Applicant: **Jimenez, Carlos**Organisation: **Enalia Physis Environmental Research Centre**Funding Sought:

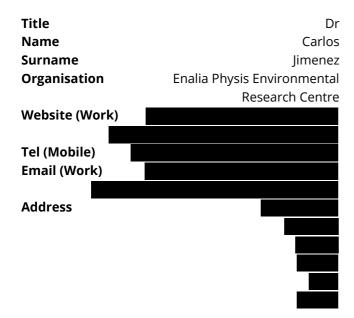
Funding Awarded: £0.00

DPLR3\1061

Chasing Ghosts: Managing abandoned fishing gear in SBA Akrotiri, Cyprus

The project "Chasing Ghosts: Managing abandoned fishing gear in SBA Akrotiri, Cyprus" aims to produce the indispensable information for the management of this pervasive type of litter in the area of the Jubilee Shoals (Episkopi Special Area of Conservation) protecting thus, the remarkable biodiversity and habitats of the shoals. The project will have an evidence-based approach for the undertaken of actions to manage ghost nets.

PRIMARY APPLICANT DETAILS



DPLR3\1061

Chasing Ghosts: Managing abandoned fishing gear in SBA Akrotiri, Cyprus

Section 1 - Project Title & Contact Details

Q1. Project Title

Chasing Ghosts: Managing abandoned fishing gear in SBA Akrotiri, Cyprus

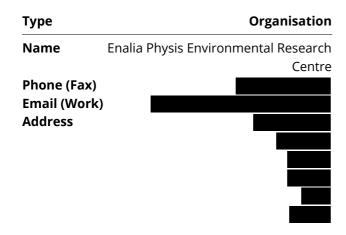
Q2. Please select whether you are applying as an organisation or as an individual (Guidance section 3 and Guidance Glossary)

Organisation

PRIMARY APPLICANT DETAILS

Title Dr
Name Carlos
Surname Jimenez
Organisation Enalia Physis Environmental
Research Centre
Website (Work) http://www.enaliaphysis.org.cy/
Tel (Mobile)
Email (Work)
Address

GMS ORGANISATION



Section 2 - Overseas Territory(ies)

Q3. Overseas Territory (Guidance section 1.3):

Which UK Overseas Territory(ies) will your project be working in? Please note that in case of a non-permanent resident population you need to demonstrate a clear, meaningful, long-term link to the territory.

☑ Sovereign Base Areas of Akrotiri and Dhekelia (on Cyprus)

* if you have indicated a territory group with an asterisk, please give detail on which territories you are working on here:

No Response

In addition to the UKOT(s) you have indicated, will your project directly benefit any other UK OT(s) or country(ies)?

Yes

Please list these below and describe how they will benefit:

The environmental problem of ghost nets is of a world-wide scale. This abandoned fishing gear causes negative impacts for many years after being lost to the sea by continuously trapping, smothering and killing marine life. In Cyprus, ghost nets can be found almost all around the island. The method and outcomes of the project can be replicated in the SBA of Dhekelia (on Cyprus), where ghost nets are known to obstruct in-use fishing gear. The impacts of the nets on the marine biodiversity and habitats needs to be evaluated for the implementation of evidence-based management actions in SBA of Dhekelia.

Section 3 - Project Partners

Q4. Project partners (Guidance section 3.2)

In this section, please give details of all the partners involved (including the Lead Partner) and provide a summary of their roles.

Project Leader name (Guidance section 3.1):	Carlos Jimenez
Lead Partner name (if applying as an organisation; Guidance section 3.1):	No Response
Lead Partner Website (if applicable):	No Response
Is the Lead Partner based in a UKOT where the project is working (Guidance section 3.1)?	⊙ Yes
List other partners involved and where are they based:	No other partner.
Summary of roles and responsibilities of each partner in the project:	No other partner.
I confirm that all listed partners are aware of this application and have indicated support:	Unchecked

Attach a Cover Letter for your application (Guidance section 4.2).

& Cover letter-DPlus-GhostNets-JubileeShoals-29.1

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- pdf 147.8 KB

Section 4 - Project Summary & Description

Q5. Project Summary (Guidance section 3.8)

Please provide a brief summary of your project. This may be used in communication activities and/or published online, if your application is successful.

