Information Sheet on Ramsar Wetlands (RIS)

1. Date this sheet was completed/updated:

Categories approved by Recommendation 4.7 of the Conference of the Contracting Parties

Note: It is important that you read the accompanying Explanatory Note and Guidelines document before completing this form.

July 18	8 th , 2002, April 29 th 2003	
2.	Country:	_
NORV	VAY	
3.	Name of wetland:	_
TUFS	INGDELTAET	
4.	Geographical coordinates:	
62° 12	'N - 11° 49'E	
	Elevation: (average and/or maximum and	— d minimum)
660-67	70 m.a.s.l.	_
6.	Area: (in hectares)	
920 (ca	a. 9,2km ²)	
	erview: (general summary, in two or three teristics)	sentences, of the wetland's principal
variationshipshipshipshipshipshipshipshipshipship	on of the wetland types, with mires, flowing gallery forests. Quite special is the format owing of ponds, etc. Areas with inpenetral	

8. Wetland Type: (please circle the applicable codes for wetland types as listed in Annex I

of the Explanatory Note and Guidelines document)

 \mathbf{C} Zk(a) marine-coastal: A B D \mathbf{E} G H I J L M N P inland: O O R Tp Ts Sp Ss Ux W Xf Xp Va Vt Y Zg Zk(b) human-made: 1 2 3 4 5 7 8 9 Zk(c)

Please now rank these wetland types by listing them from the most to the least dominant: U, L, M, W

9. **Ramsar Criteria**: (please circle the applicable criteria; see point 12 below)

1 2 3 4 5 6 7 8

Please specify the most significant criterion applicable to this site: 1

10. Map of site included? YES

(Please refer to the *Explanatory Note and Guidelines* document for information regarding desirable map traits.)

11. Name and address of the compiler of this form:

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Please provide additional information on each of the following categories by attaching extra pages (please limit extra pages to no more than 10):

- 12. **Justification of the criteria selected under point 9, on previous page**. (Please refer to Annex II in the *Explanatory Note and Guidelines* document).
 - 1. Permanent inland river and delta into the lake Femunden is representative and due to the special physiological also forms a rare habitat. Many smaller shallow ponds exist in the area, partly being overgrown by *Sphagnum* moss. Large stretches of mire surround the delta, these mires are mostly very wet, floating and inpenetrable. String mires are particularly well developed. On drier parts (alluvial deposits) along the river gallery *Betula pubescens* forests occur, on wetter areas shrubs like *Betula nana* and *Salix* spp. occur.
 - 2. Breeding site for the rare Broad-billed Sandpiper *Limicola falcinellus*, Jack Snipe *Lymnocryptes minimus*, Crane *Grus grus* and more sporadically Hen Harrier *Circus cyaneus* and Osprey *Pandion haliaetus*.
 - 3. A very special mire estuary in the boreal forest zone with rich examples of mire habitats and a southern outpost locality of more northern bird species, eg. Jack Snipe.

13. **General location**: (include the nearest large town and its administrative region)

Hedmark county, Os municipality, nearest village of Tynset lies to the west (distance 22 km), with population of 3.000.

14. **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 area; downstream area; climate)

Above the granite bedrock moraine dominates. A continous flow of nutrient rich water, combined with shallow water and high water temperatures, creates conditions for a high biological production. The climate is typical inland, with dry (500mm to 700mm precipitation) and relatively warm (but short) summers, and extremely cold winters. A dominating feature of the surrounding landscape is moraine deposits. The catchment area is limited to a few 100 km².

15. **Hydrological values**: (groundwater recharge, flood control, sediment trapping, shoreline stabilization, etc.)

No survey have been made in regard to volume and flood control of the entire area. The large lake Femund (one of Norway's largest) is a dominant feature in the area and the river Tufsinga forming the estuary empties into the lake Femund. Locally the area has a flood control role retaining water supplying the larger lake.

16. **Ecological features**: (main habitats and vegetation types)

Situated in the northern boreal zone, characterized by:

- On the border zone between coniferous forest (*Pinus sylvestris*) and alpine areas.
- A mixture of different vegetation habitats occur, dominated by different mires (dry/wet), but also tracts of moraine areas covered with trees *Pinus sylvestris/Betula pubescens*, or shrub with *Salix* spp and *Betula nana*, aquatic vegetation and floating mires.
- Wet meadows and gallery forests along the river are not extensive, but an important feature for flora and fauna.
- Periodically flooding creates good conditions for staging wetland birds.
- 17. **Noteworthy flora**: (indicating, e.g., which species/communities are unique, rare, endangered or biogeographically important, etc.)

