ANNOTATED FORMAT FOR THE PRESENTATION

REPORTS FOR THE AREAS PROPOSED

FOR INCLUSION IN THE SPAMI LIST

SEA BOTTOM OF THE
LEVANTE OF ALMERIA

SPAIN

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 IDENTIFICATION

1.1. COUNTRY/COUNTRIES (in the case of transboundary areas)

SPAIN

1.2. ADMINISTRATIVE PROVINCE OR REGION

ALMERIA (ANDALUSIA)

1.3. NAME OF THE AREA

SEA BOTTOM OF THE LEVANTE OF ALMERIA

1.4. GEOGRAPHIC LOCATION

Describe its geographical boundaries, e.g. rivers, roads, geographical or administrative boundaries (do not describe the co-ordinates here; please make a separate annex with a map and a description of geographical co-ordinates as stated in the legal declaration of the area).

The space named *Sea Bottom of the Levante of Almeria* is found to the northeast of the province of Almeria, Spain, and constitutes a wide band of territory of some 50 km long distributed parallel to the coast (see adjoined chart).

In its totally submerged under the seawater with the exception of two small islands: the island of San Juan de los Terreros measuring 1.5 ha and Isla Negra measuring 0.9 ha. They are close to each other and situated in the northernmost part of the area.

In the terrestrial part close to the space there exist two main water courses, the almost permanently filled Aguas River, and the Almonzora River that is markedly fuller in summer.

The marine current that carries out the movement of the waters in the zone is predominately in a north-south direction.

There are 6 towns that are closely affected by the coast (from north to south): Pulpí, Cuevas de Almanzora, Vera, Garrucha, Mojácar and Carboneras.

In spite of the fact that this is an underwater space, it represents along an important section of the coast numerous populations that base their economy on tourism, intensive agriculture, and secondarily fishing, which supposes a strong activity in the nearby territory.

The communications are excellent with the motorway that runs from north to southeast with the main populations of the region of Murcia and with the province capital of Almeria. In addition to this artery, the secondary roads that join the coastal towns and those that connect to the motorway are important. There also exists a road that follows along the entire coast.

1.5. SURFACE OF THE AREA (total)

6313.5	(in national unit)	6313.5	(in ha)

1.6. LENGTH OF THE MAIN COAST (Km)

Approximately 50 Km.

2. EXECUTIVE SUMMARY (maximum 3 pages)

The Sea Bottom of the Levante of Almeria represents a strip of marine territory parallel to the coast that is considered of environmental interest because it presents a high grade of naturalness over a very significant surface (6316 ha).

From a geological point of view, the surroundings of the zone present three large units: one is a volcanic origin mountain that links to the south with Cabo de Gata, a wide sedimentary basin that collects the Quaternary materials between Vera and Cuevas de Almanzora, and finally some mountain reliefs from the tertiary period corresponding to the Alpujárride mantle in the northernmost part of the area.

There is a wide human presence in the zone, especially in the less abrupt reliefs of the territory that correspond to the sedimentary basin, which has permitted the implantation of numerous centres with populations between 2000 and 9000 inhabitants.

The lines of communication in the territory are predominately terrestrial and are centralised around a motorway that runs from north to south throughout the entire area, thus permitting fast access to the towns in the zone.

With respect to the marine floors, the space presents a great added value due to the types of vegetation that develop and the associated biodiversity. The types of solid (rocky, sandy) and the diversity of the vegetation (algae and important surfaces covered with *Posidonia oceanica*) constitute the basis for a great richness of fauna. Of the species pointed out in Annex II of the protocol for the designation of Specially protected Areas of the Mediterranean (SPAMI), 2 are found in the proposed zone.

With regards to the marine fauna, the catalogues completed up to now include an important community associated both with the soft, rocky soils and the swimming species of fish and mammals. Of the catalogue of species of Annex II for the designation of SPAMI areas, 5 are found within the proposed space.

The importance of this biodiversity is manifested in the presence of 2 habitats included in the European habitats Directive, especially for the large surface of prairies of *Posidonia oceanica*, that are habitats considered priority in the framework of the European Union.

Associated with this biological richness, the fishing activity is significant in the zone, though it does not represent an important biological resource. Given the scarcity of fish, the danger of overexploitation of the fishing resources has been greater in recent years, obligating the fishermen to use prohibited drag fishing techniques to obtain a profitable economy, which has caused an alteration of the sea bottom.