The project "Chasing Ghosts: Managing abandoned fishing gear in SBA Akrotiri, Cyprus" aims to produce the indispensable information for the management of this pervasive type of litter in the area of the Jubilee Shoals (Episkopi Special Area of Conservation) protecting thus, the remarkable biodiversity and habitats of the shoals. The project will have an evidence-based approach for the undertaken of actions to manage ghost nets.

Q6a. Description (Guidance section 2.1 and 6)

Please provide a description of your project, including:

• the overall objective

- the current situation and the problem the project is trying to address
- · what success will look like and how you will measure it

Please be as specific as possible when describing the project, using quantified data and evidence where available. You may wish to consider: what are the specific threats to the environment that the project will attempt to address, and what should we know about these threats? What does your successful project look like? And how will you demonstrate whether and how your project has been successful?

OVERALL OBJECTIVE OF THE PROJECT

The project "Chasing Ghosts: Managing abandoned fishing gear in SBA Akrotiri, Cyprus" aims to produce the indispensable information for the management of this pervasive type of litter in the Jubilee Shoals protecting thus, the remarkable biodiversity and habitats of the shoals.

CURRENT SITUATION AND THE PROBLEM THE PROJECT ADDRESSES

The environmental problem of abandoned fishing gear (hereafter ghost nets) is of planetary scale. It poses a chronic impact on the marine biodiversity for decades, after the nets were lost to the sea, by continuing "fishing" by trapping and killing organisms. In consequence, ghost nets are considered the "deadliest form of marine plastic debris". In Cyprus, ghost nets are found almost everywhere around the island, threatening marine life and scuba diving activities, and obstructing in-use fishing gear and navigation. The resilience of the marine habitats of Cyprus is already compromised by Climate Change and human activities. For example, the marine heat waves of 2023 impacted significantly the marine biodiversity of the island by producing seawater warming lasting for months, and most probably, facilitating the spread of disease killing en masse sponges and other species. Making things worse, ghost nets are a permanent feature of the seascape and a pervasive source of deterioration of the already stressed-out marine communities of Cyprus. Ghost nets are known to ensnare marine mammals and sea turtles but the widest-spread killing occurs on the sea bottom, where the nets continue "fishing" and smothering the benthic biodiversity.

The common approach to the ghost nets is the business-as-usual "search and remove", however, it can seriously damage the same marine habitats that seeks to protect. In this approach, no other aspects except logistics and depth, are considered when deciding to perform the removal. Once the ghost nets are located, divers engage in the removal of the nets from the substrate, paying little to no attention to the living organisms colonizing the net. The longer the nets have been immersed, the higher is the colonization by organisms. In consequence, careless removal activities of "aged" ghost nets usually produce more harm to the marine habitats than it is acceptable and is basically due to the destruction of colonizing species of EU importance (e.g., corals and sponges) and by damaging the attachment substrate (e.g., coralligenous communities). To achieve meaningful outcomes for the conservation and management of the biodiversity of the Jubilee Shoals, the issue of the ghost nets will be addressed in this proposal with an evidence-based approach (i.e., Removal Index) for environmental managers to decide the need (or not) to remove ghost nests from the shoals.

AVAILABLE QUANTIFIED DATA AND EVIDENCE

Hundredths of meters of ghost nets were observed in the Jubilee Shoals area during the ecological surveys of an on-going Darwin Plus Local project (DPL00041). In this project, the biodiversity of the shoals is being evaluated at the easternmost pinnacle where a submarine cave system is located. The preliminary results suggest that the shoals' coralligenous and cave communities are possibly the healthiest between 35-50m depth in Cyprus. During the surveys of the eastern pinnacle and limited exploration of the second pinnacle's walls at the western end of the shoals (see supp. mat.), the presence of massive ghost nets of different ages and lengths, hanging and smothering coralligenous substrates, was confirmed (see supp. mat.).

CAPABILITY AND CAPACITY LOCAL PARTNERS

With the participation of one graduate student (PhD candidate), the project contributes with education and training. The project's novel approach (i.e., Removal Index) to the ghost nets evaluation will be an important chapter in the student's research thesis.

