



## The Tunisia-Italy Electrical Interconnection (ELMED) Project

Initial Net Gain Strategy

Report for the European Bank for Reconstruction Development

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## Table of abbreviations

ACA	Additional Conservation Action
ACEK	Association Culturelle et Environnementale de Kélibia
ACG	Association de la Continuité des Générations
AEDC	Association de l'Environnement et du Développement de
AED3	Soliman
AJEM	Association Jlij pour l'Environnement Marin
ΑΚΌΡΟΙ	Association Kraten du Développement Durable de la Culture et
ANDDCL	du Loisir
APAL	Agence de Protection et d'Aménagement du Littoral [Tunisia]
ARPA	Agenzia Regionale per la Protezione dell'Ambiente della Sicilia
ASCOB-Surtis	Association pour la Conservation de la Biodiversité dans le
ASCOD-Syrus	Golfe de Gabes
ASPEN Can Bon	Association de Sauvegarde du Patrimoine de l'Environnement
ASPEN Cap Doll	Naturel du Cap Bon
ATUTAX	Association Tunisienne de Taxonomie
AVEA	Agence de la Vulgarisation et de la Formation Agricoles
AVIA	[Tunisia]
BAP	Biodiversity Action Plan
BMEP	Biodiversity Monitoring and Evaluation Programme
BMP	Biodiversity Management Plan
BM7/CI7	Bundesministerium für wirtschaftliche Zusammenarbeit und
DIVIL/GIL	Entwicklung / Gesellschaft für Internationale Zusammenarbeit
CEPF	Critical Ecosystem Partnership Fund
CHA	Critical Habitat Assessment
CTA	Centre Technique d'Aquaculture [Tunisia]
DGPAq	Direction Générale de la Pêche et de l'Aquaculture [Tunisia]
EAAA	Ecologically Appropriate Area of Analysis
EBRD	European Bank for Reconstruction and Development
ELMED	Tunisia-Italy electrical interconnection project
EMS	Environmental Management System
ESIA	Environmental and Social Impact Assessment
ESIM	École Supérieure des Ingénieurs de Mjez El Bab
FST	Faculté des Sciences de Tunis
FSS	Faculté des Sciences de Sfax
HDD	Horizontal Directional Drilling
HVDC	High Voltage Direct Current
IFI	International Finance Institution
	Institut National des Sciences et Technologies de la
111031101	Mer [Tunisia]
INP	Institut National du Patrimoine [Tunisia]
ISBST	Institut Supérieur de Biotechnologie de Sidi Thabet
UICN Mod	International Union for Conservation of Nature - Centre for
	Mediterranean Cooperation
KPI	Key Performance Indicator
MAN	Méditerranée Action Nature

MCPA	Marine and Coastal Protected Area
MedPAN	Mediterranean Network of Marine Protected Areas Managers
MPN	Mediterranean Posidonia Network
NGB	Notre Grand Bleu [Association]
NGO	Non-Governmental Organisation
NTZ	No-Take Zone
OECM	Other Effective Area-based Conservation Measure
OFB	French Biodiversity Agency
OMMP	Office de la Marine Marchande et des Ports [Tunisia]
PBF	Priority Biodiversity Feature
PIM	Petites îles de Méditerranée [Initiative]
Plan Bleu / RAC	Plan Bleu Regional Activity Centre [Barcelona Convention]
PR6	Performance Requirement 6
	Specially Protected Areas Regional Activity Centre [Barcelona
SPA/RAC	Convention]
STEG	Société Tunisienne de l'Électricité et du Gaz
ΤΕΟΝΙΛ	Italian Electricity Transmission System Operator Rete Elettrica
IERNA	Nazionale S.p.a
The MedFund	Environmental Fund for Mediterranean Marine Protected Areas
TSSF	Tunisian Society for Sustainable Fisheries
TunSea	Association TunSea pour la Science Participative
WWF NA	World Wide Fund for Nature North Africa

## **Executive Summary**

This net gain strategy presents the approach to achieve net gain outcomes associated with the marine components of the Tunisia-Italy electrical interconnection (ELMED) project (the "Project"). It forms part of a series of assessments and biodiversity-related outputs to identify and manage biodiversity risks and impacts related to the Project. In particular, the net gain strategy builds upon the conclusions of the Biodiversity Action Plan, which set out an approach to deliver net gains using an Additional Conservation Action (ACA). This comprises a measurable on-the-ground approach to deliver the restoration of *Posidonia* meadows.

Note that the Biodiversity Action Plan (BAP) and net gain strategy presents preliminary findings based on information gathered to date. Both documents should be seen as a "living document" which will be updated as further information is derived from additional surveys and assessments. This information may change the conclusions within the BAP, which in turn, may change the approach to delivering net gains. This net gain strategy has been developed to ensure that an appropriate approach is defined to achieve this outcome as soon as possible. This is especially important given EBRD's requirements for funding the Project.

This net gain strategy sets out its purpose, principles that guide the implementation of the ACA, geographic and temporal scope, and programme components. It also sets out approaches that are taken or proposed for stakeholder engagement and participation, monitoring and reporting. Based on current information, the net gain strategy also presents recommendations associated with scheduling and funding requirements.

The outcome of the approach that has been taken to inform the net gain strategy has defined a specific programme of activity that will achieve the desired net gain outcome. This comprises expansion of a flagship *Posidonia* passive restoration programme already being delivered in Tunisia that will results in additional positive outcomes. Justification for the selection of this approach is enclosed. Finally, the net gain strategy presents next steps to take forward the ACA to the subsequent design and implementation phase, which will be reported upon in a net gain implementation and management plan.



## 1 Introduction

#### 1.1 Context for the net gain strategy

The European Bank for Reconstruction and Development (EBRD) are supporting the development of the Tunisia-Italy electrical interconnection (ELMED) project (the "Project"). The Project will be jointly implemented by a partnership between the Italian Electricity Transmission System Operator Rete Elettrica Nazionale S.p.a (TERNA) and the Tunisian energy and electricity company Société Tunisienne de l'Électricité et du Gaz (STEG). EBRD are supporting the component of the Project that incorporates the installation of a new two-way High Voltage Direct Current (HVDC) submarine electrical interconnection and telecommunications cable between Tunisia and Italy. A primary objective of the Project is to increase the interconnection capacity, and therefore the security and sustainability of supply of the Euro-Mediterranean system by creating a link between the European and North African energy systems. Figure 1 shows the location of the route for the submarine cable installation.



Figure 1: Location of the submarine cable route



On the Sicilian coastline, the landfall point of the cables is at Marinella; and on the Tunisian coastline, the cables will land to the south of Kélibia. The submarine cables, extending approximately 200 km of the territorial waters, will share the same trench. The cables will be installed at a depth range of up to 160 m in Italian waters and 800 m in Tunisian waters.

