



# Ramsar Information Sheet

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## Estonia

### Haapsalu-Noarootsi



Designation date	8 February 2011
Site number	2022
Coordinates	59°09'51"N 23°30'07"E
Area	27 450,00 ha

## Color codes

Fields back-shaded in light blue relate to data and information required only for RIS updates.

Note that some fields concerning aspects of Part 3, the Ecological Character Description of the RIS (tinted in purple), are not expected to be completed as part of a standard RIS, but are included for completeness so as to provide the requested consistency between the RIS and the format of a 'full' Ecological Character Description, as adopted in Resolution X.15 (2008). If a Contracting Party does have information available that is relevant to these fields (for example from a national format Ecological Character Description) it may, if it wishes to, include information in these additional fields.

## 1 - Summary

### Summary

Haapsalu-Noarootsi wetland site is a large mosaic marine/coastal wetland complex situated along the Northwest coast of Estonia. The site embraces vast shallow coastal sea areas from Haapsalu to Keibu Bay (Nõva-Osmussaare Limited Conservation Area), a five kilometers long and one-and-half wide Island by the entrance to the Gulf of Finland (Osmussaare Landscape Conservation Area) and an area of numerous shallow bays formed in place of a former straight that separated the Noarootsi Peninsula from the mainland (Silma Nature Conservation Area). It consists of coastal seascape, shallow inlets and bays, coastal lagoons, coastal meadows, reed-beds and flooded mud- and sandflats and is important due to its well-preserved marine biota and abundance of migratory and breeding birds.

## 2 - Data & location

### 2.1 - Formal data

#### 2.1.1 - Name and address of the compiler of this RIS

##### Responsible compiler

Institution/agency

Postal address

##### National Ramsar Administrative Authority

Institution/agency

Postal address

#### 2.1.2 - Period of collection of data and information used to compile the RIS

From year

To year

#### 2.1.3 - Name of the Ramsar Site

Official name (in English, French or Spanish)

#### 2.1.4 - Changes to the boundaries and area of the Site since its designation or earlier update

(Update) A. Changes to Site boundary Yes  No

(Update) B. Changes to Site area No change to area

(Update) For secretariat only. This update is an extension

#### 2.1.5 - Changes to the ecological character of the Site

(Update) 6b i. Has the ecological character of the Ramsar Site (including applicable Criteria) changed since the previous RIS? Not evaluated

## 2.2 - Site location

### 2.2.1 - Defining the Site boundaries

#### b) Digital map/image

<1 file(s) uploaded>

Former maps

#### Boundaries description

### 2.2.2 - General location

a) In which large administrative region does the site lie?

b) What is the nearest town or population centre?

### 2.2.3 - For wetlands on national boundaries only

a) Does the wetland extend onto the territory of one or more other countries? Yes  No

b) Is the site adjacent to another designated Ramsar Site on the territory of another Contracting Party? Yes  No

### 2.2.4 - Area of the Site

Official area, in hectares (ha): 27450

Area, in hectares (ha) as calculated from GIS boundaries 27590.88

## 2.2.5 - Biogeography

## Biogeographic regions

Regionalisation scheme(s)	Biogeographic region
Other scheme (provide name below)	2. terrestrial area Sarmatic mixed forests freshwater area Southern Baltic Lowlands temperate floodplain rivers and wetlands
EU biogeographic regionalization	1. Boreal

## Other biogeographic regionalisation scheme

1. EEA, European Environment Agency, [http://www.eea.europa.eu/publications/report\\_2002\\_0524\\_154909](http://www.eea.europa.eu/publications/report_2002_0524_154909)
2. B: Olson, D. M, E. Dinerstein, E.D. Wikramanayake, N.D. Burgess, G.V.N. Powell, E.C. Underwood, J.A. D'amico, I. Itoua, H.E. Strand, J.C. Morrison, C.J. Loucks, T.F. Allnutt, T.H. Ricketts, Y. Kura, J.F. Lamoreux, W.W. Wetengel, P. Hedao, & K.R. Kassem. 2001. Terrestrial Ecoregions of the World: A New Map of Life on Earth. - BioScience 51:933-938
- Abell, R., Thieme, M. L., Revenga, C., Bryer, M., Kottelat, M., Bogutskaya, N., Coad, B., Mandrak, N., Contreras Balderas, S., Bussing, W., Stiassny, M., Skelton, P., Allen, G., Unmack, P., Naseka, A., Ng, R., Sindorf, N., Robertson, J., Armijo, E., Higgins, J., Heibel, T.J., Wikramanayake, E., Olson, D., Lopez, H. L., Reis, R. E., Lundberg, J.G., Sabaj Perez, M.H., Petry P., 2008, Freshwater Ecoregions of the World: A New Map of Biogeographic Units for Freshwater Biodiversity Conservation. - BioScience 58: 403-414.

### 3 - Why is the Site important?

#### 3.1 - Ramsar Criteria and their justification

- Criterion 1: Representative, rare or unique natural or near-natural wetland types

Hydrological services provided	
Other ecosystem services provided	Marine habitats such A-Permanent shallow marine waters and H- Intertidal marshes create a unique habitat for migratory birds for resting and feeding. It also creates a habitat for several site-specific plant species.
Other reasons	<p>The site is a good representative of the following habitat types listed in the Annex I of the EU Habitats Directive: sandbanks slightly covered by sea water all the time (1110), mudflats and sandflats not covered by seawater at low tide (1140), coastal lagoons (1150*), large shallow inlets and bays (1160), reefs (1170), annual vegetation of drift lines (1210), perennial vegetation of stony banks (1220), vegetated sea cliffs of the Baltic coast (1230), boreal Baltic islets and small islands (1620), boreal Baltic coastal meadows (1630*), boreal Baltic sandy beaches with perennial vegetation (1640) and alkaline fens (7230).</p> <p>The sign '*' indicates priority habitat types under the Habitats Directive.</p> <p>The wetland complex plays a substantial hydrological, biological and ecological role in the region and has been identified both as an IBA and Natura 2000 site (both SPA and SCI).</p>

