

# LIFE Project Number LIFE11 ENV/SK/1023

# Inception Report Covering the project activities from 01/10/2012 to 31/01/2013

Reporting Date **27/02/2013** 

LIFE+ PROJECT NAME or Acronym

# Implementation of sustainable groundwater use in the underground karst system of the Krásnohorská jaskyňa Cave

# Acronym KRASCAVE

# **Data Project**

	Data Project						
Project location	Slovakia						
Project start date:	01/10/2012						
Project end date: 30/09/2017 Extension date: -							
<b>Total budget</b> 1.244.326 €							
EC contribution: 631.238 €							
(%) of eligible costs 50 %							
	Data Beneficiary						
Name Beneficiary	Štátny geologický ústav Dionýza Štúra Bratislava						
Contact person	Mr. Peter Malík						
Postal address	Mlynská dolina, 1, SK, 817 04, Bratislava						
Telephone	421-2-59375416						
Fax:	421-2-54771940						
E-mail	peter.malik@geology.sk						
Project Website	http://www.geology.sk/krascave/						

# TABLE OF CONTENTS

Table of contents	2
1. List of abbreviations	
2. Executive summary	3
2.1. General progress	3
2.2. Assessment as to whether the project objectives and work plan are still viable	
2.3. Problems encountered	
3. Administrative part	
3.1. Description of project management	
3.2. Organigramme of the project team and the project management structure	6
3.3. Partnership agreements status (incl. date of signature) and key content	
4. Technical part	
4.1. Actions	
4.1.1. Action A.1	
4.1.2. Action A.2	
4.1.3. Action A.3	
4.1.4. Action A.4	
4.1.5. Action A.5	
4.1.6 Action A.6	
4.1.7. Action A.7	
4.1.8. Action B.1	
4.1.9. Action B.2	
4.1.10. Action B.3	
4.1.11. Action B.4	
4.1.12. Action B.5	
4.1.13. Action C.1	
4.1.14. Action C.2	
4.1.15 Action C.3	
4.1.16. Action C.4	
4.1.17. Action D.1	
4.1.18. Action D.2	
4.1.19 Action D.3	
4.1.21. Action D.5	
4.1.21. Action D.5 4.1.22. Action D.6	
4.1.22. Action D.0 4.1.23. Action D.7	
4.1.24. Action D.8	
4.1.25. Action E.1	
4.1.26. Action E.2	
4.1.27. Action E.3	12
4.1.28. Action E.4	
4.2. Availability of appropriate licences and authorisations.	
4.3. Envisaged progress until next report.	
5. Financial part	
5.1. Putting in place of the accounting system.	
5.2. Continued availability of co financing.	
5.3. Costs incurred.	
6. ANNEXES	
6.1. Partnership agreements:	
6.1.1. Partnership agreement KHGPRIFUK – ŠGÚDŠ	
6.1.2. Partnership agreement MINOTAURUS – ŠGÚDŠ	
6.1.3. Partnership agreement OZ ENVI – ŠGÚDŠ	
6.2. Deliverables:	
6.2.1. Updated tables of deliverables and milestones	
6.3. Maps, drawings, technical designs, technical memos etc. as appropriate []	
6.4. Output indicators. Definition [also separate file "KRASCAVE_output_indicators.xls"]	
Annex 6.4.1. Output indicators	
6.5. Other:	
6.5.1. Project team members (ŠGÚDŠ)	
6.5.2. View of the introductory KRASCAVE project web page	

- Annex 6.5.3. Proposal of the information board to be installed in front of the coordinating beneficiary ( $\check{S}G\check{U}D\check{S}$ ) headquarters' building
- Annex 6.5.4. Project email group members
- Annex 6.5.5. Project steering committee members proposal
- Annex 6.5.6. Statement for Štátny geologický ústav Dionýza Štúra to project LIFE+ "Krascave" ENV11/SK/1023 on value added tax (VAT) eligibility for the refinancing
- Annex 6.5.7. Agreement on working conditions change (example)
- Annex 6.5.8. Internal guideline of ŠGÚDŠ for the calculation of costs of transportation
- Annex 6.5.9. Documents from the procurement process of the web-page with final invoice (action D.3)
- Annex 6.5.10 Examples of filled timesheets
- Annex 6.5.11 Presentation of the KRASCAVE LIFE+ project on the 16th Slovak Hydrogeological Conference in the Spa of Bardejovské Kúpele.

#### 1. List of abbreviations

**MŽP SR** – Ministry of the Environment of Slovak Republic

ŠGÚDŠ – Štátny geologický ústav Dionýza Štúra (Geological Survey of Slovak Republic)

**KHGPRIFUK** – Katedra hydrogeológie PRIF UK Bratislava (Department of Hydrogeology, Faculty of Natural Sciences, Comenius University Bratislava)

**MINOTAURUS** – OZ Speleoklub Minotaurus Rožňava (Civic Association Speleoklub Minotaurus Rožňava)

**OZ ENVI** – OZ Envi Slovakia Bratislava (Civic Association Envi Slovakia Bratislava)

**ŠOP SR** – Štátna ochrana prírody Slovenskej republiky (State Nature Conservancy of the Slovak Republic)

**NP SK** – Štátna ochrana prírody Slovenskej republiky - Správa Národného parku Slovenský kras (State Nature Conservancy of the Slovak Republic – Slovenský Kras National Park Administration)

**SSJ** – Štátna ochrana prírody Slovenskej republiky - Správa slovenských jaskýň (State Nature Conservancy of the Slovak Republic - Slovak Caves Administration)

SHMÚ – Slovenský Hydrometeorologický ústav (Slovak Hydrometeorolical Institute)

**VÚVH** – Výskumný ústav vodného hospodárstva (Water Research Institute)

#### 2. Executive summary

The main objective of the project is to reduce the risk of contamination of drinking water source in the ecosystem of the Krásnohorská jaskyňa Cave, through:

- 1. The implementation of innovative activities and thus contribute to meet the requirements of the Water Framework Directive (2000/60/EC) on the local level, and
- 2. To reduce the risk of damaging of fragile ecosystem, dependent on the groundwater quantity and quality.