On the other hand, the great accessibility to the zone, the pleasant climate and the naturalness of the environmental characteristics have been the motor in the past decades to activate a tourist industry that is ever growing, which has also generated a deterioration in the resources that is also ever growing.

The activities that generate impact on the natural medium of the zone are the water sports associated with the tourist industry, as well as the spilling of wastes from a chemical industry.

In spite of everything, the area that is proposed presents indubitable ecological values that merit protection and conservation since we are talking about the bottoms with the most important prairies of *Posidonia* along the Spanish coast.

3. SITE DESCRIPTION

3.1. TYPOLOGY OF THE SITE

3.1.1. Terrestrial surface, excluding wetlands (ha):		2.4 ha
3.1.2. Wetland surface (ha):		0
3.1.3. Marine surface (Sq. Km):	Marine internal waters	0
	Territorial sea	6,311.1 ha
	High sea	0

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.

The landscape of the Sea Bottoms of the Levante of Almeria and the nearby terrestrial portion is configured, from a geological point of view, over 5 large units distributed from south to north in the following way: the abrupt neogenic mountains of the Volcanic Complex (which encompass the southern portion), the plioquaternary material of the Carboneras basin, the snow covered reliefs of the alpujarra region (Sierra de Cabrera), the neogenic-quaternary materials of the Sorbas basin, the neogenic-quaternary materials of the Vera basin and the snow covered materials of the alpujarra region of Sierra de Almagrera.

The Volcanic Complex of Cabo de Gata constitutes a small part of an ample volcanic province that currently extends submerged under the Alborán Sea, and that began to be generated about approximately 14 to 15 million years ago (in the Miocene). The volcanic activity, essentially underwater, stayed active until about 6.5 million years ago. The surface exit of the magma is associated with a great thinning in the earth's crust in the zone of the Alborán Sea produced after the continental collision of the great African and European plates, in the Alpine orogeny. The volcanic activity operated in various successive stages, among which the dismantling was produced, due to erosion, of the reliefs created by the volcanoes and the accumulation of marine sediments among volcanic rocks. Some volcanic edifices finally emerged as islands, such is the case of the island of San Juan de los Terreros.

The plioquarternary materials of the Carboneras basin, as well as the neogenic-quaternary of the Sorbas and Vera basins house an exceptional register of the geological processes that occurred during the Quaternary, and whose mark permits the reconstruction of the geologic history of this sector of the coast and of the processes that happened in this era in the context of the Betica Mountain Range and on the edge of the Mediterranean basin. Recent forms are present that belong to the marine morphogenetic domain (marine terraces, and coastal beaches) and the continental (cone and fan shaped alluvial formations, glacis, fluvial terraces and mountain bases).

Finally, the snow covered materials of the alpujarra regions of Sierra Cabrera and Sierra Almagrera, represent the counterfort of mantles originating from the betic geological unit, that appear from the west of Andalusian to the Balearic Islands, a product of the rising up generated during the alpine orogeny. In general they are hard materials (carbonates) though metamorphic rocks also appear such as schists, quartzite, etc. In both cases the reliefs generated demonstrate a very steep slope, that continue even right up to the coast.

3.2.1. Geology/Geomorphology (continued):

With respect to the underwater portion, the sea bottoms closest to the coast are for the most part sandy, though some rocky bottoms are found, which have a volcanic origin, in the meridian portion of the area. Surrounding the above-mentioned material, the farthest bottoms from the coast are made up predominately of mud.

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

There are no relevant formations in this zone.

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

a) Length of sandy beaches:	22.5
b) Length of pebble or stony beaches:	12.7
c) Length, height and depth of active sand-dunes:	0

3.3. FRESHWATER INPUTS

3.3.1. Mean annual precipitation (in mm)

290 mm

3.3.2. Main water courses (permanent and seasonal)

Not Applicable to the Proposed Area.

3.3.3. Estuarine areas: Existence and brief description

Not Applicable to the Proposed Area.

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

Not Applicable to the Proposed Area.

