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# CEYHAN PROPANE DEHYDROGENATION - POLYPROPYLENE PRODUCTION PROJECT

## BIODIVERSITY MANAGEMENT PLAN (ANNEX-R)

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FEBRUARY 2023  
ANKARA

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# CEYHAN PROPANE DEHYDROGENATION - POLYPROPYLENE PRODUCTION PROJECT

## BIODIVERSITY MANAGEMENT PLAN

Version	Revision	Date	Prepared By	Quality Management By	Checked By	Approved By
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# 1 INTRODUCTION

## 1.1 Background

An Environmental and Social Impact Assessment (ESIA) study is being conducted for the Ceyhan Propane Dehydrogenation (PDH) - Polypropylene Production (PP) Facility and Jetty Project (“Ceyhan PDH-PP Project” or “the Project”), located in Ceyhan district of Adana province in the south of Turkey at the Mediterranean shore with two main components: Terrestrial and Marine Parts.. Lenders are considering financing the Project. Therefore, the Project has been developed in accordance with the policy and requirements of the Lenders. As part of the Project, a framework for a Biodiversity Management Plan (BMP) has been identified.

The Project is being developed in alignment with IFC Performance Standards, including Performance Standard 6 (PS6) on Biodiversity Conservation and Sustainable Management of Living Natural Resources.

While preparing this BMP for the Project, the BMP prepared for the outcomes of the project specific ESIA, supplementary ecological surveys and reporting e.g., Critical Habitat Assessment.

This BMP should be read in conjunction with the supplementary terrestrial and marine ecology surveys, Critical Habitat Assessment reports as well as ESIA’s biodiversity section.

## 1.2 Report Purpose

This report provides a framework of mitigation and monitoring commitments, required to be provided to ensure that the Project is in compliance with PS6 and international good practice about biodiversity. These commitments are derived from the outcomes of the Project’s Environmental and Social Impact Assessment (ESIA) and Critical Habitat Assessment (CHA).

This report is a living document and hence, should be updated to reflect increased understanding of Project program and design throughout construction and operation (until agreed otherwise by Project Lenders) and should also be informed by new information as it becomes available (e.g., as obtained from ongoing/pre-construction surveys or as received from pertinent stakeholders).

## 2 ROLES AND RESPONSIBILITIES

### 2.1 Introduction

A key aspect of the successful implementation of the BMP is the proper understanding of roles and responsibilities described within this plan. It is the responsibility of Ceyhan PP A.Ş. to ensure that all relevant Project staff and contractors adhere to the requirements of the BMP, together with all other relevant obligations as included within the ESIA.

Ceyhan PP A.Ş. will be responsible for ensuring that the BMP is updated, to ensure its efficacy as the Project develops, and that updates are submitted for approval to the Lenders and/or their Technical Advisors (TA's). Ceyhan PP A.Ş. will award a proper qualified Environmental Supervisor in the Project to facilitate compliance with the BMP. Where necessary, additional technical specialists will also need to be contracted to discharge specific components of the BMP, e.g. in relation to botany, hydrobiology, ornithology, etc.

In Table 3-1, an indicative breakdown of roles and responsibilities is included. This will be updated as the Project design program is finalized.

Please refer to the ESMMP documents in order to follow the structure of the implementation of the requirements of this BMP together with the other aspects. In those documents, roles and responsibilities of different parties are presented.

Ceyhan PP A.Ş. will be developing an Environmental and Social Management System (ESMS) to cover the implementation of all components of the Project, including biodiversity. Within the ESMS team, the roles and responsibilities for implementing the BMP are defined in the following sections. As the Project develops, further staff will be brought into the Environment team to provide technical support, particularly for coordinating the implementation of offset actions.

### 2.2 CORPORATE E&S MANAGER:

Responsible for monitoring infrastructure and superstructure regarding environmental and social governance issues and member of the Executive E&S Committee on behalf of the Rönesans Holding.

### 2.3 EPC

- EPC Project Manager - responsible for overseeing the construction of the Project, including planning and delivery. They will be suitably competent and have a strong understanding of construction best practice. The Project Manager is accountable for overall HSE performance and making the human and financial resources available to ensure compliance with HSE requirements of the Contract. The Project Manager will

be responsible for coordinating the internal management response of the Contractor to a major emergency.

- EPC HSE Project Manager - responsible for the implementation of health and safety practices during construction. Project HSE Manager will be suitably competent and have a strong understanding of health and safety best practice including the Project EHSS Requirements.
- EPC Environmental Engineer- responsible for reporting and supervising environmental activities on site. Environmental Engineer will be suitably competent and have a strong understanding of environmental best practice including the Project HSE requirements.

## 2.4 EXECUTIVE ENVIRONMENTAL AND SOCIAL MANAGEMENT COMMITTEE

- SPV Technical director - responsible for implementation of the ESMMP measures through method statements and site working practices.
- SPV EHSS Manager: Responsible for managing infrastructure regarding health, safety and environmental issues.
- On site biologist will be composed of one or two qualified biologist(s), who will be responsible from i) the planning, execution and reporting of the pre-construction surveys on flora and fauna, ii) informing the committee on the results and necessary actions to be taken, iii) follow-up of the specific actions (i.e. micro-siting, fencing etc.) required by the BMP, iv) act as the responsible person of contact to ensure a synergic execution of the various environmental plans (i.e. Landscape Management Plan, Habitat Restoration Plan etc.) under direct responsibility of other parties.

Further technical staff may be required during the course of the Project, who will be assigned internally by the Ceyhan PP A.Ş., either by means of permanent or temporary basis until the completion of relevant tasks under the Project whilst they undertake their current responsibilities.

## **3 BIODIVERSITY MANAGEMENT**

### **3.1 Introduction**

This section provides details of the outline aims of this BMP together with objectives required to be met in order to deliver these aims.

### **3.2 Aims**

The aim of the BMP is to achieve no net biodiversity loss as a result of the Project by ensuring that the biodiversity is protected and enhanced where possible.

## 4 MANAGEMENT ACTIONS

### 4.1 Introduction

This Section presents the actions and targets required for management of biodiversity requirements in line with the aims and objectives in Chapter 3. These actions are indicative at this stage and will be refined by Ceyhan PP A.Ş as part of the finalizing process of the BMP based on upcoming monitoring surveys. The actions and targets are presented chronologically within Table 4-1.



