

# Mid-term Report LIFE17 NAT/GR/000522 - LIFE GRECABAT

**Reporting period:** 

01/09/2018 - 29/02/2020

**DELIVERABLE - ACTION D4** 

**LIFE - Performance indicators of the project** 

Relative analysis report

UoC

















#### Summary

The purpose of the action is to select and record quality and quantitative performance indicators of the project. These indicators can be used to report the success of LIFE GRECABAT (based on paragraph 3 of Article 3 of the Life Regulation). An additional purpose of the action is to insert these indicators in the KPI database through the KIP web-tool but also to update these indicators in order to reflect in the best possible way the real results of the project.

A first review of the proposal performance indicators in relation to the needs of the KPI web-tool has already started. A problem was encountered with accessing the KPI web-tool, and therefore we have not managed to upload the KPIs into the web platform. The problem has been reported at the ENV-CLIMA-LIFE Helpdesk on December 6, 2018 (we have sent our account details in order to enable our access to the KPI web-tool) and was reminded on December 13, 2018. The project team was finally informed by the EMT (NEEMO GEIE) on 27/03/2019 that the access to the web tool was enabled.

Since then we have tried to insert the indices into the web tool but have encountered several problems on how to insert the indices which are discussed below (e.g. definition of overarching and specific contexts, identification of indices that require analysis that is not available but planned to be implemented in the context of the actions, the absence of Annex II species from the drop down lists, the absence of cave habitat from the list of ecosystem services), all of which in combination with the workload of the team ov on other actions (during this time) delayed the introduction of indicators for 8 months (first submission for verification was made on 4th of December 2019).

On the 4<sup>th</sup> of December 2019 KPIs submitted for verification in the web tool although there were a lot of things to discuss with the EMT in order to get more precise instructions to correct possible problems. On 27/12/2019 we received detailed list of comments and requests of clarifications. On 07/02/2020 we send our answers and clarifications on the ETM questions & comments and on 27<sup>th</sup> of February 2020 we got instructions on how to correct indices by the external monitoring team. Finally 05/03/2020 we submitted KPIs of LIFE GRECABAT for verification.

















#### Αναφορά ανάλυσης των δεικτών του ΚΡΙ

Σκοπός της δράσης είναι η επιλογή και καταγραφή ποιοτικών και ποσοτικών δεικτών αποτελεσματικότητας του προγράμματος (LIFE GRECABAT). Μέσω αυτών των δεικτών θα μπορεί να γίνεται αναφορά της επιτυχίας του προγράμματος (με βάση την παράγραφο 3 του άρθρου 3 του κανονισμού των Life [Life Regulation]). Επιπλέον σκοπός της δράσης είναι η εισαγωγή των δεικτών αυτών στη βάση δεδομένων των ΚΡΙ μέσω του ΚΙΡ web-tool αλλά και η ενημέρωση των δεικτών αυτών ώστε να αντικατοπτρίζουν με τον καλύτερο δυνατό τρόπο τα πραγματικά αποτελέσματα του προγράμματος (https://webgate.ec.europa.eu/eproposalWeb/kpi/module).

Με βάση τις οδηγίες (160215\_LIFEproject\_level\_outcome\_indicators) το πρώτο βήμα για την εισαγωγή των δεικτών γίνεται με την συμπλήρωση κατά την υποβολή της πρότασης του "LIFE Performance Indicators.xlsx" όπου και συμπληρώνονται οι δείκτες αποτελεσματικότητας του προγράμματος και οι τιμές στόχοι (α) μέχρι το τέλος του προγράμματος και (β) για 5 χρόνια μετά το τέλος του προγράμματος για τα Life Nature όπως το LIFE GRECABAT.

Σαν δεύτερο βήμα περιγράφεται η καταγραφή της αρχικής / υφιστάμενης κατάστασης (baseline data) στην αρχή του προγράμματος πριν την εφαρμογή των δράσεων. Για το σκοπό αυτό στο LIFE GRECABAT εφαρμόζονται οι προπαρασκευαστικές δράσεις Α1 και Α4 οι οποίες είναι σε εξέλιξη και προβλέπετε να ολοκληρωθούν 31/05/2020 και 30/07/2020 αντίστοιχα. Επομένως οι δείκτες με βάση τα δεδομένα των δράσεων Α1 και Α4 θα είναι διαθέσιμοι με την ολοκλήρωση των δράσεων αυτών όπου θα ενημερωθούν και τα αντίστοιχα πεδία της βάσης δεδομένων του KPI web-tool.

Πριν από την πρώτη αναφορά προόδου (1st Progress Report) έγινε προσπάθεια να ενημερωθεί η πλατφόρμα με βάση το xlsx της πρότασης αλλά δεν ήταν δυνατή η πρόσβαση μας στην εφαρμογή του KPI web-tool. Μετά από επανειλημμένες δοκιμές κοινοποιήσαμε το πρόβλημα στην εξωτερική ομάδα παρακολούθησης (NEEMO) που με τη σειρά της μας παρέπεμψε στο **ENV-CLIMA-LIFE-HELPDESK@ec.europa.eu** όπου και στείλαμε σχετική αναφορά του προβλήματος (06/12/1018).

