

5.4.1.1. Direct environmental benefits

- 103.9 ha habitat was already purchased and the reconstruction has started by Kiskunsági National Park Directorate. These are direct benefits for the Annex I. *A. heliaca* and *F. cherrug* species but also for *S. citellus*, *N. montanosyrmiensis* and *L. europeus*..
- 55 ha stepping stones were created among Natura 2000 sites by Fertő-Hanság National Park Directorate. These are direct benefits for the Annex I. *A. heliaca* and *F. cherrug* species but also for *C. cricetus*, and *L. europeus*.
- 50 ha bounds were reconstructed along dirt roads in the Great Plain (in 7 areas) by NIMFEA. These are direct benefits for the Annex I. A. heliaca and F. cherrug species but also for C. cricetus and L. europeus.
- The reconstruction of 2.1 ha area farmhouse lands was done by NIMFEA. These are direct benefits for the Annex I. *A. heliaca* and *F. cherrug* species but also for *C. cricetus* and *L. europeus*.
- 0,279 ha was reconstructed by MILVUS at ROSCI0021 for the benefit of . *A. heliaca* and *F. cherrug* species but also for *S. citellus* and *L. europeus*.
- Improved conservation status of the target species.
- Stabilised populations.

5.4.1.2. Relevance for environmentally significant issues or policy areas

EU Natura 2000 iniciative

- Bird Directives
- Habitat Directives

Agri-Environmental schemes

- A proposal for proper habitat management requirement of *S. trizona* was prepared and submitted to the Bükk National Park Directorate.
- The bind-mol rat advisory board was extended to *S. citellus* based upon the porposal of the project to co-ordinate all *S. citellus* related conservation issues.
- *S. citellus* habitat of Hármashatár-hegy is protected from montain bike playground dou to some intervention of the project manager.

5.4.2. Long-term benefit and sustainability

5.4.2.1. Long-term environmental benefit

The long term environmental benefit would be that the increasing *A. heliaca*, and *F. cherrug* breeding population may find enough food in the long run and can sustain on it. Besides the targeted prey species are also endangered species and their survival itself a long term benefit will be of the project.

The project sites in the Natura 2000 areas will be improved which support higher biodiversity and the EU policy for it.

5.4.2.2. Long-term economic benefit

The nature conservation is not an economic issue but rather an issue to compensate or eliminate the distraction of the economic activities. However the stabilised or increased population may attract recreational tourism. Some extensive agriculture with some agri-environmental subsidies may sustain local farmers.

5.4.2.3. Long term social benefit

Peoples especially the future decision maker generation (children) may understand better the value of Natura 2000 sites, the biodiversity, ecosystem service and the importance of the conservation of the preys of the raptors. A healthier ecosystem would means healthier human beings.

The extensive agriculture may provide more employment in some regions.

5.4.2.4. Sustainability of the project actions

Sustainability of project actions is assured by the following ways:

- equipments purchased and can be used the same after the end of the project (e.g. traps for *S.citellus* and predators, photo traps and transmitters)
- infrastructure established (e.g citellus shows (E5) and captive breeding(C1)) within the project and they can be maintained by the partners
- by the information and knowledge gained by the surveys/researches made genetic survey (A2), stress analysis (A3), veterinary examinations (C2)
- activities implemented with a favourable result where the maintenance of the result is required and these can be implemented with less effort compared to the activity, e.g. new colonies of *S.citellus* established with repatriation (C5) and they can be maintained with the appropriate land use (grazing of mowing), sustaining the status of reconstructed areas

5.4.2.5. Continuation of the project actions

- C1. Establishing captive breeding program for *S. citellus* and gene bank from captive and natural colonies.
- C2. Establishing veterinarian surveillance of potential food sauces of *A. heliaca* and *F. cherrug i.e. S.citellus, C. cricetus, N. montanosyrmiensis* and *L. europeus*
- C3. Improving the genetic status of target populations by planned introductions of animals of known allelic composition
- C4. Habitat reconstruction to improve the carrying capacity for prey species
- C5. Reintroduction of S. citellus to reconstructed areas
- C6. Protection of short term survival and evaluation of long term success of reintroduced and natural prey populations
- C7. Encouraging hunters to catch predators the competitors of *A. heliaca* and *F. cherrug* around the habitat of *S. citellus, C. cricetus,* and *L. europeus* by distribution of traps for them
- D1. Monitoring of the impact of the project actions by video record and photo traps in A. heliaca and *F. cherrug* nests
- E1. Organising forums for stakeholders
- E5. S. citellus show (Introduction of the target species for the general public)
- E6. Design and operate project web site

E8. Secure public support for conservation efforts

5.4.3. Replicability, demonstration, transferability, cooperation

The establishment and management of stepping stones among the Natura 2000 areas has demonstration character. It demonstrates for nature conservationists farm advisors, farmers of other areas and for the press how to incorporate nature conservation interest into daily farming practice.

There is an interest and demand from Serbian organisations to transfer the knowledge and replicate the project in Serbia in a new LIFE project. The knowledge what would be gained during the project will be transferred to the stakeholders and target audience via project web page, networking, by the press and in a planned international conference.

Project partners have an intensive cooperation among them and in the neighbouring countries.

The international conference what will be organise next year will be a good forum to share the experiences and transfer knowledge.

5.4.4. Best Practice lessons

The project has applied best practices of the Best of LIFE projects LIFE06 NAT/H/000096 and LIFE09 NAT/HU/000384 i.e.