Table 4-1. BMP Actions

Biodiversity Element	Measure	Activity	Location	Timing	Indicator	Performed by	Responsible
<b>Construction Phase</b>							
Natural/semi-natural habitats	Protection and maximizing avoidance	<ul style="list-style-type: none"> <li>- The clearance of natural vegetation will be limited to the strip of land needed for the occupation of the project and the adjacent working width</li> <li>- Avoiding disposal of spoil/excess excavation materials on down-slope or in adjacent areas where it will affect sensitive natural habitats,</li> <li>- Mobilization area and excavation material temporary storage area will not be located in natural habitats.</li> <li>- Contractor will be kept on environmental protection matters and prohibit unnecessary disturbance, damage and harm to natural habitats, through clear delineation of the boundaries of the work area to avoid encroachment into any critical, natural or modified habitats.</li> <li>- Record the EUNIS classes and map the extension of the potentially affected area.</li> <li>- Prepare an 'Avoidance Plan and Map' to inform construction on the avoidance measures for the particular area</li> <li>- Re-assess the condition of the habitat and prepare a report with photos showing the condition after the construction to decide if restoration/offsetting is required.</li> <li>- Implement measures to ensure safe handling of chemicals and fuels, in accordance with the Hazardous Material Management Procedure, with consideration of the following aspects:                             <ul style="list-style-type: none"> <li>- Regular vehicle and machinery maintenance,</li> </ul> </li> </ul>	All construction site	Pre-Construction	Survey reports Habitat maps Number of project personnel reached through site induction and training; number of posters at site offices	Onsite biologist	Ceyhan PP A.Ş. EPC

Biodiversity Element	Measure	Activity	Location	Timing	Indicator	Performed by	Responsible
		<ul style="list-style-type: none"> <li>- Correct storage and adherence to the manufacturer's Material Safety Data Sheets (MSDS) requirements, Controlled access to and accountability in the use,</li> <li>- Staff training, induction and awareness programmes,</li> <li>- Regular auditing to control and account for the use of liquid fuels, oils and chemicals and minimise unintended loss and wastage.</li> <li>- Stormwater management of construction sites will be planned in advance and implemented to separate clean and dirty water systems to avoid the transport of contaminants into aquatic systems.</li> <li>- A Method Statement will be developed and implemented that recognises the different forms of waste and guides their disposal in a manner that is not harmful to the local environment.</li> <li>- Potential contaminated sites, such as fuel and chemical storage areas, heavy equipment parking will be tested for contamination prior to closure and remediated in a manner that addresses all hazardous chemicals identified in the test results.</li> <li>- Any contaminated sites that develop as a result of accidental spills will be remediated according to a Spill Management and Response Plan that will be developed. Spill response kits will be available at sites where there is a high risk of contamination from fuels, oils and chemicals.</li> <li>- Waste management measures and facilities that avoid creating opportunities</li> </ul>					

Biodiversity Element	Measure	Activity	Location	Timing	Indicator	Performed by	Responsible
		<p>for food scavengers will be developed and implemented.</p> <ul style="list-style-type: none"> <li>- Unnecessary destruction of habitats, cutting of trees or vegetation found outside the area absolutely needed for the project will be strictly prohibited.</li> <li>- Training of the project personnel (i.e. construction managers, machine operators, workers) will be done on mitigation of the effects of construction on Natural/semi-natural habitats</li> <li>- Biodiversity awareness creating measures will be taken both for the construction workers as well as to the surrounding community.</li> <li>- Training will be delivered to constructions workers prior to the start and during construction works to increase their awareness and responsibilities concerning the surrounding natural values.</li> <li>- A communication strategy should be developed to provide education and awareness on biodiversity measures with local stakeholders, including project-affected communities and fishermen. This will be led by a team of public relations and social experts to manage local liaison. The aim will be to raise community awareness of local biodiversity values, actions undertaken by project company and its partners for the management of biodiversity impacts, to support local community members who may want to sustain local biodiversity value and ecosystem services.</li> <li>- Revegetation of disturbed sites will be implemented within the same spring season, or within the upcoming spring</li> </ul>					

Biodiversity Element	Measure	Activity	Location	Timing	Indicator	Performed by	Responsible
		<p>season for disturbances occurring during the dry season.</p> <ul style="list-style-type: none"> <li>- Only non-invasive species are to be used for rehabilitation. These species will be native species.</li> <li>- To monitor success of the newly established <i>Cyclamen persicum</i> populations, monitoring studies will be conducted during the flowering season of the species in February-March.</li> <li>- As the Project site is located within the Mediterranean Region of Turkey, it is suitable for Mediterranean species to grow. Therefore, during the restoration of the areas that will be impacted from the Project activities, it is important to use native plant species in plantations along the roads to prevent erosion and ensure habitat integrity. Some of the tree species that can be used in landscaping include <i>Pinus brutia</i>, <i>Pinus pinea</i> and <i>Zizyphus lotus</i>, a natural shrub species of the region.</li> </ul>					
Nationally threatened Plant taxa, habitats	Determination of Nationally threatened Plant taxa, habitats	-Conduct botanical field inventories to determine the locations of individuals/groups of <i>Cyclamen persicum</i> , <i>Pancratium maritimum</i> , <i>Sternbergia pulchella</i> and <i>Crocus vitellinus</i> .	All construction site	Pre-Construction (preferably in March-April)	Surveys reports	- Botanist(s) - Onsite biologist	Ceyhan PP A.Ş. EPC
Nationally threatened Plant taxa, habitats	Protection and maximizing avoidance	<ul style="list-style-type: none"> <li>- Tubers of the <i>Cyclamen persicum</i>, <i>Sternbergia pulchella</i>, <i>Crocus vitellinus</i> and <i>Pancratium maritimum</i> will be collected and replanted in areas that would not be impacted by the Project activities.</li> <li>- Fencing, sign-posting, photographing, recording of numbers and location of those individuals/groups in the buffer zones of the construction area.-</li> </ul>	All construction site	Pre-Construction (preferably in March-April)	Number of plants translocated Meters of fence established, number of signs and demarcations	- Botanist(s) - Onsite biologist - All relevant parties of the construction work, with guidance from onsite biologist	Ceyhan PP A.Ş. EPC