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)

Habitat Code	Habitat	Surface
1120	Posidonia Prairies	5493
1430	halo-nitrophiles underbrush (*Pegano-Salsoletea*)	1

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 (C) (U) (O)	Global STATUS (r) (e) (t)	Local STATUS (R) (B) (F) (W) (M)
MARINE PLANTS			
Cystoseira mediterranea	(C)	(r)(t)	
Posidonia oceanica	(C)	(r)	
MARINE INVERTEBRATES			
Dendropoma petraeum	(U)	(r) (t)	
FISH			
Hyppocampus hyppocampus	(U)	(r) (t)	
REPTILES			
Caretta caretta	(U)	(t)	(B) (F) (M)
BIRDS			
Larus audouinii	(U)	(t)	(F)
Calonectris diomedea	(U)	(r)	(B)
Phalacrocorax aristotelis	(O)	(t)	(F)
Hydrobates pelagicus	(U)	(t)	(B)
Pelecanus sp.	(O)	(r)	(W)
Alca torda	(U)	(r)	(W)
Fratercula arctica	(U)	(r)	(W)
Egretta garzetta	(U)	(r)	(B)

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

The terrestrial flora is all included in the framework of typical specimens in the biogeography of Murcia and Almeria, which due to its climatic and geological characteristics is one of the spots with the most unique flora in the entire Peninsula. The scarcity of annual rainfall is the main factor that explains the abundance of ephemeral annual plants. Among the underbrush we can find unique elements in a European context such as *Ziziphus lotus*, *Periploca laevigata*, *Chamaerops humilis*, *Stipa tenacissima*, etc. and two endemic species (2 species)

With respect to the marine flora, the principal species corresponds to phanerogams of great ecological interest such as *Posidonia oceanica* or *Cymodocea nodosa*, as well as communities of brown algae with *Cystoseira mediterranea* as the most representative species or quality indicator.

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

The most significant populations of terrestrial fauna are made up of colonies of marine birds that nest in the two islands in the north of the space. Among the most representative species are the *Calonectris diomedea*, *Hydrobates pelagicus*, *Egretta garzetta* and *Bubulcus ibis* that nest in the zone, as well as the *Larus audouinii*, or the *Phalacrocorax aristotelis*, that use the zone as a resting and feeding point.

With respect to the marine fauna, it is worthwhile to mention that the diversity of species that the area presents is in direct relation to the variety of environments and types of soil that appear in the marine medium. Of these habitats the ones that stand out are the betony communities with soft, rocky floors in their distinct layers (supra-, meso- and infra-coastal), though there also exist notable swimming species among which we find *Caretta caretta* that has made its nests on the beaches of this year in 2001.

3.5. HUMAN POPULATION AND USE OF NATURAL RESOURCES

3.5.1 Human population

a) Inhabitants inside the area:	Number	Date of data
Permanent	0	01-01-2001
Seasonal number (additional to permanent)	0	01-01-2001
b) Inhabitants surrounding the area:	Number	Date of data
Permanent	39470	01-01-1996
Seasonal number (additional to permanent)	An estimated 74000 additional	01-01-1996

Description of the population

Though within the space there are no permanent populations, the immediate terrestrial surroundings to the proposed zone present an important population distributed in 7 population nuclei, to which are added small secondary nuclei and numerous rural dwellings. The largest human presence in the space occurs in the summer months, though there exists a small influx of tourists in spring and autumn due to the pleasant climate in those seasons.

Main human settlements and their populations

The following are the main human nuclei and their populations: Pulpi 5291, Cuevas de Almanzora 9495, Vera 6695, Garrucha 5001, Mojácar 4525, Turre 2151 and Carboneras 6312. Other relatively near important nuclei are: Huercal – Overa 13839, Antas 2666, Los Gallardos 1738 and Bedar 550.

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 principal uses that are carried out in the interior of the zone correspond to professional fishing using the arts of dragging and netting, and there is also fishing done by traditional methods.

In the surroundings of the area and within the terrestrial portion, the principal uses come from tourism, with intensive and traditional agriculture being the second source of income. In third place we find fishing, with the Garrucha port the place where the largest part of the fishing business is concentrated.