Στη συνέχεια (06/12/2018) μας ζητήθηκε να αποστείλουμε τα στοιχεία του λογαριασμού (account details) από το <a href="https://webgate.ec.europa.eu/cas/userdata/">https://webgate.ec.europa.eu/cas/userdata/</a> ShowDetails.cgi ώστε να ενεργοποιηθεί ο λογαριασμός μας στο KPI Web-tool, στείλαμε τις πληροφορίες του λογαριασμού. Στις 27/03/2019 ενημερωθήκαμε από την εξωτερική ομάδα παρακολούθησης ότι ενεργοποιήθηκε η δυνατότητα πρόσβασης μας στο KPI web-tool. Από την ενεργοποίηση της πρόσβασης ξεκίνησαν οι προσπάθειες εισαγωγής των δεικτών στο web-tool για διάφορους λόγους (δυσκολία: [1] στην κατανόηση των απαιτήσεων, στην εκτίμηση των δεικτών, [2] την εισαγωγή κάποιων παραμέτρων που δεν υπάρχουν στις λίστες επιλογής ή δεν εκφράζονται ικανοποιητικά, [3] τον μεγάλο φόρτο εργασίας της ομάδας στην υλοποίηση των δράσεων του προγράμματος) η τελική εισαγωγή – προσαρμογή των αρχικών δεικτών καθυστέρησε με την πρώτη εισαγωγή τελικά στις 04/12/2019. Σε συνέχεια της υποβολής για έγκριση των δεικτών (04/12/2019) λάβαμε στις 27/12/2019 οδηγίες, σχόλια και προτάσεις για τη διόρθωση των δεικτών από την εξωτερική ομάδα παρακολούθησης (ΕΜΤ – ΝΕΕΜΟ), στη συνέχεια στις 07/02/2020 απαντήσαμε συνολικά στα σχόλια της εξωτερικής ομάδας ενώ ζητήσαμε να μας δοθεί η δυνατότητα να διορθώσουμε τους δείκτες. Στις 27/02/2020 η ΕΜΤ έστειλε νέες













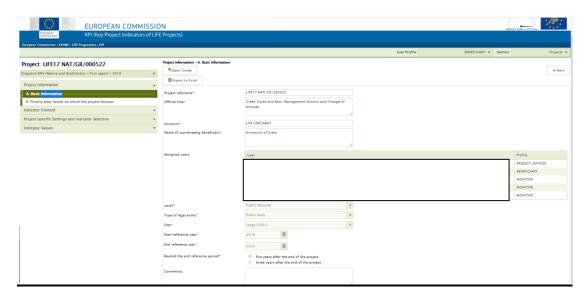




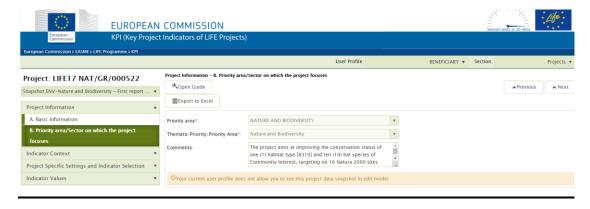
οδηγίες και διορθώσεις για την εισαγωγή των δεικτών τις οποίες ακολουθήσαμε όπου ήταν εφικτό και υποβάλαμε τους δείκτες για έγκριση στις 05/03/2020.

Συμπλήρωση των δεικτών

#### Γενικά στοιχεία του προγράμματος:



### Πληροφορίες προγράμματος προτεραιότητα και τομέας που εστιάζει το πρόγραμμα



















#### Πλαίσια προσδιορισμού των δεικτών:

#### Γενικό πλαίσιο δεικτών (Overarching contest)

Βιογεωγραφικές περιοχές / Επιλέχθηκε η Μεσογειακή περιοχή / παρά το γεγονός ότι κανένας δείκτης δεν αναφέρεται σε βιογεωγραφικό επίπεδο.

Στις επικράτειες που εκτείνεται το έργο / Επιλέχθηκε Ελλάδα εφόσον είναι είναι εθνικό πρόγραμμα με δράσεις σε όλη τη χώρα, αλλά και Κύπρος και Βουλγαρία, ευρωπαϊκές χώρες όπου τα αποτελέσματα θα μπορούσαν άμεσα να διαδοθούν λόγω γειτνίασης και κοινών αντιλήψεων και προβλημάτων.

Οικοσυστήματα και υπηρεσίες / βάλαμε περιοχές μα αραιή βλάστηση (Sparsely vegetated land). Εφόσον ήταν η μοναδική από τις διαθέσιμες επιλογές που συσχετίζεται (αντιστοίχιση με Habitat 8310 από το MAES) με τον οικότοπο των σπηλαίων.



#### Περιοχές του δικτύου Natura στην Ελλάδα (οι δέκα επιλεγμένες περιοχές)

- GR4220014 KENTRIKI KAI NOTIA NAXOS: ZAS KAI VIGLA EOS MAVROVOUNI KAI THALASSIA ZONI (ORMOS KARADES - ORMOS MOUTSOUNAS)
- 2. GR4340010 DRAPANO (VOREIOANATOLIKES AKTES) PARALIA GEORGIOUPOLIS LIMNI KOURNA
- GR1110005 VOUNA EVROU
- 4. GR2320007 OROS PANACHAIKO
- 5. GR1260007 ORI VRONTOUS LAILIAS EPIMIKES
- 6. GR1130008 MARONEIA SPILAION
- 7. GR2410001 LIMNES YLIKI KAI PARALIMNI SYSTIMA VOIOTIKOU KIFISOU
- 8. GR1240001 KORYFES OROUS VORA
- 9. GR2320009 SPILAIO KASTRION
- 10. GR4340008 LEFKA ORI KAI PARAKTIA ZONI



















#### Ειδικό πλαίσιο δεικτών (Specific context)

Δημιουργήθηκαν 13 ειδικότερα πλαίσια σε διάφορα χωρικά επίπεδα που περιγράφουν καλύτερα διάφορες πλευρές του προγράμματος:

#### Εθνικό επίπεδο:

- 1. Awareness raising to the general public (EL)
- 2. Establishment of volunteer network (EL)
- 3. National action plans for species and habitat(EL)
- 4. Change the attitude and behavior of stakeholders in Greece (EL)
- 5. Cave micro reserves (EL)
- 6. Project area LIFE GRECABAT (EL)