Biodiversity Element	Measure	Activity	Location	Timing	Indicator	Performed by	Responsible
		<p>Informing the construction managers and workers about these fenced sites and avoidance</p> <ul style="list-style-type: none"> <li>- Micrositing: minimizing the work area, setting up physical barriers and complying with it throughout the work, choosing locations for encampment, material storage etc. which have a flexibility in location according to the constraints of biodiversity</li> <li>- Assessing and reporting the condition of fenced groups after the construction; and in case of unintentional lost/harm, documenting the number of individuals affected and including those into the supplementary seedling plantation program</li> </ul> <p>The BAP details the plant translocation procedure and the monitoring and maintenance approach to ensure the viability of the displaced individuals.</p>					
Invasive species	Prevention of introduction/spread of invasive species	-Conduct botanical field inventories to determine the locations of individuals/groups of <i>Solanum elaeagnifolium</i>	All construction site	Pre-Construction Construction Post-construction	Surveys reports	- Botanist(s) - Onsite biologist	Ceyhan PP A.Ş. EPC
Invasive species	Prevention of introduction/spread of invasive species	<ul style="list-style-type: none"> <li>- Remove the populations of <i>Solanum elaeagnifolium</i> from the project site safe dispose and replant known native species</li> <li>- After removing the plants, air dry them until dead. If possible, cover the material with plastic to speed up decomposition and limit dispersal by birds and other animals. Placing material in areas where there is a risk of being swept away by rain or into a waterbody will be avoided.</li> <li>- During the transportation of material off site, plants will be put in thick, durable</li> </ul>	All construction site	Pre-Construction Construction Post-construction	Number of plants disposed Number of project personnel reached through site induction and training; number of posters at site offices	- Botanist(s) - Onsite biologist	Ceyhan PP A.Ş. EPC

Biodiversity Element	Measure	Activity	Location	Timing	Indicator	Performed by	Responsible
		<p>plastic bags and dispose of them at licensed landfill. The material will be securely contained to avoid spread during transport.</p> <p>Dried plant can be incinerated if suitable incineration sites are available.</p> <p>- All vehicles leaving the infested area and / or transporting infested soil/materials must be thoroughly pressure-washed in a designated wash-down area before being used for other work.</p> <p>Environmental Awareness training will be provided to all personnel to increase awareness about the invasive species.</p>					
Invasive species	Prevention of introduction/spread of invasive species	<p>-The vegetable soil will be stripped and stored prior to construction and the stripped vegetation will be used to make the disturbed habitats reinstatement. The vegetable soil will not be used in any other area. Also will not be stored next to existing alien invasive species infestations.</p> <p>- Topsoil will not be imported from elsewhere/ if importation is necessary this will be from a reputable supplier with certification that the material does not contain AIS. Local species will be used in landscaping/planting studies. Non-native plant species will not be used.</p>	All construction site	Pre-Construction Construction Post-construction	No encounters with alien invasive species	<p>- Onsite biologist</p> <p>- All relevant parties of the construction work, with guidance from onsite biologist</p>	Ceyhan PP A.Ş. EPC
Invasive species	Prevention of introduction/spread of invasive species	<p>Jetty trestles will be periodically inspected to detect the presence of imported marine pests and marine species with invasive characteristics.</p> <p>Prevent introduction of invasive alien species on purpose or by accident.</p>	All construction site	Pre-Construction Construction Post-construction	No encounters with alien invasive species	<p>- Onsite biologist</p> <p>- All relevant parties of the construction work, with guidance from onsite biologist</p>	Ceyhan PP A.Ş. EPC

Biodiversity Element	Measure	Activity	Location	Timing	Indicator	Performed by	Responsible
		<p><i>Caulerpa racemosa</i> will be removed from the study area of the project and the introduction of other invasive species will be prevented.</p> <p>Source areas such as seaports and mobilization area will be kept clean of invasive species to minimize the presence of seeds or fragments of <i>C.racemose</i> that can be dispersed unintentionally.</p> <p>Shellfish stuck to the outer surface of the ships and to the ropes should be cleaned at regular intervals.</p> <p>Ships leaving ballast water must be prevented under the International Convention on the Control and Management of Ships' Ballast Water and Sediments.</p> <p>Prevent the intentional and accidental introduction of marine alien invasive species.</p> <ul style="list-style-type: none"> <li>- Invasive species will not be used in replanting/reseeding works to be carried out due to the project. It should be ensured that the species to be used in replanting/reseeding studies are not invasive.</li> <li>- Source areas such as vehicle parking and mobilization area will be kept clean of invasive species to minimize the presence of seeds that can be dispersed unintentionally.</li> <li>- Seeds belonging to species that escape the eyes of the researchers, come to the project site by birds, wind or man-made and are thought to be invasive should be removed from the project site and the impact area.</li> </ul>					

Biodiversity Element	Measure	Activity	Location	Timing	Indicator	Performed by	Responsible
		<p>- Live invasive species can be removed from the project site by cutting or uprooting.</p> <p>Removal of all invasive species from the project site in the form of uprooting when the operation phase is started.</p>					
Fauna burrows/shelters	Protection and maximizing avoidance	<p>- Presence of active burrows/shelter for the fauna will be scanned during the pre-clearance survey. Active burrows/shelters will be mapped. The individuals in the detected active shelters will be caught and released prior to the construction activities, with assistance from an experienced expert if needed.</p> <p>-In cases where it is necessary to use the burrows/shelter area, the animal will be allowed to move away safely or the animal will be caught by digging the nest and transported to the nearest suitable habitat.</p> <p>- If catching prior to the construction activities cannot be completed, these shelters will be sign-posted. The maps of the locations of these burrows will be shared with construction managers and relevant machine operators will be informed for planning of the ground construction works accordingly. The onsite biologist will be present on the site during the ground preparation/vegetation removal work to lead the machine operators in order to avoid harm to the underground fauna and their safe escape from the construction site.</p> <p>During this relocation, artificial gallery entrances with a horizontal position, which may be up to 1 m long, will be excavated in order to hide the animals left in the transported area.</p>	All construction site	Pre-Construction	<p>Pre-clearance survey report</p> <p>Number of burrows/shelter identified</p> <p>Number of fauna individuals relocated</p> <p>Number of secured burrows/shelter</p>	<p>- Fauna expert(s)</p> <p>- Onsite biologist</p> <p>- All relevant parties of the construction work, with guidance from onsite biologist</p>	Ceyhan PP A.Ş. EPC



