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

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

FOR OFFICE USE ONLY.

DD MM YY

Designation date | Site Reference Number

Ms. A. Pel-Roest
Ministry of Economic Affairs
Department of Nature and Biodiversity
Prins Clauslaan 8
P.O. Box 20401
2500 EK The Hague, the Netherlands
Tel: +31 (0)70 378 6868

2. Date this sheet was completed/updated:

September 2013

3. Country:

the Netherlands

4. Name of the Ramsar site:

Veerse Meer

5. Designation of new Ramsar site or update of existing site:
This RIS is for:

a) Designation of a new Ramsar site ❑; or
b) Updated information on an existing Ramsar site ❑

6. For RIS updates only, changes to the site since its designation or earlier update:

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 ❑; or
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 ❑; or
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:

Mid 2004 the Veerse meer was reconnected with the Oosterschelde to restore the water exchange with the Oosterschelde. Since then the lake became saltier and the oxygen level in the deeper parts increased again. The number of marine species increased as well. This change among others caused changes observed in the application of the criteria (see 14).

7. Map of site:

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** ❑.

b) Describe briefly the type of boundary delineation applied:

The Ramsar site Veerse Meer has also been designated as the European Natura 2000-site Veerse Meer.

For this RIS-version, the new Ramsar site boundary has therefore been adjusted to the Natura 2000-boundary. Some farmland and the dike in the northwest has been excluded or exclavated from the site, while some natural area in the northwest has been included within another Natura 2000-site named 'Manteling van Walcheren'.

In total this new boundary resulted in a decrease of -37,9 ha.

8. Geographical coordinates (latitude/longitude, in degrees and minutes):

51°32'N - 03°44'E

9. General location:

Province of Zeeland, ca. 10 km north of Middelburg (population 47.523 per 1-1-2013; source CBS, Netherlands Statistics).

10. Elevation: (min & max)

NAP -25 / -2 m

11. Area:

2538,9 ha

12. General overview of the site:

The Veerse Meer is a former part of the Oosterschelde estuary. Influence of the tides disappeared after completion of the Veerse Dam in 1961. The site had become a brackish water lake and over 2000 ha of salt marshes became permanently emerged. Mid 2004 a connection with the Oosterschelde was installed

again. The lake became saltier and the oxygen supply in the deeper parts increased. The number of marine species increases again. The lake contains small islands (former sandbanks) and is surrounded with wet grasslands, scrub and agricultural areas. Swampy vegetation grows in shallow waters along the shores. Salty vegetations exist in places due to infiltration of salt water. The site is especially important for the conservation of water birds.

13. Ramsar Criteria:

1	2	3	4	5	6	7	8	9
❑	❑	❑	❑	❑	❑	❑	❑	❑

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

The Ramsar site Veerse Meer has been designated under Natura 2000 as well. Natura 2000 is the centrepiece of EU nature & biodiversity policy. It is an EU-wide network of nature protection areas which aims to assure the long-term survival of Europe's most valuable and threatened species and habitats. It is comprised of Special Areas of Conservation (SAC) designated by Member States under the Habitats Directive, and also incorporates Special Protection Areas (SPAs) designated under the Birds Directive. Natura 2000 applies to SACs and SPAs which are divided into biogeographical regions. The Ramsar site Veerse Meer applies to the Bird Directive only and the justification for the application of each Ramsar criterion below, greatly refers to its designation as a SPA.

Justification criterion 2

The table below shows Annex I species (BD) for which the site has been designated as a SPA, as well as some threatened species of the National Red Lists.

Species of Annex I of the European Bird Directive for which the site has been designated as a SPA, as well as some threatened species of the National Red Lists (- = Not Applicable). Year of adoption of the National Red List in parentheses.