Q6b. Long-term sustainability (Guidance section 2.1 and 6)

Please describe the long-term benefits of the project and the change it will bring about. How will the outcomes of the project be sustained after the funding is finished?

The environmental managers of SBA Administration (SBAA) and the national authorities will have an evidence-based approach for the undertaken of actions to manage ghost nets. These actions are in the medium to long-term plan for the conservation and management of the Episkopi Special Area of Conservation. A database will be available of the biodiversity of the habitat where the ghost nets are located as well as a map of the distribution of the nets.

(Optional) Please upload any additional and supporting materials or files (such as maps of project sites, etc) below. Maximum of 5 sides of A4, and is combined as a single PDF:

- <u>SuppMat-DPlus-GhostNets-JubileeShoals-29.11.</u>
 2023
- ① 11:55:37
- pdf 606.71 KB

Section 5 - Project Outcome(s)

Q7. Project Outcome(s) (Guidance section 1.2)

Successful Darwin Plus Local projects must demonstrate measurable outcomes in <u>at least one of the</u> <u>themes of Darwin Plus with a clear focus on biodiversity and the natural environment</u>, either by the end of the project or soon after through a credible plan.

Please confirm that your project has a clear focus on biodiversity and the natural environment.

Checked	Biodiversity: improving and conserving biodiversity, and slowing or reversing biodiversity loss and degradation;
Checked	Climate change: responding to, mitigating and adapting to climate change and its effects on the natural environment and local communities;
Checked	Environmental quality: improving the condition and protection of the natural environment
Checked	Capability and capacity building: enhancing the capacity within OTs, including through community engagement and awareness, to support the environment in the short- and long-term.

Please justify your selection. Please use quantitative information where possible here.

The project addresses these themes by developing an evidence-based tool for the management of the ghost nets that pose a threat to the Biodiversity and health status of EU Priority Habitats and by contributing to mitigate the effects of Climate Change and the Human Impact on the Jubilee Shoals.

Measurable outcomes of the project are the removal of recent ghost nets and a biodiversity database with the

evaluation according to a Removal Index. The database will used by the SBAA and national environmental managers for the implementation of conservation actions, and the training and education of a PhD candidate.

Section 6 - Workplan

Q8. Workplan (Guidance section 2.2)

<u>Please provide anticipated dates for the start and end of your planned project here.</u> Please use the <u>Darwin Plus Local Project Workplan</u> (available at: <u>Darwin Plus website</u>) to provide a list of the individual activities you have planned for this project, a brief description of what each activity entails, and the months in which the activities will be carried out. If the project involves only one activity (e.g. a purchase), please still provide project start and end dates (noting estimated times for procurement). <u>Please note that your project must start after 1 April 2024 and be completed by 31 March 2025.</u>

Start date:	End date:	Duration (e.g. 3 months):
01 April 2024	31 March 2025	12 Months

Please upload the completed Darwin Plus Local Project Workplan with your proposed project activities here

- A R3-DPlus-Local-Workplan-Template-FINAL-Chasi ng Ghosts-09.11.2023
- **ii** 29/11/2023
- ① 12:00:04
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Section 7 - Costs

Q9. Costs (Guidance section 2.2 and please read the Finance Guidance)

Please provide a breakdown of costs to be funded through Darwin Plus Local (in GBP). Are you seeking any matched funding for this project?