- C4 Habitat reconstruction to improve the carrying capacity for prey species;
- C5 Reintroduction of *S. citellus* to reconstructed areas, relocation of *C. cricetus* and N. *montanosyrmiensis*;
- D1 Monitoring of the impact of the project actions by video record and photo traps in *A. heliaca* and *F. cherrug* nests;
- D2 Monitoring of the impact of the project actions by satellite tagged adult birds;
- D3 Monitoring of the project actions;
- F1-F5 Overall project operation and monitoring of the project progress

5.4.5. Innovation and demonstration value

The indoor breeding of *S. citellus* will be an innovative process.

The establishment of stepping stones among the Natura 2000 areas has demonstration value.

5.4.6. Long term indicators of the project success

The indicators was given in the online indicator tables

The status of the indicators for project LIFE13 NAT/HU/000183 has changed to Validated

6. Comments on the financial report

6.1. Summary of Costs Incurred

Table 4: Summary of the costs incurred

PROJECT COSTS INCURRED from 01/07/2014 to 31/08/2017					
Cost category	Budget according to the grant agreement	Total cost after modification	Costs incurred within the reporting period	% by GA	% by modified
Personnel	880 983	912 664	-	64.91	62.66
Travel	171 887	200 032	113 975	66.31	56.98
External assistance	543 660	573 279	317 590	58.42	55.40
Durables: total non- depreciated cost	502 981	536 285	453 085	90.08	84.49
- Infrastructure sub-tot.	108 621	148 256	122 117	112.42	82,37
- Equipment sub-tot.	394 360	388 029	330 968	83.93	85,29
- Prototypes sub-tot.	0	0	0	0	0
Land purchase/lease	435 856	318 076	240 093	55.09	75.48
Consumables	172 402	150 940	99 899	57.95	65.43
Other costs	13 518	22 283	10 194	75.41	45.75
Overheads	159 956	167 684	109 625	68.53	65.38
TOTAL	2 881 243	2 881 243	1 916 308	66.51	66.51

Since FHNPD had to keep the money in the National Treasury and the costs of the Associated Beneficiary was usually post-financed therefore there was no interest gained.

6.1.1. Comments on the costs categories

6.1.1.1. Personnel costs

64.91% of the original personnel costs were used. However there were some relocations to and from the personnel costs:

At FÁNK due to recent changes of partner administrator some costs was excluded from the report.

At FHNPD the Project technical coordinator's costs (54,720 €) and the project administrator's costs (41,280 €) were transferred from External assistance to personnel costs. This changes was reported already in the Inception Report.

Some communication work was transferred from FHNPD to NIMFEA with 7,474 € covered by the Partnership Agreement.

At KAPOSVAR there was some internal changes:

Since the partner coordinator who is doing the most specific project work cannot spend more than 50% of his working time on the project some two additional staff (Field Assistant 5,070 €, and Genetic consultant 5,850 €) were employed.

The partner coordinator's salary is much higher than it was originally budgeted because he became a professor (Expected total sum $30,800 \in$). However the animal keeper's cost would be much lower $19,008 \in$ only. These changes was approved by the TDO on 2 January 2016.

Since the breeding did not start up until October 2017 the personnel costs of some staff are considered questionable. Clarifications were requested about them as the management has some doubts whether the personnel costs of those in C1 action who are linked to the breeding (animal keepers, genetic consultant and breeding assistant) are eligible or if it should excluded from the financial report (Annexes F1/5 & F1/11).

At MADARVILAG the total personnel costs (60,952 €) were transferred to external assistance costs due to the form of applied payment according to the Hungarian regulation. This was already reported in the Inception Report.

At MME some work was transferred from NIMFEA to MME with some money.

At NIMFEA 5,180 € personnel cost were converted to external assistance costs. This was approved by the TO on 14/04/2016.

8,066 € was transferred to equipment costs for swather with the approval of the TDO on 11/07/2017.

Some communication work was transferred to NIMFEA from FHNPD with 7,474 € covered by the Partnership Agreement and some work from NIMFEA to MME.

The personnel costs were calculated according to the CP 24.2.

Table 5: More than 20% differences in actual and planned daily rates:

Partner	Name of	Position	Actual	Daily	Reason
	person		average	rate in	
			daily	the	
			rate	budget	
BEKE	Tamás	Partner	55.47 €	72 €	According to the Statistical Office, BEKE is a
	Cserkész	coordinator			non-governmental researcher place, therefore
					BEKE is entitled to validate income tax reduction.
BEKE	Tamás	Parter	33 €	72 €	Same as above
	Kondor	assistant			
FÁNK	Dr. Endre Sós	Veterinary/	107.04 €	64 €	Because of the one year delay three team has
		Partner co-			collected the samples in the same time therefore
		ordinator			he had to participate in the work for a few days.
					But the other vet work cheaper as it was planned.
FÁNK	Dr. Viktória	Veterinary	45.53 €	64 €	Originally this position was planned for a person
	Koroknai				specially hired for this position but due to the
					delay the work has to be done in a shorter period
,					therefore the two permanent vet did the work.
FÁNK	Gábor	Communicati	96.65 €	59 €	Originally this position wasn't planned for the
	Simonyi	on Manager			Head of Communication, but since the citellus
					show was in delay only a few days work was done
E (2 Hz	14/ 1 D 1/	70	60.00.6	22.6	by him.
FÁNK	Mária Bodó	Partner	68.23 €	33 €	Originally this position was planned for a person
		administrator			specially hired for this position, but since the work
					was in delay due to the lack of permission,
E Á NIIZ	Erzsébet	D	45 00 C	22.0	therefore less administration was needed also.
FÁNK	Vargáné	Partner administrator	45.98 €	33 €	Replacement of Mária Bodó
	Kertész	aummstrator			
FÁNK	Gabriella Jenei	Partner	56.25 €	33 €	Replacement of Erzsébet Vargáné Kertéz
		administrator	00.20	35 0	Tespine in the English Control