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	ASSESS IMPORTANCE OF Socio-economic	Conserv. Impact	Estimated No. of Users	Seasonality
FISHING				
Subsistence	**1**	**1**		
Commercial, local	**2**	**2**		
Commercial, non-local	**1**	**2**		
Controlled recreational	**1**	**1**		
Un-controlled recreational	**1**	**2**		
Other				
TOURISM				
Regulated	**2**	**1**		
Unregulated	**2**	**2**		
Indicate the type of tourism -. -..... . .				
Tourism facilities	**2**	**2**		
FOREST PRODUCTS				
Subsistence	**0**	**0**		
Non-timber commercial, local	**0**	**0**		
Non-timber commercial, non-local	**0**	**0**		
Timber commercial, local	**0**	**0**		
Timber commercial, non-local	**0**	**0**		
Agriculture	**0**	**0**		
Stockbreeding	**0**	**0**		
Aquaculture	**0**	**0**		
EXTENSIVE STOCK GRAZING				
Subsistence	**0**	**0**		
Commercial, local	**0**	**0**		
Commercial, non-local	**0**	**0**		
OTHER ACTIVITIES - -				

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.

Traditional fishing is the only activity integrated in the natural medium, and is located in the small coastal nuclei. This is carried out by small boats following traditional arts such as the barrier (to intercept migratory species), three-net fishing (to catch diverse fish and cephalopods).

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).

The area presents various marine habitats of general interest in the Mediterranean, where a complex ecosystem is developed with a high biodiversity that has its origin in the variety of sea bottoms that appear in the zone.

Therefore this is a place of environmental interest that has been maintained in an excellent state in the context of the Mediterranean.

To a lesser extent the presence of the two islands stands out that house colonies of birds such as *Bubulcus ibis, Egretta garzetta, Calonectris diomedea, Hydrobates pelagicus*, that nests in the zone, as well as *Larus audouinii* or *Phalacrocorax aristotelis* that use the zone partially for feeding and as a rest area.

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.

The principal interest of the area that is proposed resides in the enormous development and extension of the *Posidonia oceanica* prairies, constituting one of the places with higher value in the Iberian Peninsula.

These prairies extend along a wide strip, in some points more than 3 Km wide, and extend from the coastline 30 metres deep. The excellent state of conservation of the prairie stands out in the zone as well as the rocky soils that surround San Juan de los Terreros Island and the small barrier reef of *Posidonia* situated in front of El Calón.

The presence of this habitat enriches the quality and quantity of the community of fish in the area.

Therefore, this is a unique place due to its ecological characteristics as well as for the composition of the habitats clearly threatened in the Mediterranean.

Finally, it is necessary to emphasise the presence of *Caretta caretta* that has built its nest on the beaches of the village of Vera, with the eggs hatching in September 2001, a fact that represents one of the few places of the western Mediterranean where the tortoise has nested.

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

Within the natural elements that make up the space, the following stand out as relevant for education:

- Geological formations of volcanic complex
- Geomorphologic coast of cliffs and island
- Littoral marine habitats, and over soft and hard soils

In the surroundings the following can be noted among others:

- Archaeology mining – industrial
- Steppe terrestrial and subdesert fauna
- Subdesert flora and vegetation with spiny underbrush

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.

Same as the above point.

4.3.3. Aesthetic Interest (B-3 in Annex I)
Name and briefly describe any outstanding natural features, landscapes or seascapes.

Outside of the proposd area and adjacent to it, a series of aesthetically interesting landscapes inthe terrestrial portion are developed. Among them the following stand out:

An exotic geological volcanic landscape with a proliferation of domes, furnaces and a natural museum of volcanic structures and textures, whose reddish colours give the landscape a character reminiscent of Africa.

A peculiar vegetation cover characterised by the general absence of tree mass but with an abundance of underbrush with a high aesthetic and ecological value.

The traditional Mediterranean garden. In spite of the aridity, it has always been populated and its lands have been used, and the evidence has been left behind in the disperse buildings that can be seen, some are residential (farmhouses), used in farming, or cattle raising, etc.

The rich and varied cultural heritage, with a variety of towers, Arabic forts, coastal defence castles, ethnic elements related with water, waterwheels, mills, irrigation canals, etc. All these things make up another interesting trait of the landscape.

4.3.4. Main cultural features
Indicate if the area has a high representative value with respect to the cultural heritage, due to the existence of environmentally sound traditional activities integrated with nature which support the well-being of local populations.

