Information Sheet on Ramsar Wetlands (RIS) – 2009-2012 version

Available for download from http://www.ramsar.org/ris/key_ris_index.htm.

Categories approved by Recommendation 4.7 (1990), as amended by Resolution VIII.13 of the 8th Conference of the Contracting Parties (2002) and Resolutions IX.1 Annex B, IX.6, IX.21 and IX. 22 of the 9th Conference of the Contracting Parties (2005).

Notes for compilers:

- 1. The RIS should be completed in accordance with the attached *Explanatory Notes and Guidelines for completing the Information Sheet on Ramsar Wetlands.* Compilers are strongly advised to read this guidance before filling in the RIS.
- 2. Further information and guidance in support of Ramsar site designations are provided in the *Strategic Framework and guidelines for the future development of the List of Wetlands of International Importance* (Ramsar Wise Use Handbook 7, 2nd edition, as amended by COP9 Resolution IX.1 Annex B). A 3rd edition of the Handbook, incorporating these amendments, is in preparation and will be available in 2006.
- 3. Once completed, the RIS (and accompanying map(s)) should be submitted to the Ramsar Secretariat. Compilers should provide an electronic (MS Word) copy of the RIS and, where possible, digital copies of all maps.

FOR OFFICE USE ONL	Y.
Designation date	Site Reference Number
	Spanish) of the Convention. me.
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6. For RIS updates only, changes to the site since its designation or earlier update:

a) Designation of a new Ramsar site \square ; or

b) Updated information on an existing Ramsar site

✓

a) Site boundary and area								
The Ramsar site boundary and site area are unchanged: □								
or If the site boundary has changed: i) the boundary has been delineated more accurately ii) the boundary has been extended □; or iii) the boundary has been restricted** □								
and/or								
If the site area has changed: i) the area has been measured more accurately ii) the area has been extended □; or iii) the area has been reduced** □								
** Important note: If the boundary and/or area of the designated site is being restricted/reduced, the Contracting Party should have followed the procedures established by the Conference of the Parties in the Annex to COP9 Resolution IX.6 and provided a report in line with paragraph 28 of that Annex, prior to the submission of an updated RIS.								
b) Describe briefly any major changes to the ecological character of the Ramsar site, including in the application of the Criteria, since the previous RIS for the site: in the application of the Criteria, since the previous RIS for the site: Only minor adjustments have been performed.								
7. Map of site: Refer to Annex III of the Explanatory Note and Guidelines, for detailed guidance on provision of suitable maps, including digital maps.								
a) A map of the site, with clearly delineated boundaries, is included as: i) a hard copy (required for inclusion of site in the Ramsar List): ☑;								
ii) an electronic format (e.g. a JPEG or ArcView image) ☑;								
iii) a GIS file providing geo-referenced site boundary vectors and attribute tables \Box .								
b) Describe briefly the type of boundary delineation applied: e.g. the boundary is the same as an existing protected area (nature reserve, national park, etc.), or follows a catchment boundary, or follows a geopolitical boundary such as a local government jurisdiction, follows physical boundaries such as roads, follows the shoreline of a waterbody, etc. The boundaries are the same as the existing nature reserve Karlsøyvær.								
8. Geographical coordinates (latitude/longitude, in degrees and minutes): Provide the coordinates of the approximate centre of the site and/or the limits of the site. If the site is composed of more than one separate area, provide coordinates for each of these areas. 67° 34' N 14° 40' E								
9. General location:								

Include in which part of the country and which large administrative region(s) the site lies and the location of the nearest large

Karlsøyvær is an archipelago in the ocean approx. 30 km north of the Bodø city, which also is the administration centre of the county of Nordland. Bodø has app. 34 000 inhabitants (2006).

10. Elevation: (in metres: average and/or maximum & minimum) 0-101 m.a.s.l.

11. Area: (in hectares)

4.936 ha of which approx. 4.194 ha is sea area

12. General overview of the site:

Provide a short paragraph giving a summary description of the principal ecological characteristics and importance of the wetland.

Archipelago with varying topography from the low islands in SW and raising towards NE up to 101 m. Among the largest coastal conservation areas in Norway. Typified with numerous skerries, islets and islands. Former farmland on the largest island, today used for recreation. Low vegetation but some deciduous forest on a few of the islands. Seashore botanical areas of national value. Important breeding area for seabirds, White-tailed Eagle *Haliaetus albicilla* and Eurasian Otter *Lutra lutra*.

13. Ramsar Criteria:

Tick the box under each Criterion applied to the designation of the Ramsar site. See Annex II of the Explanatory Notes and Guidelines for the Criteria and guidelines for their application (adopted by Resolution VII.11). All Criteria which apply should be ticked

1	•	2 •	3 •	4 •	5 •	6 •	7	8 •	9
$ \sqrt{} $		$\overline{\mathbf{A}}$	$\overline{\checkmark}$	$\overline{\checkmark}$					

14. Justification for the application of each Criterion listed in 13 above:

Provide justification for each Criterion in turn, clearly identifying to which Criterion the justification applies (see Annex II for guidance on acceptable forms of justification).

