RAMSAR WETLANDS INFORMATION SHEET

please note: This has been typed out from handwritten forms without any grammatical corrections.

1. **Country:** Portugal 2. **Date**: 5-11-92 3. **Ref**: 7PT001

4. Name and address of compiler:

António M. Teixeira, SNPRCN/CEMPA, Rua Filipe Folque, 46,3°, 1000 LISBOA, Portugal. Tel: +351 1 352 30 18, Fax: +351 1 57 4771

- 5. **Name of wetland:** Estuário do Tejo
- 6. Date of Ramsar designation 24/11/1980
- 7. Geographical coordinates: 38°50'N 008°57'W
- 8. General location: (e.g. administrative region and nearest large town)
 Lisboa
- 9. Area: (in hectares)

14,563 hectares

10. Wetland type: (see attached classification, also approved by Montreux Rec. C.4.7)

G, 5, F, H, 1, 3

11. Altitude: (average and/or maximum & minimum)

maximum 20 m

12. Overview: (general summary in two or three sentences of the wetland's principle characteristics)

Estuarine tidal mudflats facing large area of estuarine water. The inland fringes of the tidal mudflats are covered by large continuous area of saltmarsh vegetation. Cultivated areas inland on reclaimed soils, artificially drained and protected from higher tides by man-made sea walls.

13. Physical features: (e.g. geology; geomorphology; origins - natural or artificial; hydrology; soil type; water quality; water depth; water permanence; fluctuations in water level: tidal variations; catchment areas; downstream area; climate)

Vast natural sedimentary basin just before the mouth of the Tejo river. Permanent water through the year, with important variations in salinity related to rainfall levels upstream and to their balance to the saltwater entering the estuary from the sea with the tidal circulation. Water quality still fairly good, but high turbidity caused by heavy suspended sediment loads in the water column. Atlantic climate, comparatively mild with Mediterranean influences.

14. Ecological features: (main habitats and vegetation types)

The main habitats are:

- 1. the extensive tidal mudflats exposed at low tide and drained naturally by a network of small webbing creeks
- 2. the very large areas of natural saltmarsh vegetation, dominated by pioneer species like *Spartina maritima* on the waterfront and by *Atriplex* and *Arthrocnemum* species in the higher marsh areas inland
- 3. manmade saltpans and the associated structures for water circulation and storage
- 4. occasionally reedbeds (*Phragmites*) associated to adequate freshwater inputs
- 5. farmland (wheat, oats, and other cereals; melons)

15. Land tenure/ownership of:

(a) site:

wetland areas mostly state owned (in excess of 95%)

(b) surrounding areas:

the farming areas adjacent to the wetland are privately owned, with a small number of comparatively large farms

16. Conservation measures taken: (national category and legal status of protected areas - including any boundary changes which have been made; management practices; whether an officially approved management plan exists and whether it has been implemented)

The site is a Nature Reserve under national legislation since 1975. The reserve area certainly includes many of the most valuable sites in the estuary. There is a management plan approved for the area, but possibly needs some updating. Enforcement of protection measures in this area may be considered fairly good. The area is a Special Protection Area for wild birds under EC law.

17. Conservation measures proposed but not yet implemented: (e.g. management plan in preparation; officially proposed as a protected area etc.)

Some expansion of the nature reserve limits is desirable in order to include some adjacent areas of high ecological significance. Economic incentives to environmentally friendly management practice could be helpful. There includes salt extraction by traditional techniques.

18. Current land use: principal human activities in:

(a) site

Agriculture and cattle raising (mostly extensive); salt extraction (by evaporation, but most salinas are now abandoned); fishing and shellfish collecting.

(b) surrounding/catchments:

Mostly agriculture and cattle raising; fish farming; rice fields; hunting; industrial activities; urban areas.

19. Disturbances/threats, including changes in land use and major development projects: (factors which may have a negative impact on the ecological character of the wetland)

(a) at the site:

The salt extraction techniques based on evaporation of estuarine water at salinas is being discontinued, due to lack of economic incentives. This traditional activity is replaced by investments in fish farming, subsidised by EC and Portuguese funds. These modifications have already affected some important areas in the wetland and pressure will probably increase in the future.

(b) surroundings/catchment

Spreading of urban and industrial pressure in the surrounding areas; intensification of agriculture and fish farming techniques; excessive hunting pressure. However, the single most important threat is the proposed new bridge from eastern Lisbon to the Samarco/Montijo area, expected to bring outstanding development pressure to important wetlands habitats.

20. Hydrological and physical values: (groundwater recharge, flood control, sediment trapping, shoreline stabilization etc.)

-

21. Social and cultural values: (e.g. fisheries production, forestry, religious importance, archaeological site etc.)

Horse and cattle raising activities are important in this area and relate to the tradition of Portuguese bull fighting (very strong in the Ribatejo)

22. Noteworthy fauna: (e.g. unique, rare, endangered, abundant or biogeographically important species; include count data etc.)

The area is a key overwintering/migration stopover site in Portugal to the following birds: Flamingo - *Phoenicopterus ruber*, Avocet — *Recurvirostra avosetta*, grey plover *Pluvialis squatorola*, black-tailed godwit — *Limosa limosa* and to many species of migratory passerines. The area is also a key breeding site to the black-winged stilt *Himantopus himantopus*, and the collared Pratincole *Glareola pratincola*.

- 23. Noteworthy flora: (e.g. unique, rare, endangered, or biogeographically important species/communities etc.)
- 24. Current scientific research and facilities: (e.g. details of current projects; existence of field station etc.)

Several field projects are currently underway in this area; some very basic filed station facilities are available locally

25. Current conservation education: (e.g. visitor centers, hides, information booklet, facilities for school visits etc.)

Some facilities are available nowadays but much still remains to be done in this area

26. Recreation and tourism: (state if wetland used for recreation/tourism; indicate type & frequency/intensity)

Recreational activities are increasing, often related to hunters and to urban dwellers spending their weekends or short holidays

27. Management authority: (name and address of body responsible for managing the wetland) No single management authority. There is a complex network of sectoral legislation and authorities, share among several ministries

28. Jurisdiction: (territorial e.g. state/region and functional e.g. Dept of Agriculture/Dept of Environment etc.)

Most of the wetland areas are public and state owned, except for the salinas which are private. The agricultural land is mostly private.

29. Bibliographical references: (scientific/technical only)

- COMRA midwinter wader and waterfowl counts (1976 to 1992)
- The Portuguese Atlas of breeding birds (R. Rufino/CEMPA)
- other

30. Reasons for inclusion: (state which Ramsar criteria - as adopted by Rec.C.4.15 of the Moutreux Conference - are applicable)

The Tejo Estuary is the most important wetland in Portugal. The Ramsar site includes the most valuable habitats within the wetlands (but there are still many important sites not included)