From the landfall areas, the cable will be connected to terrestrial infrastructure. However, assessment of any infrastructure beyond the coastal cable landfall location lies outside of the scope for this net gain strategy. Separate work is being undertaken for such components by EBRD or the other International Finance Institutions (IFIs) that are funding the overall Project.

To understand and manage marine biodiversity risks, the Project has undertaken a range of assessments and planning exercises. These include work commissioned by the Project directly, including Environmental and Social Impact Assessments (ESIA) (HPC, 2023), marine feasibility studies (RINA, 2021; 2023), and underwater surveys, which sought to evaluate the technical and environmental viability of the Project.

As components of the Project are being funded by EBRD, there is a requirement to ensure compliance with Performance Requirement 6 (PR6) of the EBRD's Environmental and Social Policy (EBRD, 2019). As a result, supplementary assessments and biodiversity action planning have been undertaken by Bluedot Associates (hereafter "Bluedot") on behalf of the Project. The scope of such work was restricted to the coastal and subtidal components of the Project (excluding any terrestrial infrastructure). The work that has been completed by Bluedot includes the following:

- A coastal and marine Critical Habitat Assessment (CHA) (Bluedot Associates, 2023a).
- A review of the potential impacts and mitigation for coastal and marine critical habitat and priority biodiversity features (PBF), building upon previous assessments (Bluedot Associates, 2023b).
- A review of the overall project Biodiversity Management Plan (BMP), and an addendum, to ensure that outcomes of Bluedot studies are integrated by the Project (Bluedot Associates, 2023c).
- A Biodiversity Action Plan (BAP) that sets out the approach to mitigate residual impacts to achieve no net loss and/or net gains of coastal and marine PBF and critical habitat (Bluedot Associates, 2024).

Figure 2: Figure 2 presents the relationship and interaction between the studies completed by the Project to manage its biodiversity risks and deliver positive outcomes for biodiversity.





Figure 2: Relationships between biodiversity-related outputs

The CHA established the biodiversity context within the wider seascape where the Project is situated. This assessment concluded that the Project lies within a biodiversity hotspot, supporting a variety of priority habitats and multiple species of conservation significance; and therefore, is located in an area comprising critical habitat across multiple features. Furthermore, numerous habitats and species within the area have also been classified as PBF. Additionally, the Project site either overlaps with or has potential connectivity to several legally protected areas and other zones recognised for their high biodiversity value. For critical habitat, to adhere to EBRD requirements, the Project must achieve an overall net gain in biodiversity. For PBF, no net loss is required, but the delivery of a net gain is preferred.

During the review of impacts and mitigation, key pressures on biodiversity were identified based on current information available; and additional mitigation measures were set out in line with mitigation hierarchy. The BAP consolidated these conclusions to set out the approach to mitigate residual impacts to achieve no net loss and/or net gains of PBF and critical habitat. The BAP is presented around a state-pressure-response framework which provides a logical stepwise process to help the Project to understand and address its impacts and contribute to positive outcomes for biodiversity. The BAP reported that following optimised implementation of avoidance, minimisation, and restoration



measures at the site level, no net loss will be achieved as no significant residual impacts to ecosystem integrity are anticipated. Therefore, offsets are not required to achieve no net loss. Therefore, to achieve a net gain outcome, alternative approaches that lead to measurable positive outcomes on the ground should be implemented using Additional Conservation Actions (ACAs). In this context ACAs are defined as on-the-ground actions designed to have measurable positive outcomes for biodiversity, relative to the baseline. They comprise quantitative actions but unlike offsets, such actions are not balanced against loss to measure the net gain outcome. The approach taken is in alignment with the requirements of EBRD Performance Requirement (PR6) (EBRD, 2019)<sup>1</sup>.

Based on the preliminary assessment of different conservation actions against criteria, the BAP recommended that an ACA that seeks to protect and restore *Posidonia* meadows is preferred to deliver an overall net gain for the Project.

Conclusions in the BAP were formed using currently available baseline information. During the review of impacts and mitigation (Bluedot Associates, 2023b), requirements for additional surveys to collect further baseline information were outlined. This additional information will help to confirm the understanding of impacts and to inform the development of mitigation approaches; this information must be available prior to the application of mitigation measures and commencement of construction. The BAP further provided a discussion on the requirements for further information to be collected to confirm conclusions related to impact significance. As stated in the BAP, such information will be reported in the Contractor's supplementary ecological assessment. Given these requirements, the BAP was presented as a "living document". As outlined in the BAP, it was anticipated that this information would be available to inform the development of the net gain strategy with feedback established to the BAP. However, due to delays in commissioning of the Contractor and the need to ensure that an appropriate approach is defined to achieve this outcome as soon as possible, this initial net gain strategy has been developed using currently available information. This therefore builds on the current content of the BAP by exploring and presenting options for delivering a net gain in biodiversity for the Project through the implementation of the currently proposed ACA approach. Once further information is available from the Contractor's supplementary ecological assessment, the approach to deliver no net loss and net gains will need to be reassessed to ensure that all previous conclusions remain valid. This will include a review to determine if there is potential for more significant residual impacts on critical habitats or PBF values. If the survey information changes the context, then this will require an update

<sup>&</sup>lt;sup>1</sup> As defined in footnote '80' in EBRD Performance Requirement 6, net gains may be achieved through the development of a biodiversity offset and/or, in instances where the client could meet the requirements of paragraph 14 of this Performance Requirement without a biodiversity offset, the client should achieve net gains through the implementation of programmes that could be implemented in situ (on the ground) to enhance habitat, and protect and conserve biodiversity.



to the review of impacts and mitigation and the BAP, which will in turn influence the strategy to deliver net gains. Therefore, like the BAP, this initial net gain strategy is a "living document" requiring finalisation once further information is available.

#### 1.2 Summary of the project details

Detailed design has not yet been completed for the Project, but the following presents an overview of the design components that have been considered for previous assessments.

The electrical cable is proposed to have a diameter of 100-140 mm, whilst the telecommunications cable will have a diameter of 25-37 mm. Nearshore, a subtidal electrode configuration system will be anchored to the seabed with protective deterrents against trawling. The electrode configuration will be located 4.5 km from the coastline of Tunisia and 6 km from the coastline of Sicily. The cables, laid by a dedicated vessel, will be buried using jetting or trenching methods to ensure protection. Where burial is not feasible due to seabed conditions, rock dumping may be employed, although this requires further confirmation when design work is completed. In nearshore areas, jetting may be supported by divers. Natural backfilling of disturbed areas will occur. For jetting, the burial depth will be 1-2 m with trench width if 0.3-0.4 m. For trenching, the burial depth will be up to 2 m, the trench width will be 0.2-0.5 m. For nearshore installation, floating equipment will be used to limit disturbance of the seabed to the cable installation footprint. In hard substrate areas, cable emplacement may also be achieved by cutting. The Project also includes horizontal directional drilling (HDD) in the coastal and nearshore area of Tunisia to transition the cable from land to sea, with a maximum proposed drilling length of 600-800 m. This is proposed to limit the extent of disturbance of the Posidonia meadows that cannot be avoided.