#### 2.1. General progress

Since its start, the project was governed in accordance with the project schedule and in terms of common provisions and rules of LIFE+. During the first three months of the project running, its working group was established after discussions with the ŠGÚDŠ director. Further, preparatory actions and dissemination activities have started. The first public tender for website creation was realized. Other public procurements, necessary for successful project progress, were prepared as items in the whole public procurement bulk of ŠGÚDŠ and send as a 2013 public procurement proposal to the Ministry of the Environment of Slovak Republic (MŽP SR) for an obligatory approval.

In accordance with the project's schedule the activities of A.1, A.2, D.3, D.5, D.7, E.1 and E.4 had started. Apart from project management, dissemination activities concentrated on website creation (http://www.geology.sk/krascave/), its content preparation and designing. For preparatory actions, as bound to establishment of monitoring instruments in the Krásnohorská jaskyňa Cave (dependent on successful completing of the public tender), designs of monitoring activities and monitoring sites were prepared. All other preparatory actions (A.3 – A.7) did not start yet, in terms of the approved project's schedule. The same is for the implementation actions (B.1 – B.5), monitoring of the impact of the project actions (C.1 – C.4), and some of the communication and dissemination actions (D.1 – D.4; D.6; D.8) – they were not scheduled for the reported period. The action E.2 - monitoring of the project progress started at the end of January 2013 by drafting the Inception report and discussing the project progress during the first monitoring mission by the EC external team.

Project management dealt with personal meetings with the project partners (KHGPRIFUK, MINOTAURUS, OZ ENVI). Three informal meetings were held with the

KHGPRIFUK team members Z. Ženišová and R. Fľaková in October 4, October 25 and December, 17 2012, two visits of Mr. I. Polčan (OZ ENVI) to ŠGÚDŠ were on October 10 and November 7, 2012. During the stay of ŠGÚDŠ team members in Rožňava, Mr. J. Stankovič (MINOTAURUS) was visited by Mr. Malík, Mr. Michalko and Mr. Bottlik on October 19, 2012. Also contact with State Nature Conservancy of the Slovak Republic - Slovenský Kras National Park Administration (NP SK) was widened during this stay as its Director, Mr. Kilík was visited by ŠGÚDŠ team members on October 17, 2012. Establishing of the management group (personnel matrix) was finalised and items of public tenders for action A.1 (Quantitative and qualitative analysis, detailed interdisciplinary field reconnaissance in order to state precisely the threat to groundwater and ecosystems) were prepared. These tenders, according to legislation, had to be a part of the whole public procurement bulk of ŠGÚDŠ that is approved by the Ministry of the Environment of Slovak Republic (MŽP SR), what had not been finished yet. Preparation of partnership agreements with project partners is in the stage of its approval by the ŠGÚDŠ Contract Management Department. Project team members were selected in a personnel matrix (Annex 6.5.1.). With all the team members at ŠGÚDŠ, an agreement on working conditions change to work on the KRASCAVE project was elaborated and signed. An example of such an agreement is shown in Annex 6.5.7.

Proposal of the KRASCAVE project Steering Committee members was elaborated and sent for approval to their appropriate institutions. According to organigramme (part 3.2) the Steering Committee members represent several sections of the Ministry of Environment of the Slovak Republic, as well as institutions dealing with water – Water Research Institute and Slovak Hydrometeorological Institute in Bratislava. Proposed Steering Committee members are listed in Annex 6.5.5.

# 2.2. Assessment as to whether the project objectives and work plan are still viable

The objectives of the KRASCAVE project are fully valid and achievable. All activities planned within the project until now are solved in accordance with the project schedule. It is not necessary to modify timing or financing for any of planned activities yet.

#### 2.3. Problems encountered

All potential problems related to the project running can be categorized in two main categories, financial and technical:

• **Financial problems.** Financial problems are related to the co-financing of the project. For the budget and contributory organisations established within the domain of the Ministry of the Environment of the Slovak Republic (MŽP SR), among which ŠGÚDŠ (coordinating beneficiary of this project) belongs, co-financing of the LIFE+ projects are guaranteed by the Ministry of the Environment of the Slovak Republic from its own sources. This guaranty is conditioned by the sufficiency of disposable sources and expenses and success of the project.

Co-financing call is based on the Resolution No. 57 OPM6/2010 "Procedures and rules for co-financing of LIFE + projects from the state budget" by the Ministry of Environment of the Slovak Republic, dated on November 10, 2010. Following the methodological interpretation of the terms of the Ministry of Finance of the Slovak Republic (No. MF/020043/2007 – 421), LIFE + is classified to be one of the "Joint programs of the Slovak Republic and the European Union", as referred to in paragraph 2 of the methodological interpretation. This was confirmed by the letter of the Ministry of Finance of the Slovak Republic dated 17.10.2008 (No. MF/26708/2008-54). Given the above, the funds from the state budget for co-financing of the LIFE+ projects, provisions of § 8 of the Act No. 523/2004 Z. z. on budgetary rules and on

amendments to certain laws, as amended, to provide for the possibility of use of funds for financing joint programs of national and EU in several years, so they can be moved from the date of allocation to the budget heading in the coming years to until exhaustion for their intended purpose.

For the projects that were successful within the LIFE+ 2011 the official call of MŽP SR for co-financing was not opened yet.