Species(group)	Species code	BD Annex	National RL Category
Vascular plants			(2004)
Parsley Water-dropwort *Oenanthe lachenalii*	-	-	VU
Marsh Helleborine *Epipactis palustris*	-	-	VU
Early Marsh-orchid *Dactylorhiza incarnata*	-	-	VU
Mushrooms			(2004)
Tricholoma fulvum	-	-	VU
Clavulinopsis luteoochracea	-	-	VU
Mammals			(2009)
[1]Root Vole *Microtus oeconomus arenicola*	-	-	VU
Non-breeding birds			
Little Egret *Egretta garzetta*	A026	I	-
Eurasian Spoonbill *Platalea leucorodia*,	A034	I	-
Bewick`s Swan *Cygnus bewickii*	A037	I	-
Barnacle Goose *Branta leucopsis*	A045	I	-
Avocet *Recurvirostra avosetta*	A132	I	-
Eurasian Golden Plover *Pluvialis apricaria*	A140	I	-
Breeding birds			(2004)
Eurasian Spoonbill *Platalea leucorodia*	A034	I	LC

[1] The Rote Vole subspecies *Microtus oeconomus arenicola* is endemic to the Netherlands and a priority species under the HD (Annex II, IV). The Ramsar site Veerse Meer has however not been designated a SAC for this species.

Justification criterion 3

The Veerse Meer is designated as a Natura 2000 site (SPA) and can therefore be considered important for maintaining the biodiversity of the Atlantic biogeographic region. Besides the species mentioned under criterion 2, the site has also been designated as a SPA for a number of bird species that are not on Annex I of the BD. See the table below.

Bird species (not on Annex I of the BD) for which the site has been designated as a SPA as well as their status on the National Red List (2004).

Species	**Species code**	**National RL category**
Non-breeding birds		
Little Grebe *Tachybaptus ruficollis*	A004	-
Great Crested Grebe *Podiceps cristatus,*	A005	-
Great Cormorant *Phalacrocorax carbo,*	A017	-
White-fronted Goose *Anser albifrons*	A041	-
Brent Goose *Branta bernicla*	A046	-
Eurasian Wigeon *Anas [Mareca] penelope,*	A050	-
Gadwall *Anas strepera*,	A051	-
Mallard *Anas platyrhynchos*	A053	-
Northern Pintail *Anas acuta*,	A054	-
Northern Shoveler *Anas clypeata*,	A056	-
Tufted Duck *Aythya fuligula*	A061	-
Common Goldeneye *Bucephala clangula*	A067	-
Red-breasted Merganser *Mergus serrator*	A069	-
Common Coot *Fulica atra*	A125	-
Breeding birds		(2004)
Great Cormorant *Phalacrocorax carbo*	A017	LC
Lesser Black-backed Gull *Larus fuscus intermedius*	A183	LC

Justification criterion 4

The site is of particular importance for many breeding and non-breeding bird species (see criterion 2, 3 and 6), of which several species gather in high numbers and relatively small areas during wintering and/or migration periods like ducks and breeding periods like breeding colonies of Eurasian Spoonbill *Platalea leucorodia,* Great Cormorant *Phalacrocorax carbo* and *Lesser Black-backed Gull.*

Justification criterion 5

The site regularly supports more than 20,000 wintering waterbirds: the average peak number was 37.829 for the period 2005/2006-2009/2010, which is less than the average peak number of 61.578 for the period 1999/2000-2003/2004 (Source: Sovon, Dutch Centre for Field Ornithology).

Justification criterion 6

Species meeting the 1% threshold (WPE-4, Wetlands International 2006; Source: Sovon, Dutch Centre for Field Ornithology). (NB = nonbreeding, BR = breeding period 2006-2010).

Species (UK)	Species	NB/ BR	Biogeographic population	1% threshold	Average number of birds between 2006-2010	% at site
Eurasian Wigeon	*Anas penelope*	NB	W. Siberia/NW-NE. Europe	15.000	18.784	1.3

Compared to the period of 1992-98 (previous updated RIS-version) the following species do not meet the 1%-standard anymore: Barnacle Goose *Branta leucopsis,* Red-breasted Merganser *Mergus serrator* and Common Coot *Fulica atra.*

15. Biogeography:

a) biogeographic region:

The Ramsar site belongs to the Atlantic biogeographical region.

b) biogeographic regionalisation scheme (include reference citation):

The bio-geographic regions dataset used, contains the official delineations used in the Habitats Directive (92/43/EEC) and for the EMERALD Network set up under the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention)