Biodiversity Element	Measure	Activity	Location	Timing	Indicator	Performed by	Responsible
		- The results of the pre-clearance survey and the construction work phase will be reported along with the locations, photos of the shelters and sign-posts for reference, by the onsite biologist.					
Bat roosts	Protection and maximizing avoidance	<ul style="list-style-type: none"> <li>- The bat roosts (crevices of old trees, caves) will also be scanned during the pre-construction survey. In case such roosts are found, their locations will be recorded on maps.</li> <li>- In case active roosts are found on the project area, micrositing will be planned to avoid destruction</li> <li>- If micrositing does not fully resolve, work with a bat specialist before construction works to determine possible avoidance and mitigation activities depending on the planned season of the construction works</li> </ul>	All construction site	Pre-Construction	Pre-clearance survey report Number of roosts identified	<ul style="list-style-type: none"> <li>- Fauna expert(s)</li> <li>- Onsite biologist</li> <li>- All relevant parties of the construction work, with guidance from onsite biologist</li> </ul>	Ceyhan PP A.Ş. EPC
Reptile and amphibian hibernacula and shelters	Protection and maximizing avoidance	<ul style="list-style-type: none"> <li>- During the pre-clearance survey walk-throughs, small permanent or temporary pools found in the project area will be mapped and photographed. The onsite biologist will report the findings to the construction manager to enable micrositing. The avoided sites will be sign-posted in order to avoid the destruction/disturbance of the pools.</li> <li>- If micrositing is not possible or enough, the eggs, larvae and adults of the amphibians and fish will be caught from these pools prior to construction activities and released into another nearby natural pool. Such potential pools for relocation of caught individuals will be searched and determined prior to the catching work. Assistance from an experienced herpetologist could be required to perform these tasks.</li> </ul>	All construction site	Pre-Construction	Pre-clearance survey report Number of burrows/shelter identified Number of fauna individuals relocated Number of secured burrows/shelter	<ul style="list-style-type: none"> <li>- Fauna expert(s)</li> <li>- Onsite biologist</li> </ul>	Ceyhan PP A.Ş. EPC

Biodiversity Element	Measure	Activity	Location	Timing	Indicator	Performed by	Responsible
		<ul style="list-style-type: none"> <li>- Additionally, the onsite biologist will perform a survey before the actual ground construction work starts and remove/ the individuals of the reptiles.</li> <li>- Particular attention should be given to the vulnerable <i>Testudo graeca</i> to prevent loss of individuals due to Project activities. This species will be screened before the commencement of the construction activities in the Project site. If this species is identified in the area, they will be carefully relocated/transported to another safe location. During the construction activities, relocation works for species will continue.</li> <li>- The results of the pre-clearance survey, determination of the release site(s), capture and relocation study will be reported including data on the locations, maps, photos, number of individuals of each species caught and relocated.</li> <li>- Soil stripping activities conducted prior to construction activities will be performed before winter season. Provided that soil stripping is conducted before winter season, construction activities may continue throughout the winter.</li> <li>- Provide small puddles or semi-natural ponds in the Project site to support the amphibian species to breed in the area.</li> </ul>					
Bird nest	Protection and maximizing avoidance	<ul style="list-style-type: none"> <li>- Field survey for actual or potential nests or rest stop areas, prior to construction activities, with assistance of a bird expert. Recording of potential sites: location (point and polygon mapping of the area), photos, evidence of use</li> </ul>	All construction site	Pre-Construction	<ul style="list-style-type: none"> <li>Pre-clearance survey report</li> <li>Number of nests identified</li> <li>Number of fauna individuals relocated</li> <li>Number of secured burrows/shelter</li> </ul>	<ul style="list-style-type: none"> <li>- Fauna expert(s)</li> <li>- Onsite biologist</li> <li>- All relevant parties of the construction work, with</li> </ul>	Ceyhan PP A.Ş. EPC

Biodiversity Element	Measure	Activity	Location	Timing	Indicator	Performed by	Responsible
		<p>(observation, information from local people etc.).</p> <ul style="list-style-type: none"> <li>- Surface clearing and stripping activities will not be implemented in birds' breeding period between February and early June in order to avoid the damage on bird species. In the parts of the Project site where surface clearing and stripping are already in progress, the construction activities may continue to be undertaken. In some parts of the Project site where breeding burrows do not exist, construction activities will be performed during this season between February and early June. If construction activities, especially surface clearing and stripping, are undertaken within the breeding season, it is important to check the breeding activities and presence of any breeding burrows, to be observed by the biologist.</li> <li>- Identified nests and rest stop areas are sign-posting the area and informing the construction managers and workers about these sites (through maps) and developing measures of avoidance: no construction activities in breeding period near those sites; micrositing, the onsite biologist will report the findings to the construction manager for planning of ancillary works and associated facilities not to overlap with these areas, to enable micrositing</li> <li>- Birds cannot identify large glass-covered surfaces and striking on glass surfaces is an important cause of bird death. It is recommended that glass-covered buildings shall not be preferred for the design of the Project site</li> </ul>				guidance from onsite biologist	

Biodiversity Element	Measure	Activity	Location	Timing	Indicator	Performed by	Responsible
Bird nest	Protection and maximizing avoidance	<ul style="list-style-type: none"> <li>- All shrubs and trees that will not be directly affected by Project activities are important for breeding and nesting and will be protected as much as possible.</li> <li>- Plant some food plants with fruits and /or seeds and to supply some water sources in the area to support some birds during dry seasons from mid-May to late November.</li> <li>- Some of the bird species prefer to nest under roofs of buildings. Therefore, roof type and holes under roofs are important; and bird-friendly construction will be preferred specifically for birds and bats</li> </ul>	All construction site	Construction Post-construction	<ul style="list-style-type: none"> <li>Number of identified shrubs and trees important for breeding and nesting</li> <li>Number of secured shrubs and trees</li> <li>Number of planted shrubs and trees</li> </ul>	<ul style="list-style-type: none"> <li>- Fauna expert(s)</li> <li>- Botanist(s)</li> <li>- Onsite biologist</li> </ul>	Ceyhan PP A.Ş. EPC
Fauna species	Protection and maximizing avoidance	<ul style="list-style-type: none"> <li>- Pre-clearance surveys will be done by the onsite biologist</li> <li>- All trees and shrubs will be cut, and the floor will be cleaned before stripping the surface soil in the construction site in order to protect and reduce negative impacts on amphibians, reptile and mammal species.</li> <li>- Some natural areas will be left untouched as it would be beneficial to provide space for some species to continue their existence in the area</li> <li>- Necessary wildlife warning and information signs will be placed on the construction sites</li> <li>- After cleaning the ground and transporting the amphibians, reptiles and mammals encountered in the construction site, surface soils should be stripped carefully. While stripping, some amphibians, reptiles and mammals may be seen again in excavated soil. All these</li> </ul>	All construction site	Pre-Construction	<ul style="list-style-type: none"> <li>Pre-clearance survey report</li> <li>Number of fauna individuals relocated</li> <li>Number of placed signs</li> <li>Number of project personnel reached through site induction and training; number of posters at site offices</li> </ul>	<ul style="list-style-type: none"> <li>- Fauna expert(s)</li> <li>- Onsite biologist</li> <li>- All relevant parties of the construction work, with guidance from onsite biologist</li> </ul>	Ceyhan PP A.Ş. EPC