- Criterion 2 : Rare species and threatened ecological communities

- Criterion 3 : Biological diversity

Justification	The site supports particular elements of biological diversity that are rare or particularly characteristic of the Boreal biogeographic region such as coastal grasslands (semi-natural meadows), coastal lagoons and marine ecosystems with high biodiversity (at the coastal sea 33 taxa of phyto-benthos and 43 taxa of zoobenthos are found). In total 225 different bird species have been observed, 119 of which breed.
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- Criterion 4 : Support during critical life cycle stage or in adverse conditions

- Criterion 5 : >20,000 waterbirds

Overall waterbird numbers	far more than 20 000 waterbirds
Start year	2014
Source of data:	Bird census and expert estimation

- Criterion 6 : >1% waterbird population

- Criterion 8 : Fish spawning grounds, etc.

Justification It is one of the biggest spring spawning grounds in Western Estonia for freshwater fish (Pike *Esox lucius*, Ide *Leuciscus idus*, Roach *Rutilus rutilus*). Altogether 25 fish species are found here.

### 3.2 - Plant species whose presence relates to the international importance of the site

Phylum	Scientific name	Criterion 2	Criterion 3	Criterion 4	IUCN Red List	CITES Appendix I	Other status	Justification
<b>Plantae</b>								
TRACHEOPHYTA/ LILIOPSIDA	<i>Cladium mariscus</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	LC	<input type="checkbox"/>		Crit 3: on its distribution border. Only in specific coastal wetlands
TRACHEOPHYTA/ LILIOPSIDA	<i>Dactylorhiza russowii</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	VU in Estonian Red Data Book	Only in wet grasslands
TRACHEOPHYTA/ MAGNOLIOPSIDA	<i>Homungia petraea</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		Crit 3.: only on rocks
TRACHEOPHYTA/ LILIOPSIDA	<i>Liparis loeselii</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	Annex II, Habitats Directive; VU in Estonian Red Data Book	Crit 2, 3: species grows only in fen habitats
TRACHEOPHYTA/ MAGNOLIOPSIDA	<i>Ostericum palustre</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	Annex II, Habitats Directive	Typical only for coastal meadows

Otericum palustre = Angelica palustris

### 3.3 - Animal species whose presence relates to the international importance of the site

Phylum	Scientific name	Species qualifies under criterion				Species contributes under criterion				Pop. Size	Period of pop. Est.	% occurrence 1)	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
		2	4	6	9	3	5	7	8								
<b>Others</b>																	
CHORDATA/ AMPHIBIA	<i>Epidalea calamita</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	Annex IV, Habitats Directive	
CHORDATA/ MAMMALIA	<i>Lutra lutra</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				NT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Annex II, Habitats Directive	
CHORDATA/ AMPHIBIA	<i>Pelophylax lessonae</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	Annex IV, Habitats Directive	
<b>Fish, Mollusc and Crustacea</b>																	
CHORDATA/ ACTINOPTERYGII	<i>Esox lucius</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>		Criterion 8: It is one of the biggest spring spawning grounds in Western Estonia for freshwater fish
CHORDATA/ ACTINOPTERYGII	<i>Leuciscus idus</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>		Criterion 8: It is one of the biggest spring spawning grounds in Western Estonia for freshwater fish
CHORDATA/ ACTINOPTERYGII	<i>Rutilus rutilus</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>		Criterion 8: It is one of the biggest spring spawning grounds in Western Estonia for freshwater fish
<b>Birds</b>																	
CHORDATA/ AVES	<i>Anas penelope</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	90000		6.42	LC	<input type="checkbox"/>	<input type="checkbox"/>		Western Siberia & NE Europe/NW Europe. <a href="https://www.eoy.ee/hirundo/files/Eltermaa_Linden_2020.pdf">https://www.eoy.ee/hirundo/files/Eltermaa_Linden_2020.pdf</a>