No

Budget line Explanation Cost in GBP	
-------------------------------------	--

Staff costs:	-Project Leader with long experience (ca. 40yrs) in research and conservation of marine habitats, who developed the concept, strategy and goals of the project and who will be responsible for the successful completion of activities and performance of participants. -Project Assistant experienced in technical/rebreather diving research methods and safety, who will participate in all activities of	
	the project and who will use selected data from the database for a chapter of the PhD research project.	
Consultancy costs:	-Since diving in the Jubilee Shoals requires high-skilled diving, resources are requested to cover the fees of certified experienced divers. The surveys will be done by means of Rebreather and Technical diving. The former will work at depths more than 40m (max. dive time of 3hrs) and the latter will work on the shallower habitats (decompression diving).	
	-For the access to the Jubilee Shoals it is necessary to charter a boat suitable for the dive team (4 divers).	
	-A pick-up vehicle will be rented to transport participants, diving gear and instruments from the capital to the coast (Pissouri).	
Overhead costs:	It is a standard practice of the Leading Partner Organization to add overhead costs for administrative use.	
Travel & subsistence costs:	During the first 7 months of the project (Apr-Oct 2024), the project requires local travels from the capital to the study site. Included here are car rental (pick-up), car fuel, per diem and accommodation for the participants (between 2 and 4 depending on the activity).	
Operating costs:	The diving activities will follow stringent rules for safety and decompression procedures to perform the assessments of biodiversity and ghost nets. It is necessary to rent scuba tanks with NITROX, Oxygen, and air.	
Capital equipment:	For the ghost nets that according to the Removal Index and expert opinion should be removed, the following materials are needed: lift bags (balloons), shackles, rope, Ethanol 96% (preservation of biological samples).	
Other Costs	The meetings at the start and end of the project will require catering.	
Total:		

This section provides more information on the budget to help evaluators understand how you will use the funds you are requesting. You do not need to list all costs, but please list and detail costs of more than £1,000 per item below, under the appropriate budget line.

Details of staff costs over £1,000 (if relevant)
-Carlos Jimenez (Male), Research Director (Project Leader), time for 91 days (for project management, participate in surveys, advise on data management and analysis, writing of reports.
-Vasilis Resaikos (M), PhD candidate, time for 120 days to organize and participate in surveys, meetings, workshops, managing and analysis of the data, writing of reports.
-No funds are required for other participants Magdalene Papatheodoulou (Female) diving and statistics; Marios Papageorgiou (M) ichthyology, statistics, management; Christiana Tourapi (F) management; Monica Demetriou (F) biological oceanography.
Details of overhead costs over £1,000 (if relevant):
lt is a standard 7% of the overall cost for administrative use (
Details of travel and subsistence costs over £1,000 (if relevant):
-Transportation cost (fuel) for the surveys to the study site: 8 round trips calculated as each .
-Per diem fieldwork: 16 times (, calculated as the official rate of
-Accommodation during field work: 18 nights (calculated as /night/studio for 4 persons.
Details of operating costs over £1,000 (if relevant):
- Dive equipment rentals (NITROX, Oxygen, Air) for tech divers: 32 sets calculated as 2 divers x 16 dives x
- Dive equipment rentals (Sofnolime, Oxygen, Air) for rebreather divers: 32 sets (calculated as 2 divers x 16 dives x
Details of capital equipment costs over £1,000 (if relevant):
Costs below
Details of consultancy costs over £1,000 (if relevant):
- Rebreather divers surveying the deep (>35m) ghost nets and pinnacles: 16 dives (£8,395) calculated as 2 divers x 1 dives x
-Technical divers surveying the ghost nets and pinnacles: 16 dives) calculated as 2 divers x 1 dives x /diver.
Diving scooters for transporting divers underwater with their equipment to cover a larger area: 16 charters (calculated as 2 scooters x / charter
-Boat charters for the surveys at the shoals: 16 charters (charters) calculated as £ (charter (half a day).
-Pick-up rental for transport: 20 rentals (calculated as £
Details of other costs over £1,000 (if relevant)
Costs bolow

If your project budget was prepared in another currency and converted to GBP, please provide the exchange rate, its source, and the date it was accessed:

Other currency:	Exchange rate:	Source of this exchange rate:	Date exchange rate accessed:
Euros	1.1435EUR/GBP	https://www.exchangerates.org.uk/Pounds- to-Euros-currency-conversion-page.html	11 October 2023

Darwin Plus Local has been created to build capacity and contribute to local economies in-territory.

What % of the total will be spent in the OTs?

If less than 80% of the total project spend is to be spent within the OT(s), please explain why.

No Response

Section 8 - Local and National Priorities

Q10. Local and national priorities

Please explain how this project aligns with local and national priorities? You may wish to consider the project in the context of national environmental laws, objectives, strategies, territory specific agreements, action plans or policies.

