





UNEP(DEPI)/MED WG.382/16 21 June 2013

ENGLISH ORIGINAL: ENGLISH



#### **MEDITERRANEAN ACTION PLAN**

Eleventh Meeting of Focal Points for SPAs

Rabat (Morocco), 2-5 July 2013

# DRAFT PROPOSALS OF AREAS FOR INCLUSION IN THE LIST OF SPECIALLY PROTECTED AREAS OF MEDITERRANEAN IMPORTANCE (SPAMI LIST)

Delegates are kindly requested to bring their documents to the meeting

#### Note:

The designations employed and the presentation of the material in this document do not imply the expression of any opinion whatsoever on the part of RAC/SPA and UNEP concerning the legal status of any State, Territory, city or area, or of its authorities, or concerning the delimitation of their frontiers or boundaries.

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## **Draft Proposals of areas for inclusion in the List of Specially Protected Areas of Mediterranean Importance (SPAMI List)**

During the biennial period 2012-2013 and prior to the Eleventh meeting of Focal Points for SPAs, only Cyprus has submitted to the RAC/SPA Secretariat a proposal for inclusion in the SPAMI List. It is the Lara – Toxeftra Turtle Reserve.

The executive summary of the Presentation report of the Lara – Toxeftra Turtle Reserve proposed for inclusion in the SPAMI List is presented here after, whereas the full Presentation report is annexed in its original version (English).

#### **EXECUTIVE SUMMARY (Lara – Toxeftra Turtle Reserve)**

The turtle conservation project started in 1976, with beach surveys after the first turtle tracks were noticed. In 1978 the Lara Turtle Station was set up on the west coast of the island. The Project evolved with time from a primarily hatchery project, with some head-starting, to a much wider project involving habitat protection, which started in 1989 with the setting up of the Lara/Toxeftra Reserve. *In situ* protection of nests on all the beaches in and outside the Reserve followed the implementation of the management measures foreseen by the legislation which was introduced with the setting up of the Reserve. The Reserve covers the foreshore and the adjacent sea. The project is a government project, run by the Department of Fisheries and Marine Research (DFMR). The Cyprus Wildlife Society (CWS) helps with the project with experienced biologists (Demetropoulos and Hadjichristophorou 2004).

#### A BRIEF HISTORY OF TURTLE CONSERVATION IN CYPRUS

#### **Benchmarks**

| 1971<br>1976-1977 | Turtles were protected by law (Fisheries Law and Regulations) First beach surveys  |
|-------------------|--|
| 1978              | Launching the Turtle Project and setting up the Lara Turtle Station  |
| 1989              | Habitat protection with Lara/Toxeftra Reserve set up under the Fisheries Legislation, with Management Regulations included in the law. The protected area includes the foreshore and the adjacent sea down to the 20 m isobaths            |
| 1989              | Training courses for other Mediterranean countries started, with trainees from RAC/SPA (UNEP/MAP) mainly.  |
| 2002              | Polis/Limni was declared a "Shore for Ecological Protection" (Town and Country Planning legislation) – it includes conditions for the adjacent area regarding lights and no permits for commercial use of beach, no breakwaters or marinas |
| 2005              | Polis/Limni/Yialia area (foreshore and sea to the 50 m isobath) proposed to EC as a Natura 2000 site (management plan pending). This was accepted.   |
| 2011              | Akamas Peninsula has been included in the Natura 2000 network. Lara – Toxeftra area is located within the Akamas Peninsula.  |

In 1989 the west coast nesting area (10 km of coastline) was declared as a turtle reserve, the Lara/Toxeftra Turtle Reserve. This included the foreshore and the sea area down to the 20 m isobath (0.4 to 1 km from the coast). It includes the five main green turtle nesting beaches, which have a total length of about 3.5 km. There is also loggerhead nesting on these beaches. The following three years were focused on implementing the management

regulations that were passed by law, which was no easy task. After some court cases (and other battles) this succeeded and the management measures for the area were generally accepted.

In the Protected Area from the 1<sup>st</sup> June to the 30<sup>th</sup> September of every year it is forbidden to:

- Stay on the beaches or the coastal area at night (one hour before sunset until sunrise)
- Place any sun-bed, umbrella, caravan, tent, etc. on, or near, the beaches
- Use or anchor a boat without a special permit or tolerate such action, in the adjacent sea area where the sea is shallower than 20 m
- Drive any vehicle on a beach or tolerate such action
- Fish, except with a rod and line (to the 20 m isobath)

#### WHAT THE PROJECT IS DOING NOW

The project and the activities, methods and strategies used, evolved with time following:

- a. the knowledge and experience gained through the project
- b. the knowledge gained by the scientific community elsewhere
- c. changing circumstances and opportunities

The main activities of the project are summarised below:

- Management of the Lara/Toxeftra Reserve coastal area and adjacent sea. This includes law enforcement by the DFMR. Management also of the Chrysochou Bay beaches and adjacent sea and law enforcement (though some of the specific management regulations for the area are pending).
- All beaches are monitored and all nests are protected *in situ* on all the beaches they were laid on. Non-magnetic, self releasing cages are used.
- Nests laid too near the sea are relocated up the same beach (about 5% of the nests)
- Nests from intensive tourism beaches, mainly from the two beaches in Coral Bay on the west coast, where they have no future, are relocated to the "hatchery" at Lara. About 10-20 nests p.a. are relocated from there.
- The egg chamber is located with an aluminium tube/rod when the nests are fresh and the nest is not dug at this stage so as not to destroy the structure of the "lid" of the chamber
- All green turtle nests are dug up after emergence of hatchlings from the nest has finished, to ascertain the fate of the eggs. Most loggerhead nests are also dug the same way.
- Turtles are double tagged on the front flippers with plastic Dalton tags. Tagging is on the soft trailing part at the distal end of the flipper. This ensures that the tag will tear off the flipper if it gets entangled in nets. Tagging is undertaken when egg laying and covering up of the chamber have finished.
- A rescue facility is run at the Meneou Experimental Mariculture Station of the DFMR.
- Hands-on training courses are held for scientists and protected area managers and rangers. Most trainees are sponsored by RAC/SPA (UNEP/MAP).
- The project is a government project, run by the DFMR, with no volunteers. The Cyprus Wildlife Society (CWS) has been helping with the project with experienced biologists since 1989. The CWS has been running training courses for RAC/SPA (UNEP/MAP) in cooperation with the DFMR. This has recently been subject to an agreement following tender procedures.

There is no regular habitation in the Lara/Toxeftra Turtle Reserve but visitation is high, especially in the summer season, largely due to the Turtle Project and the opportunity for people to see live turtle hatchlings in the Information Centre at the Lara Turtle Station where some are kept in tanks for this purpose. Guided ecotourism trips are common during daylight hours in the breeding season. No night visits are allowed.

Small scale fishing (artisanal) with trammel nets is frequent from a small number of boats stationed at the Ayios Georgios fishing shelter about 1 km south of the Reserve.

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Presentation report of the Lara – Toxeftra Turtle Reserve proposed for inclusion in the SPAMI List

## ANNOTATED FORMAT FOR THE PRESENTATION REPORTS FOR THE AREAS PROPOSED FOR INCLUSION IN THE SPAMI LIST

#### **OBJECTIVE**

The objective of this Annotated Format is to guide the Contracting Parties in producing reports of comparable contents, including the information necessary for the adequate evaluation of the conformity of the proposed site with the criteria set out in the Protocol and in its Annex I (Common criteria for the choice of protected marine and coastal areas that could be included in the SPAMI List).

#### **CONTENTS**

The presentation report shall include the following main information on: (i) identification of the proposed protected area (ii) site description (iii) its Mediterranean importance (iv) the activities in and around the area and their impacts (v) legal status (vi) management measures (vii) human and financial resources available for the management and the protection of the site.

#### SUBMISSION OF REPORTS

The reports should be submitted to the RAC/SPA two months before the meeting of National Focal Points for SPA in English or in French.

Dossiers should be compiled on A4 paper (210 mm x 297 mm), with maps and plans annexed on paper with a maximum size of an A3 paper (297 mm x 420 mm). Contracting Parties are also encouraged to submit the full text of the proposal in electronic form.