High variation, but characteristic and no rare species known.

18. **Noteworthy fauna**: (indicating, e.g., which species are unique, rare, endangered, abundant or biogeographically important; include count data, etc.)

Common birds species: Particularly noteworthy is the occurrence of *Gavia arctica* (1 pair), *Grus grus* (1 pair and staging area for 30 birds), *Anas penelope* (5 pairs), *Anas crecca* (10 pairs), *Aythya fuligula* (10-20 pairs), *Bucephala clangula* (5-10 pairs), *Gallinago gallinago* (25-30 playing birds), *Numenius phaeopus* (4 pairs), *Philomachus pugnax* (>10 breeding females), *Tringa nebularia* (5 pairs), *Tringa glareola* (ca. 25 pairs), *Phalaropus lobatus* (5-10) and *Lymnocryptes minimus* (1 pair). 11 species of ducks and 14 wader species were recorded prior to 1987. The area needs to be surveyed on a more detailed scale concerning the bird life.

Rare or threatened bird species: Pandion haliaetus (1 pair) and Limicola falcinellus (1 pair).

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

The area is today particularly used for fishing activites, but also to some degree canoe-padling. Fishing on spawning grounds inside the delta has traditions since the 15-century. Previously extensively used for fodder-gathering, a practice abandoned today (with overgrowing of some areas with bushes etc).

- 20. Land tenure/ownership of: (a) site State (b) surrounding area State
- 21. Current land use: (a) site No particular use (b) surroundings/catchment

The use of natural resources in the region is low and habitation is very low. Forestry is one of the most important income in the region.

- 22. Factors (past, present or potential) adversely affecting the site's ecological character, including changes in land use and development projects: (a) at the site: Little impact today. (b) around the site: Little impact today.
- 23. **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): Established as a Nature reserve December 18th 1981.
- 24. Conservation measures proposed but not yet implemented: (e.g., management plan in preparation; officially proposed as a protected area, etc.)

No management plan exist.

25. Current scientific research and facilities: (e.g., details of current projects; existence of field station, etc.)

Not known.

26. **Current conservation education**: (e.g., visitors centre, hides, information booklet, facilities for school visits, etc.)

No information leaflet exist, but a poster have been put on display at the entrance to the area.

27. **Current recreation and tourism**: (state if wetland is used for recreation/tourism; indicate type and frequency/intensity)

The area is used by tourists and residents for sport fishing, but on a low scale.

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

The Ministry of the Environment.

29. **Management authority**: (name and address of local body directly responsible for managing the wetland)

The site is managed by the County Governor of Hedmark county, which is a subsidiary body of the Ministry of the Environment. Adress: County Governor of Hedmark, Postboks 4034, N-2306 Hamar.

30. Bibliographical references: (scientific/technical only)

Geology:

• Sollid, J.L. & Kristiansen, K. 1982. Hedmark fylke. Kvartærgeologisk verneverdige områder. Universitetet i Oslo, Geografisk institutt. Notat 65pp.

Limnology:

• Norsk Institutt for Vannforsking. 1973. Vern av naturlig næringsrike innsjøer i Norge. Økologiske undersøkelser av innsjøer og dammer i Femund-området 1972. NIVA-rapport 0-70/66. (in Norwegian - description of naturally eutrophic lakes)

Birds:

- Sonerud, G. & Skattum, E. 1972. Undersøkelser av avifaunaen på en del myrer i Hedmark utført i perioden 8.6-28.6.1972 for IBP-CT-TELMA. Rapport 14pp. (in Norwegian IBP-TELMA mapping of birds)
- Bekken, J. Ornitologiske registreringer i 11 våtmarksreservater 1985-86. Rapport nr. 13:1-43. Fylkesmannen i Hedmark, Miljøvernavdelingen. (in Norwegian - bird registration in 11 wetland reserves).

Flora:

A botanical excursion guide for the International Mire Conservation Group (IMCG) meeting 1995 describes the flora and bird life. Published by the University of Trondheim.