Administrative problems. At the very beginning of the project running even in the future we do not suppose any serious technical problems or obstacles that could make project's objective not achievable. As less significant but still a complication from the point of view of project's timetable execution we find the fact that all public tenders necessary for the project's implementation exceeding 3,000 € must be approved by the MŽP SR. This is a rule valid for every project run by any institution in the domain of MŽP SR. In addition, no deadline for such approval is fixed and that is the reason why the beneficiary is not able to guarantee the correct timing of public tender above 3,000 €. In the KRASCAVE project, it is the case of procurement for A.1 action (includes speleomonitoring - monitoring of cave air temperature, air humidity, CO<sub>2</sub> content, water conductivity and temperature on 5 places of the Krásnohorská jaskyňa cave; monitoring of discharge on 3 places of the underground system, geophysical prospecting - resistivimetry and thermometry in streams, 10 tracings from the surface to spring outflows using environmentally safe tracing material, 600 basic chemical and isotope water sample analyses, and 200 water sample analyses for tritium). Procurement for drawing of technical documentation of prototype (A.5 action), and design and printing of 2 brochures and 2 leaflets (D.2 action) falls here as well. The procurement specification for A.1 action was completed by the end of December 2012 and send to the responsible body of the Ministry of the Environment of the Slovak Republic (MŽP SR).

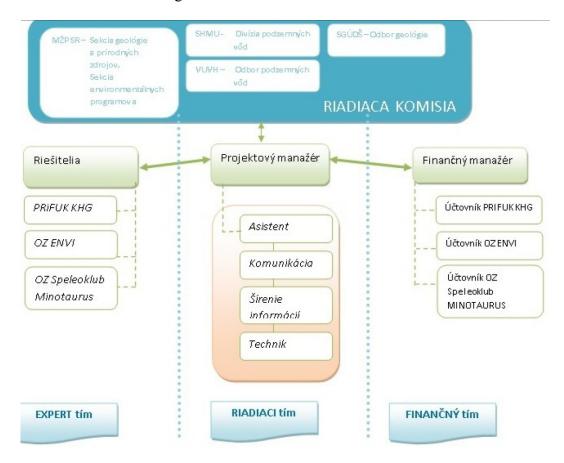
#### 3. Administrative part

# 3.1. Description of project management

Management structures of the project (project team members, coordinators of activities) were already proposed and approved. Steering Committee members were proposed and their approval is expected by the end of February 2013. Project partners are contacted "per rollam" and Partnership agreements with all three partners were approved by the ŠGÚDŠ Contract Management Department and send to all (KHGPRIFUK, and OZ ENVI and MINOTAURUS). Tenders with subcontractors, according to legislation, had to be a part of the whole public procurement bulk of ŠGÚDŠ that is approved by the Ministry of the Environment of Slovak Republic (MŽP SR), and had not been finished yet. We also tried to involve professional public to the project activities. Although during the initial stages of the KRASCAVE project, no official event was planned – i.e. no public meetings, seminars, nor conference were organised, the preliminary information about the significance and objectives of the KRASCAVE project were disseminated by the technical staff of the project through technical presentation on the 16<sup>th</sup> Slovak Hydrogeological Conference of the Slovak Association of Hydrogeologists, organised in the period of Oct. 2 – Oct. 5, 2012 in Bardejovské kúpele under the topic "Actual Hydrogeological Problems of Slovak Regions". Installation of the project's notice board is planned in the nearest future.

## 3.2. Organigramme of the project team and the project management structure

The organigramme of the project team is in accordance with the project's implementation schedule in the following visualisation:



Project management is provided by the project manager and project team (technical staff). On October 1, 2012 RNDr. Peter Malík, CSc. was nominated as the project manager by the director of ŠGÚDŠ (coordinating beneficiary). During December 2012, the whole technical staff (project team) of the coordinating beneficiary (ŠGÚDŠ) was nominated. This staff includes permanent employers of ŠGÚDŠ and also counts for twelve specialists in environmental and biology issues, as well as public relation and media communication specialists. Those twelve staff members will be contracted through temporary type of contract during appropriate time period to actions they should participate.

Steering committee should be nominated in terms of project's plan and all planned organizations delegated their own representatives. This will include representative of the two main sections of MŽP SR (section of geology and natural resources and Section of environmental programmes), the representatives of the Slovak Hydrometeorolical Institute (SHMÚ) from its Groundwater Division and of Water Research Institute (VÚVH) – Groundwater Branch.

The members of technical staff (in "personnel matrix") are listed within the Annex 6.5.1.

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

Preparation of partnership agreements with the three project partners (KHGPRIFUK, MINOTAURUS, OZ ENVI) is in the stage of its approval by the ŠGÚDŠ Contract management Department. The proposals of partnership agreements are appended as Annexes 6.1.1.-6.1.3.

#### 4. Technical part

The main actions of the project are directed on the implementation of Water Framework Directive (WFD) on the local level in the specific conditions of karst geological formations with the occurrence of the unique karst structures included in the list of UNESCO heritage. The proposed project includes complex activities which are directed on the protection of the local water source in the municipality of Krásnohorská Dlhá Lúka. The prototype will be installed for securing the safe karst water supply for people, not for the commercial use. Actions in spreading good farming and forestry practices which would prevent the pollution of the waters sources from their activities are planned as well, together with educational programmes for school children. The actions are directed more on forest management companies and more on the changing of the forest management into such type with very limited intervention or no management in the forest at all. The KRASCAVE project has a local character, but cross-border international cooperation with municipalities in Hungary should also reach another benefit in securing the protection of the local water source.

#### 4.1. Actions

# 4.1.1. Action A.1

Action A.1 "Quantitative and qualitative analysis, detailed interdisciplinary field reconnaissance in order to state precisely the threat to groundwater and ecosystems" is the first of preparatory actions. As bound to establishment of monitoring instruments in the Krásnohorská jaskyňa Cave (dependent on successful completing of the public tender), procurement for A.1 action has to be started as first. Activities here include speleomonitoring - monitoring of cave air temperature, air humidity, CO<sub>2</sub> content, water conductivity and temperature on 5 places of the Krásnohorská jaskyňa cave; monitoring of discharge on 3 places of the underground system, geophysical prospecting - resistivimetry and thermometry in streams, 10 tracings from the surface to spring outflows using environmentally safe tracing material, 600 basic chemical and isotope water sample analyses, and 200 water sample analyses for tritium. The procurement specification for the A.1 action was completed by the end of December, 2012 and sent to the responsible body of the Ministry of the Environment of the Slovak Republic (MŽP SR). At the meantime, designs of monitoring activities and monitoring sites are prepared. Works on this activity are running in accordance with project's schedule. Possible obstacles may be influenced by late decisions on procurement by MŽP SR what may postpone the start of monitoring activities. Still, there is full assumption to close the A.1 action in the planned date of 31/12/2014 and its aims are achievable at this date.