The requested annexes should be submitted on paper and, if possible, also in electronic form. They are the following:

- Copies of legal texts
- Copies of planning and management documents
- Maps: administrative boundaries, zoning, land tenure, land use, and distribution of habitats and species, as appropriate
- Existing inventories of plant and fauna species
- Photographs, slides, films/videos, CD-ROMs
- List of publications and copies of the main ones concerning the site

**N.B.:** All the following sections have to be in the report submitted, even those sections or elements that do not apply to the proposed area. Where that is the case, please put "not applicable to the proposed area".

| 1. AREA IDENTIFICA       | ATION  |                    |  |
|--------------------------|--|--------------------|--|
| 1.1. COUNTRY/COUN        | TRIES (in the case of trans  | ooundary areas)    |  |
| CYPRUS                   | ,  | · · ·              |  |
| 1.0.1                    |  |                    |  |
|                          | PROVINCE OR REGION   |                    |  |
| PAFOS                    |  |                    |  |
|                          |  |                    |  |
| 1.3. NAME OF THE AF      | RFΔ  |                    |  |
|                          |  |                    |  |
| Lara – Toxeftra Turt<br> | ie Reserve   |                    |  |
|                          |  |                    |  |
|                          |  |                    |  |
| boundaries (do not des   | DCATION  nical boundaries, e.g. rive cribe the co-ordinates here cographical co-ordinates as s | please make a s    | eparate annex with a map   |
| Kilometers north of      | the town of Pafos. The Prothe south and extends to $Ar$  | otected Area start | of the Akamas peninsula, 15 s at <i>Aspros stream</i> (north of <i>hi</i> in the north, covering about |
|                          | 0 meters from the sea (from ch is about 0.4 to 1 km from                                       |                    | el) and extends seaward to the   |
| A map of the area is p   | provided in Annex I.   |                    |  |
|                          |  |                    |  |
|                          |  |                    |  |
| 1.5. SURFACE OF TH       | E AREA (total)   |                    |  |
|                          |  |                    |  |
| 650 ha                   | (in national unit)   | 650 ha             | (in ha)  |
| 1.6. LENGTH OF THE       | MAIN COAST (Km)  |                    |  |

The Reserve covers about 10 Km of coastline.

#### 2. EXECUTIVE SUMMARY (maximum 3 pages)

Supply a summary of the information contained in sections 3 to 9.

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| 3. SITE DESCRIPTION                                  |                      |
|--|----------------------|
|  |                      |
| 3.1. TYPOLOGY OF THE SITE                            |                      |
| 3.1.1. Terrestrial surface, excluding wetlands (ha): | 100 ha               |
| 3.1.2. Wetland surface (ha):                         |                      |
| 3.1.3. Marine surface (Sq. Km): Marine internal      | waters               |
| Territorial  | sea 5.5 Km² (550 ha) |

#### 3.2. MAIN PHYSICAL FEATURES

#### 3.2.1. Geology/Geomorphology

Give a brief description of: (i) geological aspects (lithologic and tectonics); (ii) processes of sedimentation and erosion observable in the area; (iii) coastal geomorphology and (iv) island system. Indicate bibliographical sources.

(i) The coastal strip is basically of limestone slopes and cliffs, fringed, on the interface with the sea, by vermetid shelves. Stretches of the allochthonous Mamonia melanges and serpentinites can be found just north of Lara in the coastal area. There are raised beaches in some areas (Toxeftra etc)

High sea

- (ii) There is little or no sedimentation or erosion.
- (iii) The protected area has a series of sandy beaches alternating with rocky shores and shingle beaches. Some of the beaches have sand-dunes adjoining them. The sea bed in front of the protected beaches is mainly sandy, with extensive rocky substrates especially around the cliffs and capes.
- (iv)There are no islands

3.2.2. Other interesting physical features: Such as hydrodynamics, volcanic formations, caves, underwater formations, etc.

There are sea cliffs with cracks and small caves in the Lara area, in the limestone areas. See also comments on Posidonia meadows in stretches of the coast.

- 3.2.3. Length of beaches (in Km), including islands:
  - a) Length of sandy beaches:

3.5 km

b) Length of pebble or stony beaches:

1.5km

c) Length, height and depth of active sand-dunes:

1km, 5 to 25m height, to 150m from the sea.

#### 3.3. FRESHWATER INPUTS

3.3.1. Mean annual precipitation (in mm)

500 mm per year, seasonal

3.3.2. Main water courses (permanent and seasonal)

Aspros Potamos

Avakas and Kalamouli (Argaki ton koufon) – with a joint estuary

Argaki tou Mykhou, Argaki Kaskious, Argaki Rodhia, Mirrillis, Argaki tou Yousoufi All seasonal.

Avakas (Avgas) is a permanent stream fed by springs, though there is no surface flow to the sea except during winter storms.

3.3.3. Estuarine areas: Existence and brief description

The small estuaries that exist are only temporary in nature and end up in pebble or sandy beaches

3.3.4. Freshwater springs: Existence and brief description, including marine offsprings

Mainly the springs in Avakas Gorge which give the Avakas stream a permanent flow for much of its length.

#### **3.4. BIOLOGICAL FEATURES** (B2, Annex I)

**3.4.1.** Habitats: A brief description of dominant marine and terrestrial habitats, on the basis of the habitat classifications adopted within the framework of MAP (and their coverage in ha)

*Posidonia oceanica* meadows (Habitat 1110) are present in the marine part of the protected area and they cover 6.4 ha. Shallow meadows can be found in the protected area on big blocks, at depths as shallow as 1m depth.

The results of the mapping of Posidonia in the area can be found in Annex II.

#### 3.4.2. List of regionally important species (flora and fauna) (B-2a, Annex I)

List here ONLY those species protected by international agreements, particularly those marine species included in Annex II of the Protocol, which are present in the area. Any other species may be listed if it is clearly considered of regional importance given its high representation in the area. Display the species list under the headings Marine Plants, Terrestrial Plants, Marine Invertebrates, Fish, Amphibians and Reptiles, Birds, and Mammals. For each species state:

- a) its relative abundance as Common (C), Uncommon (U) or Occasional (O),
- b) Its global status as rare (r), endemic (e) and/or threatened (t), and
- c) its status as an important resident population (R), or important for its breeding (B), feeding (F), wintering (W) or migratory passage (M)

| SPECIES   | Rel. Abundance<br>(C) (U) (O) | Global STATUS<br>(r) (e) (t) | Local STATUS<br>(R) (B) (F) (W) (M) |
|---|-------------------------------|------------------------------|-------------------------------------|
| Examples: BIRDS Pelecanus onocrotalus Falco eleonorae | (C)<br>(U)                    | (e) (t) (e) (t)              | (R)<br>(B)                          |
| REPTILES Caretta caretta Chelonia mydas               | (C)<br>(C)                    | (e) (t)<br>(e) (t)           | (B), (F)<br>(B), (F)                |
| CRUSTACEA<br>Ocypode cursor                           | (C)                           | (t)                          | (R), (B), (F)                       |
| BRYOZOA<br>Hornera cf. lichenoides                    | (U)                           | (t)                          | n.a.                                |
|   |                               |                              |                                     |
|   |                               |                              |                                     |
|   |                               |                              |                                     |

#### 3.4.3. Flora: Describe in a few sentences the main plant assemblages significant in the area.

The vegetation of the protected area is to a large degree wind-shaven Maquis forest with *Pistacia lentiscus* (Lentisc) *Juniperus phoenicea* (Juniper), *Olea europea* (wild olive), *Myrtus communis* (Myrtle) and *Ceratonia* with *Cistus monspeliensis*. There are several species of Orchids (*Orchis pyramidalis*, *O. coriophora* ssp. *fragnans*, *Serapias vomeracea* etc.) as well as sand-dune vegetation, which includes the endangered *Pancratimum maritimum*, in places. Endemic plants include *Carlina pygmaea*, *Alyssum akamasicum* and *Gladiolus triphyllus*.

The marine vegetation includes extensive *Posidonia oceanica* meadows and *Cymodocea nodosa* as well as many algae.