The total construction period for the installation of the submarine cables, including for landfall, is expected to be around 2.5 months, with potential for maintenance activities during the Project's operational phase.

#### 1.3 Purpose of the net gain strategy

The net gain strategy aims to present the initial approach for the implementation of net gains to biodiversity. It involves the following activities:

- Confirms the focus of the proposed ACA as set out in the BAP.
- Includes broad consultation with national stakeholders on the Project's intent to deliver restoration of impacted habitats where feasible and to deliver a net gain outcome.
- Identifies potential programmes and partners that may support the implementation of a net gain approach.
- Defines wider opportunities to deliver an ACA.
- Screens the potential ACA opportunities using criteria.
- Incorporates detailed consultation with potential implementation partners.
- Provides information on the currently preferred net gain approach.



• Provides information to support the subsequent design, implementation and management during subsequent steps.

#### 1.4 Guiding principles for the initial net gain strategy

No specific principles exist for delivering ACAs. Longstanding guidance has set out principles to guide the design and implementation of offsets (IUCN, 2014; BBOP, 2012; New Zealand Government, 2014; World Bank Group, 2016; IFC, 2019). Whilst the implementation of ACAs can be guided by some of these principles, they are not bound by them, mainly as they are not intended to be set against loss in the way that offsets need to be. Some of the principles that have been embedded in the ACA approach include:

- Taking actions that are supported by an appropriate evidence-base.
- Adherence to the mitigation hierarchy.
- Determining actions in a seascape context.
- Considering the need for ACAs to address seascape pressures.
- Taking actions that consider ecological connectivity.

Other key principles that have been applied for the ACA are set out in Table 1.

Principle	Description
Recognition of limits	In the marine environment especially, net gains can be complex to implement and monitor, with a level of uncertainty over outcomes. Additionally, there are some cases where application of an ACA would not be appropriate, these include where habitats or ecosystems which take many decades to restore or for which restoration techniques are unknown. Such aspects have been taken into consideration when selecting the preferred approach for the ACA.
Local stakeholder engagement and outcomes	From initial conception to long-term implementation, the ACA design has included engagement of stakeholders; and will promote participation of key stakeholders in the design and implementation of the ACA.
Additionality	The ACA will result in a positive outcome on-the-ground that would not have been delivered by other means.
Measurable outcome	The ACA will be designed to provide a measurable outcome on the ground.
Equity	The ACA has been designed in an equitable manner, which means the sharing among stakeholders of the rights and responsibilities, risks and rewards associated with a project and offset in a fair and balanced way, respecting legal and customary arrangements. Special consideration should be given to respecting both internationally and nationally recognised rights of indigenous peoples and local communities.

Table 1: Principles that have been applied for the ACA approach



Principle	Description
Longevity	A long-term outcome for biodiversity will be achieved and assured by the ACA.
Transparency	The design and implementation of the ACA, and communication of its results to the public, will be undertaken in a transparent and timely manner.
Monitoring and evaluation	The ACA approach will ensure that outcomes are monitored, and that adaptive management can be implemented as required.

#### 1.5 Justification for the ACA approach

As discussed in the BAP, response criteria were applied to help identify feasible actions that seek to maximise the positive outcomes for biodiversity and people, as well as offering cost-effective approaches for the Project to deliver net gains. The justification for supporting an ACA approach is presented in Table 2.

Selection criteria	Justification for score
Ability to address	High potential by tackling previous habitat loss and degradation
existing pressures	including damage from destructive fishing practices such as
	bottom trawling. Also provides opportunities to help control
	and prevent further intrusions of invasive alien species,
	particularly <i>Caulerpa</i> spp.
Restoration potential	Moderate potential for active restoration although there are still
	significant gaps in developing effective propagation techniques
	and in identifying effective long-term restoration strategies (see
	Escandell-Westcott et al. (2023) for a review). Passive restoration
	can be successful although Posidonia oceanica exhibits
	particularly slow growth dynamics, the slowest among all
	seagrasses, resulting in recovery rates of only a few centimetres
	per year.
Potential to maintain or	Moderate potential by prioritising areas that have led to a loss in
enhance ecological	ecological connectivity. Further engagement with stakeholders
connectivity	needed to identify priority sites.
Potential to conserve of	High potential to support threatened species associated with
multiple biodiversity	<i>Posidonia</i> meadows including the fan mussel and maerl beds as
features	well as numerous fish species that use <i>Posidonia</i> meadows as
	nursery grounds.

 Table 2: Justification for selection criteria scoring for undertaking conservation and restoration of *Posidonia* meadows as a Project ACA

Selection criteria	Justification for score
Potential for scalability	Moderate potential to learn from and apply conservation and restoration lessons to scale up efforts to other priority conservation areas.
Potential to capitalise on existing conservation initiatives	High potential to support existing <i>Posidonia</i> conservation and research initiatives that have demonstrated success in <i>Posidonia</i> conservation (see list above).
Political support	High potential for political support given <i>Posidonia</i> conservation will be recognised as a priority action by government agencies and would build on existing programmes in line with existing national conservation programmes, alleviating the need for lengthy government consultation processes.
Potential to deliver people-positive outcomes	High potential to deliver people positive outcomes. Project ACA will not lead to any exclusions of people and enhance key ecosystem services such as fisheries, regulating services such as carbon sequestration (i.e. "blue carbon") and shoreline stabilisation. Further opportunities for involving people through "citizen science" volunteering programmes.
Cost effectiveness	Moderate cost effectiveness as investments would go towards existing initiatives with demonstrable success. Ongoing tracking of fund usage would be required to ensure funds are spent effectively.

#### 1.6 Net gain outcomes

In general, the approach to delivering the ACA will help to restore interconnected mosaics of a coastal and nearshore habitat that will be beneficial for *Posidonia* extent and quality and will also benefit multiple species and connected regional biodiversity. The approach provides an in-kind positive outcome for the critical habitat that is likely to be most disturbed by the Project and delivers an out-of-kind benefits for other values. Additional benefits can also accrue for carbon storage, protection from erosion, nutrient cycling and water quality, and a wide range of contributions to humans. Table 3 presents a summary of some of the direct and indirect outcomes for ecosystem integrity that can be associated with the ACA.