#### Περιοχές του Δικτύου Natura 2000:

- 1. Conservation of selected artificial habitats [GR2320007, GR1110005, GR4340008].
- Conservation actions at the project sites [GR4340008, GR2320009, GR1240001, GR2410001, GR1130008, GR1260007, GR2320007, GR1110005, GR4340010, GR4220014].
- Conservation of the selected caves [GR4220014, GR4340010, GR1260007, GR1130008, GR2410001, GR1240001, GR4340008, GR2320009].
- Protection, restoration and management at project sites [GR4340008, GR2320009, GR1240001, GR2410001, GR1130008, GR1260007, GR2320007, GR1110005, GR4220014, GR4340010]
- 5. Early warning monitoring systems for habitat 8310 and important bat colonies [GR1240001, GR2320009, GR1130008]

#### Άλλες χώρες:

1. Dissemination in Bulgaria [BG]

















#### 2. Dissemination in Cyprus [CY]



#### Δείκτες και σημειώσεις για τις εκτιμήσεις που δόθηκαν κατά την συμπλήρωση:

Για τον υπολογισμό των δεικτών χρησιμοποιήθηκαν τα παρακάτω δεδομένα:

- 1. Η μέτρηση των επιφανειών γύρω από τα σημαντικά καταφύγια χειροπτέρων με βάση το shape-file των σημαντικών περιοχών για τα σπήλαια και τα χειρόπτερα στην Ελλάδα (<a href="https://www.lifegrecabat.eu/el/news-articles/239">https://www.lifegrecabat.eu/el/news-articles/239</a>) η εκτίμηση των 11,662.00 ha αφορά τις θέσεις του προγράμματος ενώ η εκτίμηση 100,000.00 ha αφορά το σύνολο των θέσεων που θα ωφεληθούν από την υλοποίηση των δύο εθνικών σχεδίων δράσης του προγράμματος.
- 2. Οι τιμές αναφέρονται στο άθροισμα των επιφανειών των επιλεγμένων σπηλαίων για την υλοποίηση των δράσεων C, και περιλαμβάνουν μια περιφερειακή ζώνη γύρω τους (με μέση ακτίνα αρκετών εκατοντάδων μέτρων) που σχεδιάστηκε με βάση: το σχήμα, τον προσανατολισμό της εισόδου, οικολογικές απαιτήσεις των ειδών και τα γύρω ενδιαιτήματα (π.χ. δάση, υγρότοποι, ρέματα με φυσική βλάστηση) και τη γεωλογία & υδρογεωλογία της περιοχής.
- 3. Τις εκτιμήσεις για τους πληθυσμούς χειροπτέρων από τις δειγματοληψίες που έγιναν στα πλαίσια της δράσης Α1 (από τις απευθείας καταμερίσεις αποικιών σε διάφορες εποχές του έτους αλλά χωρίς να έχουν συμπεριληφθεί δεδομένα ηχογραφήσεων). Είναι πιθανό οι παραπάνω εκτιμήσεις να διορθωθούν στη συνέχεια με ποιο ακριβείς τιμές και εκτιμήσεις.
- 4. Η επιφάνεια του οικοτόπου των σπηλαίων (8310) προσεγγίζεται (αδρή εκτίμηση με βάση την κάτοψη των σπηλαίων) ως ή συνολική επιφάνεια που περιλαμβάνει όλο τον διαθέσιμο θώκο για τα είδη των σπηλαίων (δάπεδο, οροφή και κατακόρυφες επιφάνειες). Η επιφάνεια είναι προφανώς υποτιμημένη εφόσον το έντονο ανάγλυφο είναι πολύ δύσκολο να μετρηθεί.

















#### «Greek Caves and Bats: Management Actions and Change of Attitude»

5. Για τα καταφύγιά χειροτέρων που δεν είναι σπήλαια (δηλαδή ορυχεία, αποστραγγιστικές σήραγγες παλαιά σπίτια) υπολογίζεται περίπου ως η επιφάνεια της κάτοψης τους.

Με βάση τα παραπάνω προκύπτουν οι παρακάτω εκτιμήσεις:

•	Psimaki cave , GR4340010 ,	0.26 ha
•	Tzani cave, GR4340008,	1.21 ha
•	Za cave , GR4220014 ,	0.889 ha
•	Limnon cave (Kastria), GR2320009,	4.628 ha
•	Aliartos sinkhole (cave), GR2410001,	1 ha
•	Zesta Nera cave (Sidirokastro), GR1260007	,0.432 ha
•	Poliphimos Cave, GR1130008,	10.93 ha
•	Upper gallery, Panagopoula, GR2320007,	0.12 , ha
•	Lower gallery, Panagopoula, GR2320007,	0.135 ha
•	Agia Varvara mine, GR1110005,	0.03192 ha
•	Tsoutouro mine , GR1110005 ,	0.0025 ha
•	House (Samaria), GR4340008,	0.0018 ha
	Total area =	20.16 ha