#### 3.4.4. Fauna: Describe in a few sentences, which are the main fauna populations present in the area.

The terrestrial fauna of the area is rich in diversity and includes the endemic *Crocidura cypria* (Cyprus White-toothed Shrew), as well as several species of bats. Foxes, hares and the Eastern Hedgehog (*Hemiechimus auritus*) live there. There are several reptiles in the area including the Spiny-footed Lizard (*Acanthodactylus schreiberi*), Vipers (*Vipera lebetina*), Montpellier snakes (*Malpolon monspessulanus*), Agama Lizard (*Agama stelio*) and many others. There are also many species of butterflies including some endemic varieties and species.

Monk seals have been reported in the area (1988, 89,90,91,92, 2010, 2011, 2012). The beaches of the area are some of the few nesting areas of the remaining populations of the Green Turtle (*Chelonia mydas*) in the Meiterranean. The Loggerhead Turtle (*Caretta caretta*) also nests there. Ghost crabs (*Ocypode cursor*) inhabit some of the beaches in the area and are also protected.

#### 3.5. HUMAN POPULATION AND USE OF NATURAL RESOURCES

#### 3.5.1 Human population

| a) Inhabitants inside the area:           | Number | Date of data |
|---|--------|--------------|
| Permanent                                 | none   | 2013         |
| Seasonal number (additional to permanent) | none   | 2013         |

#### Description of the population

| There is no human population in the protected area of Lara-Toxeftra |
|---|
|   |

Main human settlements and their populations

There are no human settlements within the area.

#### 3.5.2 Current human use and development

a) Briefly describe the current use of the area by subsistence, artisan, commercial and recreational fishing, hunting, tourism, agriculture and other economic sectors.

The area is mainly used for fishing and leisure activities and ecotourism.

Small-scale fishing (artisanal), sport fishing (on boat), spearfishing and rod and line fishing are the main fishing activities that are generally practiced in the protected area - and in the western part of the Akamas Peninsula. These activities are prohibited (with the exception of rod and line fishing) in the Lara-Toxeftra Reserve, during the turtle breeding period i.e., from the 1st June to the end of September.

The beaches are accessible by boat and by car for sunbathing and swimming. Moreover, recreational activities such as scuba diving, snorkelling, sea-trips, boating, jet-skis and safari trips (ecotourism) are found in this area. Entry into the marine protected area of the Turtle Reserve by boat is prohibited during the summer season due to the marine turtle nesting period (June-September).

The management regulations for this area that are spelled out in the Consolidated Fisheries Regulations (273/90), prohibit during the nesting season which is from the 1<sup>st</sup> of June up to the 30<sup>th</sup> of September, the entry and anchoring of a vessel of any kind in the protected area, down to the 20 m isobath, as is any kind of fishing (except with a rod and line from the shore). The presence of the public on the beaches from sunset to sunrise is prohibited as is the use of umbrellas and sunbeds on the beach. Camping and driving on the beaches are also prohibited.

b) Enter how many of the users depend on these resources, seasonality, and assessment of the social and economic importance of their use and of the perceived impact on the conservation of the area, in a score of 0-1-2-3 (meaning null, low, medium, high).

| ACTIVITY AND CATEGORY   | Soci        |             | SESS        | S IMPO      |             |             |                     | pact        | Estimated<br>No. of Users | Seasonality                |
|---|-------------|-------------|-------------|-------------|-------------|-------------|---------------------|-------------|---------------------------|----------------------------|
| FISHING   | 000         | 0 00        | OHOHH       |             |             | 71301       | v. IIII             | pact        | 140. 01 03013             |                            |
| Subsistence<br>Commercial, local<br>Commercial, non-local                 | 0<br>0<br>0 | 1<br>1<br>1 | 2<br>2<br>2 | 3<br>3<br>3 | 0 0 0       | 1<br>1<br>1 | 2<br>2<br>2         | 3<br>3<br>3 | 14 boats                  | June - Sept.               |
| Controlled recreational<br>Un-controlled recreational<br>Other            | 0           | 1<br>1      | 2 2         | 3           | 0           | 1           | <mark>2</mark><br>2 | 3<br>3      |                           |                            |
| TOURISM   |             |             |             |             |             |             |                     |             |                           |                            |
| Regulated Unregulated Indicate the type of tourism                        | 0<br>0      | 1<br>1      | 2 2         | 3<br>3      | 0           | 1<br>1      | <mark>2</mark><br>2 | 3           |                           | June – Sept<br>June - Sept |
| <br>  | 0           | 1           | 2           | 3           | 0           | 1           | 2                   | 3           |                           |                            |
| Tourism facilities FOREST PRODUCTS  | 0           | 1           | 2           | 3           | 0           | 1           | 2                   | 3           |                           |                            |
| Subsistence Non-timber commercial, local Non-timber commercial, non-local | 0<br>0<br>0 | 1<br>1<br>1 | 2<br>2<br>2 | 3<br>3<br>3 | 0<br>0<br>0 | 1<br>1<br>1 | 2<br>2<br>2         | 3<br>3<br>3 |                           |                            |
| Timber commercial, local<br>Timber commercial, non-local                  | 0           | 1<br>1      | 2 2         | 3<br>3      | 0           | 1<br>1      | 2                   | 3<br>3      |                           |                            |
| Agriculture<br>Stockbreeding<br>Aquaculture                               | 0<br>0<br>0 | 1<br>1<br>1 | 2<br>2<br>2 | 3<br>3<br>3 | 0 0 0       | 1<br>1<br>1 | 2<br>2<br>2         | 3<br>3<br>3 |                           |                            |
| EXTENSIVE STOCK GRAZING   |             |             |             |             |             |             |                     |             |                           |                            |
| Subsistence<br>Commercial, local<br>Commercial, non-local                 | 0<br>0<br>0 | 1<br>1<br>1 | 2<br>2<br>2 | 3<br>3<br>3 | 0<br>0<br>0 | 1<br>1<br>1 | 2<br>2<br>2         | 3<br>3<br>3 |                           |                            |
| OTHER ACTIVITIES  |             |             |             |             |             |             |                     |             |                           |                            |
| -   | 0           | 1           | 2 2         | 3           | 0           | 1           | 2 2                 | 3           |                           |                            |

#### 3.5.3. Traditional economic or subsistence uses

Name any environmentally sound traditional activities integrated with nature, which support the well being of the local population. E.g. land, water use, target species, if closed seasons or closed zones are used as management techniques.

Closed seasons are used as a management technique.

#### 4. MEDITERRANEAN IMPORTANCE OF THE SITE

This Section aims at stressing the importance of the site for conservation at the regional or global scales, as set in Art. 8 para. 2 of the Protocol and B2-a, B2-b and B2-c in Annex I.

### 4.1. PRESENCE OF ECOSYSTEMS/HABITATS SPECIFIC TO THE MEDITERRANEAN REGION

Name the type of habitats considered of Mediterranean specificity, on the basis of the habitat classifications adopted within the framework of MAP, and their estimated cover (Ha).

Posidonia oceanic meadows (Type 1120 of the Habitats Directive 92/43/EEC).

Estimated cover in ha: 6.4

## **4.2.** PRESENCE OF HABITATS THAT ARE CRITICAL TO ENDANGERED, THREATENED OR ENDEMIC SPECIES

A critical habitat is an area essential to the conservation of the species concerned. These species should be those included in Annex II of the Protocol. E.g. Islets and sea stacks, as small islands in the sea or in large bodies of water, mostly important for water-bird colonies; caves appropriate for monk seals; undisturbed sand beaches where marine turtle nesting occurs; coastal lagoons where threatened fish or bird species feed or breed; tidal flats, coastal or benthic substrates important for marine invertebrates, etc.

Name the habitat types and the species linked to it.

Undisturbed sandy beaches where Green turtle (*Chelonia mydas*) and Loggerhead (*Caretta caretta*) nesting occurs are critical to the survival of the two species - and to the survival of the Ghost crab.