Biodiversity Element	Measure	Activity	Location	Timing	Indicator	Performed by	Responsible
		<p>animals will be collected and transported to a suitable nearby habitat.</p> <ul style="list-style-type: none"> <li>- When animals released to new area, biologists should wait against predators until animal dig the soil to escape in.</li> <li>- During surface clearing and stripping activities in the construction phase, two biologists shall be accompany the construction team. These biologists should collect all animals (encountered during and affected by the construction phase) and transfer them to appropriate habitats around the Project site.</li> <li>- During excavation, soil stripping and ground preparing activities, attention shall be given to the storage of the excavated materials before its reuse and disposal off-site. Visual observation shall be undertaken in the sections where excavation materials will be stored temporarily, and it shall be ensured that the area is free of species and burrows. Once the sections have been observed to ensure that they are free of species and burrows, the area shall be enclosed with marking tape and storage of excavation material will be restricted to the observed sections.</li> <li>- If any active burrows are encountered during construction phase of the Project, a remarkable tape will be placed on the section/area, where burrow is encountered, and necessary signs will be placed and will be informing the construction managers and workers about these sites through maps</li> <li>- Hunting, trapping and intentional killing of wild animals by the project workers and drivers will be strictly prohibited</li> </ul>					

Biodiversity Element	Measure	Activity	Location	Timing	Indicator	Performed by	Responsible
		<ul style="list-style-type: none"> <li>- Faunal protection policies will be developed and enforced that prohibit all forms of hunting, any killing of animals and keeping of pets.</li> <li>- Awareness programs will be developed for staff and contractors to raise the awareness of the diversity of animals present, risks associated with large wildlife and how to react when confronted by different species of large wildlife, and requirements to actively prevent the loss of any animals including snakes and species commonly considered to be vermin.</li> <li>- Increase the awareness of drivers and equipment operators towards wildlife conservation and encourage them to avoid or minimize animal fatalities.</li> <li>- The impacts due to poaching and intruders will be minimized through awareness creation among the employees and to the community of the area, setting regulations and employment obligations that prohibit poaching.</li> </ul>					
Fauna species	Protection and maximizing avoidance	<ul style="list-style-type: none"> <li>- Where free-ranging wildlife occurs, vehicle speeds will be reduced through implementation of speed control measures and the regular enforcement.</li> <li>- Post appropriate signs and apply speed limits for the sections passing through important wildlife areas by setting speed limits to safe levels, (around 30km/h) monitoring and enforcing it.</li> <li>- Good site practices incorporating appropriate mitigation measures that reduce nuisance noise levels will be applied</li> </ul>	All construction site	Construction	Levels of speed limit, Number of speed limit and warning signs	<ul style="list-style-type: none"> <li>- Onsite biologist</li> <li>- All relevant parties of the construction work, with guidance from onsite biologist</li> </ul>	Ceyhan PP A.Ş. EPC

Biodiversity Element	Measure	Activity	Location	Timing	Indicator	Performed by	Responsible
All species	Precautionary measures	<p>Good practice animal welfare measures will be adopted throughout construction. These will include:</p> <ul style="list-style-type: none"> <li>- Securing active construction sites to minimize risk of harm/trapping</li> <li>- Lighting for construction and security purposes will be inward and downward facing to minimise light pollution in remote areas, and to minimize the disturbance to nocturnal wildlife, birds, invertebrates and sea turtles.</li> <li>- Reduce light contamination into natural habitats at night.</li> </ul>	All construction site	Construction	Records of securing actions Number of lights used during nighttime	<ul style="list-style-type: none"> <li>- Onsite biologist</li> <li>- All relevant parties of the construction work, with guidance from onsite biologist</li> </ul>	Ceyhan PP A.Ş. EPC
Marine environment	Protection and maximizing avoidance	<ul style="list-style-type: none"> <li>- Spring season (i.e. March, April, May and June) is known as the season when the marine biological activity is at its peak. Therefore, it is important to keep the filling activities at a minimum in that season. Noise, turbidity and mechanical effects might negatively affect the quantity and quality of marine organisms in the spring period. On the contrary, biological activities are minimal during autumn and winter seasons; therefore, these periods might be considered for undertaking the marine construction works to minimize impacts</li> <li>- The filling area should be limited and should not be larger than the actual area that is needed</li> <li>- Filling activities will be avoided in March-June.</li> <li>- Filling works will be limited during unsuitable wind, current and wave conditions; to minimise dispersion of the turbidity.</li> </ul>	All construction site	Construction	Analyse reports	<ul style="list-style-type: none"> <li>- Onsite biologist</li> <li>- All relevant parties of the construction work, with guidance from onsite biologist</li> </ul>	Ceyhan PP A.Ş. EPC

Biodiversity Element	Measure	Activity	Location	Timing	Indicator	Performed by	Responsible
		<ul style="list-style-type: none"> <li>- Excavated or transported fill material will be analysed against any contamination and hazardous content</li> <li>- Reduce light contamination into natural habitats at night</li> <li>- The environmental conditions and variations will be monitored by a specifically structured team of experts who shall prepare environmental policies and procedures in line with relevant legislation and standards;</li> <li>- Chemicals such as paints and solvents that may pose threat for marine ecosystem will be collected separately and disposed of by licensed companies;</li> <li>- Solid wastes will never be dumped into the sea and instead will be collected in a designated area and disposed of by licensed companies or municipalities;</li> <li>- It will be strictly prohibited to discharge bilge water in the port area or in the close surroundings, which will instead be collected separately;</li> <li>- Generated wastewater will never be discharged into the sea without prior treatment;</li> <li>- Contaminants to be generated during maintenance activities shall not enter the port area to prohibit their potential entrance into the marine environment.</li> <li>- Use of silt fences, extending from sea bottom to the surface, around the dredging vessel. In this way, the generated turbidity will be limited within the fence and not affect larger areas</li> <li>- A communication strategy should be developed to provide education and awareness on biodiversity measures with</li> </ul>					