#### 4.1.2. Action A.2

Action A.2 "Spatial reconnaissance and spatial monitoring of groundwater quality" is the activity coordinated by the KHGPRIFUK project partner. Preparation of partnership agreements with the KHGPRIFUK project partner is in the stage of its approval by the ŠGÚDŠ Contract management Department. After this, spatial sampling of groundwater in the Krásnohorská jaskyňa Cave and its vicinity is to be started during snowmelt period of 2013. According to the research in archives, there exist a lot of archived data about chemical analyses of the Eveteš spring in Hrušov, which was primarily supposed to be sampled among 10 other springs. The KHGPRIFUK team proposes to sample only 9 springs, with the same extent of analyses, i.e. to reduce the external assistance costs necessary for water sample

analyses by 10 % (from  $55.200 \in$  to  $49.680 \in$ ) and to appropriately extended personnel costs and travel expenses of the core staff. The completion of the A.2 action is planned on 31/12/2014 and its aims are achievable at this date.

#### 4.1.3. Action A.3

Action A.3 "Water sampling and field measurements in the underground hydrological system in a daily time step" is the activity coordinated by the MINOTAURUS project partner. Preparation of partnership agreements with the MINOTAURUS project partner is in the stage of its approval by the ŠGÚDŠ Contract management Department. After this, regime sampling of groundwater in the Krásnohorská jaskyňa Cave is to be started from 01/04/2013 what is the planned start of the A.3 action. Nowadays we do not suppose any obstacles in implementation of this action and its aims are achievable by the end of the project.

#### 4.1.4. Action A.4

Action A.4 "Comprehensive assessment of the components of the underground landscape and defining of interactions between biotic and abiotic parts of an underground landscape structure" has the planned start from 01/10/2013. Nowadays we do not suppose any obstacles in implementation of this action and its aims are achievable by the end of the project.

#### 4.1.5. Action A.5

Action A.5 "Preparatory activities for creation of the prototype device - technical drawings" has the planned start from 01/04/2013. Nowadays we do not suppose any obstacles in implementation of this action and its aims are achievable by the end of the project.

#### **4.1.6.** Action A.6

Action A.6 "Getting permission to install a prototype" has the planned start from 01/01/2014. Nowadays we do not suppose any obstacles in implementation of this action and its aims are achievable by the end of the project.

#### 4.1.7. Action A.7

Action A.7 "Meetings with local residents in order to clarify the reason of the project and potential risks posed to the drinking water source for the village" has planned start since 01/07/2013. This activity is coordinated by the OZ ENVI project partner. Preparation of partnership agreements with the OZ ENVI project partner is in the stage of its approval by the ŠGÚDŠ Contract management Department. After this, visits to the municipality of the Krásnohorská Dlhá Lúka operated by OZ ENVI team will start. Nowadays we do not suppose any obstacles in implementation of this action and its aims are achievable by the end of the project.

#### 4.1.8. Action B.1

Action B.1 "Creating models of chemical composition development by water interaction with rock environment and the development of rainfall-runoff interactions in the rock environment" has the planned start from 01/07/2014. Nowadays we do not suppose any obstacles in implementation of this action and its aims are achievable by the end of the project.

#### 4.1.9. Action B.2

Action B.2 "Creation and testing of the prototype device protecting the source of drinking water supplying population of the Krásnohorská Dlhá Lúka municipality and its installation in continuous operation" has the planned start from 01/07/2014. Nowadays we do not suppose any obstacles in implementation of this action and its aims are achievable by the end of the project.

#### 4.1.10. Action B.3

Action B.3 "Delineation of environmentally sensitive sites ("hot spots") of surface anthropogenic activities interactions with the underground landscape system" has the planned start from 01/07/2014. Nowadays we do not suppose any obstacles in implementation of this action and its aims are achievable by the end of the project.

#### 4.1.11. Action B.4

Action B.4 "Developing rules of improvement or maintaining the status suitable for the protection of natural interaction of individual system components in the area of the Krásnohorská jaskyňa Cave, design of measures for improvement and maintaining the status" has the planned start from 01/07/2014. This activity should be coordinated by the OZ ENVI project partner. Nowadays we do not suppose any obstacles in implementation of this action and its aims are achievable by the end of the project.

#### 4.1.12, Action B.5

Action B.5 "Implementation of the proposed measures in agriculture and land use in the catchment area of the underground hydrologic system of the Krásnohorská jaskyňa Cave" has the planned start from 01/07/2014. Nowadays we do not suppose any obstacles in implementation of this action and its aims are achievable by the end of the project.

#### 4.1.13. Action C.1

Action C.1 "Monitoring of groundwater quality after installing the prototype and implementation of the measures" has the planned start from 01/07/2014. This activity is to be coordinated by the MINOTAURUS project partner. Nowadays we do not suppose any obstacles in implementation of this action and its aims are achievable by the end of the project.

#### 4.1.14. Action C.2

Action C.2 "Prototype operation monitoring - monitoring of functioning, unsoundness, resistance" has the planned start from 01/07/2014. This activity is to be coordinated by the MINOTAURUS project partner. Nowadays we do not suppose any obstacles in implementation of this action and its aims are achievable by the end of the project.

#### 4.1.15. Action C.3

Action C.3 "Monitoring the impact of project activities and communication to change behavior of inhabitants and land users in the surroundings of the cave" has the planned start from 01/07/2014. This activity is to be coordinated by the OZ ENVI project partner. Nowadays we do not suppose any obstacles in implementation of this action and its aims are achievable by the end of the project.