Phylum	Scientific name	Species qualifies under criterion				Species contributes under criterion				Pop. Size	Period of pop. Est.	% occurrence <sup>1)</sup>	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
		2	4	6	9	3	5	7	8								
CHORDATA/AVES	<i>Anser erythropus</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	16			VU	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Annex I of Birds Directive (Council directive 2009/147/EC)	Criterion 4: The site is regular stop over site for globally threatened Lesser White-fronted Goose <i>Anser erythropus</i> (2-30 ind.)
CHORDATA/AVES	<i>Anthus campestris</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	Annex I of Birds Directive (Council directive 2009/147/EC)	
CHORDATA/AVES	<i>Asio flammeus</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	Annex I of Birds Directive (Council directive 2009/147/EC)	
CHORDATA/AVES	<i>Botaurus stellaris</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	9			LC	<input type="checkbox"/>	<input type="checkbox"/>	Annex I of Birds Directive (Council directive 2009/147/EC)	7-9 pairs Data from 2004- 2005.
CHORDATA/AVES	<i>Branta leucopsis</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10000		1.5	LC	<input type="checkbox"/>	<input type="checkbox"/>	Annex I of Birds Directive (Council directive 2009/147/EC)	10 000 ind. Criterion 6: Biogeographic region: Russia/Germany & Netherlands
CHORDATA/AVES	<i>Bubo bubo</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	Annex I of Birds Directive (Council directive 2009/147/EC)	
CHORDATA/AVES	<i>Calidris alpina schinzii</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	11				<input type="checkbox"/>	<input type="checkbox"/>	Annex I of Birds Directive (Council directive 2009/147/EC)	10-11 pairs Data from 2004- 2005. Criterion 4: nationally important breeding area for Southern Dunlin
CHORDATA/AVES	<i>Caprimulgus europaeus</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	Annex I of Birds Directive (Council directive 2009/147/EC)	
CHORDATA/AVES	<i>Chlidonias niger</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10			LC	<input type="checkbox"/>	<input type="checkbox"/>	Annex I of Birds Directive (Council directive 2009/147/EC)	5-15 pairs Data from 2004- 2005.
CHORDATA/AVES	<i>Ciconia nigra</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	Annex I of Birds Directive (Council directive 2009/147/EC); Highly endangered and nationally strongly protected (I protection category)	
CHORDATA/AVES	<i>Circus aeruginosus</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7			LC	<input type="checkbox"/>	<input type="checkbox"/>	Annex I of Birds Directive (Council directive 2009/147/EC)	6-7 pairs Data from 2004- 2005.
CHORDATA/AVES	<i>Circus pygargus</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	Annex I of Birds Directive (Council directive 2009/147/EC)	
CHORDATA/AVES	<i>Clangula hyemalis</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	30000		1.8	VU	<input type="checkbox"/>	<input type="checkbox"/>		Criterion 4: The site is known as the most important wintering area for Long-tailed Duck <i>Clangula hyemalis</i> in the Northern Baltic Sea (20 000-40 000 ind.). Criterion 6: Biogeographic region: Western Siberia/North Europe (bre)
CHORDATA/AVES	<i>Crex crex</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10			LC	<input type="checkbox"/>	<input type="checkbox"/>	Annex I of Birds Directive (Council directive 2009/147/EC)	5-15 pairs Data from 2004- 2005.
CHORDATA/AVES	<i>Cygnus columbianus</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1700		7.7	LC	<input type="checkbox"/>	<input type="checkbox"/>		up to 1700 ind. Criterion 6: Biogeographic region: Western Siberia & NE Europe/North-west Europe
CHORDATA/AVES	<i>Gavia arctica</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7500	2009		LC	<input type="checkbox"/>	<input type="checkbox"/>	Annex I of Birds Directive (Council directive 2009/147/EC)	During the autumn migration
CHORDATA/AVES	<i>Gavia stellata</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	25000	2009		LC	<input type="checkbox"/>	<input type="checkbox"/>	Annex I of EU Birds Directive	During the autumn migration
CHORDATA/AVES	<i>Grus grus</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	9			LC	<input type="checkbox"/>	<input type="checkbox"/>	Annex I of Birds Directive (Council directive 2009/147/EC)	8-10 pairs Data from 2004- 2005.
CHORDATA/AVES	<i>Haliaeetus albicilla</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Annex I of Birds Directive (Council directive 2009/147/EC); Highly endangered and nationally strongly protected (I protection category)	
CHORDATA/AVES	<i>Lanius collurio</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	33			LC	<input type="checkbox"/>	<input type="checkbox"/>	Annex I of Birds Directive (Council directive 2009/147/EC)	30-35 pairs Data from 2004- 2005.

Phylum	Scientific name	Species qualifies under criterion				Species contributes under criterion				Pop. Size	Period of pop. Est.	% occurrence <sup>1)</sup>	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
		2	4	6	9	3	5	7	8								
CHORDATA/AVES	<i>Lullula arborea</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	Annex I of Birds Directive (Council directive 2009/147/EC)	
CHORDATA/AVES	<i>Lyrurus tetrix</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	Annex I of Birds Directive (Council directive 2009/147/EC)	
CHORDATA/AVES	<i>Mergellus albellus</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	600		1.8	LC	<input type="checkbox"/>	<input type="checkbox"/>		more than 600 ind Criterion 6: Biogeographic region: North-east Europe/Black Sea & East Mediterranean
CHORDATA/AVES	<i>Philomachus pugnax</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	Annex I of Birds Directive (Council directive 2009/147/EC); Highly endangered and nationally strongly protected (I protection category)	
CHORDATA/AVES	<i>Podiceps auritus</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4			VU	<input type="checkbox"/>	<input type="checkbox"/>	Annex I of Birds Directive (Council directive 2009/147/EC)	3-5 pairs Data from 2004- 2005.
CHORDATA/AVES	<i>Porzana parva</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2	2008-2016			<input type="checkbox"/>	<input type="checkbox"/>	Annex I of EU Birds Directive	Breeding (1-3 pairs)
CHORDATA/AVES	<i>Porzana porzana</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	80			LC	<input type="checkbox"/>	<input type="checkbox"/>	Annex I of Birds Directive (Council directive 2009/147/EC)	30-130 pairs Data from 2004- 2005.
CHORDATA/AVES	<i>Somateria mollissima</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7600			NT	<input type="checkbox"/>	<input type="checkbox"/>		(7600 ind.) Biogeographic region: Baltic, Denmark & Netherlands
CHORDATA/AVES	<i>Sterna hirundo</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	30			LC	<input type="checkbox"/>	<input type="checkbox"/>	Annex I of Birds Directive (Council directive 2009/147/EC)	20-40 pairs Data from 2004- 2005.
CHORDATA/AVES	<i>Sterna paradisaea</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	Annex I of Birds Directive (Council directive 2009/147/EC)	
CHORDATA/AVES	<i>Sylvia nisoria</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	33			LC	<input type="checkbox"/>	<input type="checkbox"/>	Annex I of Birds Directive (Council directive 2009/147/EC)	30-35 pairs Data from 2004- 2005.
CHORDATA/AVES	<i>Tetrastes bonasia</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					<input type="checkbox"/>	<input type="checkbox"/>	Annex I of Birds Directive (Council directive 2009/147/EC)	