Biodiversity Element	Measure	Activity	Location	Timing	Indicator	Performed by	Responsible
		<p>local stakeholders, including project-affected communities and fishermen. This will be led by a team of public relations and social experts to manage local liaison. The aim will be to raise community awareness of local biodiversity values, actions undertaken by project company and its partners for the management of biodiversity impacts, to support local community members who may want to sustain local biodiversity value and ecosystem services</p> <p>- After completion of the construction activities, the piles of the Jetty and the rocks to be filled will constitute a suitable living, nesting and feeding environment for biological environment. Filling these areas with the excavated materials from the same area should be favoured to the extent possible and the fill materials should not be easily dissolved in sea water.</p>					
Marine Fish	Protection and maximizing avoidance	<p>- Taking into account the possibility of finding nests in the areas filled during the construction works, the filling works will be carried out especially in the rocky areas in the spring months. If this step is adopted, minimization measures will not be necessary.</p> <p>- If the above effect is not achieved, working close to the spawning area will be avoided at least during the breeding season (15th April to 15th June). This is considered a secondary reduction step.</p>	All construction site	Construction	Survey reports Accident reports	- Marine expert(s) - Onsite biologist	Ceyhan PP A.Ş. EPC
Marine Turtles	Protection and maximizing avoidance	<p>- There will be no work directly on the sea turtle beach during the construction works. However, activities will be timed so that the nesting period (or at least peak nesting periods) is avoided, as work</p>	All construction site	Construction	Survey reports Accident reports	- Marine turtle expert(s) - Onsite biologist	Ceyhan PP A.Ş. EPC

Biodiversity Element	Measure	Activity	Location	Timing	Indicator	Performed by	Responsible
		<p>will still be done in close quarters. The nesting period is from May to October. This is considered the primary reduction step. If this step is adopted, minimization measures will not be necessary.</p> <ul style="list-style-type: none"> <li>- If the above mitigation measure cannot be achieved, work will be avoided, at least, near the turtle exit or nesting sites during the night when turtles are most likely to nest or hatch. This is considered a secondary reduction step. - Lighting for construction and operation will be inward and downward facing to minimise light pollution in remote areas, and to minimize the disturbance to sea turtles</li> <li>- Limit the speed of marine vehicles with very low speeds within 1 mile of the shore</li> <li>- In case of an accident involving marine turtles at the sea, the initial response will be given by the expert</li> <li>- No vehicle belonging to the project will be allowed to enter sea turtle nesting areas, especially during nesting periods</li> <li>- The seaside will not be blocked in order to ensure the uninterrupted movement of the hatchlings to the sea.</li> <li>- Avoid preventing the movement of adult turtles to their "nesting areas" with non-permanent structures.</li> <li>- There is often an increase in macro pollution as a result of construction activities carried out near the beach. For this reason, before the nesting season (15th May to 30rd August), beach cleaning will be done under the supervision of a specialist who conducts sea turtle studies. Beach cleaning will be done by hand, vehicles will not be used</li> </ul>					

Biodiversity Element	Measure	Activity	Location	Timing	Indicator	Performed by	Responsible
		<p>- To avoid underwater and airborne sound effects, first of all, machines with advanced technical features will be used. Hole pile, vibro-pile or gravity pile are less noisy and will likely eliminate the possibility of harmful effects. Any technique that can be used can still cause disturbance to marine life and produce sound levels like ships.</p> <ul style="list-style-type: none"> <li>• Prior to the commencement of any noise-intensive activity, a marine fauna exclusion zone extending 500 m in all directions from the noise source should be established.</li> <li>• From one hour prior to the commencement of any noise-intensive activity, vessel based observers (or land-based observers if appropriate) should monitor the exclusion zone to check for the presence of any important marine fauna species. Activities may only commence if no important marine fauna have been sighted within the exclusion zone 30 minutes prior to the commencement of the activity.</li> <li>• If any such species are observed within the zone, noise-intensive activities should not commence until the animal is observed to leave the exclusion zone, or until 30 mins of observations have passed since the last sighting and no more important marine fauna have been sighted.</li> <li>• Activities should only be conducted in daylight conditions and preferably with appropriate sea conditions so that observers have a reasonable probability of sighting any marine fauna incursion into the exclusion zone.</li> </ul>					

Biodiversity Element	Measure	Activity	Location	Timing	Indicator	Performed by	Responsible
		<ul style="list-style-type: none"> <li>• Suitably experienced personnel should continuously maintain an adequate look-out for the presence of important marine fauna during noise-intensive activities.</li> <li>- Potentially the greatest concern of "noisy" activities occurs when driving scaffolding piles and during dredging. While planning the port construction, it is necessary to use the pier piles that have the qualifications to produce minimum noise. This is considered the primary reduction step. If these measures are implemented, it will not be necessary to avoid construction activities during the nesting season as a secondary avoidance step.</li> <li>- There is limited assessment of the effectiveness of mitigation measures used to protect sea turtles from underwater sound. The effect of underwater sound on sea turtles is different from that of marine mammals and therefore the effectiveness of measures taken for turtles is uncertain. Therefore, a strategy of avoiding such activities during the mating and nesting season (February to April) is recommended, unless "noise-induced" activities are avoided.</li> <li>- All ship operators will be given a briefing, alerting them to the possible presence of sea turtles in the area and will be provided with guidelines for safe ship operation will such species be seen.</li> <li>- Training of ship operators in the observation and recognition of sea turtles would likely be necessary. This will form part of the training exercise introducing the code of conduct for the port. An operational strategy for low boat speeds</li> </ul>					

Biodiversity Element	Measure	Activity	Location	Timing	Indicator	Performed by	Responsible
		<p>will be established and communicated to all ship pilots, followed up and implemented. During the mating season (April-May) and the main nesting season (May-September), vessels berthing both during the day and at night will be advised not to exceed 10 knots and all operators will be notified.</p> <ul style="list-style-type: none"> <li>- Ships will never deliberately approach, follow, or otherwise come into close contact with sea turtles. If sea turtles are seen approaching 50 m from the ship, ship speeds will be limited to the trailing speed. If necessary, the ship's route will be changed if it is safe to do so.</li> <li>- The sightings of sea turtles near ships will be recorded by the ship operators and any incidents will also be reported</li> </ul>					
Monk Seal	Precautionary measures	<ul style="list-style-type: none"> <li>- Of all the "noisy" activities, potentially the greatest concern is when driving scaffolding piles and during dredging. While planning the construction, it is necessary to use the scaffolding piles that have the qualifications to produce minimum noise.</li> <li>- For the Project area, the effects of underwater noise disturbance due to ship movements are not expected to be much greater than the current situation. For this reason, long-term monitoring of the Mediterranean monk seal will be carried out in order to observe the negative effects caused by increased ship movements. Based on the results to be obtained from this, management approaches, limitations on ship movements and similar effects may be considered.</li> <li>- Less noisy piles will be used instead of scaffolding piles, which can cause</li> </ul>	All construction site	Construction	<p>Survey reports Accident reports Meters of silt fence established</p>	<ul style="list-style-type: none"> <li>- Onsite biologist</li> <li>- All relevant parties of the construction work, with guidance from onsite biologist</li> </ul>	Ceyhan PP A.Ş. EPC