#### 4.3. OTHER RELEVANT FEATURES (Art. 8 paragraph 2 in the Protocol)

#### 4.3.1. Educational Interest (B-3 in Annex I)

E.g. particular values for activities of environmental education or awareness

Training courses in turtle conservation techniques and beach management have been held each year since 1989 for Mediterranean scientists, by the Cyprus Wildlife Society in close cooperation with the Department of Fisheries and Marine Research. These trainees are sponsored by the Regional Activity Center for Specially Protected Areas (RAC/SPA), UNEP. There have also been a few trainees, some from other regions, that have been sponsored by the Bern Convention and other supranational organizations.

#### 4.3.2. Scientific Interest (B-3 in Annex I)

Explain if the site represents a particular value for research in the field of natural or heritage sciences.

A marine turtle conservation project, set up by the Department of Fisheries and Marine Research, has been ongoing since 1978, covering both Green and Loggerhead turtles. The project aims at: a) protecting and managing the important nesting beaches, b) protecting eggs and hatchlings from predation and from human activities, c) protecting adult turtles, d) monitoring the turtle population and nesting activity in Cyprus, and e) raising public awareness in turtle conservation.

#### 4.3.3. Aesthetic Interest (B-3 in Annex I)

Name and briefly describe any outstanding natural features, landscapes or seascapes.

|            | sand dunes  |
|------------|---|
|            |   |
| Inc<br>exi | 3.4. Main cultural features dicate if the area has a high representative value with respect to the cultural heritage, due to the estence of environmentally sound traditional activities integrated with nature which support the welling of local populations. |
|            |   |
|            |   |
|            |   |

#### 5. IMPACTS AND ACTIVITIES AFFECTING THE AREA

#### 5.1. IMPACTS AND ACTIVITIES WITHIN THE SITE

#### 5.1.1. Exploitation of natural resources

Assess if the current rates of exploitation of natural resources within the area (sand, water and mineral exploitation, wood gathering, fishing, grazing...) are deemed unsustainable in quality or quantity, and try to quantify these threats, e.g. the percentage of the area under threat, or any known increase in extraction rates.

No exploitation of natural resources occurs in the protected area during the reproductive period of turtles. There are only minor artisanal fishing activities off season. Sand extraction from the area was stopped in the 1980s.

#### 5.1.2. Threats to habitats and species

Mention any serious threats to marine or coastal habitats (e.g. modification, desiccation, disturbance, pollution) or to species (e.g. disturbance, poaching, introduced alien species...) within the area.

Driving on beaches. There is also a threat from pressures for infrastructure for tourism and urban development in the hinterland of the currently protected coastal area. There is also a potential threat from disturbance of nesting turtles and hatchlings by humans if "development" goes ahead amassing human presence in the area.

#### 5.1.3. Demand by an increased population and infrastructures

Assess whether the current human presence or an expected increase in frequentation (tourism, passage of vehicles and boats) and any human immigration into the area, or plans to build infrastructures, are considered a threat.

| Yes – please see 5.1.2 above |  |  |
|------------------------------|--|--|
|                              |  |  |
|                              |  |  |
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|                              |  |  |
|                              |  |  |
|                              |  |  |

#### 5.1.4. Historic and current conflicts

Make a brief statement of any historic or current conflicts between users or user groups.

There has been a saga of conflict between developers and the government (and conservationists) over the use of the area for tourism development.

#### 5.2. IMPACTS AND ACTIVITIES AROUND THE SITE

In Art.7.2-e the Protocol calls for the regulation of activities compatible with the objectives for which a SPA was declared, such as those likely to harm or disturb species or ecosystems (Art.6.h), while Section B4 in Annex I asks to consider "the existence of threats likely to impair the ecological, biological, aesthetic or cultural value of the area" (B4-a in Annex I), recommending the existence, in the area and its surroundings, of opportunities for sustainable development (B4-d) and of an integrated coastal management plan (B4-e).

#### 5.2.1. Pollution

Name any point and non-point sources of external pollution in nearby areas, including solid waste, and especially those affecting waters up-current.

The real effect of debris on the nesting beaches is minimal and is mainly limited to wood and some large objects washed up by the prevailing westerly winds. Manual clean ups are carried out in the nesting season.

#### 5.2.2. Other external threats, natural and/or anthropogenic

Briefly describe any other external threat to the ecological, biological, aesthetic or cultural values of the area (such as unregulated exploitation of natural resources, serious threats on habitats or species, increase of human presence, significant impacts on landscapes and cultural values, pollution problems, any sectorial development plans and proposed projects, etc.), likely to influence the area in question.

In the protected area, there has been no coastal development and photopollution is very limited, with the exception of some temporal incidents. Human presence on the beaches at night is strictly controlled as is driving on the beaches, though some minor problems still exist with driving. There is no mechanical beach cleaning in the Reserve area.

#### 5.2.3. Sustainable development measures

Comment whether the area is covered by an integrated coastal management plan, or bordering upon a zone under such a plan. Are there other opportunities for sustainable development provided for in the neighbouring areas?

The Turtle Reserve is within the Akamas Natura 2000 site. The site was recently proposed to the European Commission and any development in this site will be subject to the provisions of the Habitats Directive. The management plan for the site is currently being elaborated.

There is also a management plan being elaborated (and in part implemented) for the part of the Akamas peninsula outside the Natura 2000 site, which covers issues of sustainable development.

#### 6. EXPECTED DEVELOPMENT AND TRENDS<sup>1</sup>

The foreseeable development and trends of the site do not appear in the list of common criteria for the choice of protected marine and coastal areas that could be included in the SPAMI list, as established in the Protocol and its Annex I. Moreover, this is not always easy to assess and it is necessary to have knowledge about the site, which is not always available to all managers of protected areas; Thus, it is not obligatory to fill in the boxes in this Section 6.

On the other hand, the assessment of this foreseeable evolution and trends constitutes a dynamic supplement to the static knowledge of the site, as it appears in Sections 3, 4 and 5 above. Moreover, it is of significant importance for the definition of the objectives and the management plan of the site.

It thus appears desirable to bringing out the main outlines at least in respect to the following points:

### 6.1. EXPECTED DEVELOPMENT AND TRENDS OF THREATS TO AND PRESSURES UPON THE AREA

Deal briefly in succession with:

- The demographic development in and around the site
- The development of economic activities (other than tourism and recreation) within the area
- The development of local demand on tourism and recreation
- The development of tourism pressure on the area

No development is expected at the Lara-Toxeftra Reserve. Moreover, the Reserve is now also included in the wider Natura 2000 area of Akamas Peninsula (CY4000010: CHERSONISOS AKAMA), in which any future development is controlled.

See also 5.2.3. There will be incentives for suitable economic activities as well as related infrastructure projects. Funding is already earmarked for these though the present economic crisis is expected to affect this.

#### 6.2. POTENTIAL CONFLICTS IN THE AREA

Make a brief statement of potential use conflicts between the users or group of users of the site.

The existing and planned interventions are expected to manage and control the use of the area.

<sup>&</sup>lt;sup>1</sup> By expected development and trends are meant the development, which is thought most likely to occur in the absence of any deliberate intervention to protect and manage the site.

| <b>ENVIRON</b> | (PECTED DE) NMENT AND I n of the pressu |               |                |               | THE NATUR<br>pected arisino |  |
|----------------|---|---------------|----------------|---------------|-----------------------------|--|
| N/A            |   |               |                |               |                             |  |
| SEASCA         | ECTED DEVEL PES OF THE A                | REA: as expe  | cted arising f | from the evol |                             |  |
| No dev         | еюртет із е                             | pected in the | manne envi     | omment        |                             |  |
|                |   |               |                |               |                             |  |
|                |   |               |                |               |                             |  |
|                |   |               |                |               |                             |  |

#### 7. PROTECTION REGIME

#### 7.1. LEGAL STATUS (General Principles "e" and Section C-2 both in Annex I)

#### 7.1.1. Historical background of the protection of the site

In Cyprus, turtles and their eggs have been protected since 1971 by the Fisheries Law. Recovery plans for turtles in the Mediterranean have been spearheaded by the Cyprus Turtle Conservation project, which started in 1978, with the setting up of a seasonal station/hatchery at Lara.

In 1989, the Lara-Toxeftra Reserve was legally established and includes the most important nesting habitats of Green and Loggerhead turtles, though the Chrysochou Bay beaches are also very important for Loggerhead nesting. The Fisheries Law and Regulations provide the statutory framework for their conservation.

