

**PROPOSAL FOR INCLUSION OF SPECIES ON THE APPENDICES OF THE  
CONVENTION ON THE CONSERVATION OF MIGRATORY SPECIES OF WILD  
ANIMALS**

**A. PROPOSAL:** Change listing in Appendix II of *Stenella coeruleoalba* from “western Mediterranean population” to “Mediterranean population”.<sup>1</sup>

**B. PROPONENT:** Government of Monaco.

**C. SUPPORTING STATEMENT:**

**1. Taxon**

<b>1.1 Class:</b>	Mammalia
<b>1.2 Order:</b>	Cetacea
<b>1.3 Family:</b>	Delphinidae
<b>1.4 Genus/species/subspecies:</b>	<i>Stenella coeruleoalba</i> (Meyen 1833)
<b>1.5 Common name:</b>	English: striped dolphin French: dauphin bleu et blanc Spanish: delfin listado

**2. Biological data**

**2.1 Distribution (current and historical)**

The striped dolphin is found in all temperate, subtropical, and tropical waters of the Atlantic, Pacific and Indian Oceans and in the Mediterranean and Red Seas. Its presence has been recorded as far south as New Zealand and as far north as Greenland (Leatherwood and Reeves 1983, Wilson *et al.* 1987, Perrin *et al.* 1994). *Stenella coeruleoalba* is the commonest pelagic cetacean in the Mediterranean, found in offshore waters from Gibraltar to the Aegean Sea and the Levant basin (Aguilar 2000).

**2.2 Population (estimates and trends)**

Line-transect surveys conducted in 1991 in the western Mediterranean (Forcada *et al.* 1994) and in 1992 in the Corsican-Ligurian-Provençal Basin (Forcada *et al.* 1995) determined a striped dolphin population size of 117.880 individuals in the western Mediterranean, and of 25.614 individuals in the Corsican-Ligurian-Provençal Basin, respectively. Although quantitative surveys were never organised in the remaining portions of the Mediterranean, the species is known to be common in the pelagic waters of the Southern Adriatic and Ionian seas (Notarbartolo di Sciara *et al.* 1993), in the Aegean Sea (Frantzis *et al.* 2003), and in the Levant Basin (Roditi-Elasar *et al.* 2003). Gaspari (2004) compared samples from 165 striped dolphins collected in different sites of the Mediterranean (Adriatic, Tyrrhenian, and Alborán Seas) and the Eastern North Atlantic, analysing them at 8 microsatellite DNA loci, and detected significant differentiation between the Mediterranean and North Atlantic populations.

**2.3 Habitat (short description and trends)**

Striped dolphins are basically pelagic, travelling occasionally in large groups of several hundreds and even thousands of individuals. In the Mediterranean, however, group sizes are more moderate. Of 70 schools sighted in the Corsican-Ligurian-Provençal Basin, Forcada *et al.* (1995) reported a mean group size of 22.5 (range 2-150, SE 3.2). Important geographic heterogeneities, possibly related to specific oceanographic conditions resulting in higher food availability, have been described for this species in the Mediterranean

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<sup>1</sup> **Rationale for this proposal:** striped dolphins occur throughout the Mediterranean Sea, not just in its western part, and threats are widely diffused throughout the basin. Accordingly, in the light of the current knowledge there is no reason to limit the species' protection status and needs to the western part of the Mediterranean population.

(Forcada and Hammond 1998). Striped dolphins in the Mediterranean feed mostly on mesopelagic prey, including squid, crustaceans and fishes (e.g., Kaschner *et al.* 2004).

#### 2.4 Migrations (kinds of movement, distance, proportion of the population migrating)

Seasonal migrations haven been suggested by some authors (e.g., Viale 1985), with striped dolphins moving to the northern part of the basin as the sea surface temperatures in the southern part increase. Circadian inshore-offshore movements, with the animals approaching the coast at night, were suggested off the French Riviera by Gannier (1999). Although fine-scale population structure was detected within the Mediterranean by Gaspari (2004), suggesting limited movements among the main longitudinal subdivisions of the region, striped dolphins are highly mobile mammals which commonly travel in the Mediterranean across boundaries between the territorial waters of adjacent countries and between the high seas and territorial waters.

### 3 Threat data

#### 3.1 Direct threats (factors, intensity)

The widespread use of driftnets to capture large pelagic fish in the Mediterranean since the 1980s has been a major source of mortality for striped dolphins in the region (Notarbartolo di Sciara 1990, Bearzi 2002). Currently fishing with pelagic driftnets in the Mediterranean is banned or regulated by a number of international and regional Instruments (ACCOBAMS, EU, ICCAT, GFCM), however this activity persist in France, Italy, Morocco and possibly Turkey (e.g., see Report of the 3<sup>rd</sup> Meeting of the Scientific Committee of ACCOBAMS, Cairo, 15-17 May 2005; Tudela *et al.* 2004).

A morbillivirus epizootic, first recorded in the Spanish Mediterranean in 1990, and later spread eastwards to France, Italy, and Greece, caused a die-off of several thousands animals between 1990 and 1992 (Aguilar and Raga 1993).