#### 4.1.16. Action C.4

Action C.4 "Monitoring socio-economic impact of the project activities on the local economy and population" has the planned start from 01/07/2014. This activity is to be coordinated by the OZ ENVI project partner. Nowadays, some obstacles in obtaining financial and business data from the local subjects are foreseen by the project partner. Therefore, this activity should be rather focused on monitoring the effect of project activities on the local urban development and land-use behaviour of the municipality. Based on this, action C.4 should be renamed to "Monitoring of the impact of the project activities on local urban development and municipal land-use behaviour" and re-defined in this sense.

#### 4.1.17. Action D.1

Action D.1 "Communication activities for the residents of the village Krásnohorská Dlhá Lúka to implement the proposed measures in agriculture and land-use" has the planned start from 01/04/2013. This activity is to be coordinated by the OZ ENVI project partner. Nowadays we do not suppose any obstacles in implementation of this action and its aims are achievable by the end of the project.

#### 4.1.18. Action D.2

Action D.2 "Communication activities for different target groups in Slovakia, to promote the project results - government, local government, professionals, general public, schools, speleologists" has a planned start since 01/04/2013. Nevertheless, shortly after the project had started, the first communication activity for the professionals in hydrogeology was undertaken as a separate presentation of the KRASCAVE LIFE+ project on the 16<sup>th</sup> Slovak Hydrogeological Conference in the Spa of Bardejovské Kúpele. The presentation is downloadable on the website of the Slovak Association of Hydrogeologists in the report about the past conferences (http://sah-podzemnavoda.sk/cms/page.php?7) as well as the link to the KRASCAVE project is to be found on the main introductory webpage of the Slovak Association of (http://sah-podzemnavoda.sk/cms/news.php). Hydrogeologists the direct collaboration with professional public had proven to be successful and effective, we would like let the team members to attend the next three conferences organised by the Slovak Association of Hydrogeologists and to add this to the action D.2 work plan. Nowadays we do not suppose any obstacles in implementation of this action and its aims are achievable by the end of the project.

#### 4.1.19. Action D.3

Action D.3 "Project Website" started on 01/10/2012. These dissemination activities concentrated on website creation, its content preparation and designing. The site itself is achievable on URL address of <a href="http://www.geology.sk/krascave">http://www.geology.sk/krascave</a>. Two other websites are also having a banner of the KRASCAVE project (one of them is the Slovak Association of Hydrogeologists: <a href="http://sah-podzemnavoda.sk/cms/page.php?7">http://sah-podzemnavoda.sk/cms/page.php?7</a> and another one the Department of Hydrogeology, Faculty of natural Sciences, Comenius University Bratislava: <a href="http://www.hydrogeology.sk/news.php">http://www.hydrogeology.sk/news.php</a> (the KHGPRIFUK partner). Also the OZ ENVI partner webpage has a link to KRASCAVE project (<a href="http://www.envislovakiaoz.sk/news/projekt-life">http://www.envislovakiaoz.sk/news/projekt-life</a>.) The view on the KRASCAVE project website introductory page is also visible as the Annex 6.5.2, together with the visitors' statistics in the period from 01-01-2013 to 22-02-2013. In the case of this action, we would like to change its budget and to reduce personnel costs by 10 % (from 24.100 € to 21.690 €) and to add external assistance necessary for website

creation and maintenance  $(2.410 \, \text{\ensuremath{\in}})$ . Nowadays we do not suppose any obstacles in implementation of this action and its aims are achievable by the end of the project.

#### 4.1.20. Action D.4

Action D.4 "Layman's Report - report of the project for general public" has the planned start from 01/04/2017. Nowadays we do not suppose any obstacles in implementation of this action and its aims are achievable by the end of the project.

#### 4.1.21. Action D.5

Action D.5 "Media activities - articles, press releases, radio inputs" had started on 01/10/2012. The preliminary information about the significance and objectives of the KRASCAVE project were disseminated by the technical staff of the project through technical presentation on the 16<sup>th</sup> Slovak Hydrogeological Conference of the Slovak Association of Hydrogeologists, organised in the period of Oct. 2 – Oct. 5, 2012 in Bardejovské kúpele under the topic "Actual Hydrogeological Problems of Slovak Regions". The presentation is downloadable on the website of the Slovak Association of Hydrogeologists in the report about the past conferences (<a href="http://sah-podzemnavoda.sk/cms/page.php?7">http://sah-podzemnavoda.sk/cms/page.php?7</a>) as well as the link to the KRASCAVE project is to be found on the main introductory webpage of the Slovak Association of Hydrogeologists (<a href="http://sah-podzemnavoda.sk/cms/news.php">http://sah-podzemnavoda.sk/cms/news.php</a>).

Instead of the 3 broadcasted inputs in the public or commercial media it is foreseen to plan not only radio broadcasts, but more generally as 3 communication activities in public media – this has to be change also in the list of the project milestones (Annex 6.2.1). More results of the activity D.5 are expected after the implementation of the first preparatory actions. Nowadays we do not suppose any obstacles in implementation of this action and its aims are achievable by the end of the project.

#### 4.1.22. Action D.6

Action D.6 "Installation of information boards" has the planned start from 01/07/2014. This activity is to be coordinated by the OZ ENVI project partner. A slight change is planned here, i.e. to install 1 information board in front of the coordinating beneficiary (ŠGÚDŠ) headquarters' building, to create 1 roll-up information board to be presented on various opportunities (conferences, meetings, presentations) and the 3 information boards to be installed near the underground hydrological system of the Krásnohorská jaskyňa Cave (one in front of the Cave entrance). The proposal of the information board to be installed in front of the coordinating beneficiary (ŠGÚDŠ) headquarters' building is annexed to the Inception report (Annex 6.5.3). This information board should be installed from July 2013. The roll-up information board should be elaborated in the same period. Nowadays we do not foresee any other obstacles in implementation of this action and its aims are achievable by the end of the project.

#### 4.1.23. Action D.7

Action D.7 "Participation at the kick-off meeting" had the planned start from 01/10/2012. At the kick-off meeting in Warsaw on September 24, 2012 Mr. Miloš Gregor and Ms. Monika Zámečníková had participated to present the KRASCAVE project. The kick-off meeting had already successfully passed, with no obstacles.