Table 3: Summary of direct and indirect outcomes for ecosystem integrity relating to the
conservation and restoration of <i>Posidonia</i> meadows

Direct outcomes	Indirect outcomes		
- Restoration of modified or	- Reduced threat of species		
degraded areas	extinctions		



Direct outcomes	Indirect outcomes
- Increased extent of natural and	- Increased diversity
critical ecosystem attributes	
- Potential for multi-feature benefits	
- Potential for scalability	
- Potential for Nature-based	
solutions	
- Enhancement of ecological	
connectivity	
- Potential for benefits relating the	
nature's contributions to people	

#### 1.7 Geographic scope

The CHA identified a single marine Ecologically Appropriate Area of Analysis (EAAA) which covers the whole Sicilian Channel area; enclosing two coastal EAAAs were defined adjacent to this EAAA in Tunisia and Sicily (Figure 3).



Figure 3: The EAAAs that were defined for the CHA



EBRD PR6 Guidance Note (EBRD, 2022) emphasises the need to deliver net gains in relation to critical habitat and/or PBF in the EAAA. Therefore, the EAAAs that have been defined form the broad zone in which the net gain outcome should be achieved. Whilst an offset is not considered necessary and impacts are not considered when defining where an off-site action may take place, impacts to *Posidonia* meadows are only expected to occur in the nearshore waters of Tunisia. Prior to restoration, such impacts are of greatest significance. Therefore, the geographic scope of the net gain strategy has been limited to nearshore waters of Tunisia.

#### 1.8 Temporal scope

The Project should seek to implement net gain actions as soon as possible following the completion of construction activities. Net gain actions should aim to secure long-term outcomes at least as long as the Project's impacts. This is defined as the operational lifespan of the Project. Preferably, the design and implementation of a net gain approach can lead to outcomes that occur in perpetuity.

The ACA approach needs to take account of the slow-growing nature of *Posidonia*, which requires time to demonstrate that net gain outcomes have been achieved. This requires appropriate funding to be secured to support monitoring in the long-term. The overall framework for supporting funding of the ACA is primarily set for 20 years. It is recommended that monitoring occurs in Years 5, 10, 15 and 20 to evaluate success. This timeframe ensures that the ACA achieves its net gain goal; and if positive outcomes are not recorded, to implement adaptive management approaches to ensure net gains are achieved.

During the subsequent design and implementation phase, the potential for additional sustainable financing should be explored (e.g., ecotourism, alternative livelihoods) to maintain conservation activities.



## 2 ACA strategy

#### 2.1 Alignment with national conservation objectives

Within Tunisia, there are no specific laws dedicated to the protection of marine plant species. However, species listed under Appendix I of the Bern Convention and Annex II of the Protocol concerning Specially Protected Areas and Biological Diversity in the Mediterranean (Barcelona Convention) are considered. Like other Mediterranean countries, Tunisia recognises the importance of marine vegetation and has therefore developed an Action Plan for the Conservation of Marine Vegetation (2021, SPA/RAC – ONU Environnement/PAM). The Action Plan aims to enhance the effectiveness of conservation efforts by aligning actions and identifying key priorities. It focuses on building a five-year work programme to protect marine vegetation and ensure sustainable management practices. Key actions within the plan include improving baseline knowledge and monitoring, building national capacity, and fostering greater engagement and awareness. A central priority is the protection of *Posidonia oceanica*, with an emphasis on establishing protective legislation, addressing impacts, and reducing threats from fisheries.

Therefore, the aim of the net gain strategy is to develop an approach that aligns with the objectives of this Action Plan. This will ensure that additional conservation measures in Tunisia are well-coordinated, contribute to national goals and align with other future conservation programmes undertaken within the country.

#### 2.2 Initial stakeholder engagement event

On 16 July 2024, Bluedot led a stakeholder engagement event in Tunis, Tunisia, which was attended by national conservation actors and government agency representatives. The purpose of the stakeholder engagement was to:

- Provide information on the Project to key stakeholders.
- Explain the need for the Project to deliver a net gain outcome related to PR6.
- Gather insights and perspectives from key stakeholders on the Project and the proposed approach to deliver a net gain.
- Understand the activities of local conservation actors to determine potential for collaboration for designing and implementing the ACA.
- Identify *Posidonia* restoration programmes that have been undertaken or are active in Tunisia that could be considered when selecting an ACA programme.
- Establish the process for ongoing engagement with stakeholders in the design and implementation of the ACA.

A list of attendees for this engagement event is provided in Annex A.



#### 2.3 Screening of existing *Posidonia* restoration programmes in Tunisia

A screening exercise to define *Posidonia* restoration programmes being undertaken in Tunisia was undertaken to:

- Identify the key actors operating in the country that may have capacity to support the design and implementation of the ACA.
- Identify relevant active programmes that are being undertaken that could inform the design and implementation of the ACA or provide opportunity for additional expansion.
- Identify programmes that are aligned with the national Action Plan.
- Understand how existing programmes are driving approaches that include local engagement and participation.

As reported in the BAP, an initial desktop study review identified some seagrass conservation and restoration initiatives in the wider seascape that could potentially be supported to deliver net gains for the Project. To supplement this review with a focus on activities in the EAAA, a more detailed screening review has been completed to inform the net gain strategy. This has involved engagement with conservation actors in Tunisia to identify *Posidonia* restoration programmes that have been or are currently being undertaken in the country. The list of stakeholders that were engaged is provided in Annex B. Seven restoration programmes were identified during the screening exercise. A summary of the programmes identified through this consultation exercise is presented in Table 4.



#### Table 4: Passive and active *Posidonia* restoration programmes being undertaken in Tunisia

Project Title	Type of restoration	Duration	Conservation actors	Activities
MIAREM: Méthodologies Innovantes et Actions de Renforcement pour protéger l'Environnement Méditerranéen / Innovative Methodologies and Reinforcement Actions to Protect the Mediterranean Environment	Active	Oct-21 to Dec-23	Main implementing organisation: ARPA Other partners: ISBST, FST, ESIM, APAL, NGB, MAN	Replanting of 500 m <sup>2</sup> of <i>Posidonia</i> covering a total area of 1000 m <sup>2</sup> in the Bay of Monastir. Aims to transfer a model for restoring <i>Posidonia</i> by replanting it. The design and installation of protective structures on the restoration site will be used for the installation of heritage species.
PPKER: Restauration écologique pour la conservation des espèces patrimoniales dans l'Archipel de Kerkennah / Ecological Restoration of Heritage Species in Kerkennah Archipelago	Active	Dec-22 to Dec-23	Main implementing organisation: ATUTAX Other partners: AKDDCL, Snorkelling Kerkennah, APAL, SPA/RAC	Restoration of 500 m <sup>2</sup> of <i>Posidonia</i> involving an innovative technique using palm tree and inspired by a traditional fishing method in Kerkennah, Gulf of Gabes.
ORIENTATE-TN: Oceanographic and Ecological data for Nature- based coastal protection in Tunisia	Active and Passive	Jun-22 to Sep-25	Main implementing organisation: University of Sfax Other partners: Alfred Wegener Institute, Meerwissen Programme (BMZ/GIZ)	Combines active restoration actions and passive conservation strategies to rehabilitate the <i>Posidonia</i> meadows in Jerba, Gulf of Gabes. Includes a study of the optimum conditions for the successful planting of seagrass meadows.
Mediterranean Blue Forests	Passive	2024-2027	Main implementing organisation in Tunisia: WWF North Africa Other partners: FSS; ISBST; APAL; AVFA; Ministry of	By 2027, the project aims to restore at least 150,000 ha of seagrass. In addition, it aims to diversify local income to reduce dependence on activities that impact seagrass through introducing sustainable revenue generating opportunities.