#### 7.1.2. Legal texts currently ruling the protection on the site

Enter the national conservation category, the dates and the present enforcement status of the legal instrument declaring the protection of the area. Consider both the land and the marine areas of the site. Include the full text(s) as an annex.

- 1. Fisheries Law (CAP 135) and consolidated 1990 Fishery Regulations.
- 2. Law 153(I)/2003 for the protection of nature and wildlife, which transposed the Habitat Directive (92/43/EC) into national law.
- 3. Modification Law of the Convention for the Protection of the Mediterranean Sea against pollution and Relevant Protocols (i.e. SPA Protocol) Ratification Law 20(III)/2001.

The management regulations for this area are spelled out in the 1989 Fisheries Regulations (consolidated 273/90 regulations). The Foreshore Protection Law was also amended at the same time (1989) incorporating into it the notion of Ecologically Important areas. An Order was issued on the basis of the Foreshore Protection Law also declaring the Lara/Toxeftra coastal area as Ecologically Important, thus giving effect to some of the provisions of the Fisheries Law.

#### Annex III

#### 7.1.3. Objectives (General Principles "a" and D-1 in Annex I)

Name in order of importance the objectives of the area as stated in its legal declaration.

The main objectives of the area is to protect Green and Loggerhead turtles near or on the nesting beaches, including their nesting activity at night, as well as their nests and hatchlings from human impacts such as from fishing, driving on beaches, use of lights etc.

7.1.4. Indicate whether the national protection regime arises from international treaties enforced or from implementation measures of treaties (Art. 6.a in the Protocol).

The protection regime originally (in the 1971, 1982 and 1989 regulations - now all in the consolidated 1990 Fisheries Regulations) did not arise from any supranational treaty. Nonetheless it has since come to cover the provisions of both the Protocol and the Habitats Directive (92/43/EC) of the EU. (These species are priority species under the Habitats Directive). It also now covers the provisions and recommendations of the Bern Convention.

#### 7.2. INTERNATIONAL STATUS

| 7.2.1. Transboundary or high seas areas  |
|--|
| Complete this section only if the area is transboundary, totally or partially in the high sea, or    |
| within areas where the limits of national sovereignty or jurisdiction have not yet been defined.     |
| In this case, mention the modalities of the consultation (Art. 9 para. 3A in the Protocol and        |
| General Principles "d" in Annex I).  |
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| 7.2.2. International category  |
| Mention if the area, or part of it, has been designated and on what date, with an international      |
| conservation category (e.g. Specially Protected Area, Biosphere Reserve, Ramsar Site, World          |
| Heritage Site, European Diploma, Natura 2000, Emerald network, etc.).                                |
|  |
| Lara-Toxeftra: National Marine/Coastal Reserve (Marine Protected Area): Officially                   |
| declared as a protected area in 1989 on the basis of the Fishery Legislation.                        |
|  |
| Chersonisos Akamas (CY4000010) - SCI (Habitats Directive) & SPA (Birds Directive) -                  |
| siteCode: CY4000023 : Officially Classified in 2011 as a Natura 2000 site.                           |
|  |
| 7.3. PREVIOUS LEGAL BACKGROUND AND LAND TENURE ISSUES  |
| Briefly mention if the area or part of it is subject to any legal claim, or to any file open in that |
| connection within the framework of an international body. Describe the land tenure regimes           |
| within the area, and append a map if existing.   |
| Much of the area was and is government award land, as forest land, foreshore, or                     |
| Much of the area was and is government owned land, as forest land, foreshore, or                     |
| Hali-land (government land)  |
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#### 7.4. LEGAL PROVISIONS FOR MANAGEMENT (Section D-1 in Annex I)

#### 7.4.1. Zoning

Briefly state if the legal text protecting the area provides for different zones to allocate different management objectives of the area (e.g. core and scientific zones in both land and sea, fishing zones, visitation, gathering, restoration zones etc) and in this case the surface area in ha of these zones. Include a map as an annex

No zoning exists – the protected area is considered as core area.

#### 7.4.2. Basic regulations

Mention the provisions, which apply to the area concerning the implementation of Article 6 of the Protocol (paragraphs a to i), Section D5 (a to d) in the Annex I and Article 17 of the Protocol.

The Lara/Toxeftra area was declared as a protected area by the Government of Cyprus in 1989, to protect the nesting of *Caretta caretta* and *Chelonia mydas*. The area is protected through Regulations of the Fisheries Law which were amended in 1989 (Fisheries Law, Cap 135, 1989 Regulations). According to Article 13 of the consolidated Fisheries Regulations (273/90), it is prohibited to capture, kill, buy, possess or sell a marine turtle, as well as their eggs, or attempt to do any of these..

The regulations prohibit from the 1<sup>st</sup> of June up to the 30<sup>th</sup> of September, camping, the use of umbrellas and sunbeds, the presence of people in the area at night, the use of vehicles on the beaches, entering and anchoring of boats and fishing (except with rod and line) in the sea area down to the 20m isobath. The Foreshore Protection Law was also amended to stop local authorities from granting leases (permits) for the use of the foreshore for umbrellas, sunbeds etc. on a commercial scale.

The Lara/Toxeftra nature reserve is managed by the Department of Fisheries and Marine Research of the Ministry of Agriculture, Natural Resources and Environment. The area has a management plan and a monitoring program during the turtle nesting season. This includes a small information center. Visitors are warned with notices at several points in the area. During the nesting / hatching season (1<sup>st</sup> June to 30<sup>th</sup> September) beaches are under permanent control and the legislation/regulations are enforced. Turtles are tagged and nesting is monitored. All eggs/nests are protected *in situ* by special aluminium cages, on the beach they were laid. The cages are mainly used to avoid predation by foxes. A small number of nests (10-20) from very touristy beaches are moved to the hatchery, which is a fenced off part of the beach. To avoid destruction by storms some nests are moved up the same beach they were made.

Through the management plan, the turtles are protected through at least part of their life cycle (nesting females, pre-nesting and nesting stage, eggs, incubation, hatchlings and resident young and adult turtles). Moreover it ensures the study and the monitoring of their population and their reproductive activity, along with the protection of their nesting sites.

Training courses in turtle conservation techniques and beach management are held each year since 1989 for Mediterranean scientists by the Cyprus Wildlife Society, in close cooperation with the Department of Fisheries and Marine Research. These trainees are mainly sponsored by the Regional Activity Center for Specially Protected Areas (RAC/SPA of MAP/UNEP). The project is financed by the government.

#### 7.4.3. Legal competencies

Section D4 in Annex I states that the competence and responsibility with regard to administration and implementation of conservation measures for areas proposed for inclusion in the SPAMI List must be clearly defined in the texts governing each area. Additionally Art.7.4. of the Protocol calls for the provision of clear competencies and co-ordination between national land and sea authorities, with a view to ensuring the appropriate administration and management of the protected area as a whole. Mention in which way do the <u>legal provisions</u> clearly establish the institutional competencies and responsibilities for the administration and conservation of the area, and if being the case, their co-ordination means, including those between land and sea authorities.

The Department of Fisheries and Marine Research is the responsible government department for law enforcement, both on land and in the sea area of the reserve. During the nesting period, both land and sea patrolling is carried out by the personnel of the Department, which is also responsible for compounding offences and/or for forwarding cases to the Attorney General's office for prosecution.

Moreover, the Port and Marine Police also works closely with the Department, as needed, in patrolling the sea area of the Reserve.

#### 7.4.4. Other legal provisions

Describe any other relevant legal provisions, such as those requiring a management plan, the establishment of a local participation body, binding measures for other institutions or economic sectors present in the area, allocation of financial resources and tools, or any other significant measures concerning the protection and management of the area or its surrounding zones.

| These relate mainly to the provisions of the Habitats Directive of the EU for which a management plan is useful but not mandatory |
|---|
|   |
|   |
|   |
|   |
|   |

#### 8. MANAGEMENT

Through the General Principles, para. (e) in the Annex I, the Parties agree that the sites included in the SPAMI List are intended to have a value as examples and models for the protection of the natural heritage of the region. To this end, the Parties ensure that sites included in the List are provided with adequate legal status, protection measures and management methods and means.

