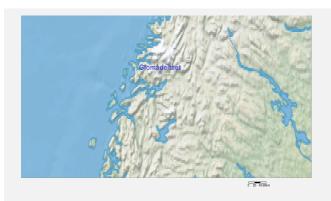


Ramsar Information Sheet

Published on 23 June 2023 Update version, previously published on : 28 November 2017

NorwayGlomådeltaet



Designation date 12 November 2010 Site number 1954

Coordinates 66°25'15"N 13°55'52"E

Area 594,00 ha

https://rsis.ramsar.org/ris/1954 Created by RSIS V.1.6 on - 23 June 2023

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

Glomådeltaet is a freshwater delta situated in the north-western part of Langvatnet Lake. It is one of the largest freshwater deltas to be found in the country, with a length of more than 5 km and width of 1 km, creating a large shallow area important for birdlife. The delta is formed by the continuous supply of glacial river deposits from Trolldalselva (southwest), Leiråga (west), Glomåga (north/northwest) and Ravnåga (northeast). The delta is still active and under natural development; the southernmost part consists of newly developed sand islets with scarce vegetation, and with elements of gravel and sand deposits with varying degrees of developed vegetation. The islets are split by numerous river branches surrounded by lush deciduous forests, mainly consisting of birch and grey alder. The continuous river development result in certain river sections drying out as some new ones are formed. The delta comprises large marshes dominated by carex, reel and eriophorum. Additionally, the area represents a special delta landscape unique for its size in the inland region of Northern Norway, and rare at a national level.

The value of the delta for birdlife is of a regional and national significance. The Site has a rich and diverse birdlife and the numerous river branches are of a great importance for ducks, while the marshes and dunes are especially important for waders. The delta is an important breeding location for water fowl in the Helgeland region, and important during migration, particularly as a staging area during the spring migrationfor birds on their way to the Saltfiell area.

The delta hosts a great biodiversity, with 151 bird species registered, 22 of these registered in the National Red List (NRL); such as the northern pintail (NRL: VU).

Almost 20 species of mammals are registered in the area, including a red listed species (NRL) such as the Lynx (NRL: EN). In the nearby area we also find Wolverine (NRL: EN) from time to time.

In addition to containing mire-botanical qualities, the area is also a valuable study area for botanical successions.

2 - Data & location

2.1 - Formal data

2.1.1 - Name and address of the com	piler of this RIS				
Responsible compiler					
Institution/agency	Institution/agency Norwegian Environment Agency				
Postal address	Post box 5672 Torgarden, N-7485 Trondheim, Norway				
National Ramsar Administrati	ve Authority				
Postal address	Postboks 5672 Sluppen Trondheim Norway				
2.1.2 - Period of collection of data and	d information used to compile the RIS				
From year	1998				
To year	2021				
2.1.3 - Name of the Ramsar Site					
Official name (in English, French or	Glomådeltaet				
Spanish)					
2.1.4 - Changes to the boundaries an	d area of the Site since its designation or earlier update				
(Update) A	Changes to Site boundary Yes O No ●				
(Updat	te) B. Changes to Site area No change to area				
^(Update) For secretariat only: T	his update is an extension				
2.1.5 - Changes to the ecological cha					
(Update) 6b i. Has the ecological character of tapplicable Criteria) change					
2.2 - Site location					
2.2.1 - Defining the Site boundaries					
b) Digital map/image <1 file(s) uploaded>					
Former maps	0				
Boundaries description					
The boundary is the same as for the	existing Glomådeltaet Landscape Protected Area.				
2.2.2 - General location					
a) In which large administrative region does	Nordland county				
the site lie?	1 Ordina County				
b) What is the nearest town or population centre?	Mo i Rana				

2.2.3 - For wetlands on national boundaries only

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

b) Is the site adjacent to another designated Ramsar Site on the territory of another Contracting Party?

2.2.4 - Area of the Site

Official area, in hectares (ha): 594

Area, in hectares (ha) as calculated from 594.481 GIS boundaries

2.2.5 - Biogeography

Biogeographic regions

Regionalisation scheme(s)	Biogeographic region
Other scheme (provide name below)	Middle boreal vegetation zone, slightly oceanic section (Mb – O1)
EU biogeographic regionalization	2. Alpine
Other scheme (provide name below)	3. Atlantic

Other biogeographic regionalisation scheme

- 1. Moen, A. 1998. National Atlas of Norway: Vegetation. Norwegian Mapping Authority, Hønefoss
- Biogeographical Regions, European Environment Agency, 2005
 Direktoratet for naturforvaltning 2007. Emerald Network i Norge Pilotprosjekt. Rapport 2007-1

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

Deltas are among the most threatened nature types in Norway. Additionally, this delta is almost unaffected by human activities, and natural dynamics are still shaping the area. It is rated as the most valuable delta Other reasons in Nordland county, and amongst the most important deltas in Norway. In this area one can find nature types listed on the Norwegian Red List for Ecosystems and Habitat types (2018), such as alluvial forest (VU) and active delta (VU).