KAPOSVÁR	Dr. Vilmos Altbäcker	Partner Coordinator	118.20 €	79 €	He became professor since the project was planned with much higher salary. This was negotiated with EC and it was accepted on 12 January 2016
KNPD	Dr. Attila Német	Partner co- ordinator	68.60 €	74 €	Ž
KNPD	Melinda Forgó/Csima	Partner administrator	39.98 €	74 €	She was employed for lower salary but more time.
ÖNPD	Krisztián Harsányi	Ranger	81.85 €	43 €	He is a ranger and his salary is given by the official classification. He was replaced by a lower salary ranger
ÖNPD	Blanka Kóródi	Ranger	59.89 €	43 €	She is a ranger and her salary is given by the official classification. She was replacing the more expensive Krisztián Harsányi

Changes in position:

EPASM:

In Romania the state employees did not get salary for about 4 months at the beginning of the year due to budgetary reason what makes a frequent fluctuation. Angela Bota was responsible for the Country coordinator position and she did the project administration also till the end of March 2015. She was replaced by Levente Koczan as Country coordinator and Mihaela Preda as partner accountant. Levente Koczan quitted from this position 14 October 2015. From 15 February 2016 he was replaced by Zoltan Balog. Project assistant Tihamér Fülöp quit his job on 31/05/2017. Zoltán Balog took over his job also. FÁNK:

Dr. Endre Sós and Dr. Viktória Koroknai share the veterinary position.

Gábor Simonyi was replaced by Bálint Botos as communication manager from 01/04/2017.

Mária Bodó was replaced by Erzsébet Vargáné Kertész as partner administrator from 01/04/2017 and she was replaced by Gabriella Jenei from 31/06/2017.

From 01/11/2014 the task of the project technical coordinator (Zsuzsa Fidlóczky) and the project administrator (Viktória Bene) were transferred from the external assistance cost category. This was already reported in the Inception Report. Viktória Bene started her maternity leave from 15/05/2017 and was temporarily replaced by Alexandra Rendes. From 01/02/2016 Attila Fersch joined to the project to take over some task from Miklós Váczi.

KAPOSVÁR:

Since the partner coordinator (Dr. Vilmos Altäcker) who is doing the most specific project work cannot spend more than 50% of his working time on the project two additional staff (Ágnes Altbäcker- Breeding Assistant and Dr. Tamás Molnár-Genetic consultant) were employed from 01.04.2016. The animal keeper Zsuzsanna Bán was replaced by Zsófia Nagy from 01/05/2017. Since the breeding did not start up until October 2017 and we did not get clarification about them we considered the personnel costs of those in C1 action who are linked to the breeding (animal keepers, genetic consultant and field assistant) ineligible and excluded from the financial report (Annex F1/5).

KNPD:

In 2016 the partner administrator Melinda Forgó changed her name to Melinda Csima after her marriage. She was replaced from 01/05/2016 by Annamária Csóka who was replaced by Katinka Botos from 01/10/2016.

For 2018 c.a 160 days and 8.700 € will be allocated for the coordinator of KNPD due to tasks taken over from other partner. The amount will be covered by allocating sources from the partners from who the task was taken over and from the reserves of the budget. MILVUS:

In the end of February 2016 Attila Marton quit his project assistant position, and he was replaced by Szilárd Sugár and Zsuzsanna Aczél-Fridrich. They divided the position from 1 March 2016.

MME:

Tamás Trauttman has quit his partner administrator position and was replaced by András Zsohovszky from 1 March 2016. András was replaced by Zsuzsanna Magyar from 01/01/2017.

NIMFEA:

Anita Nagy and Géza Molnár share the partner coordinator position from 1. March 2015. Anita took over the project administrator job also from Attila Bácskai on 01/11/2015. Géza Molnár quit his job on 31/12/2016 and Anita on 30/02/2017 and they were replaced by Tamás Barna from 01/03/2017.

ÖNPD:

Krisztián Harsányi was replaced by Blanka Kórodi in the Ranger position from 1. March 2016.

6.1.1.2. Travel costs

66.31 % of the original travel costs were used.

In Hungary all costs (fuel, repair, insurance, tall fee, etc. excluding amortization) in relation with company's cars accounted on the cars and km unit cost are calculated and accounted. A correction was calculated and accounted at the end of the years. Partners declared their unit costs by car what were used for the project. These unit costs were used to calculate the project costs multiplying the justified km of the given month and the unit costs.

In Romania partners accounted only the fuel costs of justified km.

Some cost was relocated to and from:

At EPASM 2665 € was transferred from travel costs to other costs. This was temporarily approved by TDO on 16/06/2017.

At FHNPD 29,999 € was transferred from external assistance to travel costs of the project technical coordinator. This changes was reported already in the Inception Report.

At MADARVILAG about 12,000 € additional costs would be needed in C8 action due to the more frequent field work.

MILVUS transferred 6100 € to Other costs because in the Romanian system only the fuel costs can be charged on travel.

At MME 4,122 € was relocated from travel costs to equipment costs to cover the 4WD car surplus costs.

At NIMFEA 2,535 € was relocated from travel costs to external assistance costs. This was temporarily approved by the TDO by email on 30/03/2016.

6.1.1.3. External costs

58.42% of the original external assistance costs were used.