The project is in line with several obligations of the Republic of Cyprus. The European Directive 2019/904/EU1 on the reduction of the environmental impact of certain plastic products with 48(I)/ 2022, "Waste (Amendment) Law". Within this EU Directive, fishing gear production, management and disposal are an integral component. Furthermore, the Marine Strategy Framework Directive (MSFD), 2008/56/EC3, refers to marine litter as a physical disturbance in Annex III "Indicative lists of characteristics, pressures and impacts". According to the MSFD, all EU Member States are obliged to develop a strategy for their marine waters by implementing appropriate measures and monitoring programs to protect, conserve and monitor the marine environment, preventing degradation or, if possible, restoring marine ecosystems in areas where it has been adversely affected.

In summary, ghost nets, considered the "deadliest form of marine plastic debris", is a topic of national priority.

Will the project take place on Government owned land or water or involve biocontrol, invasive alien species control or eradication?

Yes

Please attach evidence that you have Government support for this project i.e. a Letter of Support. Applications which indicate that they do not take place on Government land or water, but which propose work that appears to the reviewers would be difficult/impossible to carry out without working on government land or waters may be ineligible if no Letter of Support is provided.

- & R3 DPlus Local LoS Enalia-28.11.2023
- O 12:23:31
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Section 9 - Project Risks

Q11. Project Risks

Please demonstrate your consideration of any risks involved in this project and how you intend to manage them. Please note the importance of health and safety and environmental risk assessment in the design of your project. If there is any possibility that your project may have negative impacts on the environment or human health, it is important that you provide a comprehensive analysis of potential environmental and human health risks, and the prevention measures you will take to ensure the work does not cause harm.

Depending on your project, you may wish to consider:

- Biosecurity risks particularly for projects involving external equipment.
- Safeguarding risks particularly for projects involving vulnerable groups such as children, older people or people with disabilities.

Risk	Mitigation
Delays in the field activities due to bad weather including rough-sea conditions.	Use of available weather forecast tools (e.g., Windy.com, Kithasweather.com) and consultation to locals in order to select the best possible dates for the activities.
Logistical problems with diving gear and instruments.	Serviced diving gear; spare parts and instruments will be available.
General delays field and office work due to health- related issues.	Replacement personnel available to fulfil the activities in the field and the office.

Do you require more fields?

Yes

Risk	Mitigation
Low participation of stakeholders in the presentation and discussion of the project's outcomes during the first and final meeting.	Frequent communication with individuals and organizations, will increase motivation and engagement.
No Response	No Response

Section 10 - Terms & Conditions

Q12. Terms and conditions (Guidance section 3.10)

By applying for Darwin Plus Local you are adhering in full to the grant Terms and Conditions in full (available at: <u>Darwin Plus website</u> and as referenced in the Guidance at section 3.10). For information, the Terms and Conditions include requirements for all applicants to (amongst other requirements as per the full Terms and Conditions):

- Uphold a zero tolerance for inaction approach to tackling sexual exploitation, abuse, and harassment.
- Where appropriate, make all reasonable and adequate efforts to address gender inequality and other power imbalances.
- Notify all cases of fraud and theft (whether proven or suspected) relating to the project to the Grant Administrator as soon as they identified.

Please indicate you have read, and understood, and will adhere to the Terms and Conditions.

Checked

<u>Supporting documents list (please have these ready to attach with application)</u>

- Cover Letter of no more than two A4 pages. (Guidance section: 4.2 has information on what this cover letter should include).
- If the project takes place on public land or water or is addressing invasive alien species, a Letter of support from OT Government.
- Project Workplan in the template provided for Darwin Plus Local (available at: <u>Darwin Plus website</u>).
- Map and additional information (optional) maximum five additional pages.

If your application is successful

If your project application is successful, the Fund Administrator (NIRAS) will ask you to provide some financial evidence for due diligence checks before you receive your project grant. (Please see section 3.3 of the Darwin Plus Local Finance Guidance). Please be ready to provide this evidence promptly.

- **Financial evidence for organisations**: Year-end financial statements, the latest management accounts or audited accounts (if you have these).
- **Financial evidence for individuals**: Proof of identity such as a passport, ID card or driving licence and solvency (such as bank statements) and a police check.