16. Physical features of the site:

Lake Veerse Meer became a stagnant brackish lake (mean depth 5 meters; maximal depth 25 m) after the closure in 1961 from the Oosterschelde (building of the Zandkreekdam at the eastern side and the Veerse Dam at the western side). The water levels were unnatural: high in summer (between NAP 0 m and NAP -0.10m) and low in winter (NAP – 0,70 m until 2008). Starting in 2011 the difference in water level between summer and winter is reduced to less than 0.30 m (summer level NAP -0.05 m, winter level NAP – 0.30 m) The water quality was influenced by nutrient rich water let in from the surrounding polders and pollution from (recreation) boats. This has led to problems with strong growth of macroalgae (*Ulva lactuca*), plankton blooms and anaerobic water quality in summer in the deeper parts of the lake. Mid 2004 a connection with the Oosterschelde was installed again. The lake became saltier and the oxygen supply in the deeper parts increased. The number of marine species increases again. The first results seem to be positive. Monitoring of effects is ongoing.

17. Physical features of the catchment area:

The Veerse meer is connected with the Oosterschelde and can be considered to be part of the catchment area of the Schelde and Meuse.

- The surface area of the Schelde catchment is 21.900 km². Geologically and geomorphologically it consists mainly of Quarternary and Tertiary sediments. The general soil types are Alluvial and Podzol soils. The climate according to Köppen is rainy (Cbf).
- The surface area of the Meuse catchment is 33.000 km². Geologically and geomorphologically it consists mainly of Quarternary and Mesozoic sediments and Paleozoic (eroded) mountains. The general soil types are: Alluvial, Brown forest soils and montane soils. The climate according to Köppen is rainy (Cbf).

18. Hydrological values:

Superfluous water from the surrounding polders is pumped into this lake and subsequently discharged on the Oosterschelde (a sea arm connected to the North Sea).

19. Wetland Types

a) presence:

Marine/coastal: A • B • C • D • E • F • G • H • I • J • K • 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: J

20. General ecological features:

The lake contains small islands (former sandbanks) and is surrounded with wet grasslands, scrub and agricultural areas. Swampy vegetation grows in shallow waters along the shores. Salty vegetations exist in places due to infiltration of salt water. The site is especially important for the conservation of water birds.

Plant communities of European interest are:
- *Charetum hispidae*
- *Cladietum marisci*;

The ecosystem services mainly refer to:
- the wetlands potential for recreation both on the water and on land;
- the ability for agriculture to drain off water.

21. Noteworthy flora:

Most noteworthy flora is listed under no. 14.

22. Noteworthy fauna:

Most noteworthy fauna is listed under no. 14.

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: See 25. Current land use.

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

24. Land tenure/ownership:

a) within the Ramsar site:

The site is managed by Staatsbosbeheer, Natuurmonumenten, Rijkswaterstaat en private owners.

b) in the surrounding area:
The water (North Sea and Oosterschelde) is state owned, on land several private owners.

25. Current land (including water) use:

a) within the Ramsar site:
Boating 74%, Tourism and leisure 10%, Farming 8%, Commercial fisheries 74%, Conservation and research 13%, Water management 100%.

b) in the surroundings/catchment:
The land-use in the immediate surrounding is dominated by farming. On the broader scale of the catchment area the general land-use concerns a substantial part of Northwest-Europe:

- General land-use of Rhine-catchment: the general land use is forestry, pasture farming, arable farming, unproductive land (high mountains);
- General land-use of Meuse catchment: The general land use is pasture farming, arable farming and forestry.

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: (A = serious threat covering large part of the area; B = moderate threat or local threat; C = minor threat):

- Disturbance to birds (C airport Midden-Zeeland);
- Recreation/ tourism (B -);
- Other (A - water management: insufficient exchange with Oosterschelde);
- Pollution (not Industrial discharge) (A - eutrophication).

b) in the surrounding area:

- Construction (B - Increase of recreational capacity of harbours in the region and potential increase of boating).

27. Conservation measures taken:

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

- Special Protection Area (Birds Directive 79/409/EEC, 2000)
- Natura 2000

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

Ia ❑;Ib ❑; II ❑; III ❑; IV ❑; V ❑; VI ❑

c) Does an officially approved management plan exist; and is it being implemented?:
The Ramsar site matches 100% with the designation for Natura 2000.
The process for the Natura 2000-management plan has been started.

d) Describe any other current management practices:
In 2004 a sluice has been constructed in the Zandkreekdam (seperating the site from the Oosterschelde) to allow a more natural water management and improvement of the water quality. Large herbivors are used for grazing management.