1) Percentage of the total biogeographic population at the site

### 3.4 - Ecological communities whose presence relates to the international importance of the site



Name of ecological community	Community qualifies under Criterion 2?	Description	Justification
reedbeds	<input type="checkbox"/>	vast areas of coastal reedbeds	
Sandbanks slightly covered by sea water (1110)	<input checked="" type="checkbox"/>	Emerging sandbanks due to land uplift	EU Habitats Directive
transition mires and quaking bogs (7140)	<input checked="" type="checkbox"/>		EU Habitats Directive, priority habitat
Boreal Baltic islands and small islets (1620)	<input checked="" type="checkbox"/>		EU Habitats Directive
Fennoscandian mineral-rich springs and springfens (7160)	<input checked="" type="checkbox"/>		EU Habitats Directive
Calcareous fens with <i>Cladium mariscus</i> and species of <i>Caricion davallianae</i> (7210)	<input checked="" type="checkbox"/>		EU Habitats Directive, priority habitat
Fennoscandian Deciduous forests (9080)	<input checked="" type="checkbox"/>		EU Habitats Directive, priority habitat
Alkaline fens (7230)	<input checked="" type="checkbox"/>		EU Habitats Directive
Baltic Boreal coastal meadows (1630)	<input checked="" type="checkbox"/>		EU Habitats Directive, priority habitat
Salicornia and other annuals colonizing mud and sand (1310)	<input checked="" type="checkbox"/>	Occurs in shallow areas, where salt accumulates	EU Habitats Directive
Vegetated sea cliffs of the Atlantic and Baltic coasts (1230)	<input checked="" type="checkbox"/>		EU Habitats Directive
Annual vegetation of drift lines (1210)	<input checked="" type="checkbox"/>		EU Habitats Directive
Large shallow inlets and bays (1160)	<input checked="" type="checkbox"/>		EU Habitats Directive
Mudflats and sandflats not covered by seawater at low tide (1140)	<input checked="" type="checkbox"/>	No tides but storms	EU Habitats Directive
Coastal lagoons (1150)	<input checked="" type="checkbox"/>		EU Habitat Directive, priority habitat
Perennial vegetation of stony banks (1220)	<input checked="" type="checkbox"/>		EU Habitats Directive
Hard oligo-mesotrophic waters with benthic vegetation of <i>Chara</i> spp (3140)	<input checked="" type="checkbox"/>		EU Habitats Directive

## 4 - What is the Site like? (Ecological character description)

### 4.1 - Ecological character

The site is located in the area of neotectonic uplift (2-3 mm per year). In Haapsalu Bay area the inland bays and remnant lakes cut off from the sea due to land uplift are very shallow (0.5–1 m) and are surrounded by dense reed beds. Reed bed also stretches along the coastline in a belt up to 1 km wide and also covers over 50 small offshore islets and consists mainly of Common Reed *Phragmites australis* and smaller stands of Saw-sedge *Cladium mariscus*.

At the shallow coastal sea most widely distributed are sandbanks slightly covered by sea water, mudflats and sandflats and reefs. The main coastal habitats are Baltic coastal meadows, coastal lagoons, large shallow inlets and bays.

On Osmussaare Island alvars cover more than one-third of the area, but moist calcareous meadows, swamp meadows and small rich fens can be also found. Several small lakes with swampy shores but clear water and rich birdlife in the south-western part of the island are what remains of a former bay. In Haapsalu Bay area coastal meadows are widespread. In areas which are better preserved these comprise a low grass layer - typically Black Rush *Juncus gerardii* meadows and patches of saline Annual Seablite *Suaeda maritima* meadow. This is an important breeding habitat of coastal waders (*Calidris alpina schinzii*, *Limosa limosa*, *Tringa totanus*) and potential spawning ground for Natterjack Toad (*Bufo calamita*). 15 species of orchids have also been recorded. Coastal meadows in good condition are the popular resting place for migratory geese and cranes.

Management of semi-natural grasslands is of critical importance: due to natural succession (overgrowing) appropriate management (grazing and cutting) is needed to keep the biodiversity and habitats for endangered breeding birds.

### 4.2 - What wetland type(s) are in the site?

#### Marine or coastal wetlands

Wetland types (code and name)	Local name	Ranking of extent (1: greatest - 4: least)	Area (ha) of wetland type	Justification of Criterion 1
A: Permanent shallow marine waters		1	7845	Representative
D: Rocky marine shores		0	11	
E: Sand, shingle or pebble shores		4	102	Representative
H: Intertidal marshes		2	2064	
J: Coastal brackish / saline lagoons		3	347	Representative

#### Inland wetlands

Wetland types (code and name)	Local name	Ranking of extent (1: greatest - 4: least)	Area (ha) of wetland type	Justification of Criterion 1
Fresh water > Flowing water >> M: Permanent rivers/ streams/ creeks		0	1	
Fresh water > Marshes on inorganic soils >> Tp: Permanent freshwater marshes/ pools		4	31	Representative
Fresh water > Marshes on inorganic soils >> Ts: Seasonal/ intermittent freshwater marshes/ pools on inorganic soils		3	524	Representative
Fresh water > Marshes on peat soils >> U: Permanent Non-forested peatlands		0	9	Representative
Fresh water > Marshes on inorganic soils >> W: Shrub-dominated wetlands		4	80	Representative
Fresh water > Marshes on inorganic soils >> Xf: Freshwater, tree-dominated wetlands		0	8	
Fresh water > Marshes on peat soils >> Xp: Permanent Forested peatlands		0	4	Representative

#### Human-made wetlands

Wetland types (code and name)	Local name	Ranking of extent (1: greatest - 4: least)	Area (ha) of wetland type
2: Ponds		0	2