- 6. Οι αριθμοί επισκεπτών που θα επηρεαστούν από το πρόγραμμα προκύπτουν ως ένα μικρό ποσοστό (0.05) της συνολικής επισκεψιμότητας των θέσεων του προγράμματος ([1] Limnon cave (60,000 visitors \* 0.05) + Samaria gorge (140,000 visitors \* 0.05) + Spilaiovarathro cave (100,000 visitors \* 0.05) + other sites (estimated 10,000 visitors/stakeholders)\*0.05] \* 3 years until the end, and [2] Limnon cave (60,000 visitors \* 0.05) + Samaria gorge (140,000 visitors \* 0.05) + Spilaiovarathro cave (100,000 visitors \* 0.05) + other sites (estimated 10,000 visitors/stakeholders)\*0.05] \* 5 years after.
- 7. Οι εκτιμήσεις των εκπαιδευμένων εθελοντών πουθα χρησιμοποιήσουν τον εξοπλισμό του προγράμματος αποτελούν συντηρητική εκτίμηση με βάση τη μέχρι τώρα συμμέτοχή εθελοντών στο πρόγραμμα [Trained volunteers using prototype devices = 50 until the end 150 five years after the end].
- 8. Άλλοι χρήστες των αποτελεσμάτων και των υποδομών του προγράμματος εκτιμιόνται με βάση το ενδιαφέρον που έχουν δείξει μέχρι τώρα διάφορες κατηγορίες χρηστών.
  - a. People use data from three early warning monitoring systems = officers from three management bodies 10 until the end 30 five years after the end
  - b. Students using prototype devices and early warning monitoring systems for academic research and education = 10 until the end 30 five years after the end.
  - c. Use of data systems and prototypes in information centers or project web site to raise public awareness = 1000 until the end 3000 after the end of the project.
- 9. Η τιμή είναι μια εκτίμηση των ατόμων που θα επηρεαστούν από την εφαρμογή της Δράσης C1 απλώς παρατηρώντας τις αντίστοιχες υποδομές διαβάζοντας τις πινακίδες ερμηνείας στις επιλεγμένες τοποθεσίες με μέσο όρο

















- τουλάχιστον 100 άτομα ανά τοποθεσία ανά έτος, για κάθε τοποθεσία έργου [Τρία (3) χρόνια από την εγκατάσταση υποδομών, πινακίδες ερμηνείας και πίνακες ανακοινώσεων έως το τέλος του έργου και 5 χρόνια μετά].
- 10. Παρουσίαση της εκπαιδευτικής βαλίτσας σε μαθητές, οι εκτιμήσεις περιλαμβάνουν έναν ενδεικτικό αριθμό σχολείων που μπορούμε να προσεγγίσουμε μέσω των ΚΠΕ για τρία χρόνια μέχρι το τέλος του προγράμματος και για 5 μετά το τέλος.
  - a. (25 Primary schools + 25 Secondary schools) \* (2 classes \* 15 pupils)/ 3-year period (until the end) = 4500
  - b. (20 Primary schools + 20 Secondary schools) \* (2 classes \* 15 pupils)/ 5-year period (5 years beyond) = 6000
- 11. Υπηρεσίες ή άλλοι αρμόδιοι οι ενδιαφερόμενοι (stakeholders) που αναμένεται να εμπλακούν στους στόχους του προγράμματος μέσω των δράσεων του μέχρι το τέλος και πέντε χρόνια μετά το τέλος του.
  - a. 5 Decentralized Administrations with project areas
  - b. 7 Decentralized Administrations of Greece
  - c. 8 management bodies of the selected Natura 2000 network
  - d. 36 management bodies of Greek Natura 2000 network
  - e. 1 Ministry of Environment and Energy
  - f. 1 The municipal operation "Cave of the Lakes" at Kastria Municipality of Kalavryta in Limnon Cave
  - g. 1 The municipal enterprise "Loutra POZAR Almopias" in Spilaiovarathro Cave
  - h. 1 The municipality of Maroneia-Sapon in Poliphimos Cave
  - Trained volunteers through project seminars that will monitor the cave habitat and report pressures, threats and other important data (citizen science).
- 12. Αλλαγή στάσης και συμπεριφοράς των εμπλεκόμενων με βάση τη συμμετοχή τους στις διημερίδες επί τον αριθμό των διημερίδων
  - a. Number of trained volunteers by the project (e.g. members of speleological groups, associations and organizations).
  - b. Indicator values: Approximately 50 participants (Stakeholders) to be influenced by the project per event (50\*16=800)
  - c. Stakeholders influenced by the total project material, integrated guidelines and the infrastructures function 5 years after its end =1000
- 13. Εκτιμήσεις επισκεψιμότητας του web site του προγράμματος με βάση στοιχεία από αντίστοιχα προγράμματα LIFE στην Ελλάδα
- 14. Εκτιμήσεις των δράσεων δικτύωσης του προγράμματος με βάση τις συμμετοχές σε συνέδρια και τους αναμενόμενους συμμετέχοντες.

















- a. Members of other ongoing Life Nature Projects in EU / at least with 15 projects \* 2 persons per project =30
- b. Presentations and posters in at least 5 international conferences and 3 nationals by the end of the program / at least 5 persons per conference = 40

#### 15. Μέλη σπηλαιολογικών συλλόγων

- a. Past training seminars by the HISR and UoC = 30
- b. Participation in C5 action seminars of at least 10 people from each project area = 100
- c. Seminars by the project beneficiaries and trained volunteers using the material produced by the Project = 200 people