At BEKE 1,585 € was transferred from FHNPD for S. citellus repatriation.

At BfNPD the costs of citellus show was considered infrastructure by the financial management therefore 1568 € was transferred to infrastructure.

At FHNPD 96,000 € was relocated to personnel costs for project management and 15,600 € was relocated for car and 2,630 € for two laptop computers to equipment costs, while 145,597 € from renting of land (B2) was relocated to external assistance (C4). This changes was reported already in the Inception Report.

From FHNPD 1,585 € was transferred to BEKE for *S. citellus* repatriation.

This was approved by the TDO on 30/03/2016.

- 21,723 € was transferred to NIMFEA with the transferred communication work covered by the Partnership Agreement, another 1,706 € for additional printing works and 1,800 € was transferred to MME's equipment costs. These were approved by TDO on 30/03/2016.
- 1,600 € was transferred to MME for the development of the schedule of the methodology, 2,543 € was transferred to MME for printing costs and 6,247 € for *C. cricetus* survey in *A. heliaca* food remains what was approved by the TDO on 06/04/2016.
- 1,600 € was spent on catering of *S. citellus* conference by the approval of TDO on 21/10/2015.
- At KAPOSVÁR for grassing the enclosures every year 960 € was approved by TDO 19/01/2016. However the enclosure is not yet prepared.
- At MADARVILAG the total personnel costs (60,952 €) were transferred to external assistance costs due to the form of applied payment according to the Hungarian regulation. This was already reported in the Inception Report.
- At MME 1,600 € was transferred for the development of the schedule of the methodology, 2,543 € was transferred for printing costs and 6,247 € for *C. cricetus* survey in *A. heliaca* food remains from FHNPD what was approved by the TDO on 06/04/2016.
- At NIMFEA 401 € was transferred for project logo and hamster leaflets by the approval of TDO on 21.10.2015 and 21,723 € was transferred with the transferred communication work from FHNPD covered by the Partnership Agreement, another 1,706 € for additional printing works. These were approved by TDO on 30/03/2016.
- 1414 € was moved to infrastructure in E5.

6.1.1.4. <u>Infrastructure costs</u>

- 112.42 % of the original infrastructure costs are reported.
- At BfNPD the citellus show (E5) costs 36,050 € had to move here partly from external assistance costs partly from equipment costs.
- At FANK 5,000 € was transferred from equipment costs here (E5). The citellus show is ready and functioning. but due to the frequent and recent changes of the administration may not submitted all the invoices.
- At KAPOSVAR 1,100 € was converted from Consumables to Infrastructure with the approval by the TDO on 19/01/2016.
- At NIMFEA 1414 € was moved from infrastructure in E5. The citellus show is ready and functioning but the second part of the invoice is not yet paid due to the financial difficulties of NIMFEA.
- It is foreseen that an amendment to the Grant Agreement would be needed if all external cost would be eligible.

6.1.1.5. Equipment costs

- 83.93 % of the original equipment costs were used.
- BEKE purchased 6 pc trail cameras for S. trisona survey and monitoring with the approval by the TDO on 13/02/2017.
- BfNPD has purchased an extra objectives within the original costs for photo equipments which was approved by the TDO on 01/05/2016.
- 34,482 € of citellus show (E5) was transferred to infrastructure costs according to the law.
- The portable fences (1,724 €) were transferred from consumables to this categories.
- At EPASM the TDO approved to by a second hand car from the 6,000 € project cost what was planned for 0.5 car 12/03/2015.
- At FANK 5,000 € was transferred to Infrastructure costs for citellus show. This money was saved because the mobile anaesthetic machine and the microscope were purchased by another sources already. This was approved by the TDO on 09/03/2017.
- At FHNPD 15,600 € relocated from external assistance for a 4WD car and 2,630 € for two laptop computer for the project management. This changes was reported already in the Inception Report.
- From FHNPD 1,800 € external assistance costs was transferred to MME for a telescope with the approval of the TDO on 30/03/2016.
- At KAPOSVÁR 2,300 € was relocated from consumables costs and there was some relocation within the cost category itself and some additional equipment were purchased (trailer, 2 GPS, RFID reader/w antenna, 10 surveillance camera/w fitting, steamer cleaner, 10 metal shelf, screen) with the approval by the TDO on 19/01/2016.
- The 0.5 car was purchased much cheaper but did not used for the project. The university always provided cars for the work, but not the "project" car.
- At MADÁRTÁVLAT 21,600 € was relocated from Consumables and some new equipment was purchased (8 pc VHF receiver, updating VHF receiver stations (extending hardware capacity, calibrator unit for VHF system, Solar power banks for VHF receiver stations, 30 pc VHF tags for VHF system, DJI Phantom 4 Agro NDVI drone, Automatic meteo station) because the technology was changed. This is more efficient and more cheap. The TDO approved this on 31/03/2017.
- For MILVUS one laptop was approved by the TDO on 19/01/2016.
- For MME the EC approved on 30/03/2015 to cover the total cost of the new Land Rover project car from the budget of the project on the basis that the replacement car was broken down and therefore it completely lost its market value. This was mentioned in the Inception Report already.
- 1,800 € from external assistance costs of FHNPD was transferred to MME for a telescope with the approval of the TDO on 30/03/2016.
- At NIMFEA 8,066 € was transferred from the personnel costs for purchase a swather with the approval of the TDO on 11/07/2017.

6.1.1.6. <u>Land purchase/lease costs</u>

- 55.09 % of the original land purchase costs were used.
- At FHNPD 145,597 € from renting of land was relocated to external assistance as it was mentioned in the Inception Report.
- KNPD completed the land purchase.