#### Other non-wetland habitat

Other non-wetland habitats within the site	Area (ha) if known
Dry meadows and alvars	
forests	

### 4.3 - Biological components

#### 4.3.1 - Plant species

Other noteworthy plant species

Phylum	Scientific name	Position in range / endemism / other
TRACHEOPHYTA/MAGNOLIOPSIDA	<i>Anthyllis coccinea</i>	
TRACHEOPHYTALILIOPSIDA	<i>Carex glareosa</i>	
TRACHEOPHYTALILIOPSIDA	<i>Carex mackenziei</i>	
TRACHEOPHYTA/MAGNOLIOPSIDA	<i>Cochlearia danica</i>	
TRACHEOPHYTA/MAGNOLIOPSIDA	<i>Draba muralis</i>	
TRACHEOPHYTA/MAGNOLIOPSIDA	<i>Halimione pedunculata</i>	
TRACHEOPHYTALILIOPSIDA	<i>Hermidium monorchis</i>	
TRACHEOPHYTA/MAGNOLIOPSIDA	<i>Lunaria rediviva</i>	
TRACHEOPHYTALILIOPSIDA	<i>Ophrys insectifera</i>	
TRACHEOPHYTA/MAGNOLIOPSIDA	<i>Oxytropis pilosa</i>	
TRACHEOPHYTA/MAGNOLIOPSIDA	<i>Sagina maritima</i>	
TRACHEOPHYTA/MAGNOLIOPSIDA	<i>Suaeda maritima</i>	

#### 4.3.2 - Animal species

Other noteworthy animal species

Phylum	Scientific name	Pop. size	Period of pop. est.	%occurrence	Position in range /endemism/other
CHORDATA/ACTINOPTERYGII	<i>Carassius carassius</i>				
MOLLUSCA/BIVALVIA	<i>Macoma balthica</i>				
MOLLUSCA/BIVALVIA	<i>Mytilus edulis</i>				
CHORDATA/AVES	<i>Acrocephalus arundinaceus</i>	340	2008-2016		260-420 pairs
CHORDATA/AVES	<i>Anser anser</i>	80	2008-2016		70-90 pairs
CHORDATA/AVES	<i>Branta bernicla</i>	75000	2009		During the autumn migration
CHORDATA/AVES	<i>Cygnus olor</i>	180	2008-2016		130-230 pairs
CHORDATA/AVES	<i>Fulica atra</i>	2	2008-2016		0-3 pairs
CHORDATA/AVES	<i>Melanitta nigra</i>	700000	2009		During the autumn migration
CHORDATA/AVES	<i>Podiceps cristatus</i>	50	2008-2016		50-110 breeding pairs
CHORDATA/AVES	<i>Podiceps grisegena</i>	6	2008-2016		4-8 breeding pairs
CHORDATA/AVES	<i>Rallus aquaticus</i>	33	2008-2016		25-40 breeding pairs

Invasive alien animal species

Phylum	Scientific name	Impacts	Changes at RIS update
CHORDATA/ACTINOPTERYGII	<i>Carassius gibelio</i>	- Please select a value -	No change

### 4.4 - Physical components

#### 4.4.1 - Climate

Climatic region	Subregion
D: Moist Md-Latitude climate with cold winters	Dfb: Humid continental (Humid with severe winter, no dry season, warm summer)

Climate is maritime. The mean temperature is -3C in January and 16C in July. The average rainfall is 650 mm per year.

#### 4.4.2 - Geomorphic setting

a) Minimum elevation above sea level (in metres)

a) Maximum elevation above sea level (in metres)

- Entire river basin
- Upper part of river basin
- Middle part of river basin
- Lower part of river basin
- More than one river basin
- Not in river basin
- Coastal

Please name the river basin or basins. If the site lies in a sub-basin, please also name the larger river basin. For a coastal/marine site, please name the sea or ocean.

Baltic Sea

#### 4.4.3 - Soil

Mineral

(Update) Changes at RIS update No change  Increase  Decrease  Unknown

Organic

(Update) Changes at RIS update No change  Increase  Decrease  Unknown

No available information

Are soil types subject to change as a result of changing hydrological conditions (e.g., increased salinity or acidification)? Yes  No

Please provide further information on the soil (optional)

Dominant soils are Leptosols, Regosols, Cambisols and Gleysols. Soils are humus-rich, but stony.

#### 4.4.4 - Water regime

Water permanence

Presence?	Changes at RIS update
Usually permanent water present	

Source of water that maintains character of the site

Presence?	Predominant water source	Changes at RIS update
Water inputs from precipitation	<input type="checkbox"/>	No change
Marine water	<input type="checkbox"/>	No change
Water inputs from groundwater	<input type="checkbox"/>	No change

Water destination

Presence?	Changes at RIS update
Marine	No change

Stability of water regime

Presence?	Changes at RIS update
Water levels fluctuating (including tidal)	No change

Please add any comments on the water regime and its determinants (if relevant). Use this box to explain sites with complex hydrology.

The site extending from the Keibu Bay of the Gulf of Finland to the latitudes of the Noarootsi Peninsula and Haapsalu Bay is a part of West-Estonian Lowland. Terrestrialization began here about 9300 years ago. The region has risen more than 90 m and rises nowadays about 3 mm/year. As a result of neotectonic uplift and accumulation of sediments the bays and the coastal sea have become and are continuously becoming shallower.

The sea conditions are exceptional, because the eastern part of the Väinameri having almost 85% of water exchange, lower salinity and higher nutrient concentration. The water level changes due to eastern and western winds and it may vary within 1,5 to 2 m.

Haapsalu Bay is a typical brackish water body with limited water exchange between the inner part of the bay and the open Baltic Sea, where nutrients (N, P) get trapped into bottom sediments. Due to its shallowness the mean annual river discharge exceeds the volume of the bay by approx. two and half times.