#### 8.1. INSTITUTIONAL LEVEL

8.1.2 Other participants in the management hody

| Department of Fisheries and Marine | Research | (DFMR) | of the | Ministry | of A | Agriculture |
|------------------------------------|----------|--------|--------|----------|------|-------------|
| Natural Resources and Environment  |          |        |        |          |      | _           |

| Such as other national or local institutions, as stated in Section D6 in Annex I. |
|---|
|   |
|   |

#### 8.1.3. Participants in other committees or bodies

Such as a scientific committee, or a body of representatives from the local stakeholders, the public, the professional and non-governmental sectors, as in Sections B4-b and B4-c in Annex I

The Cyprus Wildlife Society has been responsible for implementing the monitoring and conservation plan and is answerable to the DFMR on a biennial or annual basis for this.

#### 8.1.4. Effectiveness

Satisfactory

As stated in Section B4 of Annex I, assess as very low, low, moderate, satisfactory, very satisfactory, and comment as needed on the following aspects:

a) Effectiveness of the co-ordination, where existing:

b) Quality of involvement by the public, local communities, economic sectors, scientific community:

Mostly satisfactory

#### **8.2. MANAGEMENT PLAN** (as set out in D7 of Annex I)

#### 8.2.1. Management Plan

State if there is a management plan (MP) and in this case include the document as an annex. In the absence of a MP, mention if the main provisions governing the area and the main regulations for its protection are already in place and how (D7 in Annex I) and if the area will have a detailed management plan within three years (D7 in Annex I).

The methods used are those prescribed in the "Manual for the Marine Turtle Conservation in the Mediterranean". (A.Demetropoulos and M Hadichristophorou 1995 and "Addendum 1 to the Manual – Conservation Practices" by the same authors). Addendum 1 is attached (Annex IV).

#### 8.2.2. Formulation and approval of the Management Plan

Mention how the MP was formulated, e.g. by an expert team and/or under consultation and/or participation with other institutions or stakeholders. State the legal status of the MP, whether it is officialised, and how, and if it is binding for other institutions and sectors involved in the area.

The Management Plan measures that affect the public are to very a large degree in the Fisheries Regulations of 1989. They were proposed by the Fisheries Department, approved by the Council of Ministers and debated and approved in the House of Representatives.

The scientific/monitoring/conservation component is in 8.2.1 above and is institutionalised by being mandatory in the Agreement signed with the Cyprus Wildlife Society that has been implementing the plan and its conservation practices.

#### 8.2.3. Contents and application of the Management Plan

State the <u>degree of detail</u> in the MP by entering YES or NO in the following list of potential contents, and assess the <u>degree of implementation</u> of the MP by using the 0-1-2-3 score on the right hand side:

|                                | Existing   | in MP                        | Deg | ree c | of appl | ication |
|--------------------------------|------------|------------------------------|-----|-------|---------|---------|
| Detailed management objectives | <u>YES</u> | NO                           | 0   | 1     | 2       | 3       |
| Zoning                         | YES        | NO                           | 0   | 1     | 2       | 3       |
| Regulations for each zone      | YES        | NO                           | 0   | 1     | 2       | 3       |
| Governing body(ies)            | <u>YES</u> | NO                           | 0   | 1     | 2       | 3       |
| Management programmes as:      |            |                              |     |       |         |         |
| Administration                 | <u>YES</u> | NO                           | 0   | 1     | 2       | 3       |
| Protection                     | YES<br>YES | NO                           | 0   | 1     | 2       | 3       |
| Natural resource management    | <u>YES</u> | NO                           | 0   | 1     | 2       | 3       |
| Tourism and Visitation         | YES        | NO                           | 0   | 1     | 2       | 3       |
| Education and Training         | YES        | NO                           | 0   | 1     | 2       | 3       |
| Research and Monitoring        | YES        | NO                           | 0   | 1     | 2       | 3       |
| Services and Concessions       | YES        | <u>NO</u>                    | 0   | 1     | 2       | 3       |
| Fund raising activities        | YES        | <u>NO</u><br><u>NO</u><br>NO | 0   | 1     | 2       | 3       |
| Periodic revisions of the MP   | <u>YES</u> | NO                           | 0   | 1     | 2       | 3       |

#### 8.3. PROTECTION MEASURES

By Art. 6 of the Protocol the Parties agree to take all the necessary protection measures required for the conservation of the area, particularly the strengthening the application of the other Protocols to the Convention, and through the regulation of any other activity likely to harm the natural or cultural value of the area, such as economic, recreation or research activities. As per Section D2 in Annex I, the protection measures must be adequate to the site objectives in the short and long term, and take in particular into account the threats upon it.

#### 8.3.1. Boundaries and signing

Briefly, state if the boundaries of the area and its zones are adequately marked in the field, both on land, in the sea, and at the principal points of access.

There are several signs on the land, at the entrance and near the beaches that describe the regulations in force, so that the public knows (and is warned) as to what is allowed and what is not. There is a map of the area on the main signs that indicates the boundaries of the Reserve on the land and at sea. No buoys are employed in the sea, since the site is clearly defined by the 20m isobaths in the maps.

#### 8.3.2. Institutional Collaboration

Name the different national and local institutions or organisations with legal responsibilities or involved in the protection and surveillance of land and sea zones, and any measures or mechanisms through which their co-ordination is pursued.

| See 7.4.3 |  |  |  |  |
|-----------|--|--|--|--|
|           |  |  |  |  |
|           |  |  |  |  |
|           |  |  |  |  |

#### 8.3.3. Surveillance

Consider the adequacy of the existing protection means (human and material), and your present ability to survey land and sea uses and accesses

Surveillance of the area is effected during the nesting period, but there is a need to increase surveillance and enforcement of the law and regulations that cover the area (wardens).

#### 8.3.4. Enforcement

Briefly, consider the adequacy of existing penalties and powers for effective enforcement of regulations, whether the existing sanctions can be considered sufficient to dissuade infractions, and if the field staff is empowered to impose sanctions.

The existing penalties and powers of the DFMR are sufficient. The penalties are fines for contraventions are up to 8,560 euro and/or up to six months imprisonment. The DFMR can compound offences (i.e., fine the offender without court proceedings, provided the offender agrees to pay the fine). If he does not agree then the case is taken to court.

#### 9. AVAILABLE RESOURCES

#### **9.1. HUMAN RESOURCES** (Art. 7.2.f in the Protocol)

#### 9.1.1. Available staff

Assess the adequacy of the human resources available to the management body, in number of employees and training level, both in central headquarters and in the field. Indicate if there are staff training programmes.

The staff of the Department of Fisheries and Marine Research (DFMR) is also involved in many other activities and are not exclusively working towards the management and protection of marine turtles. Therefore, during the nesting season, the DFMR, through tenders, assigns the monitoring/conservation programme of marine turtles to experts.

#### 9.1.2. Permanent field staff

Answer YES or NO on the current existence of the following FIELD staff categories. If YES, enter the number of staff either permanent or part-time in that category, and evaluate on a 0-1-2-3 score (0 is low, 3 is high) the adequacy of their training level.

|  | YES/NO                   |                | NUMBER<br>Permanent/Part-time | ADEQUACY OF TRAINING LEVEL |             |                  |             |  |
|--|--------------------------|----------------|-------------------------------|----------------------------|-------------|------------------|-------------|--|
| Field Administrator Field Experts (scientific monitoring) Field Technicians (maintenance, etc) | YES<br>YES<br>YES        | NO<br>NO       |                               | 0 0                        | 1<br>1      | 2<br>2<br>2      | 3<br>3<br>3 |  |
| Wardens Of which marine wardens Guides Other   | YES<br>YES<br>YES<br>YES | NO<br>NO<br>NO |                               | 0<br>0<br>0<br>0           | 1<br>1<br>1 | 2<br>2<br>2<br>2 | 3<br>3<br>3 |  |

#### 9.1.3. Additional Support

Briefly, describe if the area currently has the advantage of other external human resources in support of its objectives, either from other national or local institutions, volunteer programmes, non-governmental organisations, academic or international organisations. Mention if there are any significant changes in prospect for the near future.