As in the above point, the elements of cultural interest are found out of the underwater area. In the nearby terrestrial portion the following elements can be seen:

- Mining Exploitations with archaeological interest from Phoenician and Roman times.
- A multitude of elements of ethnographic interest from the Arabic Epoch (XI-XVI centuries) related with water: waterwheels, mills, reservoirs, irrigation canals, etc., as well as guard towers.
- A great richness in anthropological and ethnographic heritage related with the rural agro-fishing culture of the XIX century and the first half of the XX century.
- Inactive mining complexes of great archeo-industrial importance (mines and mineral washing places from Sierra Almagrera).

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.

The principle impacts come from an excessive pressure from commercial fishing and illegal sport fishing. In this sense, drag fishing, is altering the dynamic of the marine ecosystem in the zone.

The main exploitation of natural resources is the commercial fishing industry with small scale boats (between 3 and 9 metres long), and of these a large number are of a traditional style.

Finally, it is worth mentioning the intensification of underwater sport fishing, which is provoking a great pressure on some species, in particular grouper (*Epinephelus marginatus*).

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.

At the moment serious threats to the terrestrial habitats of the two islands in the area do not exist.

The marine medium has pollution due to spills of industrial waters in just one point in the entire zone, which is located in the surrounding of the mouth of the Almanzora River, nevertheless the characteristics of the waste (antibiotics and derivatives of ethyl) are very contaminating.

Aside from this spill point, the principle threats come from illegal underwater fishing and drag fishing that destroys the sea bottom ecosystems.

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.

The demand does not exist in the zone due to its being almost entirely underwater.

5.1.4. Historic and current conflicts

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

There are no conflicts worth mentioning.

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.

All of the populations that are found along the coastline and in the territory near the littoral have carried out a purification of their residential waters before being dumped into the sea, with there being an intercommunity management of the entire water cycle in the zone. Thus, the spills that are carried out into the sea represent a secondary treatment that eliminates the majority of the solid wastes and generates a cleaning of the liquid fraction that is that which ends up in the sea.

Another type of spill present in some coastal nuclei such as Mojácar, come from rainwater run off, which, while not being an excessively dangerous spill due to its chemical content and for the volume of water that enter into the sea.

With regards to solid urban waste, there exists a system of management for its gathering and recycling in nearby transformation centres. Therefore there does not exist and uncontrolled spill along the entire coast.

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,
any sectorial development plans and proposed projects, etc.), likely to influence the area in question.

The province of Almeria is one of the Spanish regions that has experimented a larger growth both economically and in population in the last few decades due to, fundamentally, the massive implantation of the out of season greenhouse agriculture and tourism. This rapid economic growth has also had negative effects, both from an environmental point of view (saline contents of aquifers, contamination of water and land, problems in elimination of large quantities of plastic, etc).

This problem in the change of use of intensive agricultural zones is presented in large part in the areas that border the space, so that the polluting effects derived from this activity could affect the area by means of the transport of materials in suspension (plastics, woods, etc.) carried out by the principal water courses, and also by the dilution of biocides and fertilisers used in cultivation.

Other significant environmental problems come from water sports associated with the tourism in the zone, which are altering the natural dynamic of the marine populations.

Finally, and in very specific areas, the mining activity, which was very important in the space at the end of the last century, is currently relegated to certain limestone quarries used in construction, without having a significant impact on the environment.

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?

Currently no plan exists for the sustainable development in the surroundings of the space.

6. EXPECTED DEVELOPMENT AND TRENDS[1]

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

In the last few decades the zone has experienced a slow but regular growth in the permanent population and also in the population that comes for tourism fundamentally in summer, and also in parts of autumn and spring.

As a result of this growth in the tourist population the economic activity has reactivated the population of the nuclei in the zone, that tends to revolve around the tourist industry. This effect is demanding more and more services for the mobile population and residential soil to house the combination of activities associated with tourism.

Up to now the development of tourism has been centred in the areas around the existing nuclei, not representing a disperse problem that affects the entire territory. Nevertheless, some tendencies towards indiscriminate occupation have been observed in distinct points of the coast close to the proposed area.

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.

There are no conflicts among users of the sone important enough to be included here.

[1] 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.

6.3. EXPECTED DEVELOPMENT AND TRENDS OF THE NATURAL LAND ENVIRONMENT AND LANDSCAPES OF THE AREA: as expected arising from the evolution of the pressures

The landscape and the natural medium of the zone are already altered to a large extent from the reliefs with less slope along the coast. The expected evolution of the natural medium is directed to an ever-growing occupation of the littoral space.