Section 11 - Certification

Certification

I certify that, to the best of my knowledge and belief, the statements made in this application are true and the information provided is correct.

Checked

I have the authority to submit an application on behalf of my organisation.

Checked

Name:	Carlos Jimenez
Position in the organisation: (if applicable)	Research Director

Signature (please upload e- signature)	 ♣ Signature BW ★ 29/11/2023 ♠ 12:29:30 ♣ jpg 63.71 KB 	
Date:	29 November 2023	

Section 12 - Submission Checklist

Checklist for submission

	Check
I have read the Guidance documents, including the "Darwin Plus Local Guidance" and the "Darwin Plus Local Finance Guidance".	Checked
If my proposed project takes place on public lands or water or is addressing alien invasive species, I have uploaded a Letter of Support from Government.	Checked
I have uploaded a cover letter that details the information requested in the guidance (Guidance section 4.2 has information on what this cover letter should include).	Checked
I have read, and can meet, the current Terms and Conditions for this fund.	Checked
I have provided actual start and end dates for my project that fit this Round.	Checked
I have provided my summary budget based on UK government financial years i.e. 1 April - 31 March and in GBP in the application form.	Checked
I have uploaded my project workplan using the specific template provided.	Checked
l have uploaded all supplementary documents if l have any.	Checked
(If copying and pasting into Flexi-Grant) I have checked that all my responses have been successfully copied into the online application form.	Checked
The application has been signed by a suitably authorised individual (clear electronic or scanned signatures are acceptable).	Checked
I have checked the Darwin Plus website immediately prior to submission to ensure there are no late updates.	Checked
I have read and understood the Privacy Notice on the Darwin Plus website.	Checked

We would like to keep in touch!

Please check this box if you would be happy for the lead applicant (Flexi-Grant Account Holder) and project leader (if different) to be added to our mailing list. Through our mailing list we share updates on upcoming and current application rounds under Darwin Plus. We also provide occasional updates on other UK Government activities related to biodiversity conservation and share project news. You are free to unsubscribe at any time.

Checked

Ch - -l-

Data protection and use of personal data

Information supplied in the application form, including personal data, will be used by Defra as set out in the **Privacy Notice**, available from the <u>Forms and Guidance Portal</u>.

This **Privacy Notice must be provided to all individuals** whose personal data is supplied in the application form. Some information may be used when publicising Darwin Plus including project details (usually title, lead partner, project leader, location, and total grant value).

Project Title: Chasing Ghosts: Managing abandoned fishing gear in SBA Akrotiri, Cyprus

Darwin Plus Local

Provide a **Workplan** that shows the key milestones in project activities. Complete the following table as appropriate to describe the intended workplan for your project. Round 3 is for a **maximum of 12 months** with activities starting from 1 April 2024. All activities must be completed by 31 March 2025.

Please add/remove columns to reflect the length of your project. For each activity (add/remove rows as appropriate) indicate the number of months it will last, and shade only the months in which an activity will be carried out. The workplan can span multiple pages if necessary.

	Description (max 25 words)	No. of	UK Financial Year 2024/25												
Activity #		months	Calendar Year 2024										Calendar Year 2025		
			Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	
1	Presentation of the project to the SBAA, national authorities and other stakeholders														
2	Surveys/interviews to locate ghost nets and evaluate ecological parameters for the "Removal Index"														
3	Biodiversity evaluation of the habitats where the ghost nets are located														
4	Analysis of data for the development and application of the "Removal Index"														
5	Removal/disposal of ghost nets according to "Removal Index" and expert opinion														

Project Title: Chasing Ghosts: Managing abandoned fishing gear in SBA Akrotiri, Cyprus

	Description (max 25 words)	No. of												
Activity #		months	Calendar Year 2024										Calendar Year 2025	
			Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
6	Management of the biodiversity database, including analysis, and curation													
7	Presentation of the project's outcomes to the SBAA, national authorities and other stakeholders													
8	Communication and dissemination of the project: add the project to partners' webpages, and updates													
9	Producing financial & technical reports of the project results													