The fens are fed by groundwater.

#### 4.4.5 - Sediment regime

Significant accretion or deposition of sediments occurs on the site

(Update) Changes at RIS update No change  Increase  Decrease  Unknown

Sediment regime unknown

Please provide further information on sediment (optional):

The limestone bedrock is covered by clay and marine sediments. Osmussaar Island is unique due to its geological landmarks: the cliff, being one of the best examples of the Baltic Clint, high shingle ridges along the western coast and gneiss-breccia boulders formed about 540 million years ago when the Neugrund meteorite fell into the sea 10 km North-East from Osmussaar Island.

#### 4.4.6 - Water pH

Unknown

#### 4.4.7 - Water salinity

Mxohaline (brackish)/Mxosaline (0.5-30 g/l)

(Update) Changes at RIS update No change  Increase  Decrease  Unknown

Unknown

Please provide further information on salinity (optional):

The sea conditions are exceptional, because the eastern part of the Väinameri having almost 85% of water exchange, lower salinity and higher nutrient concentration.

#### 4.4.8 - Dissolved or suspended nutrients in water

Unknown

Please provide further information on dissolved or suspended nutrients (optional):

The sea conditions are exceptional, because the eastern part of the Väinameri having almost 85% of water exchange, lower salinity and higher nutrient concentration.

#### 4.4.9 - Features of the surrounding area which may affect the Site

Please describe whether, and if so how, the landscape and ecological characteristics in the area surrounding the Ramsar Site differ from the site itself: i) broadly similar  ii) significantly different

Surrounding area has greater urbanisation or development

Surrounding area has higher human population density

Surrounding area has more intensive agricultural use

Surrounding area has significantly different land cover or habitat types

### 4.5 - Ecosystem services

#### 4.5.1 - Ecosystem services/benefits

##### Provisioning Services

Ecosystem service	Examples	Importance/Extent/Significance
Food for humans	Sustenance for humans (e.g., fish, molluscs, grains)	Medium
Wetland non-food products	Livestock fodder	Medium
Wetland non-food products	Reeds and fibre	Medium

##### Regulating Services

Ecosystem service	Examples	Importance/Extent/Significance
Maintenance of hydrological regimes	Groundwater recharge and discharge	Medium
Erosion protection	Soil, sediment and nutrient retention	Medium
Pollution control and detoxification	Water purification/waste treatment or dilution	Medium

##### Cultural Services

Ecosystem service	Examples	Importance/Extent/Significance
Recreation and tourism	Nature observation and nature-based tourism	Medium
Recreation and tourism	Picnics, outings, touring	Medium
Spiritual and inspirational	Cultural heritage (historical and archaeological)	High
Spiritual and inspirational	Aesthetic and sense of place values	Medium
Scientific and educational	Important knowledge systems, importance for research (scientific reference area or site)	Medium
Scientific and educational	Educational activities and opportunities	Medium
Scientific and educational	Long-term monitoring site	High

##### Supporting Services

Ecosystem service	Examples	Importance/Extent/Significance
Biodiversity	Supports a variety of all life forms including plants, animals and microorganisms, the genes they contain, and the ecosystems of which they form a part	High
Soil formation	Sediment retention	Medium
Soil formation	Accumulation of organic matter	Low
Nutrient cycling	Storage, recycling, processing and acquisition of nutrients	Medium
Pollination	Support for pollinators	Medium

Other ecosystem service(s) not included above:

Coastal grasslands have been managed for centuries since these coastal areas raised from the sea. Semi-natural communities are part of the national heritage. Nowadays these grasslands are maintained for nature conservation purposes and this has an important social impact for the local community. Characteristic for the region is the unique tradition of using reed as building material for reed roofs. In the Osmussaar Island and the surrounding coastal sea there are a lot of archaeological findings, which are preserved as archaeological monuments.

agricultural use (livestock grazing), reed cutting, fishing, hunting. About 1000-2000 m3 of mud is extracted annually (for its curative properties) outside the Silma Nature Reserve.

Current recreation and tourism

Main tourism load is concentrated on the short period of summer months. From May to August regular boat trips are organized to Osmussaar Island. On the mainland, nature trails and bird towers are actively used by ecotourists. There is one specialized company providing guided eco-tours (especially birdwatching trips). The annual number of visitors is approximately 5000.

Within the site: 100

Outside the site: 15 000

Have studies or assessments been made of the economic valuation of ecosystem services provided by this Ramsar Site? Yes  No  Unknown

#### 4.5.2 - Social and cultural values

i) the site provides a model of wetland wise use, demonstrating the application of traditional knowledge and methods of management and use that maintain the ecological character of the wetland

Description if applicable

Coastal grasslands have been managed for centuries since these coastal areas raised from the sea. Semi-natural communities are part of the national heritage. Nowadays these grasslands are maintained for nature conservation purposes and this has an important social impact for the local community.

Two international nature conservation projects have been carried out. During Life-Nature project "Restoration of habitats of endangered species in the Silma Nature Reserve" (2002-2006) 780 ha of valuable coastal grasslands has been restored. During the project "Wings over Wetlands" (2007-2009) ecotourism facilities have been enhanced and 150 ha of wetlands restored.

ii) the site has exceptional cultural traditions or records of former civilizations that have influenced the ecological character of the wetland

iii) the ecological character of the wetland depends on its interaction with local communities or indigenous peoples

Description if applicable

The coastal meadow management and maintenance depend on local farmers.