Project Title	Type of restoration	Duration	Conservation actors	Activities
			Environment; Ministry of Agriculture, Hydraulic Resources and Fisheries; General Secretariat for Maritime Affairs; Ocean Foundation	Lastly, the project aims to establish a new Blue Carbon Scheme to drive conservation finance in the region to scale up seagrass protection and carbon sequestration. The scheme will include one regional project incubator, at least one voluntary contribution finance mechanism per country and two Blue Carbon Projects.
Blue South Med: Rebuilding Southern and Eastern Mediterranean Marine Forests and Fish Stock	Passive	2024-2026	Main implementing organisation: WWF North Africa Other partners: Local communities Fishermen, fisheries authorities Representatives of the tourism sector, recreational fishermen and the yachting community National and local authorities and regional organisations. Inditex	Restoration will be designed and implemented using a bottom-up/participatory approach, with resource users/stakeholders involved in planning and decision-making. Aims include co-creating (with the agreement of stakeholders) closures to reduce fishing in priority areas and rebuild fish stocks, establishing no-anchoring, no-entry and no-take zones to protect and rebuild seagrass beds, and designing climate adaptation plans for marine and coastal areas in response to current and future climate scenarios.
Ecological mooring in Kuriat Islands MCPA	Passive	2016-2021	Main implementing organisation: NGB and APAL Other partners: CEPF, MAVA, The MedFund	Protecting <i>Posidonia</i> meadows from the impact of anchoring large boats carrying visitors to the smaller Kuriat island. 6 buoys have been in place since 2016. These are scientifically monitored every year by the NGB to assess their technical and ecological suitability in protecting the <i>Posidonia</i> meadows and hosting new marine organisms.



Project Title	Type of restoration	Duration	Conservation actors	Activities
Cogestion de la future aire marine protégée et pêche artisanale durable / Co- management of the future marine protected area and sustainable small-scale fishing	Passive	Sep-21 to Jul-22	Main implementing organisation: ACG Other partners: CEPF	Deploying artificial reefs to create habitats conducive to the development of underwater flora and fauna and aimed at reducing the impact of trawling.
No-take zones in La Galite and Zembra MCPAs	Passive	Unknown (Legally binding measures currently in force)	Main implementing organisation: APAL and co- managers (La Galite: MAN; Zembra: ASPEN Cap Bon)	Aim to establish no takes zones of 1.5 miles around the islands of La Galite and Zembra & Zembretta to avoid the impact of boat moorings on the biodiversity of the protected areas.
Biological rest periods	Passive	Unknown	Main implementing organisation: DGPA and local fishing authorities (in every fishing port)	Biological rest periods.
Vessel monitoring system	Passive	Unknown	Main implementing organisation: DGPA and local fishing authorities (in every fishing port)	Vessel monitoring system.



#### 2.4 Consultation with key governmental agencies in Tunisia

APAL implement the Government of Tunisia's policy on the protection of the coastline, in particular the protection and preservation of the maritime public domain. As part of their responsibilities, they supervise and coordinate the various stakeholders in the management and protection of coastal ecosystems through the implementation of programmes for the protection and preservation of biodiversity and the establishment and management of Marine and Coastal Protected Areas (MCPAs). APAL are therefore a key stakeholder in the development of any programme that will seek to deliver *Posidonia* restoration in Tunisia. Indeed, they are included as key parties engaged in many of the programmes listed in Table 4.

As part of the stakeholder engagement process undertaken during the development of this initial net gain strategy, APAL were directly consulted in the form of in-person meetings and formal written correspondence. The purpose of this consultation was to:

- Obtain opinion of the preferred approaches to *Posidonia* restoration in Tunisia.
- Understand the role of APAL in the delivery and/or oversight of the ACA.
- Identify potential collaborators who may support design and implementation of the ACA.
- Identify potential locations of where *Posidonia* actions may be completed.
- Determine support for the expansion of existing programmes to comprise the ACA.
- Establish procedures for ongoing involvement of APAL in the facilitation and implementation of the ACA.
- Understand APAL's monitoring and reporting requirements during design and implementation of the ACA.

The feedback from the consultation with APAL has been used to inform the establishment of the ACA approach that is set out in this initial net gain strategy.

In addition to APAL, an in-person meeting was held in Tunisia with the Director of Ecology and Natural Ecosystems at the Ministry of Environment, who is the acting focal point for the Convention on Biological Diversity in Tunisia. The purpose of this meeting was to discuss progress with the establishment of 'Other Effective Area-based Conservation Measures' (OECMs) in Tunisia to determine if such approaches may be supported by the ACA approach.



## 3 ACA design and implementation

#### 3.1 Overview

Both passive and active restoration approaches could create a net gain outcome for *Posidonia* meadows. As reported in the BAP, the potential for passive restoration will largely relate to the level of control that an organisation may be able to exert on pressures that are causing habitat degradation. Passive restoration can be successful, although *Posidonia oceanica* exhibits particularly slow growth dynamics, the slowest among all seagrasses, resulting in recovery rates of only a few centimetres per year. Active restoration needs to factor in the time required to achieve meaningful gains as well as the complexity, cost and potential for success that are associated with undertaking marine restoration. As reported in the BAP, there is moderate potential for active restoration although there are still significant gaps in developing effective propagation techniques and in identifying effective long-term restoration and the need to secure a net gain outcome for the Project, an ACA that delivers passive restoration is preferred.

The largest passive restoration programme that is currently being undertaken in Tunisia relates to activities under the Mediterranean Blue (MedBlue) Forest programme being led by WWF North Africa. This forms part of a wider programme that extends across four Mediterranean countries - France, Greece Tunisia and Turkey – covering over 600,000 ha or 50% of Mediterranean seagrass habitats. In Tunisia, the specific passive restoration activities within the MedBlue Forest programme are focused on three pilot sites at Tabarka, Sidi Rais and Jerba. Additional large-scale baseline mapping is also being undertaken in the Gulf of Gabes as part of the programme, but this part of the programme has no specific restoration focus (see Figure 4).