28. Conservation measures proposed but not yet implemented:

Nothing particular.

29. Current scientific research and facilities:

Ongoing biodiversity monitoring is one of the obligatory activities in relation to the designated Natura2000 habitat types and/or species.

Most of the topics studied at in the Wadden Sea (ecology of seals, birds (numbers, distribution, foraging, breeding), fish, invertebrates, sediment) are also studied and monitored in the Delta by Rijkswaterstaat (www.rws.nl) and Center for Marine and Estuarine Ecology (NIOO/CEMO, www.nioo.nl) and IMARES (part of the Wageningen University and Research Centre; www.imares.wur.nl) in Yerseke.

Rijkswaterstaat monitors the presence of water birds on a regular scale. SOVON, the Dutch Bird Research Organisation, coordinates a continuous national bird monitoring program in which it

cooperates with 7000 volunteers, research institutes and organisations in the monitoring of birds throughout the Netherlands (among others the Veerse Meer).

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

Excursions, information booklet.

31. Current recreation and tourism:

The site is very important for visitors. It has functions for water recreation (sailing, fishing, speed boats etc.) and recreation on land (walking, cycling etc.).

For details on visitor numbers see the recent study of Waterrecreatieadvies (2009).

32. Jurisdiction:

Territorial: Municipalities of Noord-Beveland, Veere, Middelburg, Goes; Functional jurisdiction (conservation purposes): Ministry of Economic Affairs.

33. Management authority:

Main management authorities:

- Rijkswaterstaat (Ministerie van Infrastructuur en Milieu), Dienst Zeeland, P.O. Box 5014, 4330 KA Middelburg, the Netherlands, +31 (0)118 672200.
- Staatsbosbeheer, P.O. Box 1300, 3970 BH Driebergen, the Netherlands, tel. +31 (0)30-6926111.
- Natuurmonumenten, P.O. Box 9955, 1243 ZS 's-Graveland, tel. +31 (0)35 655 99 33

34. Bibliographical references:

The number of scientific/technical references is too extended to list here. For a complete list please surf to the publication lists of the research institutes on the internet. For an arbitrary selection see below:

- BirdLife International, 2004. Birds in Europe, population estimates, trends and conservation status. Cambridge, UK: BirdLife International. (BirdLife Conservation Series No. 12).
- Holland A.M.B.M., C.M. Berrevoets, J. Consemulder, P.L. Peperzak, E.C. Stikvoort, F. Twisk, L.P.M.J. Wetsteyn, K. Wolfstein, 2004. Veerse Meer aan de Oosterschelde : toestand ecosysteem Veerse Meer vóór ingebruikname doorlaatmiddel. Rapport RIKZ RIKZ/2004.007; 72p.
- Hornman, M., Hustings, F., Koffijberg, K., Kleefstra, R., Klaassen, O., van Winden, E., SOVON Ganzen- en Zwanenwerkgroep & L. Soldaat, 2012. Watervogels in Nederland 2009/2010. SOVON-rapport 2012/02, Waterdienst-rapport 12.06. SOVON Vogelonderzoek Nederland, Nijmegen.
- Janssen, John, A.M. & Joop, H.J. Schaminée, 2009. Europese Natuur in Nederland. Zee en kust Natura 2000-gebieden. KNNV-Uitgeverij. 296p.
- Ministerie van LNV, 2008. Ontwerp aanwijzingsbesluit Natura-2000 gebied Veerse Meer.
- Van Roomen M.W.J, Boele A., van der Weide M.J.T., van Winden E.A.J, Zoetebier D. 2000. Belangrijke vogelgebieden in Nederland, 1993-97. Actueel overzicht van Europese vogelwaarden in aangewezen en aan te wijzen speciale beschermingszones en andere belangrijke gebieden. SOVON-informatierapport 2000/01. SOVON Vogelonderzoek Nederland, Beek-Ubbergen.
- Waardenburg 2010. Herintroductie getij in de Grevelingen en de effecten op natuur in Intergetijdengebieden.
- Waterrecreatieadvies, 2009. Onderzoek vaargedrag Deltagebied.