At the end of the 20th century, most of the coastal meadows in the area became overgrown with reeds because pastoral herding was economically unviable. This had a negative impact on the water birds Restoration of these meadows began in 2002, currently farmers manage more than 1000 hectares of coastal meadows.

iv) 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

#### 4.6 - Ecological processes

<no data available>

## 5 - How is the Site managed? (Conservation and management)

### 5.1 - Land tenure and responsibilities (Managers)

#### 5.1.1 - Land tenure/ownership

##### Public ownership

Category	Within the Ramsar Site	In the surrounding area
Public land (unspecified)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

##### Private ownership

Category	Within the Ramsar Site	In the surrounding area
Other types of private/individual owner(s)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Provide further information on the land tenure / ownership regime (optional):

within the Ramsar site: mostly private land

in the surrounding area: mostly private land

#### 5.1.2 - Management authority

Please list the local office / offices of any agency or organization responsible for managing the site:

Estonian Environmental Board, Lääne Region

Provide the name and/or title of the person or people with responsibility for the wetland:

Kadri Hänni, Senior Nature Conservation Specialist

Postal address:

Roheline 64, Pärnu, EE80010, Estonia

E-mail address:

kadri.hanni@keskkonnaamet.ee

## 5.2 - Ecological character threats and responses (Management)

### 5.2.1 - Factors (actual or likely) adversely affecting the Site's ecological character

#### Human settlements (non agricultural)

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Housing and urban areas	Low impact	Medium impact	<input checked="" type="checkbox"/>	increase	<input checked="" type="checkbox"/>	increase

#### Energy production and mining

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Renewable energy	Medium impact	Medium impact	<input type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change

#### Human intrusions and disturbance

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Recreational and tourism activities	Low impact	Medium impact	<input checked="" type="checkbox"/>	increase	<input checked="" type="checkbox"/>	increase

#### Natural system modifications

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Unspecified/others	Medium impact	Medium impact	<input checked="" type="checkbox"/>	No change	<input type="checkbox"/>	No change

#### Invasive and other problematic species and genes

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Invasive non-native/ alien species	Medium impact	Medium impact	<input checked="" type="checkbox"/>	No change	<input type="checkbox"/>	No change

#### Pollution

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Unspecified			<input checked="" type="checkbox"/>		<input type="checkbox"/>	
Household sewage, urban waste water	Medium impact	Medium impact	<input checked="" type="checkbox"/>	No change	<input type="checkbox"/>	No change
Industrial and military effluents	Medium impact	Medium impact	<input checked="" type="checkbox"/>	No change	<input type="checkbox"/>	No change
Agricultural and forestry effluents	Medium impact	Medium impact	<input checked="" type="checkbox"/>	No change	<input type="checkbox"/>	No change

Climate change and severe weather

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Storms and flooding	Low impact	Medium impact	<input checked="" type="checkbox"/>	No change	<input checked="" type="checkbox"/>	increase

Please describe any other threats (optional):

within the Ramsar site: 1) Overgrowing of coastal grasslands due to abandonment and negative impact of this to the water birds. At the end of the 20th century most of the coastal meadows in the area became overgrown with reeds because pastoral herding was economically unviable. Restoration of these meadows began in 2002, currently farmers manage more than 1000 hectares of coastal meadows. 2) Continuing eutrophication of the Haapsalu Bay caused by the active use of fertilizers in the past. The agricultural pollution load decreased considerably over the past 15 years due to reduced amounts of fertilizers applied and decreased numbers of livestock. Despite these changes and the overall decrease in pollution load to the bay the ecological quality of the bay has not been improved. Today, ecological conditions of the Bay are mainly affected by wastewater of Haapsalu Town. Even though treatment efficiency of the wastewater treatment plant is high, it is still not sufficient due to highly concentrated sewage water in the inlet, which makes it difficult to achieve necessary quality levels in the outlet. 3) Increase in alien species (the population of *Carassius auratus gibelio*) is recorded during the last decade. 4) One of the greatest dangers for the site and especially for seabirds is a potential risk of oil pollution.

in the surrounding area: interest and pressure to build offshore wind farms.

5.2.2 - Legal conservation status

Regional (international) legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
EU Natura 2000	Nõva-Osmussaare		partly
EU Natura 2000	Väinamere		partly

National legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Landscape Reserve			partly
Limited Conservation Area	Nõva-Osmussaar		partly
Nature Reserve			partly

Non-statutory designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Important Bird Area	Haapsalu-Noarootsi		whole

5.2.3 - IUCN protected areas categories (2008)

- Ia Strict Nature Reserve
- Ib Wilderness Area: protected area managed mainly for wilderness protection
- II National Park: protected area managed mainly for ecosystem protection and recreation
- III Natural Monument: protected area managed mainly for conservation of specific natural features
- IV Habitat/Species Management Area: protected area managed mainly for conservation through management intervention
- V Protected Landscape/Seascape: protected area managed mainly for landscape/seascape conservation and recreation
- VI Managed Resource Protected Area: protected area managed mainly for the sustainable use of natural ecosystems

5.2.4 - Key conservation measures

Legal protection

Measures	Status
Legal protection	Implemented

Habitat

Measures	Status
Habitat manipulation/enhancement	Partially implemented



Species

Measures	Status
Threatened/rare species management programmes	Partially implemented

Human Activities

Measures	Status
Communication, education, and participation and awareness activities	Implemented
Fisheries management/regulation	Implemented
Livestock management/exclusion (excluding fisheries)	Partially implemented
Research	Implemented

5.2.5 - Management planning

Is there a site-specific management plan for the site? Yes

Has a management effectiveness assessment been undertaken for the site? Yes  No

If the site is a formal transboundary site as indicated in section Data and location > Site location, are there shared management planning processes with another Contracting Party? Yes  No

Please indicate if a Ramsar centre, other educational or visitor facility, or an educational or visitor programme is associated with the site:

Supported by the Wings over Wetlands project (2007-2009) a Nature Information Centre has been set up for visitors in the Environmental Board office in Haapsalu, where information about the wetland site, multimedia presentation on waterbird migration, a reed-bed exhibit, etc. is offered. Information booklets are available. Environmental Board organizes approximately 15-20 educational events per year. Hiking trails and campsites are prepared for visitors in Silma Nature Reserve (2 trails with towers) and Osmussaar Island. Bird towers and watching platforms have been built around Haapsalu Bay and near Lake Suttlepa, which create good opportunities for birdwatching and recreation.