Criterion 1. This is a marine archipelago area with shallow waters dotted with numerous islets and islands. This kind of archipelago is typical of the North-European coast. The shores are mostly hard rock and gravel, but in protected parts of the archipelago there are calcareous rocks, wet meadows and brackish marshes occur on a smaller part of the area.

Some of the habitat in the Ramsar site is considered as Coastal Heatland (EN) and Salt Meadow (NT). Red list categories are given according to Norwegian red list on habitat (2011).

Criterion 2. The site has a stable population of breeding Black Guillemot *Cepphus grylle* (VU) (approx. 22 pair), and Eurasian Otter *Lutra lutra* (VU). Harbour Porpoise *Phoca vitulina* (VU) are also present but breeding is not known. (Protection statuses are given according to the National Red-List 2010).

Criterion 3. The area is a traditional breeding site for numbers of seabirds, e.g. Herring Gull *Larus canus* (NT), Black-backed Gull *Larus marinus*, breeding area for the Northern Scandinavian and Baltic subspecies of Lesser Black-backed Gull *Larus fuscus fuscus*. Common Eider *Somateria mollissima*, and White-tailed Eagle *Haliaeetus albicilla*, all characteristic species for this kind of archipelago in this biogeographic region.

Criterion 4. The area is one of several important areas along the coast for breeding, staging and wintering seabirds from large parts of the Arctic coasts and alpine areas. See also point 22 for more details.

15. Biogeography (required when Criteria 1 and/or 3 and /or certain applications of Criterion 2 are applied to the designation):

Name the relevant biogeographic region that includes the Ramsar site, and identify the biogeographic regionalisation system that has been applied.

a) biogeographic region:

- 1. Middle boreal zone (MbO2 clear oceanic section)
- 2. Arctic

b) biogeographic regionalisation scheme (include reference citation):

- 1. Zonal division showing the variation in vegetation from south to north and from the lowlands to the mountains, and sectional graduation showing the variation between the coast and inland (In: Moen, A. 1998. Nasjonalatlas for Norge; vegetasjon. Statens kartverk, Hønefoss).
- 2. EU Habitat directive 92/43/EEC

16. Physical features of the site:

Describe, as appropriate, the geology, geomorphology; origins - natural or artificial; hydrology; soil type; water quality; water depth, water permanence; fluctuations in water level; tidal variations; downstream area; general climate, etc.

The entire area is characterised by outcrops of hard bedrock (mica slate, granites, etc.) and at places also calcareous rock. Typified by shallow marine waters with numerous islets and skerries. The lower elevated areas are covered with marine deposits. In protected coves wet salt influenced meadows. Middle tidal amplitude is approx. 174 cm (Bodø harbour). The climate is typical Atlantic with high annual precipitation (>1500mm and average 200-220 days with precipitation pr. year), wet summers and mild winters.

Due to the fact that most of the shoreline consists of hard granite rocks, erosion are minimal / none existing in spite of a very harsh winter climate. All fresh water in the area originates from precipitation

17. Physical features of the catchment area:

Describe the surface area, general geology and geomorphological features, general soil types, and climate (including climate type).

Shallow marine waters mostly less than six metres deep at low tide; includes sea bays and straits. Some deeper areas (>100 m).

18. Hydrological values:

Describe the functions and values of the wetland in groundwater recharge, flood control, sediment trapping, shoreline stabilization, etc.

Shoreline stabilization.

19. Wetland Types

a) presence:

Circle or underline the applicable codes for the wetland types of the Ramsar "Classification System for Wetland Type" present in the Ramsar site. Descriptions of each wetland type code are provided in Annex I of the Explanatory Notes & Guidelines.

Marine/coastal: $\underline{A} \cdot B \cdot C \cdot \underline{D} \cdot \underline{E} \cdot F \cdot G \cdot \underline{H} \cdot I \cdot J \cdot K \cdot Zk(a)$

Inland: L • M • N • O • P • Q • R • Sp • Ss • Tp Ts • U • Va • Vt • W • Xf • Xp • Y • Zg • Zk(b)

Human-made: 1 • 2 • 3 • 4 • 5 • 6 • 7 • 8 • 9 • Zk(c)

b) dominance:

List the wetland types identified in a) above in order of their dominance (by area) in the Ramsar site, starting with the wetland type with the largest area. A, D, E, H

20. General ecological features:

Provide further description, as appropriate, of the main habitats, vegetation types, plant and animal communities present in the Ramsar site, and the ecosystem services of the site and the benefits derived from them.