The MedBlue Forest programme seeks to promote the restoration and protection of blue carbon ecosystems by taking a multi-faceted approach to ecosystem restoration, particularly *Posidonia* meadows. At each of the three pilot sites, the programme aims to work with local communities to promote passive natural restoration of *Posidonia* meadows through reducing human pressures, such as anchoring and overfishing. Sites have been selected where there is degradation linked to direct anthropogenic impacts, especially fishing and uncontrolled anchoring. The programme seeks to develop tools for monitoring human impacts, deliver actions that lead to on-the-ground outcomes, ensure appropriate local community engagement and stewardship to support actions, and promote and equitable and just approach.

Importantly, the MedBlue Forest programme is highly scalable, and offers opportunity for expansion of activities to additional sites. If the ACA approach can support such expansion, it would be possible to achieve a measurable on-the-ground net gain outcome for the Project. Such an approach provides a proven concept with existing national support and implementation structures, which means that the outcomes associated with expansion would have greater certainty than establishing a new programme for the ACA.





Figure 4: Location of the existing MedBlue Forest (MBF) programme sites in Tunisia

As an outcome of consultation with WWF North Africa, it has been confirmed that there is great potential to expand the MedBlue Forest programme to additional sites in Tunisia where pressures are leading to degradation, which will:

- Lead to additional positive outcomes.
- Improve the scale of outcomes for the overall MedBlue Forest programme outcomes.
- Provide further opportunity to assess success of the MedBlue Forest programme.
- Allow for lessons to be learned from the MedBlue Forest programme prior to implementation of the ACA.
- Improve evidence to demonstrate the positive outcomes resulting from the MedBlue Forest programme.



- Promote potential for improved connectivity across sites where actions are undertaken, helping to promote transformative an interconnected across the seascape area.
- Promote opportunity to connect fragmented *Posidonia* meadows.
- Enhance the spatial coherence of these conservation actions and support additional protection measures.
- Establish a more robust and resilient network of areas with improved protection measures driving greater ecological recovery.
- Provide opportunity to deliver long-term outcomes which extend beyond the proposed timeframe of activities for the MedBlue Forest programme.
- Connect with an existing programme that has broad stakeholder support and is aligned with national conservation objectives.
- Leverage existing partnerships and engagement processes.

APAL are an active partner in the MedBlue Forest programme in Tunisia, and during consultation with them, they provided their initial support for the concept of the implementation of the ACA through expansion of the MedBlue Forest programme.

Therefore, the preferred ACA approach that is proposed in this net gain strategy is for the expansion of the MedBlue Forest programme to further sites in Tunisia. Further details on the proposed ACA approach are provided below.

#### 3.2 ACA programme components

The ACA will aim to improve protection and lead to passive restoration of *Posidonia* meadows with measurable on-the-ground net gain outcomes. This will be achieved through adopting similar approaches that are currently being undertaken at the three existing MedBlue Forest programme sites in Tunisia.

Consultation with WWF North Africa has determined that the expansion of the programme to additional sites in the Cap Bon region is preferred. This is because this is an area with extensive Posidonia meadows that are being degraded by human activities, particularly fishing and uncontrolled anchoring activities. Currently, it is proposed that ACA activities will be undertaken at two additional sites in the Cap Bon region, which will expand coverage of actions in areas that are not yet included in the MedBlue Forest programme. The selection of these ACA sites will be guided by a comprehensive desk-based study and field verification exercise. This will utilise existing mapping data and satellite imagery available in the Cap Bon region to identify areas with *Posidonia* meadows that are under significant human pressures that may be targeted for actions. At this time, the scale of net gain outcome is uncertain, but based on existing MedBlue Forest programme sites, the intention is to seek to lead to passive restoration within an area of 1000-2000 ha of degraded *Posidonia* habitat at each site. The scale of the ACA and the outcomes will be informed by the site selection process and understanding of pressures; and therefore, will be determined during the design and implementation stages that will follow this net gain strategy.



The MedBlue Forest programme comprises several activities that support the restoration *Posidonia* meadows at each of the sites included in the programme. These will be replicated to comprise the ACA approach at the two additional sites.

The main supporting actions included in the MedBlue Forest programme that will be replicated as part of the ACA approach include:

- *Baseline Assessment*: Baseline studies are completed at each site to define extent and condition of *Posidonia* meadows. This includes mapping of *Posidonia* meadows at each site to enable the identification of areas that are thriving as well as those that are degraded or at risk. The site assessment also includes identification of the main pressures causing impacts on the extent and condition of *Posidonia* meadows.
- *Community Engagement and Awareness*: Engaging local communities, stakeholders, and the private sector to promote awareness about the value of *Posidonia* meadows and the need for their protection. Educational campaigns, workshops, and capacity-building programmes to inform stakeholders about the ecosystem services provided by *Posidonia* meadows and the importance of sustainable marine practices.
- *Monitoring*: Ongoing monitoring of the change to the extent and condition of *Posidonia* meadows to determine the success of conservation measures.

The main activities included in the MedBlue Forest programme that seek to drive measurable on-the-ground restoration outcomes that can be replicated as part of the ACA approach include:

- *Fisheries management and restrictions*: Working with local fishing communities and authorities to enforce sustainable fishing practices, including the implementation of fishing bans in specific areas or the use of less harmful fishing gear. In some areas, fishery restrictions may be coupled with efforts to promote marine or land-based livelihoods that do not rely on damaging practices.
- Additional spatial protection measures: Co-creating, with local communities and stakeholders:
  - No anchoring/no-entry/No-Take Zones (NTZs) to protect *Posidonia* meadows from ongoing disturbance.
  - Seagrass safe mooring buoys to provide anchoring alternatives that do not harm *Posidonia* meadows.

The approach to the ACA should also seek to integrate broader *Posidonia* conservation efforts into national governance frameworks.

#### 3.3 Responsibilities, governance and stakeholder engagement

As the Project owner STEG are required to deliver the net gain outcome. Therefore, the overall responsibility for funding and delivery of the ACA lies with STEG. As shown in Figure 2, the net gain strategy forms one components of the overall biodiversity management of the Project. The net gain strategy is intrinsically linked to the Biodiversity



Action Plan as it sets out how the Project will deliver on the requirement to deliver a net gain.

WWF North Africa is proposed as the leading organisation that will help STEG to implement the proposed ACA; and to provide monitoring and reporting of outcomes to STEG. WWF North Africa should therefore ensure that a governance and management structure is set out for the ACA. It is expected that this will comprise a simple structure and include information on the following:

- The parties involved in the implementation of the ACA.
- Approach to stakeholder engagement.
- Responsibilities of each party for implementation.
- Personnel resources that will be used to implement the ACA.
- The successful implementation of the ACA requires robust and coordinated effort among various partners, stakeholders, and governance structures. A clear mechanism for stakeholder engagement, as well as a plan for long-term governance, will be essential to ensure sustainability and impact.

Of note, the Project will need to integrate *Posidonia* conservation efforts into national governance frameworks, engaging APAL, DGPAq and local authorities. Likewise, to the existing MedBlue Forest programme, government agencies are expected to be a key partner in the implementation of the ACA, including APAL.