The expansion of human activity towards the main reliefs of the zone (Sierra Cabrera and Sierra Almagrera) is not probable due to the steep slope of the terrain and since there are no beaches in contact with the sea to attract tourists.

6.4. EXPECTED DEVELOPMENT AND TRENDS OF THE MARINE ENVIRONMENT AND SEASCAPES OF THE AREA: as expected arising from the evolution of the pressures

Keeping in mind the most probable evolution of the zone, the marine medium will suffer more pressure from the tourism of the zone, both in what refers to water sports, sport fishing and underwater fishing, and in that which refers to the increase of the deterioration of the environmental conditions of the terrestrial portion, which represents ultimately a greater alteration of the ecological condition of the water.

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

The Sea Bottoms off the Coast of Almeria were proposed as a Place of Community Interest in January 1998.

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.

Provisionally, The Place of Community Interest counts on the legal protection of the Habitats Directive (article 6 of the Directive 92/43/CEE) where the member states are obligated to look out for the environmental integrity of the spaces that are currently in the PLC proposal phase, and therefore Special Conservation Zones.

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 objectives of the only standing legal text are the conservation of the physical and biological integrity of the spaces that have been proposed. Thus, in the Habitats Directive the proposal of a PCI by one country of the EEC obligates that member state to conserve the environmental integrity of the proposed space as if it had already been selected to form part of the Nature Network 2000 and therefore obligates Spain to protect all its natural resources.

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).

In the Alborán area, the regimen of national protection comes from the application of the regulations of the Habitate Directive.

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).

Not Applicable to the Proposed Area.

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.).

The sea bottoms and the interior islands were proposed as a Place of Community Interest in January 1998.

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.

The entire territory is public property.

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

There is no zoning of the 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.

Specific norms to regulate the activities of the zone do not exist. Only for at this time constituting a proposal for PCI, the Autonomous Andalusian Government (which is competent and responsible in environmental material) should watch out for the natural integrity of the zone, and should send a representative to the area in the case that there be impacts or series threats to the area that is being proposed.

In the case of illegal fishing activities, the zone is under vigilance by State authorities of the Ministry of Agriculture, Fishing and Food.

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 legal provisions 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 competencies for the marine portion are shared among:

- The Land-Sea Public Domain (coastline and nearest terrestrial portion) is attributed to the Ministry of the Environment (Directorate-General of Coasts), in relation to the use of the space.
- The territory that encompasses the *interior waters*, next to the coast, is attributed to the Environmental Ministry of the Regional Andalusian Government, in relation to biological marine resources.
- The territory that includes the *exterior water* is attributed to the Ministry of Agriculture and Fishing, in relation to fishing and its protection.

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.

There are no other elements of regulation that are being applied to the zone.

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

8.1.1. Authority/Authorities responsible for the area

1. Land-Sea Public Domain: Spanish Environmental Ministry (General Coasts Department)
2. Part close to the coast (*interior waters*): Environmental Ministry of the Regional Andalusian Government
3. Part far from the coast (*exterior waters*): Ministry of Agriculture Fishing and Food.

8.1.2. Other participants in the management body

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

Do not currently exist.

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.

Do not currently exist.

8.1.4. Effectiveness

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:

A satisfactory co-ordination exists between the different competent administrations in the zone for the protection of the natural resources.

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

Given the territorial characteristics and the geographical situation of the zone, this level of implication does not exist on the part of other institutions or local committees, at least for now.

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).

At present no Management Plan or Natural Resources Organisational Plan exist.

Given the environmental importance of the zone, it is expected that the Environmental Ministry create a Natural Resources Organisational Plan in the next three years, so that the activities that are produced in the proposed area are regulated.

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 officialized, and how, and if it is binding for other institutions and sectors involved in the area.

Not applicable to the proposed area since no Management Plan exists.

8.2.3. Contents and application of the Management Plan

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

	Existing in MP	Degree of application
Detailed management objectives	NO	0
Zoning	NO	0
Regulations for each zone	NO	0
Governing body(ies)	NO	0
Management programmes as:		
Administration	NO	0
Protection	NO	0
Natural resource management	NO	0
Tourism and Visitation	NO	0
Education and Training	NO	0
Research and Monitoring	NO	0
Services and Concessions	NO	0
Fund raising activities	NO	0
Periodic revisions of the MP	NO	0

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.