#### 3.2 Habitat destruction (quality of changes, quantity of loss)

Some places in the Mediterranean are highly polluted, receiving a large amount of domestic and industrial effluents (Jeftic 1988, European Environment Agency 1999). Significant concentrations of heavy metals and organochlorine compounds, occasionally extremely high, are reported in specimens from the western Mediterranean, the Ligurian Sea, the Tyrrhenian Sea, as well as from the waters adjacent to Greece and Israel (Alzieu and Duguy 1979, Capelli *et al.* 1989, Marsili and Focardi 1995, Georgakopoulou-Gregoriadou *et al.* 1995, Roditi-Elasar *et al.* 2003).

#### 3.3 Indirect threats (e.g. reduction of breeding success by pesticide contamination)

Contaminations from organochlorine compounds and reduced prey availability have been suggested as potential triggering factors for the 1990-1992 morbillivirus die-off (Aguilar 2000).

#### 3.4 Threats connected especially with migrations

No information.

#### 3.5 National and international utilization

A limited number of animals were known to be used for human consumption in the past in the Northeast Atlantic and Mediterranean (Duguy and Hussenot 1982, Collet 1983). Today however such practices are considered to be rather episodic and do not raise a major conservation concern (Notarbartolo di Sciara and Bearzi 2002).

### 4 Protection status and needs

#### 4.1 National protection status

*Stenella coeruleoalba* is protected by all ACCOBAMS Contracting Parties because all “cetaceans” are protected by these States (in particular, it is listed in Annex I of the Agreement). In addition, striped dolphins are protected by all the Parties to the SPA & biodiversity Protocol to the Barcelona Convention, as they are listed in Annex II of such Protocol.

Several marine protected areas exist or have been proposed throughout the Mediterranean Sea. Most notably, the “Pelagos” Marine Sanctuary, established by a 1999 Agreement among France, Italy and Monaco, specifically protects critical habitat for striped dolphins in a large portion of the NW Mediterranean. In the area occupied by the Pelagos Sanctuary striped dolphins are the most abundant cetacean species (Forcada *et al.* 1995). Many other marine protected areas in the Mediterranean, and in particular many SPAMIs<sup>2</sup>, although not specifically intended for this species, may contribute to the conservation of striped dolphins, particularly those that encompass slope and pelagic habitats. In 2000, a program was initiated to identify important areas for the conservation of cetaceans in the Spanish Mediterranean with the aim of promoting the creation of marine protected areas (Universidad Autónoma de Madrid and Alnitak 2002). A follow-up of this project (LIFE02NAT/E/8610) started in the year 2002 to develop the management schemes required for these areas.

#### 4.2 International protection status

A number of existing legislative instruments provide an international legal framework for the conservation of *Stenella coeruleoalba* and its habitat. These include:

##### A) CMS and ACCOBAMS:

- CMS: only the western Mediterranean population of *Stenella coeruleoalba* is currently listed in Appendix II.
- ACCOBAMS: this species is listed in Appendix I and fully protected throughout the Agreement area.

##### B) Wildlife treaties:

- Protocol to the Barcelona Convention concerning Specially Protected Areas and Biological Diversity in the Mediterranean: the species is listed in Annex II (endangered or threatened species).
- Convention on the Conservation of European Wildlife and Natural Habitats, or “Bern Convention”: the species is listed in Appendix II (strictly protected fauna species).
- Agreement for the creation of a sanctuary for marine mammals in the Mediterranean Sea (Pelagos Sanctuary, 1999).
- CITES: *Stenella coeruleoalba* is included in Annex II.

##### C) Other International treaties relevant to the conservation of *Stenella coeruleoalba* and/or its habitats:

- Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean (the Barcelona Convention) and its protocols;
- FAO Code of Conduct for Responsible Fisheries;
- United Nation Straddling Stocks Agreement;
- Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas;
- Agreement for the Establishment of the General Fisheries Commission for the Mediterranean (GFCM).

**D)** Two European Community instruments that are binding for EU Member States are worth mentioning here among the many existing, due to their relevance to dolphin conservation: Council Regulation (EC) No 2371/2002 of 20 December 2002 on the conservation and sustainable exploitation of fisheries resources under the Common Fisheries Policy, and Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora, or “Habitats Directive” whose annex IV protect all cetaceans species.

On the global scale, the species is categorised as Lower risk/conservation dependent by IUCN (Cetacean Specialist Group 1996). A Red List assessment of the Mediterranean population is in the planning stage (see Report of the 3<sup>rd</sup> Meeting of the Scientific Committee of ACCOBAMS, Cairo, 15-17 May 2005).

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<sup>2</sup> Specially protected area of Mediterranean interest in application of the Protocol to the Barcelona Convention concerning Specially Protected Areas and Biological Diversity in the Mediterranean.

#### 4.3 Additional protection needs

Action to be taken involves further research on stock identity and abundance, the magnitude of direct and incidental mortality and the effects of pollutants and other sources of habitat degradation on the population.

### 5. **Range States<sup>3</sup>**

Algeria, CROATIA, CYPRUS, EGYPT, FRANCE, GREECE, ISRAEL, ITALY, MALTA, MONACO, MOROCCO, SPAIN, TUNISIA, Turkey, UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND (Gibraltar). Furthermore, due to their widespread distribution in the region and high mobility, striped dolphins quite likely occur as well in the territorial waters of ALBANIA, Bosnia & Herzegovina, Lebanon, LIBYAN ARAB JAMAHIRIYA, SLOVENIA, SYRIAN ARAB REPUBLIC and Yugoslavia.

### 6. **Comments from Range States**

### 7. **Additional remarks**

No additional remarks.

### 8. **References**

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<sup>3</sup> CMS Parties in capitals.

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