The turtle conservation programme has been assigned, through tender procedures, to turtle experts in an NGO over the last few years. This arrangement is foreseen to continue in the near future, subject of course to tender procedures. The experts that run the project are bound to report to the DFMR any contraventions of the legislation.

#### 9.2. FINANCIAL RESOURCES AND EQUIPMENT

By Art. 7 in the Protocol, the Parties agree to adopt measures or mechanisms to ensure the financing of the specially protected areas (Art.7.2.d), and the development of an appropriate infrastructure (Art.7.2.f). The General Principles para. "e" in the Annex I call upon the Parties to provide the areas with adequate management means.

#### 9.2.1. Present financial means

Note if the basic financing is ensured: a core funding for basic staff, protection and information measures. Who provides this core funding? Briefly assess the degree of adequacy of the present financial means for the area, either low, moderate, satisfactory; e.g. the implementation of the management plan, including protection, information, education, training and research.

The cost of the management of the area is provided by the national funds of the Department of Fisheries and Marine Research. The Cyprus Wildlife Society also contributes significantly to the project both in cash and in kind.

#### 9.2.2. Expected or additional financial sources

Briefly describe any alternative sources of funding in use or planned, and the perspectives for long-term funding from national or other sources.

No long term changes in funding are currently planned, but the present economic situation cannot preclude changes.

#### 9.2.3. Basic infrastructure and equipment

Answer YES or NO to the following questions, and if YES, assess with a score of 1-2-3 (1 is low, 3 is high) the adequacy of the basic infrastructure and equipment.

|   | YES/                     | ΝO             |                    | Υ           |                         |                  |
|---|--------------------------|----------------|--------------------|-------------|-------------------------|------------------|
| Office and/or laboratory in the field<br>Signs on the main accesses<br>Guard posts on the main accesses | YES<br>YES<br>YES        | NO<br>NO       | <b>0</b><br>0<br>0 | 1<br>1<br>1 | 2<br>2<br>2             | 3<br>3<br>3      |
| Visitors information centre Self guided trails with signs Terrestrial vehicles Marine vehicles          | YES<br>YES<br>YES<br>YES | NO<br>NO<br>NO | 0<br>0<br>0        | 1<br>1<br>1 | 2<br>2<br>2<br><b>2</b> | 3<br>3<br>3<br>3 |
| Radio and communications Environmental awareness materials Capacity to respond to emergencies           | YES<br>YES<br>YES        | NO<br>NO<br>NO | 0<br>0<br>0        | 1<br>1<br>1 | 2<br>2<br>2             | 3<br>3<br>3      |

Comment on basic infrastructure and equipment

#### 9.3. INFORMATION AND KNOWLEDGE

By Section D3 of Annex I, the Parties agree that the planning, protection and management of a SPAMI must be based on an adequate knowledge of the elements of the natural environment and of socio-economic and cultural factors that characterize each area. In case of shortcomings in basic knowledge, an area proposed for inclusion in the SPAMI List must have a programme for the collection on the unavailable data and information.

#### 9.3.1. State of knowledge

a) Assess the general state of knowledge of the area.

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b) Briefly describe the extent of knowledge of the area, considering at least specific maps, main ecological processes, habitat distribution, inventories of species and socio-economic factors, such as artisan fishing.

The area is well known and maps are available to the public along with information material and brochures. GIS maps of nesting beaches and annual nesting information are available.

#### 9.3.2. Data collection

Through the monitoring program which takes place every nesting season, the results show that the management, protection and the monitoring of marine turtle nesting are very effective.

#### 9.3.3. Monitoring programme

Section D8 in Annex I states that to be included in the SPAMI List, an area will have to be endowed with a monitoring programme having a certain number of significant parameters, in order to allow the assessment of the state and trends of the area, as well as the effectiveness and protection and management measures, so that they may be adapted if need be (indicators may, for instance, supply information about species status, condition of the ecosystem, landuse changes, extraction of natural resources -sand, water, game, fish-, visiting, adherence to the provisions of the management plan, etc.).

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YES NO

- b) If NO, are there plans to start one, and when?
- c) If YES, assess as low, medium, satisfactory,

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its adequacy and present level of development.

d) If YES, who is/are carrying out the monitoring programme?

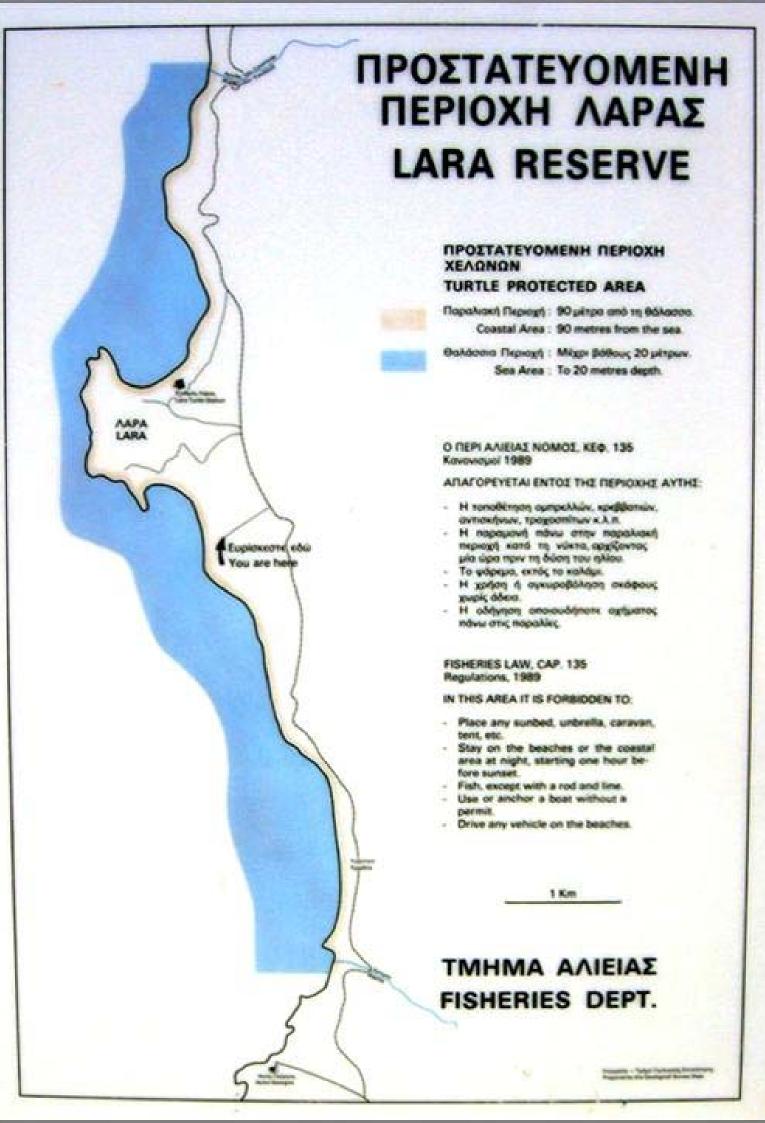
The Department of Fisheries and Marine Research is the responsible for the monitoring program and it has been assigning the programme to experts through the process of a tender