A long-term governance plan should be developed to support management for the timeframe of the ACA, transitioning to local governance after the project ends. The engagement and governance approach should draw upon the model that has been set out for the existing MedBlue Forest programme. This incorporates the following components within the engagement and governance approach:

- *Government authorities*: Government authorities, including the Ministry of Environment, APAL, will be instrumental in policy advocacy, the development of regulatory frameworks, and the establishment of protected areas. The Direction Générale de la Pêche et de l'Aquaculture (DGPAq) will facilitate discussions with fishers, while other key stakeholders such as Secrétariat Général des Affaires Maritimes, and the Office de la Marine Marchande et des Ports (OMMP) will also be involved and invited to participate in a steering committee to oversee the project's progress.
- Local Environmental NGOs: Local environmental NGOs will be instrumental to ensure community engagement, advocacy, and on-the-ground conservation actions. NGOs with expertise in marine conservation will be actively involved in the project, bringing their experience and local knowledge to support the restoration and protection of *Posidonia* meadows and associated species.
- Academic Institutions and Research Organisations: Research partners will assist with scientific monitoring, data collection, and development of innovative tools for ecosystem restoration and management.



• *Local Communities and Stakeholders*: Local fishers and coastal inhabitants will be directly engaged to ensure that conservation efforts align with local needs and create sustainable livelihoods.

It is recommended that a Steering Committee should be established to oversee the overall direction of the ACA, with quarterly or bi-annual meetings organised, depending on the scale of activities, to evaluate progress and adjust strategies. The Steering Committee should comprise representatives of the Project, the implementing lead and partners, local government, scientific experts, and community members. Periodic meetings should be held with the Steering Committee to ensure interaction with ACA implementation.

Periodic meetings should also be held with key stakeholders to ensure that the project remains on track and adapts to emerging needs and challenges. Public outreach and education should also be undertaken to raise awareness and involve the community in *Posidonia* conservation. In addition, it is recommended that local community engagement should include the following activities:

- Capacity-building programmes will empower local communities to monitor and protect *Posidonia* meadows.
- Local stakeholders will be trained in monitoring, enforcement, and sustainable fishing practices.
- Post-project stewardship plans will ensure that communities continue to manage conservation activities after project funding ends.

Details on responsibilities and stakeholder engagement will be developed when detailed discussions have been undertaken between all parties. This information will be presented in the net gain implementation and management plan.

#### 3.4 ACA activities and schedule

A detailed schedule for the ACA should be established during the subsequent design and implementation phase. However, based on the temporal scope set out in Section 1.8 recommendations are provided in Table 5.

Tak	ole	5:	ACA	activ	vities	and	sc	hed	ul	e

Activity	Schedule		
Year 1: Initial planning, site assessment and programme design			
Desk-based study to determine the extent of <i>Posidonia</i> meadows and identify key pressures.	Months 1–3		
Site selection and mapping of areas requiring intervention. Initial stakeholder consultations to gather local insights and align project goals.			



Activity	Schedule
Field surveys and data collection to assess the health of <i>Posidonia</i> meadows. Stakeholder workshops to discuss initial findings and gather community input.	Months 4–6
Designing restoration programme with on-the-ground actions. Establishment of the Steering Committee and governance framework. Start the development of legal and policy measures for site protection (e.g., local regulations for sustainable fishing).	Months 7–12
Year 2–3: Initial implementation and stakeholder engagement	
Implementation of on-the-ground actions. Start capacity-building workshops for local stakeholders (fishermen, community members). Launch community outreach and education programmes on <i>Posidonia</i> conservation.	Months 13–18
Commence community-led monitoring. Enforcement of sustainable fishing practices and no-anchoring zones. Ongoing stakeholder engagement and feedback to refine strategies.	Months 19–36
Year 4–5: Strengthening actions and monitoring	
Implement adaptive management measures based on early monitoring results and evaluation. Strengthen surveillance and monitoring systems (e.g., drones, satellite tracking). Expand on-the-ground actions as required.	Months 37–42
Year 6–7: Consolidation and long-term monitoring	
Monitoring outcomes: Assess changes in <i>Posidonia</i> health and marine biodiversity. Ongoing adaptive management if positive outcomes are not seen. This includes adjusting interventions and strategies for sustainable management. Stakeholder feedback to assess whether goals are being met.	Months 61–72
Continue to support on-the-ground actions.	Months 73–84



Activity	Schedule
Begin long-term monitoring, focusing on the health of <i>Posidonia</i> meadows and overall ecosystem resilience.	
Vear 8-10: Comprehensive evaluation and further adaptation if rea	nuired
Tear 8-10. Comprehensive evaluation and further adaptation in rec	quireu
First 5-year monitoring interval: A comprehensive evaluation of <i>Posidonia</i> restoration progress, with a focus on biodiversity recovery and ecosystem health.	Months 85–96
Final evaluation for Year 5 actions, using baseline data to assess the success of interventions.	
If needed, additional adaptive management measures will be put into place to optimise restoration actions.	
Second 5-year monitoring interval: This will provide critical insights into the long-term trends of <i>Posidonia</i> recovery.	Months 97–120
Evaluate the governance framework and adjust if necessary to ensure the ongoing sustainability of actions beyond the project's initial funding phase.	
Year 11–20: Long-term monitoring and sustainability	
Monitoring continues at 5-year intervals (i.e., years 11 and 15), including comprehensive field surveys to assess the health and expansion of <i>Posidonia</i> meadows.	Years 11–15
Continue adaptive management if outcomes are not as expected.	
Continue engaging local stakeholders, including fisheries and communities, in the management and monitoring process.	
Final 5-year monitoring interval: A final evaluation will assess whether the project has achieved its net gain outcome for <i>Posidonia</i> meadows and related species.	Years 16–20
Transition the long-term management plan fully to local governance, ensuring that conservation continues in the absence of additional project funding.	
Transition responsibilities to local authorities and stakeholders for ongoing monitoring, enforcement, and adaptive management.	

#### 3.5 Financing

The funding required to support the ACA is dependent upon the design and implementation approaches taken. However, based on the activities and schedule set out in Section 3.4, an estimation of potential funding requirements is set out in Table 6.



Activity and schedule	Estimated cost (€)
Year 1 Initial planning and site assessment	120,000
Years 2-7 Implementation of passive restoration actions and engagement with local stakeholders	110,000
Years 8-10 Monitoring, evaluation, and adaptive management	35,000
Years 11-20 Final assessment and long-term sustainability	35,000
Total	300,000

#### 3.6 Monitoring

As discussed in the BAP, a biodiversity monitoring and evaluation programme (BMEP) will need to be developed to meet the Project's monitoring requirements. A net gain implementation and management plan will also be developed subsequent to this net gain strategy. These should integrate long-term requirements for monitoring at the sites where the ACA approach will be implemented. Key Performance Indicators (KPIs) and targets will be determined to allow implementation of the ACA approach and outcomes to be tracked. The aim of the monitoring will be to verify that ACA actions are implemented, track their effectiveness and undertake adaptive management if approaches are not performing as anticipated.