#### 4.1.24. Action D.8

Action D.8 "Post-project communication" has to start after the closing of the project, i.e. on 01/10/2017. The "Post-project communication plan" will be also added to the

newly proposed list of deliverables, which is contained in this Inception Report as Annex 6.2.1. Nowadays we do not foresee any obstacles in implementation of this action and its aims are achievable by the end of the project.

#### 4.1.25. Action E.1

Action E.1 "Project management" started, together with the project, on 01/10/2012. Project management is covered mainly ŠGÚDŠ, who is responsible for the overall management of the project. The main coordinator of the project is the project manager of ŠGÚDŠ and he organises meetings with the other authorized persons representing KHGPRIFUK, MINOTAURUS and OZ ENVI partners. For each partner one person is to be selected to be responsible to principal project manager (Ms. Zlatica Ženišová – KHGPRIFUK, Mr. Jaromír Stankovič – MINOTAURUS and Mr. Igor Polčan – OZ ENVI). The organization of project activities is ensured through regular meetings of the project management and problem-solvers with a set frequency each month with the possibility of convening an "ad hoc" meeting if necessary solutions to emergency situations. The first regular meeting of all project partners is planned on March 21, 2013, with partnership agreements and public procurement issues as the dominating items of its agenda. Furthermore, the partners communicate electronically. Project management is provided by the team consisting from a project manager, assistant project manager, financial manager and investigators for each project activity. Supervision of the project will be carried out by the Steering Committee. Nowadays we do not foresee any obstacles in implementation of this action and its aims are achievable by the end of the project.

#### 4.1.26. Action E.2

Action E.2 "Monitoring project progress" has the planned start from 01/01/2013. Nowadays we do not foresee any obstacles in implementation of this action, the Inception report was submitted on time on 28/02/2013 and also other project reports should be delivered as foreseen. The aims are achievable by the end of the project.

#### 4.1.27. Action E.3

Action E.3 "Project audit" is planned before project closure, i.e. before 30/09/2017. Nowadays we do not foresee any obstacles in implementation of this action and its aims are achievable by the end of the project.

#### 4.1.28. Action E.4

Action E.4 "Networking with other LIFE projects in similar areas - at both national and international level" had the planned start on 01/10/2012. Since that date, identification of the similar projects was undertaken. In the field of Slovak currently running LIFE+ projects we did not find any project dealing with karst issues of underground karstic ecosystems. An extension of the search to other types of projects is evidently necessary and the first steps were already undertaken. Within this trial, after the presentation of the KRASCAVE LIFE+ project on the 16<sup>th</sup> Slovak Hydrogeological Conference in the Spa of Bardejovské Kúpele we found similar EU projects of "Research of groundwater vulnerability for sustainable management of groundwater exploitation in the Bratislava Self-governing Region" (ITMS Code No. 26240220059) and "Integrated system for runoff processes simulation" within its activity "Determination of quantitative parameters of the natural groundwater outputs of in space and time" (ITMS Code No. 26220220167, both projects from the Operational Programme Research and Development). To reach the aim of networking

with similar projects, a contact link was created on the KRASCAVE project web site forum for discussion (http://www.geology.sk/krascave/plugins/forum/forum.php) and contact (http://www.geology.sk/krascave/contact.php), see also Annex 6.5.2. The nearest networking partner LIFE+ project is LIFE08 INF/SK/000243 "WATLIFE" "Enhancement of Public Awareness of the Importance of Water for Life, its Protection and Sustainable Use in Accordance with the Water Framework Directive" with Water Research Institute Bratislava the leading partner as (http://www.vuvh.sk/index.php/sk SK/projekt-life/zakladne-informacie-o-projekte). We expect more fruitful discussion and extension of the email group after the publication of the first project results in 2014. Until now, email group was established only between the project participants and the aforementioned EU projects members (See also Annex 6.5.4. Nowadays we do not foresee any other obstacles in implementation of this action and its aims are achievable by the end of the project.

Implementation of proposed and actual actions is illustrated in the Gantt chart below.

Tasks / Activ		2012			20	13			_	14				20	15			20	16			20	17	
Action Nun	nber	IV	I		II	III	IV	I	II	H	I IV	7	I	II	III	IV	I	II	III	IV	I	II	III	IV
Overall project	Proposed	X		П						Щ		Ţ											?	
schedule	Actual		Щ	Ц						Ц		_												
Action A.1	Proposed			Н								4			<b> </b>			<b> </b>						
	Actual		_	Н						Н	_	_												
Action A.2	Proposed			Н						Н	-	4						-						
	Actual		_	Н						Н	-	+						-						
Action A.3	Proposed Actual	-	-	Н						Н	+	+												
	Proposed	<del>                                     </del>	-	Н						Н		+												
Action A.4	Actual		-	Н						Н	_	7												
	Proposed			Н						Н		$^{+}$												
Action A.5	Actual			Н						П	_	+												
	Proposed			Н								1												
Action A.6	Actual			П						П	1	T												
	Proposed			П																				
Action A.7	Actual			П						П	1	T												
Action B.1	Proposed																							
Acuon B.1	Actual											I												
Action B.2	Proposed																							
Acuell D.2	Actual											floor												
Action B.3	Proposed		$\Box$	Ц																				
71CHOH DIS	Actual			Ц						Ц		┙												
Action B.4	Proposed			Ц						Ш														
	Actual		ncej							Ц		4												
Action B.5	Proposed	ш	Rep	or	t _					Ш		_												
	Actual	_		Н						Н		4												
Action C.1	Proposed	-		Н						Н		+												
	Actual	-	-	Н						Н	_	-												
Action C.2	Proposed	<del>                                     </del>	-	Н						Н		+												
	Actual Proposed		Н	Н						Н		+												
Action C.3	Actual		H	Н						Н	_	+												
	Proposed		H	Н						Н		+												
Action C.4	Proposed		H	Н						Н	_	7												
	Actual		H	Н						Н	+	1												
Action <b>D.1</b>	Actual		П	Н						П	_	T												
4 4' D.A	Proposed			П						П		T												
Action D.2	Actual			П						П		T												
Action D.3	Proposed																							
ACTOR D.3	Actual			П						П		I												
Action D.4	Proposed		Ш	Ц						Ц		_[												
	Actual			Ц						Ц	_	_												
Action D.5	Proposed									Ш		4												
**	Actual			Н						Ш		4			<u> </u>			<u> </u>						
Action D.6	Proposed	<del>                                     </del>	$\vdash$	Н		<b>.</b>			<u> </u>	Н		+			ļ			ļ				<b>.</b>		
	Actual			Н					13.4		term	+			<b> </b>			<b>-</b>				-		
Action D.7	Proposed			Н		_						H			-			-						
	Actual Proposed			Н		_			┝┷┖	Rep	ort	H			-			-						
Action D.8	Actual	$\vdash$	$\vdash$	Н		<del>                                     </del>			$\vdash$	Н	+	+	-		<b>-</b>			<b>-</b>	-			-		
	Proposed			Н						Н		+												
ACTION B.	Actual			П						П		7												
Action E.2 Proposed			Н						Н	1	+													
	Actual		П	Н						П	1	Ť												
Donner d		Ħ	П						П	1	T													
Action E.3	Actual		П	П						П	1	1												
1	Proposed																							
Action E.4	Actual									U	$\mathbf{I}$	I												
										_				,				1						
		1					S	tart d	late x					/			end o	late ?	,					