Signs of the marine limits do not exist.

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.

The institutional collaboration is mainly carried out among the organisms that have responsibility for the marine portion such as the Environmental ministry of the Regional Andalusian Government and the Ministry of Agriculture, Fishing and Food, in particular in materials of ecosystems, fishing and its protection. This collaboration is complementary, in such a way as to optimise the human resources and materials available.

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

Currently the human resources and material of the distinct administrations involved is insufficient to control the area. Its effectiveness is very reduces in the two competent administrations in the area.

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 sanctions are enough to dissuade the people. The guards of the Regional Environmental Ministry, as well as the Ministry of Agriculture, Fishing and Food and the Ministry of Defence, have capacity to fine those people that do not have authorisation, that commit environmental crimes or that do not follow the rules of each zone.

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 personnel existent in the central offices of the Regional Environmental Government in Seville and Almeria is not adequate for the objectives for protection and conservation of the natural medium, with it being necessary to have more human resources and materials. The personnel of vigilance and control is insufficient, and therefore the human resources and material should be equally reinforced to comply with the objectives.

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

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 area counts on the technological support and ecological information in the Central Services of the Regional Environmental Government located in Seville, Spain, as well as technicians in diverse environmental material in the Provincial Environmental Delegation in Almeria.

In material of fishing and control of fishing resources the area also counts on technical support in the general Secretariat of Fishing in Madrid.

It is also worthwhile to note the existence of scientific support of the Universities of Almeria, Granada and Malaga, the Advanced Centre for Scientific Research of Spain, as well as the Sea Classroom of Cabo de Gata-Nijar.

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 main financing comes from the Regional Environmental Ministry, the Autonomous Andalusian Government, that covers all aspects of personnel, vigilance, research, species conservation, information, value diffusion, etc.

Equally, the Ministry of Agriculture, Fishing and Food pays the fees of maintenance of the personnel, research and material resources connected to the zone.

Only some aspects of the scientific research are in the hands of different universities and regional and federal research centres.

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 other finance sources exist.

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/NO	ADEQUACY
Office and/or laboratory in the field	**NO**	**0**
Signs on the main accesses	**NO**	**0**
Guard posts on the main accesses	**NO**	**0**
Visitors information centre	**NO**	**0**
Self guided trails with signs	**NO**	**0**
Terrestrial vehicles	**NO**	**0**
Marine vehicles	**YES**	**1**
Radio and communications	**YES**	**2**
Environmental awareness materials	**NO**	**0**
Capacity to respond to emergencies	**YES**	**1**

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. | | **1** | | |

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.

Exhaustive catalogues of the marine medium of the zone exist, as well as a knowledge and cartography of the principle habitats and species that characterise them, especially the prairies of *Posidonia oceanica,* that dominate in the zone.

9.3.2. Data collection

Describe and assess the adequacy of any programme and activities to collect data in the area.

Rather extensive basic studies exist on the flora and fauna, though it would be a good idea to update the information in the entire territory, especially on the species in danger of extinction or that are protected by law.

Continuous follow-ups are only being made on birds in danger of extinction such and the Auduin seagull or *Phalacrocorax aristotelis,* as well as other species of birds that use the islands for nesting.

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, land-use changes, extraction of natural resources -sand, water, game, fish-, visiting, adherence to the provisions of the management plan, etc.).

a) Is there a monitoring programme?	**NO**
b) If NO, are there plans to start one, and when?	In the upcoming years (2002-2004)
c) If YES, assess as low, medium, satisfactory, its adequacy and present level of development.	

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

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

10 Other information, if any

11 **CONTACT ADDRESSES** (name(s), position(s) and contact address(es) of the person(s) in charge with the proposal and that compiled the report)

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12 SIGNATURE(S) ON BEHALF OF THE STATE(S) PARTY/PARTIES MAKING THE PROPOSAL

Director General de Gestion del Medio Natural Junta de Andalucia	Directora General de Conservacion de la Naturaleza Ministerio de Medio Ambiente
Fdo. Jose Guirado Romero	Fdo. Ines Gonzalez Doncel

13 DATE 5/10/2001