It should be recognised that restoration of *Posidonia* may not always show immediate or linear positive outcomes. If the initial activities do not yield the anticipated results in terms of recovery and restoration of *Posidonia* meadows and associated species, an adaptive management approach will be implemented to adjust strategies and ensure that the overall goal of achieving net gains for *Posidonia* ecosystems is still attainable. Based on the activities and schedule set out in Section 3.4, a summary of potential monitoring requirements is set out in Table 7.

## Table 7: Potential monitoring requirements related to the initial breakdown of activities and schedule

#### Monitoring activities and schedule

*Baseline Monitoring (Year 1)*: Remote sensing, verification and stakeholder interviews to establish baseline data on *Posidonia* coverage, water quality, biodiversity, and existing pressures (e.g., anchoring, fishing).

Monitoring of outcomes at 5-Year Intervals (Years 5, 10, 15 and 20):

Extensive site-based data collection and analysis and interviews with stakeholders. Assess changes in *Posidonia* health, water quality, biodiversity, and effectiveness of management measures. Evaluate long-term impacts, check if net gain has been achieved, and assess socio-economic benefits to local communities.



#### 3.6.1 Auditing

This net gain strategy should be reviewed as part of the design and implementation process, and any necessary revisions made to reflect changes or updated information that becomes available. It is recommended that the auditing of the implementation of this net gain strategy be embedded within the wider company Environmental Management System (EMS). Internal audits will include ongoing review of the implementation of monitoring requirements.

In addition to internal auditing, it is recommended that a review of implementation be undertaken by EBRD periodically, which may include external independent review. Internal and external audit findings, along with actions, should be recorded and reported.

#### 3.6.2 Reporting

The implementing organisation(s) will be required to report to the Project and key stakeholders as follows:

- Bi-annual progress reports
- Detailed report after the completion of site-specific monitoring set out in Table 7.

These reports will include budget and expenditure details as well as details on the effectiveness of the conservation and restoration programme(s) based on basic criteria including, for example, area restored as well as any lessons learned and adaptive management approaches that have been implemented.

#### 3.7 Next steps

This net gain strategy is informed by current information. Before finalising, the net gain strategy should include addressing any updates that have been recommended in the BAP, including reviewing the Contractor's supplementary ecological assessment to determine implications for the mitigation strategy. Once this work is complete the net gain strategy can be finalised. After this step, there is a need to take the recommendations of the net gain strategy forward to the design and implementation phase. This will comprise:

- Ongoing consultation with key stakeholders to inform and gain agreement on the net gain approach.
- Formalisation of agreements with the implementation partners.
- Finalisation of activities and schedule.
- Finalisation of financial requirements.
- Development of a net gain implementation and management plan, including details on responsibilities, governance, engagement and monitoring etc.



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Annex A

# 16 July 2024 Engagement Session: Summary and List of Attendees



#### Introduction

Bluedot and EBRD collaborated with STEG to host a stakeholder engagement event on 16<sup>th</sup> July 2024, in Tunis, Tunisia, attended by national conservation actors and government representatives. The purpose of this event was to begin a collaborative process to help STEG deliver a net gain through an additional conservation action. The stakeholder engagement event aimed to introduce stakeholders to the ELMED project and gather insights and perspectives from key stakeholders on what is needed to deliver *Posidonia* restoration along the Tunisian coast and current restoration activities.

The stakeholder engagement event was split into three sessions. The first two sessions were presentations delivered by Bluedot's Director, Neil Cousins, firstly on the overview of project biodiversity studies completed to date, and secondly the restoration potential and options for delivery of a net gain. The third session was an open discussion with event participants, both in the room and online, sharing their perspectives and insights.

Organisation	Name of attendee
In-person attendees	
APAL	Raja Abdelmalek
ACG	Sana Taktak
AEDS	Socerb Charttocte
СТА	Basma Al-Hamdaoui Lahmar
MAESDA-ecovert	Ziadi Lassaad
INP	Wafa Ben Slimen
INSTM	Ahmed Afli
Ministère de l'Agriculture, des Ressources Hydrauliques et de la Pêche	Asma Ben Abdallah
Ministère de l'Agriculture, des Ressources Hydrauliques et de la Pêche	Nassoui Nomi
Ministère des Affaires Culturelles	Ahmed Gadhoum
Ministère des Affaires Culturelles	Wafa Sheniame
SPA/RAC	Atef Ouerghi
STEG	Raoudha Haouala
STEG	Myriam Bessibes
STEG	Mourad Ayed
STEG	Soiel Feoli
STEG	Maruo Chihbani
STEG	Atfi Tayachi
STEG	Hatem Jendoubi
STEG	Helmi Souri

The table below presents the list of event attendees and a summary of the open discussion session.



STEG	Ahmed Bouaziz
STEG	Yassine Bennour
STEG	Emna Khlifi
WWF Tunisia/North Africa	Jamel Jrijer
Online attendees	
APAL	Ahmed Ben Hmida
Service des Aires Marines et Côtières Protégées du Centre et du Sud	
ASCOB-Syrtis	attendee name not provided
EBRD	Bossan Annayeva
Direction Générale des Industries Alimentaires du Ministère de l'Industrie, des Mines et de l'Energie	Fatma Charfi
FSS	Imed Jribi
FSS	Randa Mejri



Annex B

## List of the stakeholders engaged relating to existing *Posidonia* restoration programmes in Tunisia



The list of stakeholders who were engaged during the remote information gathering phase is as follows:

#### <u>Tunisian</u>

Governmental institutions:

- APAL
- DGPAq
- INSTM

Academic institutions:

- ESIM
- FSS
- ISBST

Non-governmental, not-for-profit, organisations:

- ACEK
- ACG
- AEDS
- AJEM
- AKDDCL
- ASCOB-Syrtis
- ASPEN Cap Bon
- ATUTAX
- MAN
- NGB
- TSSF
- TunSea

Ecological consultancies and other businesses:

- BlueSeeds S.A.S.
- Cabinet Thetis Conseil
- Ertha Consultancy & Services
- Okianos S.A.
- Cyrine Bouafif Freelance consultant
- Gérard Pergent Freelance consultant
- Iberostar Group

#### Regional/International

Academic institutions:

• Université de Corte (Corse)



Inter-governmental organisations:

- IUCN-Med
- Plan Bleu / RAC [Barcelona Convention]
- SPA/RAC [Barcelona Convention]

Governmental organisations:

• OFB / Mediterranean Posidonia Network (MPN)

Non-governmental organisations:

- MedPAN
- PIM
- The MedFund
- WWF NA