### Αλληλογραφία: Διορθώσεις με την ΕΜΤ και απαντήσεις του LIFE GRECABAT από 07/02/2020 [Answer]

Code			ANSWER
		question	
C.1.1	Overarchin g Context/Bio geographic al regions	We should probably tick "Mediterranean "as the relevant biogeographic region for your project.	We agree that we could choose as one of the Overarching Contexts the Mediterranean biogeographical region but it is relatively unlikely that we can describe specific indicator values at this geographical level.
C.1.4	Ecosystems and their services	You chose "Sparsely vegetated land" as main ecosystem relevant for the project. Is it relevant to include other ecosystems involved in some project sites like Notia Naxos (sea inlets)Koryfos Orous, Evrou (woodlands) and LimniYliki (inland water bodies)	Since none of the available ecosystem categories fits to caves or other important roosting sites, we chose the category "Sparsely vegetated land" as this corresponds with the MAES matching between habitat codes and ecosystems (Habitat 8310 = "Sparsely vegetated land", <a href="https://www.eea.europa.eu/data-and-maps/data/linkages-of-species-and-habitat">https://www.eea.europa.eu/data-and-maps/data/linkages-of-species-and-habitat</a> ). Furthermore habitat 8310 is described based on typical fauna species rather than characteristic plant species in other Habitat types. Other types of ecosystems such as sea inlets, woodlands and inland water bodies are not connected directly to the project sites although they exist in the wider Natura area.
C.2	Specific Context	You have decided to create 10 specific context names.  Please be aware that in order to avoid double counting, the same overarching context, can only be linked once with the same indicator	We will take into consideration your comment.

















		descriptor	
	Indicator values		
1.5	Project area/length	1. Concerning the 1st Specific Context (Action Plans): explain the increase from 11,662 hectares at the end of the project to 100,000 hectares 5 years later.  2. The action plans will not cover the total area of 180,388 ha of the project's Natura 2000 sites?  3. Why there will be no progress from the end of the project to 5 years later for Specific Contexts 2-4 and 5 (important roosting sites, 8310 conservation status and selected bat species)	ANSWER 1: The first value (11,662.00 ha) refers to the project actions area, which is the the sum of surfaces of selected caves for the implementation of actions C, and includes a buffer zone around them (with an average radius of several hundred meters). While the second value (100,000.00 ha) refers to the national action plans implementation area. Thus, this increase is explained by the fact that implementation of the action plans at the beginning will apply at local level and at the end of the project at national level.  ANSWER 2: The actions plans will cover all bat species and caves of Greece. The action plans will contribute conservation of selected species and habitat across the total area of Natura 2000 network, but the values refer to the specific areas around all known important roosting sites and caves of Greece (please see the respective comment box). We can calculate the total area of Natura 2000 network of Greece plus the important sites outside Natura 2000 network to substitute the above value (if you think this is better).
			<b>ANSWER 3:</b> The value used for the above mentioned contexts is an approximation of the size of caves and other artificial habitats of the project (please see the respective comment box). Thus, it is not expected the size (available area) of the protected habitats to change 5 years after the end of the project.
1.6	Humans (to be) influenced by the project	Please give explanations for your estimated figures for the End and Beyond 5 years values	ANSWER: As regards the Specific Context "Early warning monitoring systems for habitat 8310 and important bat colonies" the values used refers to persons whose lives were directly, positively impacted by main environmental actions of project. The number at the end and 5 years after the end of the project resulting as follows:  • Trained volunteers using prototype devices
			<ul> <li>= 50 until the end 150 five years after the end</li> <li>People use data from three early warning monitoring systems (officers from three management bodies) = 10 until the end and</li> </ul>

















#### «Greek Caves and Bats: Management Actions and Change of Attitude»

#### 30 five years after the end

- Students using prototype devices and early warning monitoring systems for academic research and education = 10 until the end and 30 five years after the end
- Use of data systems and prototypes in information centers or project web site to raise public awareness = 1000 until the end 3000 after the end of the project

As regards the Specific Context "Protection, restoration and management of important roosting sites for bats" we used 3 categories of values a) Other persons influenced and b) Persons who may have been influenced via dissemination or awareness raising project-actions.

For category (a) the number at the end and 5 years after the end of the project is estimation of persons that will be influenced by the implementation of Action C1 simply by noticing the respective infrastructures and reading the interpretation signs and notice boards on the selected sites. Thus, we assume that at the end of the project 100 persons will visit each site per year (100 persons \* 10 sites\* 3 years = 3000) and 5 years after the end of the project (100 persons \* 10 sites\* 5 years = 5000).

For category (b) the number of persons who may have been influenced via dissemination or awareness raising project-actions, the numbers at the end and 5 years after the end of the project have estimated as follows:

#### At the end of the project:

At least 50 schools (25 Primary + 25 Secondary) \* (2 classes \* 15 pupils) / 3-year period (until the end) = 4500 persons

Visitors of Limnon cave (60,000 visitors \* 0.05), Samaria gorge (140,000 visitors \* 0.05), Spilaiovarathro cave (100,000 visitors \* 0.05) and other sites (estimated 10,000 visitors/stakeholders)\*0.05) = xx\*3 years = 50000 persons

#### 5 years after the end of the project

At least 40 schools (20 Primary + 20 Secondary)
\* (2 classes \* 15 pupils) / 5-year) = 6000
persons

Visitors of Limnon cave (60,000 visitors \* 0.05),

















			Samaria gorge (140,000 visitors * 0.05), Spilaiovarathro cave (100,000 visitors * 0.05) and other sites (estimated 10,000 visitors/stakeholders)*0.05) = xx*5 years = 60000 persons  * 0.05 Assuming that a 5% of visitors will be affected by the program  As regards the Specific Context "Establishment of volunteer network" the values used refers to persons with improved capacity or knowledge due to project actions for example members of speleological groups, associations and organizations. The number at the end and 5 years after the end of the project is approximate and will be updated during the project.  As regards the Specific Context "Change the attitude and behavior of stakeholders — Monitoring" the values used refers to persons who changed their behaviour or practices due to the project actions. The numbers resulting as follows:  At the end of the project: 50 participants — stakeholders * 16 seminars = 800 individuals 5 years after the end of the project= 1000
7.3	Natural and semi- natural habitats	For ID 20224 (Protection, restoration and management of important roosting sites for bats), you mention the figures 0-5-5 although in the GA you declare that 13 roosting sites will be restored.  Please clarify	ANSWER: ID 20224 refers to artificial habitats (roosting sites) of the project which are not listed in Annex I Habitat Directive and are: 1 building, 2 old mines, 2 abandoned galleries. The roosting sites of the project are 13: 5 artificial (ID 20224) and 8 caves (ID 20223)
7.4	Wildlife species	1. For Compound ID 20225, you mention an increase of 7445 individuals (from the start to the end of the project) but you don't expect any progress 5 years later. Also no extension of the conservation status area beyond 5 years. Can you explain why? 2. Please check and provide clarifications concerning the % of protection of species	ANSWER 1: The excessive increase shown in Miniopterus schreibersii is obviously incorrect, it will be corrected based on the reference values of Action A1.  As the action A1 (Inventory of target species and habitat at the selected sites = Collection of reference data from literature and fieldwork.) has not completed yet, and we do not know the actual number of individuals using the caves and the artificial habitats of the project. The final population values as well as a better estimate of

