Criterion 2 : Rare species and threatened ecological communities

The delta host a great biodiversity, with 151 bird species registered, and several of these are registered Optional text box to provide further in the National Red List (NRL, 2021).

> information One can also find National Red Listed mammals such as the Lynx (NRL: EN). In the nearby area one can also find Wolverine (NRL: EN) from time to time.

Criterion 3 : Biological diversity

The delta is of regional and national importance for waterfowl. This is one of the most important inland breeding places in Helgeland, and it also play a key role as a resting/staging area during the spring migration. The numerous river branches are particularly important for ducks. The swamp- and mire areas are most important for waders, but also the sand banks are an important and necessary biotope. There Justification are 151 different bird species registered here.

The whole protected landscape consists of the threatened nature type delta, one of the most threatened nature types in Norway. Depending on size, representativeness, biological diversity, threatened species and how intact the location is, the locations are very important for biological diversity.

☑ Criterion 4 : Support during critical life cycle stage or in adverse conditions

Optional text box to provide further information

The delta is an important breeding location for water fowl in the Helgeland region, and important during migrations, especially as a staging area during the spring migration, for birds on their way to the Saltfiell

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

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

Phylum	Scientific name	Species Species Contributes Contribu	Period of pop. Est.	occurrence R	CN CITES Appendix	CMS I Appendix I	Other Status	Justification
Others								
CHORDATA MAMMALIA	Lynx lynx			L	С		National red list: Considered as EN	
Birds								
CHORDATA AVES	Accipiter gentilis			L	С		National red list: Considered as VU	Criterion 4: This is an important breeding site for this species.
CHORDATA AVES	Anas acuta			L	С		National red list: Considered as VU	
	Aythya marila			L	С		National red list: Considered as EN	Criterion 4: The species occasianally breed in the area
CHORDATA AVES		Ø000000		L	С		National red list: Considered as EN	
CHORDATA AVES	Cygnus cygnus			L	С			Criterion 4: This is an important breeding site for this species.
CHORDATA AVES	minor							Criterion 4: This is an important breeding site for this species.
CHORDATA AVES	Grus grus			L	С			Criterion 4: This is an important breeding site for this species.
CHORDATA AVES	Philomachus pugnax	Ø000000		L	С		National red list: Considered as VU	
CHORDATA AVES	Podiceps auritus	Ø000000		\	U 🗆		National red list: Considered as VU	Occasionally seen on migration
CHORDATA AVES	Poecile montanus			L	С		National red list: Considered as VU	Criterion 4: This is an important breeding site for this species.
	Sterna hirundo	Ø000000		L	С		National red list: Considered as EN	
CHORDATA AVES	Tringa nebularia			L	С			Criterion 4: This is an important breeding site for this species.
CHORDATA AVES	Vanellus vanellus	Ø000000		1	т 🗆		National red list: Considered as CR	

¹⁾ Percentage of the total biogeographic population at the site

Capitalizad latters above the appaiant status on the National Dad Liet 2021
Capitalized letters shows the species' status on the National Red List 2021.
Capitalizadi intere di intere di contra di capitali di tatto i all'all'all'all'all'all'all'all'all'all

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
Α	ctive delta	>		National red list for habitat types 2018: VU
Α	lluvial forest	✓		National red list for habitat types 2018: VU

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

4.1 - Ecological character

This is a complex "bird-foot-delta" in the northwestern part of the lake Langvatnet. This type of delta is characterized by a branched delta front (looks like a birds foot) with high riverbanks along the branch(es). The delta is still developing due to the continuously supply of fine-grained particles such as sand, silt and clay with the river.

The delta is a mosaic of different habitats which has developed for centuries, and the older parts have small lakes, mires, old river courses and channels between dry areas and transitions to vegetation free, unstable banks and river courses.

The vegetation in the area is diverse, from sandbanks with pioneer vegetation, mire areas, wet and flooded alder forests, and sloughs with reed vegetation to deciduous and coniferous forests. There are also smaller areas with agricultural land inside the Ramsar site. Here one can also find nature types listed on the Norwegian Red List for Ecosystems and Habitat types (2018), such as open alluvial forest and active delta (Both considered as VU).

The delta is of regional and national importance for waterfowl. This is one of the most important inland breeding places in Helgeland, and it also plays a key role as a resting area during the spring migration. The numerous river branches are particularly important for ducks. The swampand mire areas are most important for waders, but also the sand banks are an important and necessary biotope. 151 different bird species are registered here.