# 4.2. Availability of appropriate licences and authorisations

From the licences and authorisations relevant for the KRASCAVE project, a permission to install a prototype within the underground karstic hydrological system of the Krásnohorská jaskyňa Cave will be required. This is a subject of the action A.6 "Getting permission to install a prototype" that has the planned start from 01/01/2014 and should be finished within nine months from the beginning of this action.

## 4.3. Envisaged progress until next report

The next planned report is to be compiled as "Mid-term report" on the planned deadline of 31/08/2014. We assume to achieve the major part of necessary field data for project implementation by that date. From preparation activities, that are closest to the Mid-term report deadline, the A.3 activity "Water sampling and field measurements in the underground hydrological system in a daily time step" is to be one month before its planned closing. Up to now, we do not foresee problems or obstacles that could make this action not achievable. The "administrative decision" obstacle will be hopefully overcome within the time reserve. At the date of "Mid-term report", 3 milestones should be achieved: all monitoring equipment should be installed (A.1 action), all samples taken and analysed (A.3 action) and 7 meetings with mayor, inhabitants and students from the Krásnohorská Dlhá Lúka municipality should be performed within the A.7 action. From the deliverables, 3 GIS maps in 1:5000 scale should be finished (action A.1), together with 8 water quality maps (action A.2), final report describing the underground water system with accompanying GIS should be submitted (A.4 action), technical drawings of the prototype should be finished (A.5 action) and permit for its use should be issued (A.6 action). In accordance with the project's schedule all other planned actions will continue.

#### 5. Financial part

#### 5.1. Putting in place of the accounting system.

We have established a separate bank account and accounting center relevant to the items of the project. The account is maintained under the name BÚ-projekt LIFE-Krascave, Štátny geology ústav D.Š. and with the number 000000-7000390960/8180 (IBAN: SK37 8180 0000 0070 0039 0960). The bank account is set up since September 2012.

#### 5.2. Continued availability of co-financing.

We are waiting for the Call for co-financing to be provided by our Ministry of Environment in amount of 631 088 (50,71% from project cost). Co-financing call is based on the Resolution No. 57 OPM6/2010 "Procedures and rules for co-financing of LIFE+ projects from the state budget" by the Ministry of Environment of the Slovak Republic, dated on November 10, 2010. Following the methodological interpretation of the terms of the Ministry of Finance of the Slovak Republic (No. MF/020043/2007 – 421), LIFE+ is classified to be one of the "Joint programs of the Slovak Republic and the European Union", as referred to in paragraph 2 of the methodological interpretation. This was confirmed by the letter of the Ministry of Finance of the Slovak Republic dated 17.10.2008 (No. MF/26708/2008-54). Given the above, the funds from the state budget for co-financing of the LIFE+ projects, provisions of § 8 of the Act No. 523/2004 Z. z. on budgetary rules and on amendments to certain laws, as amended, to provide for the possibility of use of funds for financing joint programs of national and EU in several years, so they can be

moved from the date of allocation to the budget heading in the coming years to until exhaustion for their intended purpose.

**5.3.** Costs incurred (summary by cost category and relevant comments). All costs incurred in table below are dated to 16.01.2013, i.e. they are finalized and closed in accounting system.

In the following table, incurred project costs are listed:

Budget breakdown categories	Total cost in €	Costs incurred from the start date to 31.12.2012 in €	% of total costs
1. Personnel	492 890	836,53	0,17
2. Travel and subsistence	97 400	0	0
3. External assistance	372 300	993	0,27
4. Durable goods			
Infrastructure	0	0	0
Equipment	35 700	0	0
Prototype	140 000	0	0
5. Land purchase / long-term lease	0	0	0
6. Consumables	20 800	0	0
7. Other Costs	5 000	0	0
8. Overheads	80 236	100	0,12
TOTAL	1 244 326	1 929,53	0,16

Additional table, compiled according to Form B of the KRASCAVE project proposal:

Action number and name	Foreseen costs	Spent so far	Remaining	Projected final cost
Action 1 "A1"	413 000	0	413 000	413 000
Action 2 "A2"	76 500	0	76 500	76 500
Action 3 "A3"	14 780	0	14 780	14 780
Action 4 "A4"	31 600	0	31 600	31 600
Action 5 "A5"	32 350	0	32 350	32 350
Action 6 "A6"	2 765	0	2 765	2 765
Action 7 "A7"	4 700	0	4 700	4 700
Action 8 "B1"	67 095	0	67 095	67 095
Action 9 "B2"	122 850	0	122 850	122 850
Action 10 "B3"	19 960	0	19 960	19 960
Action 11 "B4"	6 425	0	6 425	6 425