5.2.6 - Planning for restoration

Is there a site-specific restoration plan? Yes, there is a plan

5.2.7 - Monitoring implemented or proposed

Monitoring	Status
Birds	Implemented
Animal species (please specify)	Implemented
Plant species	Implemented
Plant community	Implemented

Cape Põõsaspea is an excellent site to monitor the trends of arctic birds, as birds are passing in big numbers close by and are also flying low enough to get good sample of age structure (in autumns, not in springs). The site is maybe only place in Europe to get with relatively small costs the good overview of reproduction success of many arctic ducks related with Siberian/East-Atlantic Flyway. Monitoring results in autumn 2004 and 2009 included totals equal to 10-60% of the flyway's populations of several species, including Red-throated Diver *Gavia stellata*, Scaup *Aythya marila*, Pintail *Anas acuta*, Brent Goose *Branta bernicla* and Barnacle Goose *Branta leucopsis*. The collapse of Long-tailed Duck's *Clangula hyemalis* population was clearly showed by monitoring results. Unfortunately the monitoring in Cape Põõsaspea has not been carried out systematically in every autumn and there is no sign that it would happen in the future neither. Further information, see <http://www.eoy.ee/poosaspea/home>. During the seabird inventory conducted in 2007-2008 (Kuresoo et al., 2009) main waterbird congregation areas (key areas) were identified in the offshore coastal sea area. Endangered vascular plant and moss species are monitored and Natura 2000 endangered habitats are monitored regularly

## 6 - Additional material

### 6.1 - Additional reports and documents

#### 6.1.1 - Bibliographical references

- Ellermaa, M., Pettay, T. 2006. Põõsaspea niemen arktinen muutto syksyllä 2004 (Autumn migration of the arctic birds in Põõsaspea Cape in 2004) – Linnut-vuosikirja 2005: 99-112. (in Finnish with English summary). [http://www.eoy.ee/poosaspea/file\\_download/2/alustava+taitto+arktika.pdf](http://www.eoy.ee/poosaspea/file_download/2/alustava+taitto+arktika.pdf)
- Ellermaa, M., Pettay, T., Könönen, J. 2010. Sügisränne Põõsaspeal 2009. aastal (Autumn migration in Põõsaspea Cape in 2009) – Hirundo 23: 21-46 (in Estonian with English summary). [http://www.eoy.ee/hirundo/sisukorrad/2010\\_1/Eltermaa\\_etal\\_23\\_1.pdf](http://www.eoy.ee/hirundo/sisukorrad/2010_1/Eltermaa_etal_23_1.pdf)
- Ellermaa, M., Pettay, T., Könönen, J. 2010. Peatuvad veelinnud Põõsaspeal 2009. aasta sügisel (Water birds stopping in Põõsaspea in autumn 2009). – Hirundo 23: 67-70 (in Estonian) [http://www.eoy.ee/hirundo/sisukorrad/2010\\_2/Eltermaa\\_etal\\_23\\_2.pdf](http://www.eoy.ee/hirundo/sisukorrad/2010_2/Eltermaa_etal_23_2.pdf)
- Erit, M. 2006. Silma looduskaitseala tähtsus niidu- ja roostikulindude elupaigana Eestis (The importance of the Silma Nature Reserve for birds breeding in meadows and reed-beds) – Hirundo 19: 58-67 (in Estonian with English summary).
- Erit, M. 2007. Rannaniidu- ja roostikulindude asustustihedus Silma looduskaitsealal ja Eestis (A comparison of the nesting densities of coastal and reed-bed birds in Silma Nature Reserve, with national figures for Estonia). – Loodusevaatlusi 2006: 31-48.
- Ilital, A., Vilt, K., Loigu, E., Kurba, J. 200X. Spatial conflict resolution and coastal zone management for Haapsalu Bay. Case study report within the Coastman project. Tallinn University of Technology, Haapsalu Town Government, 17 pp.
- Kuresoo, A., Luigujõe, L., Leito, A. 2009. Loode- ja Lääne-Eesti avameremadalate mittepesisusaegne linnustik: 2007-2008 a. lennuloenduste kokkuvõte (Nonbreeding birds fauna of shallow water marine areas in NW and W Estonia: Summary of aerial censuses in 2007-2008) – SA KIK projekti aruanne. Keskkonnaamet. 40 pp. (in Estonian).
- Valker, T.; Ojaste, I. 2003. Osmussaare haudelinnustik 2003. a. – Linnurada: 3-17.

#### 6.1.2 - Additional reports and documents

##### i. taxonomic lists of plant and animal species occurring in the site (see section 4.3)

<no file available>

##### ii. a detailed Ecological Character Description (ECD) (in a national format)

<no file available>

##### iii. a description of the site in a national or regional wetland inventory

<no file available>

##### iv. relevant Article 3.2 reports

<no file available>

##### v. site management plan

<2 file(s) uploaded>

##### vi. other published literature

<no file available>

#### 6.1.3 - Photograph(s) of the Site

Please provide at least one photograph of the site:



Osmussaare ( *Taino Aasma,*  
05-06-2012 )

#### 6.1.4 - Designation letter and related data

##### Designation letter

<1 file(s) uploaded>

Date of Designation