Situated in the boreal zone, and characterised by:

• Shallow marine waters, with numerous islands and skerries.

- Coastal substrate characterized by rocks and gravel shores, inland calcareous deposits occur (seashells and corals) creating substrate for flora dependent on calcareous soil.
- Highly differentiated vegetation types, depending of influence from saltwater. E.g. foreshore with kelp drifts, salt meadows, brackish meadows - including brackish lagoons and freshwater ponds, herb rich meadows.
- Typical flora contains *Puccinellia* spp., *Carex subspathacea, Juncus arcticus* ssp. *balticus* and *Blysmus rufus*. Brackish/aquatic flora typically includes *Hippuris, Potamogeton* and *Myriophyllum*.

21. Noteworthy flora:

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in 14, Justification for the application of the Criteria) indicating, e.g., which species/communities are unique, rare, endangered or biogeographically important, etc. *Do not include here taxonomic lists of species present – these may be supplied as supplementary information to the RIS*.

Nationally rare species include Carex appropinquata, Dactylorhiza lapponica, Dactylorhiza incarnata, Ranunculus trichophyllus, Gymnadenia conopsea, Botrychium lunaria, Primula scandinavica (NT), Chara cfr. contraria (VU) and Cystopteris fragilis ssp. dickieana. Red list categories are given according to Norwegian red list on species (2011).

22. Noteworthy fauna:

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in 14. Justification for the application of the Criteria) indicating, e.g., which species/communities are unique, rare, endangered or biogeographically important, etc., including count data. *Do not include here taxonomic lists of species present – these may be supplied as supplementary information to the RIS*.

Mammals:

The archipelago has a stable population of Eurasian Otter *Lutra lutra* (VU). The Harbour Porpoise *Phoca vitulina* (VU) and the Grey Seal *Halichoerus grypus* are present but breeding is not known. The mink *Mustela vison* (American mink) has unfortunately managed to spread to the archipelago.

Birds:

Nationally rare or internationally rare or interesting species: Breeding species include: Red-throated Diver Gavia stellata (2 pairs) and White-tailed Eagle Haliateus albicilla (50-100 individuals and 8 breeding pairs). Nationally common species: European Shag Phalacrocorax aristotelis (27-36 pairs), Greylag Goose Anser anser (18-20 pairs), Common Eider Somateria mollissima (30-41 pairs), Red-breasted Merganser Mergus serrator (22-35 pairs), Oystercatcher Haematopus ostralegus (81-82 pairs), Ringed plower Charadrius hiaticula (5 pair)Redshank Tringa totanus (10 pairs), Curlew Numenius arquata (6 pairs), Common Snipe Gallinago gallinago (5 pairs), Herring Gull Larus argentatus (108 pairs), Greater Black-backed Gull Larus marinus (200 pairs) and Black Guillemot Cepphus grylle (22-31 pairs). Totally there are approximate 582-633 pairs breeding in the Ramsar site. The registrations of breeding bird have been done in 2009. The numbers will vary between years.

Staging and wintering site for 1000-2000 seabirds, including *Gavia* spp., Common Eider *Somateria* mollissima, Red-breasted Merganser *Mergus serrator*, Long-tailed Duck *Clangula hyemalis* and European Shag *Phalacrocorax aristotelis*. Little research and counts on birds have so far been conducted in the area.

Sea-gull eggs and eider down have for centuries been collected in the area. Down collecting is now mostly an abandoned practice, but eggs are still collected from three species of seagulls. The down and egg collecting was advantageous to the local breeding population of seabirds through building of eider-houses (for protection during breeding) and lowering of predation levels (crows, raven etc). In relation to the protection regime (and Ramsar-status) plans have been made to re-start these activities, including increase of traditional scything of meadows (cf. Bliksvær).

23. Social and cultural values:

a) Describe if the site has any general social and/or cultural values e.g., fisheries production, forestry, religious importance, archaeological sites, social relations with the wetland, etc. Distinguish between historical/archaeological/religious significance and current socio-economic values:

Traditionally the breeding population of Common Eider Somateria mollissima were used for down- and egg collection. The close relation between man and bird along the northern coast contributed to a high population of Eider, and it gained from predator protection and erection of breeding-houses. This tradition has gradually faltered and is today only evident at a few revived sites (outside this site). Some egg collecting is still performed.

b) Is the site considered of international importance for holding, in addition to relevant ecological values, examples of significant cultural values, whether material or non-material, linked to its origin, conservation and/or ecological functioning? No

If Yes, tick the box \square and describe this importance under one or more of the following categories:

- sites which provide a model of wetland wise use, demonstrating the application of traditional i) knowledge and methods of management and use that maintain the ecological character of the wetland:
- sites which have exceptional cultural traditions or records of former civilizations that have ii) influenced the ecological character of the wetland:
- sites where the ecological character of the wetland depends on the interaction with local 111) communities or indigenous peoples:
- iv) sites where relevant non-material values such as sacred sites are present and their existence is strongly linked with the maintenance of the ecological character of the wetland:

24. Land tenure/ownership:

a) within the Ramsar site:

Private approx. 2/3 and State 1/3

b) in the surrounding area:

State

25. Current land (including water) use:

a) within the Ramsar site:

Mainly leisure activities like fishing and the use of local cabins/houses, also traditionally used for collecting seabird eggs. Smaller populations of sheep graze in the area

b) in the surroundings/catchment: Fishing

26. Factors (past, present or potential) adversely affecting the site's ecological character, including changes in land (including water) use and development projects:

a) within the Ramsar site:

The cessation of traditional agriculture with grazing animals and haymaking has led to an abandon of the unique collaboration between man and seabirds (predator control, building of houses for the Common Eider, and also to a succeeding overgrowing of the landscape).

b) in the surrounding area:

Not known

27. Conservation measures taken:

a) List national and/or international category and legal status of protected areas, including boundary relationships with the Ramsar site:

In particular, if the site is partly or wholly a World Heritage Site and/or a UNESCO Biosphere Reserve, please give the names of the site under these designations.

Karlsøyvær was established as Karlsøyvær nature reserve the 6th of December 2002. The boundaries for the Ramsarsite are the same as the nature reserve. The Ramsar area is enclosed by a large bird and seal protection zone of approx. 7.300 ha (ca. 73 km2). The bird protection zone only enforces a prohibition against bird and seal hunting and does not provide protection of the land or water therein, and is consequently not a part of the Ramsar site.

b) If appropriate, list the IUCN (1994) protected areas category/ies which apply to the site (tick the box or boxes as appropriate):

Ia ∅;Ib □; II □; III □; IV ∅; V □; VI □

c) Does an officially approved management plan exist; and is it being implemented?:

Finalised in 2011.

d) Describe any other current management practices:

The Ramsar area is fully surrounded by a larger area where hunting of all species of birds and seals is permanently prohibited. (A bird and seal reserve was originally established already in 1977.)

28. Conservation measures proposed but not yet implemented:

e.g. management plan in preparation; official proposal as a legally protected area, etc.

The Ramsar site is expected to be included as a part of the national plan for marine protected areas.

29. Current scientific research and facilities:

e.g., details of current research projects, including biodiversity monitoring; existence of a field research station, etc.

The marine site was earlier included in the national monitoring program for seabirds (SEAPOP).

30. Current communications, education and public awareness (CEPA) activities related to or benefiting the site:

e.g. visitors' centre, observation hides and nature trails, information booklets, facilities for school visits, etc.

A new information folder is produced by the management authorities.

31. Current recreation and tourism:

State if the wetland is used for recreation/tourism; indicate type(s) and their frequency/intensity.

The area is to a low degree used by residents and tourists, mainly for fishing.

32. Jurisdiction:

Include territorial, e.g. state/region, and functional/sectoral, e.g. Dept of Agriculture/Dept. of Environment, etc.

Norwegian Directorate for Nature Management (DN), Tungasletta 2, 7485 Trondheim Ph +47 73580500

Fax +47 73580501

Email: postmottak@dirnat.no

33. Management authority:

Provide the name and address of the local office(s) of the agency(ies) or organisation(s) directly responsible for managing the wetland. Wherever possible provide also the title and/or name of the person or persons in this office with responsibility for the wetland.

The site is managed by the County Governor of Nordland, which is under the instruction of DN. Address: County Governor of Nordland, Moloveien 10, N- 8002 Bodø. Phone: +47 755 31580. E-mail: postmottak@fmno.no

34. Bibliographical references:

Scientific/technical references only. If biogeographic regionalisation scheme applied (see 15 above), list full reference citation for the scheme.

Larsen, B. H. & Wergeland Krog, O. M. 2009. Karlsøyvær naturreservat i Bodø kommune. Naturtyper, fugl og sjøpattedyr. Miljøfaglig utredning Rapport 2009:37: 1-68

Flora:

• Elven, R., Alm, T., Edvardsen, H., Fjelland, M., Fredriksen, K. E. & Johansen, V. 1988. Botaniske verneverdier på havstrender i Nordland. B: Beskrivelser for regionene Nord-Helgeland og Salten. Økoforsk rapport 1988:2B, pages 227-233. In Norwegian - botanical survey of beaches in Northern parts of Norway).

Fauna:

• No scientific survey have been published, but smaller notes on the birds in the area exists.

Please return to: Ramsar Convention Secretariat, Rue Mauverney 28, CH-1196 Gland, Switzerland Telephone: +41 22 999 0170 • Fax: +41 22 999 0169 • e-mail: ramsar@ramsar.org