#### «Greek Caves and Bats: Management Actions and Change of Attitude»

#### after the end of the project and beyond 5 years (**see table below**)

Site	Grant Agreement	KPI e proje
	10.07.0/	
1	13-27 %	59.
2	14-71 %	0
3	5-7 %	0
4	2-4 %	0
5	19-95%	0
6	5-11%	0
7	3-7 %	0
8	2-5 %	0
9	0.5-0.7 %	0
10	30-60 %	300

individuals expected 5 years after the end of the project will be inserted with the completion of the deliverable of action A1. The same we can say for the conservation status of the targeted species, noting here that the majority of them has unknown conservation status.

The values entered in the fields are not final and will soon be corrected based on final estimates of A1 action. At this stage it would be preferable to put "provide values later" but it was not accepted by the web-tool.

ANSWER 2: For more accurate and valid clarifications, the percentage of protection species after the end of the project and beyond 5 years will be presented after the completion of the deliverable of action A1. At this stage it would be preferable to put "provide values later" but it was not accepted by the webtool.

Please see also the comments: "The species are listed in Annex II Habitat Directive as well \* The selected LIFE GRECABAT Annex II bat species are not available on the drop down list and therefore only selected as Annex IV. Final population values will be inserted with the completion of the deliverable of action A1."

In order to estimate the change in conservation status we need to know what is happening to the known national population and other parameters for calculating the conservation status of the species.

The project will contribute e.g.:

- Improving the knowledge of the population at Project sites Action A1
- Recordings from other sites by trained volunteers and use of bat detectors and prototypes.
- Protecting (end restoring the habitat of the) the percentage of bats national population on the project sites (Action C1 and C2)

















	T		
			<ul> <li>Protection and conservation through Action Plans and Micro Caves (Actions A3 &amp; C3)</li> </ul>
10.1.2	Governanc	1. For Cave micro-	(please see the respective comment box)
	e / Supervisory	reserves, can you give some details on the significant progression 1-	ANSWER 1:
	/enforceme nt bodies involved	14-46 bodies involved (along with the 3 steps: start, end of project and beyond 5 years)	- Cave micro-reserves = 5 Decentralized Administrations with project areas (end, 5 years beyond)
		<ul><li>2. The same for Actions</li><li>Plans</li><li>3. For each specific</li></ul>	- 7 Decentralized Administrations of Greece (5 years beyond)
		Context, which institution/body is involved at the project start?	- 8 management bodies of the selected Natura 2000 network (end, 5 years beyond)
			-36 management bodies of Greek Natura 2000 network (beyond 5 years)
			- 1 Ministry of Environment and Energy (start, end, 5 years beyond)
			ANSWER 2: Actions Plans =
			1 Ministry of environment and Energy (start, end, 5 years beyond)
			8 management bodies of the selected Natura 2000 sites (end, 5 years beyond)
			36 management bodies of Greek Natura 2000 network (5 years beyond)
			1 The municipal operation "Cave of the Lakes" at Kastria Municipality of Kalavryta in Limnon Cave (end, 5 years beyond)
			1 The municipal enterprise "Loutra POZAR Almopias" in Spilaiovarathro Cave (end, 5 years beyond)
			1 The municipality of Maroneia-Sapon in Poliphimos Cave (end, 5 years beyond)
			ANSWER 3: in both cases is the Ministry of environment and Energy as a project partner
11.1	Website	Please explain why you chose this Specific Context	ANSWER 1: Because the website has created in order to inform the visitors for the protection,

















#### «Greek Caves and Bats: Management Actions and Change of Attitude»

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		"Protection, restoration and management of important roosting sites for bats" instead of "Awareness raising to the general public"  2. We can consider that the website will be also accessible to individuals in all of Greece. So you can	restoration and management of caves and bats of the Project. However, we can change it taking into account your comment.  ANSWER 2: Your comment has been taken into account and will be incorporated if possible.
		probably include EL as overarching context for 20235. 3. In the note box, maybe useful to mention that you include in <i>general public</i> the stakeholders groups.	ANSWER 3: The comment will be taken into account and we will mention in the note box that we include in general public the stakeholders groups.
12.1	Networking	1. Maybe useful to include the number of cave visitors in a new specific context "Awareness raising to the general public" to be closer to the estimation of 350,000 individuals	ANSWER 1: The comment will be taken into account and the number of cave visitors (when is available) will be included in the specific context "Awareness raising to the general public".
		impacted as mentioned in the Grant Agreement.  2. Please explain why in the Specific Context "Change of attitude and behavior" you mention the figures 0 -500 -1500 although 19,500 individuals are mentioned in the Grant Agreement KPI Table.	ANSWER 2: In the Grant Agreement KPI table stated that approximately 19500 people would be expected to be notified. Whereas the values given here are related to the number of members of interest groups (scientists, members of speleological organizations, etc.).
14.1	Running cost/operati ng costs during the project and expected in case of continuation /replication/t ransfer after the project period	• Why have you included only 2 Specific Contexts (early warning monitoring and Actions Plans) with a total of 130,000+145,000=275,000 euros. It should comprise all categories of expenses (1 270,000 euros) made during the project's duration,  including expenditure not eligible for LIFE funding	We will follow your advice and introduce also all the other specific contexts in this section.  It is not quite clear what exactly to include in this section, e.g. after completion of the project many of the actions will continue to operate without any particular additional funding needs (Should they appear here? e.g. It is expected that (1) the reproduced 12 prototypes will be used by volunteers to monitor the selected and other important caves until the end of the project but also after the end of its lifetime. (2) Integration of GRECABAT in information centers is expected to replicated or transferred to other contexts. (3) VR and application will replicated by other stakeholders managing show caves. (4) The specifications for e.g. cave gating are expected

