NIMFEA has valid contract already but not yet paid for it.

6.1.1.7. Consumable costs

57.95% of the original consumable costs were used.

BEKE spent about 690 € for some small unforeseen items (butteries, services, ect.) what was not planned covered by some money relocated from other cost categories.

At BfNPD the portable fences $(1,724 \in)$ were moved to equipment categories.

6000 copies of B/5 size guide booklets 4,138 € (E5) were transferred to MME.

From FHNPD 24,000 € was transferred to NIMFEA and MME for communication costs.

At KAPOSVÁR the 5 video cameras and the screen were moved to equipment and some relocation has happened inside the consumables so some additional items were purchased (50 souslik identity card and 200 bags of litter + 6 garbage bins) with the approval by the TDO on 19/01/2016.

Since the breeding did not start until October 2017 and less nourishment would be needed some money was relocated to 6 kertisol test set to continue the stress hormone test. Approved by EU on 22/08/2017.

At MADÁRVILÁG 21,600 € was transferred to equipment costs in relation to C.8 action. The TDO approved this on 31/03/2017.

From MILVUS the production and costs of 300 sheets posters were shift to NIMFEA.

At MME 6,260 € was transferred from FHNPD for communication materials.

There was the most money transfer back and forth in this cost category at NIMFEA. The communication work was transferred from FHNPD to here and some work to MME later. 4,854 € was transferred to external assistance cost from here.

6.1.1.8. <u>Other costs</u>

75.41 % of the original other costs were used.

EPASM transferred 2,665 € from travel costs. This was temporarily approved by TDO on 16/06/2017.

MILVUS transferred 6,100 € from travel costs because in the Romanian system only the fuel costs can be charged on travel.

6.2. Accounting system

Forrás SQL Integrated accounting system is used by the Coordinating Beneficiary. In this system the project's codes are 1121 and 1126 (Annex Fin46).

Coordinators of Beneficiaries submitted their monthly financial report to the Project Office of the Coordinating Beneficiary where the project administrator checked them whether all verifications were submitted, matching the formal requirement and the approved budget figures.

Time sheets were completed electronically.

The Coordinators of Beneficiaries were countersigned the staff's time sheets and the Project Manager approved the Coordinators' time sheets. Any deviation from the approved budget was requested and approved by the Project Manager in advance.

Usually the purchase order has included the project reference number and the supplier had to refer for it. All beneficiaries got a stamp including the project reference number and the short name of the Beneficiary. All invoices and any other verification had to be stamped

with it. The accounting system of the Associated Beneficiaries are 54 shown in Annexes Fin 42-Fin 45 & Fin 47-Fin 54.

6.3. Partnership arrangements

The Project Administrator entered the accepted costs into the financial table. The coordinating beneficiary reimbursed the costs what were approved by the project manager until the available advance payment. The NGOs got quarterly advance payment according to a Financial Amendment of the Partnership Agreement and their annual budget. Project administrator sent the financial table to the Associated Beneficiaries Coordinator for checking.

Most of the partners can't reclaim VAT except MAVIR, and MADÁRVILÁG, which is under examination by the Tax Office. (Annexes Fin29-Fin39)

6.4. Auditor's report/declaration

An external Auditor was contracted.

Name of the Auditor Ltd.: Kolbe Könyvvizsgáló Kft. (Kolbe Auditor Ltd.)

Address: 1137 Budapest, Szent István park 14.

Registration nr.: 01-09-260371

Represented by: Mrs. Tünde Kolbe manager/auditor

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6.5 Summary of costs per action

Annex Fin1 includes an excel tables with these information.

7. Annexes

Annex 1 List of Annexes of Mid-term Report2

7.1 Administrative annexes

Annex 1 Annexes of Inception Report Annex 2 Annexes of Mid-term Report 1

Annex 7.1/1 – Modification of PA with BfNPD

Annex 7.1/2 – Modification of PA with MME

Annex $7.1/3 - 2^{nd}$ Modification of PA with NIMFEA

Annex F1/1 – Invitation for 2016 year's evaluation meeting

Annex F1/2 – Minutes of the 2016 year's evaluation meeting

Annex F1/3 – Invitation for 2017 year's evaluation meeting

Annex F1/4 – Minutes of the 2017 year's evaluation meeting

Annex F1/5 – Minutes of the meeting with KAPOSVAR staff on 4.09.2017.

Annex F1/6 – Minutes of the meeting with DINPD on

Annex F1/7 – List of participants of the meeting in DINPD

Annex F1/8 – Regulation of the Blind-mole rat and Suslik Advisory Board

Annex F1/9 – Invitation for the meeting of the Blind-mole rat and Suslik Advisory Board

Annex F1/10 – List of project participants

Annex F1/11 – List of activities of carried out by breeding staff while breeding did not work

Annex F2/1 – Invitation and program of 2017 year's Steering Committee Meeting

Annex F2/2 – Minutes of the 2017 year's Steering Committee Meeting

Annex F2/3 – List of participants of the 2017 year's Steering Committee Meeting

Annex F2/4 – Picture of the participants of the 2017 year's Steering Committee Meeting

Annex F2/5 – Overview and deadlines discussed in the SCM

7.2 Technical annexes

7.2.1. List of keywords and abbreviations used

CAP Common Agriculture Policy EC European Commission

EPASM Environmental Protection Agency of Satu Mare County

GIS Geographic Information System
GSM Global System for Mobile

HQ Headquarters

KNPD Kiskunság National Park Directorate

MAVIR Hungarian Transmission System Operator Company Ltd.