Biodiversity Element	Measure	Activity	Location	Timing	Indicator	Performed by	Responsible
		<p>harmful effects and make a lot of noise. JNCC guidelines, which are considered to include the best applications, will be followed to minimize the risk of injury to marine mammals from piling activities (JNCC, 2010):</p> <ul style="list-style-type: none"> <li>• Working in the marine environment at night will be avoided. No work will be done when visibility is low.</li> <li>• Prior to the commencement of any noise-intensive activity, a marine fauna exclusion zone extending 500 m in all directions from the noise source should be established.</li> <li>• From one hour prior to the commencement of any noise-intensive activity, vessel based observers (or land-based observers if appropriate) should monitor the exclusion zone to check for the presence of any important marine fauna species. Activities may only commence if no important marine fauna have been sighted within the exclusion zone 30 minutes prior to the commencement of the activity.</li> <li>• If any such species are observed within the zone, noise-intensive activities should not commence until the animal is observed to leave the exclusion zone, or until 30 mins of observations have passed since the last sighting and no more important marine fauna have been sighted.</li> <li>• Activities should only be conducted in daylight conditions and preferably with appropriate sea conditions so that observers have a reasonable probability of sighting any marine</li> </ul>					

Biodiversity Element	Measure	Activity	Location	Timing	Indicator	Performed by	Responsible
		<p>fauna incursion into the exclusion zone.</p> <ul style="list-style-type: none"> <li>• Suitably experienced personnel should continuously maintain an adequate look-out for the presence of important marine fauna during noise-intensive activities.</li> <li>• A gradual increase in the driving of scaffolding piles (soft start) is recommended as a way to reduce the risk of injury by allowing time for individuals to move away from the area. The soft start process must be for not less than 20 minutes.</li> <li>• Training of all construction personnel on the potential impacts of the activities on marine mammals will take place prior to the commencement of the works.</li> <li>• Entry and exit movements of ships to the construction area or operational port will be arranged according to the determined routes/approach channels.</li> </ul> <p>All ship operators involved in the construction studies will be given a briefing alerting them to the possible presence of marine mammals in the area and will be provided with guidelines for safe ship use in the presence of such species. Guidance will include:</p> <ul style="list-style-type: none"> <li>• Ships must enter and exit the port using designated routes/approach channels. An operational strategy for low boat speeds will be communicated to all ship operators and followed and implemented. During the breeding season (February to April), ships will use the 10 knot</li> </ul>					

Biodiversity Element	Measure	Activity	Location	Timing	Indicator	Performed by	Responsible
		<p>speed limit when berthing in port, both during the day and at night.</p> <ul style="list-style-type: none"> <li>Ships will never deliberately approach, follow, or in any way come into close contact with marine mammals. If cetaceans are seen in a 50 m radius area of the ship, ship speeds will be limited to the trailing speed. If necessary, the ship's route will be changed if it is safe to do so.</li> <li>Ships must not deliberately enter within 100 m (50 m for dolphins) of cetaceans and/or stand in front of the direction of movement of a cetacean or group of cetaceans.</li> <li>Injury or death of marine mammals will be documented and reported.</li> <li>All observations of cetaceans will be recorded and added to a GIS database.</li> </ul> <p>- Use silt fences to minimize the turbidity generation</p>					
Disturbed habitats	Reinstatement, restoration, rehabilitation	<ul style="list-style-type: none"> <li>Stored topsoil will be used in the reinstatement of the disturbed habitats.</li> <li>Planting of native plant species in plantations to prevent erosion and also ensure habitat integrity.</li> </ul>	All construction site	Post-construction	<p>Reports of landscaping activities</p> <p>Number of plants planted and/or the amount of seeds</p>	<ul style="list-style-type: none"> <li>Onsite biologist</li> <li>All relevant parties of the construction work, with guidance from onsite biologist</li> </ul>	Ceyhan PP A.Ş. EPC
<b>Operation Phase</b>							
Natural/semi-natural habitats	Protection and maximizing avoidance	<ul style="list-style-type: none"> <li>Limit the project activities to designated sites</li> <li>Inform and train Project personnel</li> </ul>	Facility site	Operation	<p>Number of project personnel reached through site induction and training; number of posters at site offices</p>	<ul style="list-style-type: none"> <li>Environmental and Social Manager</li> <li>Botanist(s)</li> </ul>	Ceyhan PP A.Ş.
Invasive species	Prevention of introduction/spread of invasive species	<ul style="list-style-type: none"> <li>Conduct botanical field inventories to determine the locations of</li> </ul>	Facility site	Operation	<p>Surveys reports</p> <p>Number of plants disposed</p>	<ul style="list-style-type: none"> <li>Environmental and Social Manager</li> </ul>	Ceyhan PP A.Ş.



Biodiversity Element	Measure	Activity	Location	Timing	Indicator	Performed by	Responsible
		<p>individuals/groups of <i>Solanum elaeagnifolium</i> and <i>Caulerpa racemosa</i></p> <ul style="list-style-type: none"> <li>- Jetty trestles will be periodically inspected to detect the presence of imported marine pests and marine species with invasive characteristics.</li> <li>- Prevent introduction of invasive alien species on purpose or by accident.</li> <li>- <i>Caulerpa racemosa</i> will be removed from the study area of the project and the introduction of other invasive species will be prevented.</li> <li>- Source areas such as seaports and mobilization area will be kept clean of invasive species to minimize the presence of seeds or fragments of <i>C.racemosa</i> that can be dispersed unintentionally.</li> <li>- Shellfish stuck to the outer surface of the ships and to the ropes should be cleaned at regular intervals.</li> <li>- Ships leaving ballast water must be prevented under the International Convention on the Control and Management of Ships' Ballast Water and Sediments.</li> <li>- Prevent the intentional and accidental introduction of marine alien invasive species.</li> </ul>				- Botanist(s)	
Fauna species	Protection and maximizing avoidance	<ul style="list-style-type: none"> <li>-Provide water sources (i.e., small pond) at the Project site to support the birds, where possible.</li> <li>- Provide small puddles or semi-natural ponds in the Project site to support the amphibian species to breed in the area.</li> <li>-Plant food bushes and trees in natural species at the Project site to support</li> </ul>	Facility site	Operation	<p>Number of identified shrubs and trees important for breeding and nesting</p> <p>Number of secured shrubs and trees</p> <p>Number of planted shrubs and trees</p> <p>Number of project personnel reached through site induction</p>	<ul style="list-style-type: none"> <li>-Environmental and Social Manager</li> <li>- Fauna expert(s)</li> <li>- Botanist(s)</li> </ul>	Ceyhan PP A.Ş.