			to be adopted by the Ephorate of Paleoanthropology and Speleology. (5) Good practices are expected to be adopted by a key stakeholders.).
14.3	Future funding	Please clarify if the awareness raising and conservation actions in Natura 2000 sites are included in the Actions Plans. Or should you propose to define other related Specific Contexts.	It is clear that not all of this is included in this estimate (but mainly the restoration of inappropriate cave gating in a national level) and other specific contexts will probably need to be added.  The problem is that is being asked to estimate the cost e.g. for the implementation of Action Plans that are still being prepared, which is sure to lead to a wrong estimate.
14.4.3	Entry in new geographic areas	You are proposing Cyprus as new geographic area.  Maybe some project dissemination activities could be added in the Balkans area (Bulgaria).	Answer: We will add Bulgaria and probably other Balkan countries if it is possible to import more than one country (per specific context) in this section.

#### Προτάσεις δεικτών από την πρόταση του προγράμματος:

#### (a) Expected at the end of the project

Ir	I	Number of	13	100% change	The habitat of thirteen (13) multi-
npr	lab	multi-species	colonies:	(currently, in	species colonies (in eight (8) caves (6
VO.	Habitats	bat roosting		Greece there	not open to the public (8310), 2
be	S	sites		are no bat	touristic), two (2) mines, two (2)
Nat		protected		roosts under	concrete tunnels/galleries and one(1)
Improved Nature,		and restored		proper	building) will be restored, improved
				management)	and protected, securing the
pe					conservation of the extant colonies as
Species				26% of the 50	well as potentially attracting more bat
ි <u>න</u>				most important	species and/or individuals.
and				Greek bat	
Biodiversity				roosts, ca. 50%	All 13 sites are missing conservation
ďv				of those in	practices and are facing a number of
ers				NATURA2000	pressures and threats
sity				areas	
					The selected sites are ranked among
					the 50 most important bat roosts in
					Greece (25 of those 50 are in
					NATURA2000 areas).

















Habitats	Number cave micro reserves designated as wildlife refuges	5 caves	100% change Please explain reference data	At least 5 micro reserves will be designated, based on documentation of C3 action
Wildlife Species	Number of threatened species in improved or secured status	species (10 Annex II & 2 Annex IV)	100% protection of target colonies (currently, they are not under proper management)  protection of 0.5 to 95% of national populations of target bat species (currently, in Greece there are no bat roosts under proper management - see exlpanations)	For most of the 10 target bat species, an important percentage of their national populations will be protected: Miniopterus schreibersii: 13% - 27% Myotis blythii: 14% - 71% Myotis capaccinii: 5% - 7% Myotis emarginatus: 2% - 4% Myotis myotis: 19 % - 95% Rhinolophus blasii: 5% - 11% Rhinolophus euryale: 3% - 7% Rhinolophus ferrumequinum: 2% - 5% Rhinolophus hipposideros: 0.5% - 0.7% Rhinolophus mehelyi: 30% - 60% These calculations are based on the min and max national values estimated during the National Monitoring Program Additionally, the only significant colonies (with several hundreds of individuals) of the Annex IV species, Myotis nattereri & Eptesicus serotinus will be protected.

















Wildlife Species	Number of bats protected through the actions of the project	16,980 individuals	100% protection of target colonies (currently, they are not under proper management)  Protection of 0.5 to 95% of national populations of target bat species (currently, in Greece there are no bat roosts under proper management - see exlpanations)	Ten (10) bat species refer to Annex II(16,090 individuals) and two (2) bat species refer to Annex IV (890 individuals) will be protected through the project's actions. These estimates are based on surveys performed on the project's sites in 2006 (2 sites) and in 2014, 2015.
Wildlife Species	Number of bats protected from inappropriate fencing induced injuries	4330 individuals from 9 species in 2 caves	100% change (all present bats are susceptible to be injured)  Protection of 0.8 to 60% of national populations of target bat species from inappropriate fencing induced injuries	Limnon cave (1900 individuals) + Polyphimos cave (2430 individuals)  Miniopterus schreibersii: 4 - 10% Myotis blythii: 0.8 - 4% Myotis capaccinii: 3 - 4% Myotis emarginatus: 1 - 3% Myotis myotis: 9 - 45% Rhinolophus blasii: 5 - 11% Rhinolophus euryale: 5 - 11% Rhinolophus ferrumequinum: 1 - 3% Rhinolophus mehelyi: 30 - 60% These calculations are based on the min and max national values estimated during the National Monitoring Program
Wildlife Species	Number of caves monitored	27 caves	100% change Please explain reference data	C2 actions 3 automatic systems + C2 prototype 12 *2 by volunteers
Alien Species	Reduction of invasive alien species	Population /ha Population /m3	% change	

