MILVUS "Milvus Group" Association

MME BirdLife Hungary
MoA Ministry of Agriculture

NEA National Environment Authority NGO Non-governmental Organisations

NHM Natural History Museum

NW North West

PA Partnership Agreement

PTT Platform Transmitter Terminals

RD Rural Development

RDP Rural Development Program

RMEWF The Romanian Ministry of Environment Water and Forest

SC Steering Committee
SPA Special Protected Area
ToR Terms of Reference

7.2.2 Other Technical annexes

Annex A1/1a – Baseline survey of S. citellus population

Annex A1/1b – Baseline survey of C. *cricetus* population

Annex A1/1c – Baseline survey of *N. montanosyrmiensis* population

Annex A1/1d – Baseline survey of *S. subtilis trizona* population

Annex A1/2 – Minutes of the 1st meeting of the Blind-mole rat & Suslik Advisory Board

Annex A1/3a – Preliminary report of C. cricetus and S. citellus survey in A. heliaca food remains

Annex A1/3b – Mid-term Report of C. cricetus and S. citellus survey in A. heliaca food remains

Annex A1/4a – Habitat survey sheet S. citellus habitats

Annex A1/4b – Habitat survey sheet of repatriation sites

Annex A1/5 – Habitat suitability analyses

Annex A1/6 – A. heliaca & F. cherrug population trend

Annex A1/7 – C. cricetus population trend

Annex A1/8 - N. montanosyrmiensis population trend

Annex A1/9 - S. trizona population trend

Annex A1/10 - L. europeus population trend

Annex A2/1 - S. citellus genetic survey results

Annex A2/2 – Abstract of S. citellus genetic survey

Annex A2/3 – Invitation for evaluation meeting in KNPD in Kecskemét on 19.01.2017

Annex A2/4 – Attendance sheet of the evaluation meeting

Annex A2/5 – Minutes of the evaluation meeting

Annex A2/6 – Photo for the audience of the evaluation meeting

Annex A2/7 – List of additional samples in Hungary

Annex A2/8 – Permission of the Romanian Ministry of Environment, Water and Forests

Annex A2/9 – Location of the sites of the planned sampling

Annex A2/10 – Photos from the Romanian genetic sampling

Annex A2/11- List of collected samples in Romania

Annex A2/12 – Letter of Romanian Academy, Commission for the Monuments of Nature Protection

Annex A3/1 – Results of laboratory examination

Annex A3/2 – Report on the evaluation of laboratory examination

Annex A3/3 – Request for the extension of the stress hormone samples collection and examination

Annex A4/1 – Romanian "Best Management Guideline"

Annex A5/1 – Minutes of the meeting with the management of the Szentkirályszabadja airport

Annex A5/2 – Filled in questioner

Annex A5/3 – Photos and minutes from the general meeting of the Association of Rural Airports

Annex A5/4 – Final text of the Airport's grassland management guideline

Annex A6/1 – Updated S. citellus Reintroduction Protocol

Annex A7/1 – BEKE's recommendation for the flood and inland water prevention activities in the habitat of the strictly protected susliks

Annex A7/2 – Acknowledgement of N-Hungary Water Management Directorate

Annex A7/3 – NIMFEA's recommendation for the flood and inland water prevention activities in the habitat of the strictly protected susliks

Annex A7/4 – Acknowledgement of Tiszántúli Water Management Directorate

Annex A9/1 – Pictures of the equipments marked by LIFE and Natura 2000 logos

Annex B1/1 – Map of Öttömös 0100/85 divided into 0100/108 by KNPD

Annex B1/2 – Statement of the area of expropriating procedure by KNPD

Annex B1/3 – Review map of all purchased areas by KNPD

Annex B1/4 – Map of purchased farmhouse lands by NIMFEA

Annex B1/5 – Summary table of the purchased lands by NIMFEA

- Annex C1/1 Permission of the National Authority for captive breeding Annex C1/2 – Pictures of S. citellus placed at the breeding station Annex C1/3 – Captive breeding technology Annex C2/1 – Pictures of the sampling activity at Fertőújlak Annex C2/2 – Result of the samples of two individuals Annex C2/3 – Detailed description of the veterinary checks of 2016 and 2017 Annex C2/4 – Minutes of the meeting about sample collection Annex C4/1 – Map of the reconstruction works of KNPD Annex C4/2 – Table with list of owners and stepping stone sites of FHNPD Annex C4/3 – Maps of the stepping stone sites of FHNPD Annex C4/4 – Pictures of the stepping stone sites of FHNPD Annex C4/5 – Permission of the authority for the habitat reconstruction at Péri airport Annex C4/6 – Pictures of the undersowing at Péri airport Annex C4/7 – Map of the sites of reconstructed farmhouse lands by NIMFEA Annex C4/8 – Report on the activity of bounds by dirt roads Annex C4/9 – Map of the bounds reconstructed by NIMFEA Annex C4/10 – Maps of the reconstructed area in Romania Annex C4/11 – Pictures of the area and the reconstruction activity in Romania Annex C5/1 – Report on repatriation activities of BEKE Annex C5/2 – Report on repatriation activities of BfNPD Annex C5/3 – Report on repatriation activities of FHNPD Annex C5/4 – Report on repatriation activities of MADÁRVILÁG Annex C5/5 – Report on repatriation activities of ÖNPD Annex C5/6 – Report on repatriation activities of N.montanosyrmiensis of KNPD Annex C5/7 – Report on repatriation activities of S.citellus of KNPD Annex C5/8 – Report on repatriation activities of NIMFEA Annex C5/9 – Report on repatriation activities of C. cricetus of BEKE Annex C5/10 – Report on repatriation activities of MILVUS Annex C5/11 – Permission for repatrition of C.cricetus Annex C5/12 - Summary table of repatriation and survival rates of repatriations activities of 2016 Annex C5/13 – Selected and approved new site of BfNPD at Nyirád Annex C5/14 – Selected new site of BfNPD at Pécsely Annex C6/1 – Pictures of the fencing-around of repatriation sites Annex C6/2 – Pictures of the guarding the repatriation sites Annex C6/3 – Pictures of the feeding the repatriated animals Annex C7/1 – Hunters report BfNPD Annex C7/2 – Hunters report FHNPD Annex C7/3 – Hunters report MADÁRVILÁG Annex C7/4 – Hunters report NIMFEA Annex C7/5 – Hunters report ÖNPD Annex C7/6 – Hunters report EPASM Annex C8/1 – List of tagged S. citellus Annex C8/2 – Summary report regarding tagging activity
- Annex D1/1 Pictures form the Web camera
- Annex D1/2 Minutes of the preparation meeting of the installation of photo-traps
- Annex D1/3 Pictures made by the photo-traps about the preys brought to the nest
- Annex D1/4 List of prey of F. cherrug according to the pictures of 18 photo-traps