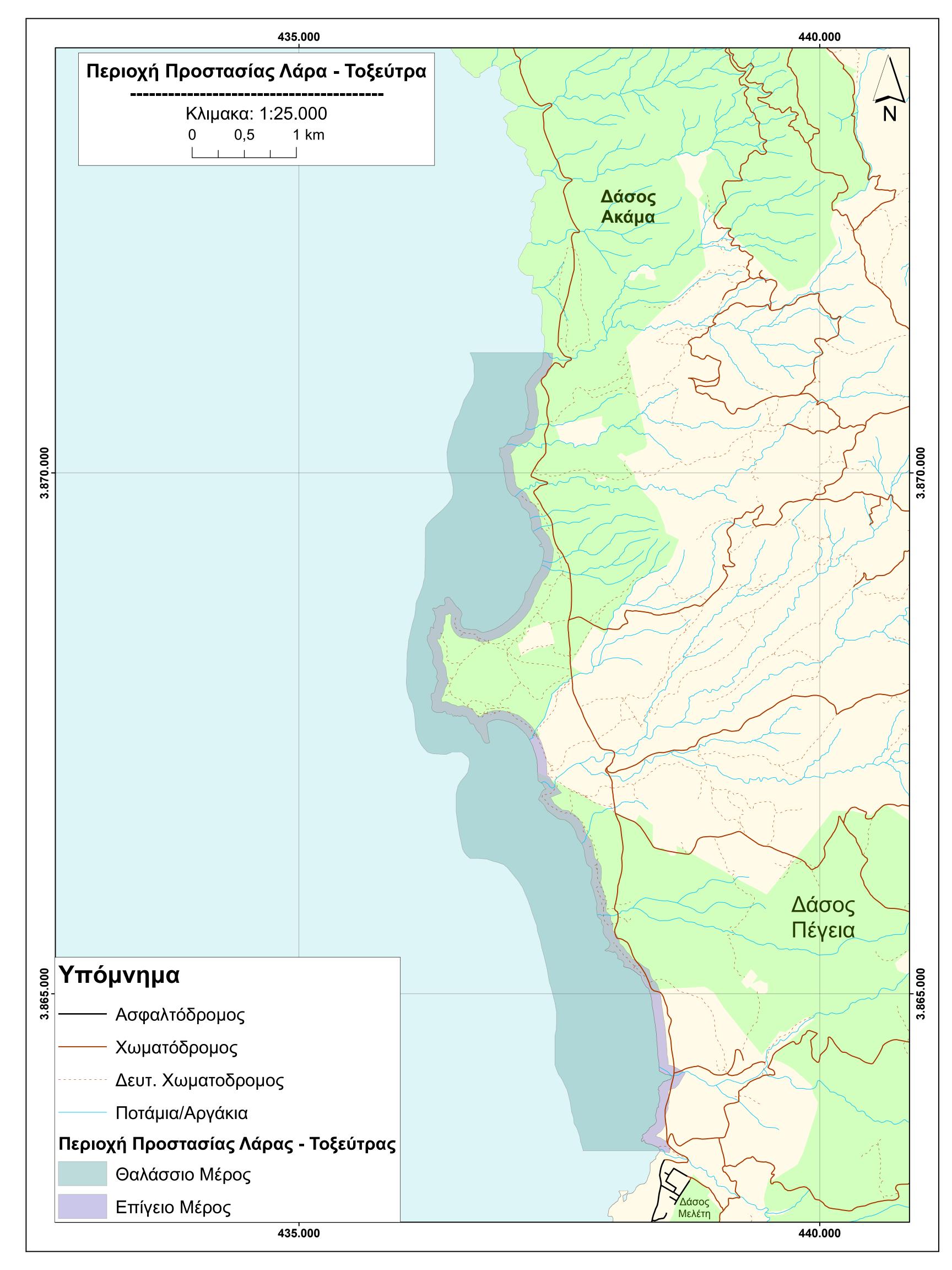
d) If YES, briefly describe how the monitoring programme will be used in reviewing the management plan.

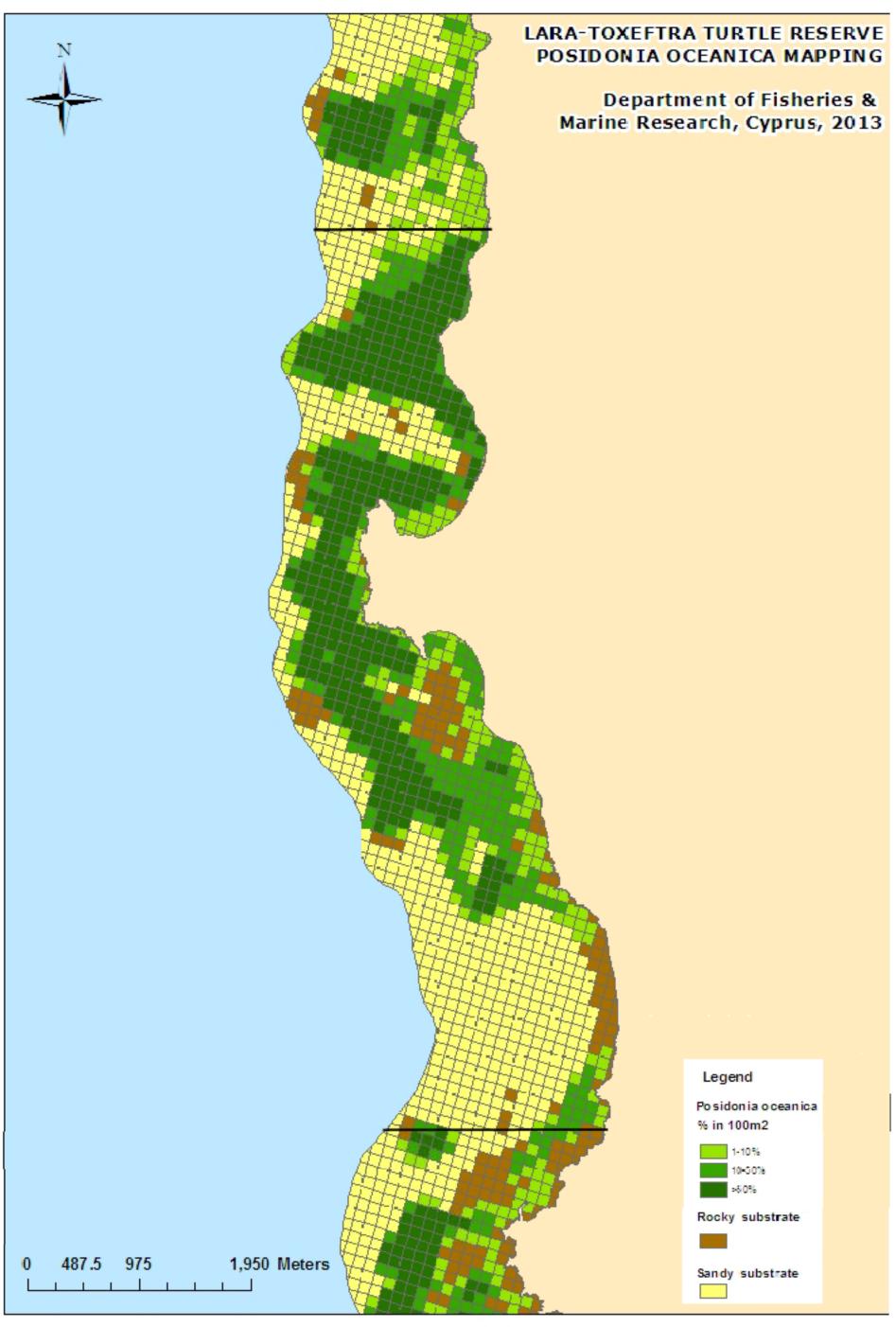
The monitoring program has been in effect since 1978 and it shows positive results with very significant increases in nesting and therefore, that the management plan works effectively. Fine tuning of the management plan have been effected at times on the basis of the results of the monitoring programme

| 10. Other information, if any |  |  |  |  |  |
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| <b>11. CONTACT ADDRESSES</b> (name(s), position(s) and contact address(es) of the person(s) in charge with the proposal and that compiled the report)  |
|--|
| <ol> <li>Marina Argyrou, Senior Fisheries and Marine Research Officer, Department of Fisheries and Marine Research (DFMR), 101 Vithleem Street, 1416 Nicosia, Cyprus. (email: margyrou@dfmr.moa.gov.cy)</li> <li>Melina Marcou, Fisheries and Marine Research Officer, Department of Fisheries and Marine Research (DFMR), 101 Vithleem Street, 1416 Nicosia, Cyprus. (email: mmarcou@dfmr.moa.gov.cy)</li> <li>Andreas Demetropoulos. President, Cyprus Wildlife Society, P.O. Box 24281, Nicosia 1703, Cyprus (email: andrecws@logos.cy.net).</li> </ol> |
|  |
| 12. SIGNATURE(S) ON BEHALF OF THE STATE(S) PARTY/PARTIES MAKING THE PROPOSAL   |
|  |
| 13. DATE   |







Note: The black lines show approximately the boundaries of the Lara-Toxeftra Reserve.