Biodiversity Element	Measure	Activity	Location	Timing	Indicator	Performed by	Responsible
		<p>birds in the area. If possible, protect natural bushes and trees in the area.</p> <p>-Paint tall structures (i.e., towers and chimneys) in bright colors and the maintain paintings so that they are visible to birds.</p> <p>-Inform and train Project personnel.</p>			and training; number of posters at site offices		
Marine Turtles	Protection and maximizing avoidance	<p>- - All ship operators will be given a briefing, alerting them to the possible presence of sea turtles in the area and will be provided with guidelines for safe ship operation will such species be seen.</p> <p>- Training of ship operators in the observation and recognition of sea turtles would likely be necessary. This will form part of the training exercise introducing the code of conduct for the port. An operational strategy for low boat speeds will be established and communicated to all ship pilots, followed up and implemented. During the mating season (April-May) and the main nesting season (May-September), vessels berthing both during the day and at night will be advised not to exceed 10 knots and all operators will be notified.</p> <p>- Ships will never deliberately approach, follow, or otherwise come into close contact with sea turtles. If sea turtles are seen approaching 50 m from the ship, ship speeds will be limited to the trailing speed. If necessary, the ship's route will be changed if it is safe to do so.</p> <p>- The sightings of sea turtles near ships will be recorded by the ship operators and any incidents will also be reported</p>	Facility site	Operation	Survey reports Accident reports	-Environmental and Social Manager - Marine turtle expert(s)	Ceyhan PP A.Ş.

Biodiversity Element	Measure	Activity	Location	Timing	Indicator	Performed by	Responsible
		<ul style="list-style-type: none"> <li>- Limit the speed of marine vehicles with very low speeds within 1 mile of the shore</li> <li>- In case of an accident involving marine turtles at the sea, the initial response will be given by the expert</li> </ul>					
Monk Seal	Precautionary measures	<p>All ship operators involved in the construction studies will be given a briefing alerting them to the possible presence of marine mammals in the area and will be provided with guidelines for safe ship use in the presence of such species. Guidance will include:</p> <ul style="list-style-type: none"> <li>• Ships must enter and exit the port using designated routes/approach channels. An operational strategy for low boat speeds will be communicated to all ship operators and followed and implemented. During the breeding season (February to April), ships will use the 10 knot speed limit when berthing in port, both during the day and at night.</li> <li>• Ships will never deliberately approach, follow, or in any way come into close contact with marine mammals. If cetaceans are seen in a 50 m radius area of the ship, ship speeds will be limited to the trailing speed. If necessary, the ship's route will be changed if it is safe to do so.</li> <li>• Ships must not deliberately enter within 100 m (50 m for dolphins) of cetaceans and/or stand in front of the direction of movement of a cetacean or group of cetaceans.</li> <li>• Injury or death of marine mammals will be documented and reported.</li> </ul>	Facility site	Operation	Survey reports Accident reports	-Environmental and Social Manager - Marine turtle expert(s)	Ceyhan PP A.Ş.

Biodiversity Element	Measure	Activity	Location	Timing	Indicator	Performed by	Responsible
		<ul style="list-style-type: none"> <li>All observations of cetaceans will be recorded and added to a GIS database.</li> </ul>					
Disturbed habitats	Reinstatement, restoration, rehabilitation	- Use native plant species in plantations	Facility site	Operation	Reports of landscaping activities Number of plants planted and/or the amount of seeds	-Environmental and Social Manager - Botanist(s)	Ceyhan PP A.Ş.

## 5 MONITORING AND ADAPTIVE MANAGEMENT

### 5.1 Introduction

This section presents a summary of the provisional monitoring requirements required to be delivered under the BMP, together with the pathways to inform adaptive management on the Project.

### 5.2 Monitoring

#### 5.2.1. Flora Surveys

The flora surveys are undertaken by a suitably experienced botanist, preferably one that has been involved on the Project to date. Surveys will be undertaken on an annual basis within the appropriate flowering seasons for the two threatened plant species.

Botanical surveys will also include a check of areas subject to compensatory planting/restoration required to mitigate losses. Surveys will include (but are not limited to) the following:

- Planting success (i.e. continued presence of saplings, etc.); and
- Evidence of degradation/damage, e.g. from herbivores.

Given the timescales required to monitor success (or otherwise) of this mitigation, the monitoring surveys will be undertaken on an annual basis for the first five years initially. Monitoring beyond this point should then be reviewed and tailored according to the conditions at this point but as a minimum should be no less frequent than every three years until such time that the rare plants have become fully established and show evidence of naturally increasing their numbers.

#### 5.2.1. Bird Surveys

Bird surveys will be split into construction and operational monitoring. Surveys will be completed by suitably experienced ornithologists, preferably one with experience of the Project to date.

Construction monitoring will comprise survey effort undertaken around key ornithological sensitivities to identify the potential for significant disturbance to occur. In terms of individual species, this will be done for threatened and migratory bird species, Additional monitoring around all nest sites (where sufficient avoidance through timing of works/micro-siting has not been possible) will also be undertaken as advised the onsite biologist.

Operational monitoring will comprise flight activity surveys at pre-identified areas of highest potential risk. Surveys will be completed during migration and overwintering periods for waterbirds and during the breeding season of those bird species and will monitor the success of mitigation designed.

Bird survey effort should follow methods already deployed on the Project (e.g., in line with methods described within SNH 2017).

### 5.2.3. Marine Turtle Surveys

Marine Turtle surveys will be split into construction and operational monitoring. Surveys will be completed by suitably experienced marine turtle expert, preferably one with experience of the Project to date.

Surveys will be undertaken on an annual basis within the May-October at Incirli beach.

## 5.3 Reporting

Monitoring survey outcomes and associated recommendations to update this BMP will be reported to the Project Lenders on a monthly basis.

## 5.4 Adaptive Management

Adaptive management will be informed by findings from the monitoring described above. Where it is identified that targets associated with the BMP actions are not being met, Ceyhan PP A.Ş. will be responsible for rectifying this through appropriate adaptive management, to the approval of the Project Lenders.

## 6 MONITORING, ASSURANCE AND VERIFICATION

Key success indicators (KPIs) of this procedure will be monitored, verified and evaluated by the relevant parties in accordance with their responsibilities.