- Annex D1/5 Result of photo-trapping at A. heliaca nests in 2015 & 2016
- Annex D1/6 Minutes of the evaluation meeting
- Annex D1/7 Picture about the photo-trap installed on a special arm
- Annex D1/8 List of installed photo-traps and the recorded pictures in Hungary
- Annex D1/9 List of installed photo-traps and the recorded pictures in Romania
- Annex D2/1 List of marked birds with PTT
- Annex D2/2 Photos from tagging birds
- Annex D2/3 Digital maps with the adult F. cherrugs' locations in Hungary
- Annex D2/4 Digital maps with the juvenile F. cherrugs' locations in Romania
- Annex D2/5 Digital maps with the juvenile A. heliacas' locations in Romania
- Annex D2/6 Recovering killed bird with transmitter by "Falco" the detection dog
- Annex D3/1 Breading results of Aquilla heliaca and Falco cherrug in 2016
- Annex D3/2 2016 years monitoring report of C. cricetus population
- Annex D3/3 2016 years monitoring report of *N. montanosyrmiensis* population
- Annex D3/4 2016 years monitoring report of S. subtilis trizona population
- Annex D3/5 2016 years monitoring report of L. europeus population
- Annex D3/6 Monitoring of potential habitats
- Annex D5/1 Draft report of assessment of ecosystem restoration
- Annex F5/1 Summary table for Networking activities
- Annex F5/2 Poster presented at the 6th EGSM meeting in Belgrade
- Annex F5/3 The layout of the posters for the 9th International Conference on Biodiversity Research in Daugavpils
- Annex F5/4 Minutes of the meeting regarding *C. cricetus*
- Annex F5/5 Photos of the field activity with Túrjánvidék LIFE
- Annex F5/6 Photos of the activity
- Annex F5/7 Minutes of the meeting
- Annex F5/8 Summary of the trip to Mongólia
- Annex F5/9 Pictures of the activity
- Annex F5/10 Photos and attendance sheet of the meeting of ÖNPD
- Annex F5/11 Photos of the activity in Romania
- Annex F5/12 Photos of the activity

7.3 Dissemination annexes

7.3.2. Other dissemination annexes

- Annex E1/1 Pictures of the work of the advisory service of BEKE
- Annex E1/2 Attendance sheet of the field trip to the demonstration sites of FHNPD
- Annex E1/3 Pictures of the field trip for the LSAS to demonstration site of FHNPD
- Annex E1/4 Pictures of the advisor of KNPD at the repatriation activities at Debrecen
- Annex E1/5 Pictures of the advisor of KNPD at the repatriation activities at Baja
- Annex E1/6 Announcement on website and advertisement in newspaper regarding the LSAS services of NIMFEA
- Annex E1/7 Forum organized by NIMFEA regarding S.citellus before the repatriation activities (pictures, attendance sheet, presentation)
- Annex E1/8 Layout of the leaflet on the protection of bounds
- Annex E1/9 Layout of the posters on the protection of bounds
- Annex E1/10 Pictures of distribution of the materials and of the announcement on the maintenance of bounds at the farm advisor offices and public areas
- Annex E1/11 Pictures of the resolution of the project regarding the poisoning with the use of redendin exhibited at farmers' shop
- Annex E1/12 Picture of presenting the project on the annual training of hunters of Vas county by ÖNPD
- Annex E1/13 Attendance sheet of the forum of ÖNPD
- Annex E1/14 Minutes of the forum of ÖNPD
- Annex E1/15 Attendance sheet of the Spring-forums in Romania
- Annex E1/16 Minutes of the Spring-forums in Romania
- Annex E1/17 Attendance sheet of the Autumn-forums in Romania
- Annex E1/18 Minutes of the forums of Autumn in Romania
- Annex E1/19 Pictures of the forums in Romania
- Annex E1/20 Attendance sheets and minutes of the personal consultations for farmers and hunters of the LSAS of NIMFEA
- Annex E2/1 Layout of the leaflet & hard copy
- Annex E2/2 Layout of coloring book & hard copy
- Annex E2/3 Pictures of distribution of colouring books & memory cards for children
- Annex E2/4 Layout of memory card & hard copy
- Annex E2/5 Layout of the leaflet of S.citellus in Hungarian
- Annex E2/6 Layout of the leaflet of S.citellus in Romanian
- Annex E2/7 Number of materials distributed so far
- Annex E4/1 Layout of the Romanian poster & hard copy
- Annex E4/2 Pictures, maps and coordinates of the exhibited posters in Romania
- Annex E4/3 Pictures of the exhibited posters in Hungary
- Annex E5/1 Introduction of the structure of the show at BfNPD
- Annex E5/2 Technical description of the system
- Annex E5/3 Invitation and pictures of the opening ceremony of the show
- Annex E5/4 Layout of the booklet of BfNPD & hard copy
- Annex E5/5 Pictures of the citellarium of NIMFEA
- Annex E5/6 Pictures of the paddock at FÁNK
- Annex E5/7 Permission of FANK
- Annex E6/1 Statistics of the website
- Annex E8/1 Layout of the Romanian posters & hard copy
- Annex E8/2 Pictures of the posters posted at public areas in Hungary and Romania
- Annex E8/3 Layout of the T-shirts & hard copy
- Annex E8/4 Layout of the gym bags & hard copy
- Annex E8/5 Pictures of shooting the film.