Economic Performance, Market Uptake, Replication	Employment	Jobs created	FTE	% change	(a) The project will invest in infrastructures on project sites where workers from the project areas will work. (b) The accommodation and restaurants of the wider project area will be used. (c) The consumables of GRECBAT events for catering will be given to local businesses with preference for traditional local products. In this way, it is expected that jobs will be given or maintained in project areas during the program.
ake, Replication	Replication / Transfer	N . of replication / Transfer	NA	not applicable	It is expected that (1) the reproduced 12 prototypes will be used by volunteers to monitor the selected and other important caves until the end of the project but also after the end of its lifetime. (2) Integration of GRECABAT in information centres is expected to replicated or transferred to other contexts. (3) Augmented reality demo end application will replicated by other stakeholders managing show caves. (4) The specifications for e.g. cave gating are expected to be adopted by the Ephorate of Paleoanthropology and Speleology. (5) Good practices are expected to be adopted by key stakeholders.
	Market	Expected revenues	Euros	not applicable	
	et uptake	market size in number of customers	customers	not applicable	
	Reduction of cost		in Euros / unit	% change	
	Payback Time	capital invested / net income	in years	not applicable	

















Communication, dissemination, awareness rising	Awareness raising	Number of entities/indivi duals reached/ made aware	350,000 individuals	100% change (currently, public servants, stakeholders and the broad public lack knowledge on the natural history of bats and the ecosystem services they provide)	[Limnon cave (60,000 visitors * 0.05) + Samaria gorge (140,000 visitors * 0.05) + Zesta Nera springs (1,000,000 visitors * 0.05) + other sites (estimated 10,000 visitors/stakeholders)] * 5 years
	Website	Number of hits	30,000 hits	100% change (see above)	Estimation based on visitor numbers at websites of other LIFE projects in Greece
	Educational kit	Number of entities/indivi duals reached/ made aware	5,000 individuals	100% change (see above)	(30 Primary schools + 25 Secondary schools) * (3 classes * 30 pupils) / 5-year period
	Behavioural change	Number of entities/indivi duals changing behaviour	38,500 individuals	100% change (see above)	10% of all visitors and pupils involved during the current 5-year period

#### (β) Anticipated 5 years after the project's end:

Improved Nature, Spe Biodiversity	Habitats	Number of multi- species bat roosting sites	13 colonies	100% change Please explain reference	The habitat of thirteen (13) multi-species colonies (in eight (8) caves, two (2) mines, two (2) concrete tunnels/galleries and one(1) building) will be restored, improved and protected, securing the good conservation status of the
		protected and restored		data	extant colonies as well as potentially attracting more bat species and/or individuals.
Species and	Habitats	Number cave micro reserves designated as wildlife refuges	3 caves	60 % change Please explain reference data	3 more micro reserves will be designated, based on documentation of C3 action

















	Wildlife Species	Number of threatened species in improved or secured status	12 species (10-II selected + 2- IV)	100% change Please explain reference data	10 target bat species: Rhinolophus hipposideros, Rhinolophus ferrumequinum, Rhinolophus euryale, Rhinolophus mehelyi, Rhinolophus blasii, Myotis blythii, Myotis myotis, Myotis capaccinii, Myotis emarginatus, Miniopterus schreibersii. + also benefit 2 Annex IV species (Myotis nattereri, Eptesicus serotinus).
	Wildlife Species	Number of bats protected from inappropriat e fencing induced injuries	1,500 individuals	100% change Please explain reference data	Limnon cave (500 individuals) + Polyphimos cave (1,000 individuals)
	Wildlife Species	Increase in numbers of bats protected through the actions of the project	17,830- 18,680 individuals	5-10% increase	Estimates are based on currently available figures and are likely to change, following the implementation of Action A1.
	Wildlife Species	Number of caves monitored	27 caves	100% change Please explain reference data	C2 actions 3 automatic systems + C2 prototype 12 *2 by volunteers
	Alien Species	Reduction of invasive alien species	Population/h a Population/m 3	% change	Please limit to a maximun of 3 most relevant alien species targeted by your proposal
Economic Performance, Market Uptake,	Empl oyme	Jobs created	FTE	% change	
	Replication / Transfer	N . of replication / Transfer		not applicable	Please specify, if applicable, in how many countries / sectors /entities /regions replication/transfer takes place.

















	1		4== 000	=00/	(00.000.11/
င	ra. ≯	Number of	175,000	50%	[Limnon cave (60,000 visitors * 0.05) + Samaria
Communication, dissemination, awareness rising	Awareness raising	entities/indivi	individuals	change	gorge (140,000 visitors * 0.05) + Zestanera
	G	duals		Please	springs (1,000,000 visitors * 0.05) + other sites
nic	ess	reached/		explain	(estimated 10,000 visitors/stakeholders)] * 5
äti	0,	made aware		reference	years
,no				data	
di					
sse	5	Number of	15,000 hits	50%	Estimation based on visitor numbers at websites
	eb/	hits		change	of other LIFE projects in Greece
nat	Website			Please	
ion	(D			explain	
aj				reference	
wa				data	
ren					
ess	ū	Number of	5,000	100%	(30 Primary schools + 25 Secondary schools) * (3
	duc	entities/indivi	individuals	change	classes * 30 pupils) / 5-year period
sin	ati	duals		Please	
9	on	reached/		explain	
	Educational kit	made aware		reference	
	a÷			data	
	Φ	Number of	19,500	85%	10% of all visitors and pupils involved during the
	eha	entities/indivi	individuals	change	current 5-year period
	jve	duals		Please	
	nuc	changing		explain	
	al	behaviour		reference	
	cha			data	
	Behavioural change				
	е				