Action number and name	Foreseen costs	Spent so far	Remaining	Projected final cost
Action 12 "B5"	9 430	0	9 430	9 430
Action 13 "C1"	15 800	0	15 800	15 800
Action 14 "C2"	3 600	0	3 600	3 600
Action 15 "C3"	6 260	0	6 260	6 260
Action 16 "C4"	4 175	0	4 174	4 175
Action 17 "D1"	8 225	0	8 225	8 225
Action 18 "D2"	41 520	993	40 527	41 520
Action 19 "D3"	24 100	362,27	23 737,73	24 100
Action 20 "D4"	6 300	0	6 300	6 300
Action 21 "D5"	25 200	0	25 200	25 200
Action 22 "D6"	9 925	0	9 925	9 925
Action 23 "D7"	300	0	300	300
Action 24 "D8"	0	0	0	0
Action 25 "E1"	171 620	474,26	171 145,74	171 620
Action 26 "E2"	9 500	0	9 500	9 500
Action 27 "E3"	15 000	0	15 000	15 00
Action 28 "E4"	21 110	0	21 110	21 110
TOTAL	1 164 090	1 829,53	1 162 260,47	1 164 090

The budget spent so far is 1 929,53 €, including overheads.

The project has been running only for 3.5 months, but the financial items are accounted only for the first 3 months. That is why the amount spent so far corresponds to the project's schedule. The grant agreement was signed on Sept. 11, 2012 while the official start of the project is still considered to be June 1, 2012. The real start, however could take place only after the official signature of the Grant agreement, i.e. on Oct. 1, 2012. Since majority of project personnel was involved in finishing of other EU projects, preparation activities were run without any demand to remuneration in the first months of the project. The complete involvement of the project staff started with the beginning of January 2013. Costs incurred from the start date of the project are mainly bound to "Personnel" expenses and overheads. Overall activities covered by increased financial costs like external assistance (speleomonitoring, gauging, tracing tests, prototype preparation), meetings, travelling (travel costs), equipment etc. are planned for the period after the submission of the Inception report. According costs of transportation, an internal guideline of ŠGÚDŠ for the calculation of costs of transportation is annexed in 6.5.8.

#### 6. Annexes (list)

#### **6.1.** Partnership agreements

Annex 6.1.1. Partnership agreement KHGPRIFUK – ŠGÚDŠ

Annex 6.1.2. Partnership agreement MINOTAURUS – ŠGÚDŠ

Annex 6.1.3. Partnership agreement OZ ENVI – ŠGÚDŠ

#### **6.2. Deliverables** (if relevant, e.g. management plans)

There were no deliverables planned until the date of Inception Report submission. According to the discussed milestones and deliverables of the KRASCAVE project, we propose new, extended list of deliverables, where items from the list of milestones had been rearranged, and milestones for A.3 (all samples taken and analysed), A.7 (7 meetings with mayor / inhabitants / students), B.1 (2 computer models for the project area), C.1 (database of monitoring results), D.3 (web-page created) become deliverables. In Annex 6.2.1 "Updated tables of deliverables and milestones" these appear in the list of deliverables (marked with blue colour). Original deadlines for all actions remain preserved. For the action D.8 "Post-project communication", a new deliverable ("Post-project communication plan") was added to the proposed list of deliverables. In the list of the project milestones, instead of the 3 broadcasted inputs in the public or commercial media (action D.5) it is foreseen to plan not only radio broadcasts, but more generally as 3 communication activities in public media – this was also a matter of change in the newly proposed list of deliverables and milestones (Annex 6.2.1)

#### Annex 6.2.1. Updated tables of deliverables and milestones

## 6.3. Maps, drawings, technical designs, technical memos etc. as appropriate.

These were not planned and elaborated in the period of Inception Report submission.

#### 6.4. Output indicators. Definition.

From the KRASCAVE project milestones, three output indicators had to be reached before the Inception Report deadline: these are concerning action E.1 ("Project management"):all management positions had to be occupied before 30-11-2012; action E.4 ("Networking with other LIFE projects in similar areas - at both national and international level"): e-mail group had to be established before 31-12-2012; and action D.3 ("Project Website"): web-page had to be created before 30-11-2012. As seen in annexes 6.5.1. "Project team members", 6.5.4. "Project email group members", and 6.5.2. "View of the introductory KRASCAVE project web page", all these output indicators were reached in time.

No deliverables were planned until the date of Inception Report submission. On the other hand, we propose new, extended list of deliverables, where items from the list of milestones had been rearranged, and milestone for action D.3 (web-page created) would become one of the deliverables (see Annex 6.2.1).

Tables of output indicators in \*.xls format are attached in a separate file "KRASCAVE\_output\_indicators.xls" as well as in the Annex 6.4.1.

No other output indicators should be reached until the date of Inception Report submission.

#### Annex 6.4.1. Output indicators

#### **6.5.** Other

Annex 6.5.1. Project team members

Annex 6.5.2. View of the introductory KRASCAVE project web page

Annex 6.5.3.	Proposal of the information board to be installed before the coordinating beneficiary (ŠGÚDŠ) headquarters' building
Annex 6.5.4.	Project email group members
Annex 6.5.5.	Project steering committee members - proposal
Annex 6.5.6.	Statement for Štátny geologický ústav Dionýza Štúra to project
	LIFE+ "Krascave" ENV11/SK/1023 on value added tax (VAT)
	eligibility for the refinancing
Annex 6.5.7.	Agreement on working conditions change (example)
Annex 6.5.8.	Internal guideline of ŠGÚDŠ for the calculation of costs of
	transportation
Annex 6.5.9.	Documents from the procurement process of the web-page with
	final invoice (action D.3)
Annex 6.5.10	Examples of filled timesheets
Annex 6.5.11	Presentation of the KRASCAVE LIFE+ project on the 16 <sup>th</sup> Slovak
	Hydrogeological Conference in the Spa of Bardejovské Kúpele