Annex E8/6 – Pictures of the dissemination events

Annex E8/7 – Pictutes of the presentations at education programmes

Annex E8/8 – Presentation of Infolife Day by EPASM

Annex E8/9 – Pictures of the event of Infolife Day

Annex E8/10 – Layout of the roll-ups of S. trizona

Annex E9/1 – Copy of the article

Annex E9/2 – Copy of the article

Annex E9/3 – Scanned copy of the article & hard copy

Annex E9/4 – Copy of the article

Annex E9/5 – Copy of the article

Annex E9/6 – Pictures of the site visit for press

Annex E9/7 – List of representative of press

Annex E9/8 – List of links to news and articles of MILVUS

7.4 Final table of indicators

The indicators was given in the online indicator tables

"The status of the indicators for project LIFE13 NAT/HU/000183 has changed to Validated"

8. Financial report and annexes

8.1 Finacial Reporting

Finacial Report including all beneficiaries

Financial Reports by beneficiaries

Annex Fin1 Costs per action tables

(electronic and hard copy)

Annex Fin2 "Standard Payment Request and Beneficiary's Certificate"

Annex Fin3 "Consolidated Cost Statement for the Project"

Annex Fin4 "Beneficiary's Certificate for Nature Projects"FHNPD

Annex Fin5 "Beneficiary's Certificate for Nature Projects" BEKE

Annex Fin6 "Beneficiary's Certificate for Nature Projects"BfNPD

Annex Fin7 "Beneficiary's Certificate for Nature Projects" EPASM

Annex Fin8 "Beneficiary's Certificate for Nature Projects"FÁNK

Annex Fin9 "Beneficiary's Certificate for Nature Projects" KAPOSVÁR

Annex Fin10 "Beneficiary's Certificate for Nature Projects" KNPD

Annex Fin11 "Beneficiary's Certificate for Nature Projects" MADÁRVILÁG

Annex Fin12 "Beneficiary's Certificate for Nature Projects" MAVIR

Annex Fin13 "Beneficiary's Certificate for Nature Projects" MILVUS

Annex Fin14 "Beneficiary's Certificate for Nature Projects" MME

Annex Fin15 "Beneficiary's Certificate for Nature Projects" NIMFEA

Annex Fin16 "Beneficiary's Certificate for Nature Projects"ÖNPD

Annex Fin17 "Beneficiary's Individual Cost Statement"FHNPD

Annex Fin18 "Beneficiary's Individual Cost Statement" BEKE

Annex Fin19 "Beneficiary's Individual Cost Statement" BfNPD

Annex Fin20 "Beneficiary's Individual Cost Statement" EPASM

Annex Fin21 "Beneficiary's Individual Cost Statement"FÁNK

Annex Fin22 "Beneficiary's Individual Cost Statement" KAPOSVÁR

Annex Fin23 "Beneficiary's Individual Cost Statement" KNPD

Annex Fin24 "Beneficiary's Individual Cost Statement" MADÁRVILÁG

Annex Fin25 "Beneficiary's Individual Cost Statement" MAVIR

Annex Fin26 "Beneficiary's Individual Cost Statement" MILVUS

Annex Fin27 "Beneficiary's Individual Cost Statement" MME

Annex Fin28 "Beneficiary's Individual Cost Statement" NIMFEA

Annex Fin29 "Beneficiary's Individual Cost Statement"ÖNPD

Annex Fin30 VAT declaration of FHNPD

Annex Fin32 VAT declaration of BfNPD

Annex Fin33 VAT declaration of EPASM

Annex Fin36 VAT declaration of KNPD

Annex Fin37 VAT declaration of MILVUS

Annex Fin41 VAT declaration of MADÁRVILÁG

Annex Fin42 Print-screen of BEKE's book

Annex Fin43 Print-screen of BfNPD's book

Annex Fin44 Print-screen of EPASM's book

Annex Fin45 Print-screen of FÁNK's book

Annex Fin46 Print-screen of FHNPD's book

Annex Fin47aPrint-screen of KAPOSVAR's book

Annex Fin47b Hand book for accounting for KAPOSVAR's book

Annex Fin48 Print-screen of KNPD's book

Annex Fin49 Print-screen of MADÁRVILÁG's book

Annex Fin50 Print-screen of MAVIR's book

Annex Fin51 Print-screen of MILVUS's book

Annex Fin52 Print-screen of MME's book

Annex Fin53 Print-screen of NIMFEA's book

Annex Fin54 Print-screen of ÖNPD's book