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

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 >> L: Permanent inland deltas		1		Rare
Fresh water > Flowing water >> M: Permanent rivers/ streams/ creeks		2		Rare
Fresh water > Flowing water >> N: Seasonal/ intermittent/ irregular rivers/ streams/ creeks				
Fresh water > Lakes and pools >> Tp: Permanent freshwater marshes/ pools		3		
Fresh water > Marshes on inorganic soils >> Ts: Seasonal/ intermittent freshwater marshes/ pools on inorganic soils				
Fresh water > Marshes on peat soils >> U: Permanent Non- forested peatlands				
Fresh water > Marshes on inorganic soils >> W: Shrub- dominated wetlands				
Fresh water > Marshes on inorganic soils >> Xf: Freshwater, tree-dominated wetlands				
Fresh water > Marshes on peat soils >> Xp: Permanent Forested peatlands		4		

4.3 - Biological components

4.3.1 - Plant species

Optional text box to provide further information

Sclerophora coniophaea (NT).

Capitalized letters show the species' status on the National Red List of 2021.

The delta consists of many different vegetation types. The most important are:

- Rich and extreme rich lawn (carpet and mud-bottom)
- Large water horsetail-sedge swamp areas with equisetum, carex and cottontail vegetation

4.3.2 - Animal species

Optional text box to provide further information

American mink (SE) is a threat for nesting water fowl at several locations in Nordland. The county governor of Nordland is so far not familiar with mink inside the protected area.

Canada goose (SE) is an introduced bird species which, during the nesting season, can display aggressive behaviors towards other water fowl. The species have been observed in the proximity of the eastern part of Langvatnet, but is so far not registered inside the protected area.

Capitalized letters show the species' status on the National list for alien species 2021.

4.4 - Physical components

4.4.1 - Climate

Climatic region	Subregion
D: Moist Mid-Latitude climate with cold winters	Dfc: Subarctic (Severe winter, no dry season, cool summer)

The climate is slightly oceanic with an inland character where summer temperatures are slightly higher and winter temperatures slightly lower than is the case closer to the coast. The closest official meteorological station is found at Mo i Rana airport on Røssvoll, about 15 km east-southeast of the delta. Average middle temperatures range from -9,4°C (January) to 13,3°C (July). Annual precipitation of 800-1500 mm.

4.4.2 - Geomorphic setting

a) Minimum elevation above sea level (in metres)	45	
a) Maximum elevation above sea level (in metres)	58	
	Entire river basin	
	Upper part of river basin ☐	
	Middle part of river basin ✓	
	Lower part of river basin \square	
	More than one river basin \square	
	Not in river basin	
	Coastal	
Please name the river basin or basins. If the s	ite lies in a sub-basin, please also name the larger river basin. For a coastal/marine site, please name the sea or ocean.	
Glomåga River flows into Langvassåga river, tributary of Ranelva River (Norwegian Sea).		

4.4.3 - Soil

Mineral

(Update) Changes at RIS update

No change ● Increase O Decrease O Unknown O

No available information

Are soil types subject to change as a result of changing hydrological conditions (e.g., increased salinity or acidification)?

Yes O No ●

Please provide further information on the soil (optional)

The bedrock consists of garnet mica schist, quartzite, marble (limestone), amphibolite and granite. The quaternary deposits are dominated by glacial river deposits, with some marshes occasionally.

Thin and incoherent layers of peat. The area is likely in an early phase of peat structuring for future open mire communities.

Calcareous bedrock can be found to the north of Langvatnet, but south and east of the delta the bedrock contains little limestone. As a result, it is the river deposits which characterize the environment, and these deposits do not provide a foundation for lime demanding vegetation.

4.4.4 - Water regime

Water permanence

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 surface water		No change
Water inputs from precipitation		No change

Water destination

Presence?	Changes at RIS update
Feeds groundwater	No change

Stability of water regime

Presence?	Changes at RIS update
Water levels largely stable	No change

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

Generally, the water is shallow although there are some deeper areas (2-3 m). The water is affected by the large glaciers in the catchment area, which gives an oligotrophic, good quality water with some reduced sight. Due to a large number of glaciers, the water level depends both on the temperature and precipitation; the water level will rise also on dry, warm days.

This is an area with a complex groundwater recharge, due to all caves and underground rivers.

4 4 -	0 11		
445	- Sedi	ment	regime

Significant accretion or deposition of sediments occurs on the site 🗹
^(Update) Changes at RIS update No change ② Increase O Decrease O Unknown O
Sediment regime unknown □
4.4.6 - Water pH
Unknown ☑
4.4.7 - Water salinity
Fresh (<0.5 g/l)
^(Update) Changes at RIS update No change ② Increase O Decrease O Unknown O
Unknown □
4.4.8 - Dissolved or suspended nutrients in water
Oligotrophic ☑
^(Update) Changes at RIS update No change ② Increase O Decrease O Unknown O
Unknown □
Please provide further information on dissolved or suspended nutrients (optional):
Oligotrophic, good quality water with some reduced sight.

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 i) broadly similar O ii) significantly different o site itself:

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

Provisioning Services							
Ecosystem service	Examples	Importance/Extent/Significance					
Wetland non-food products	Fuel wood/fibre	Low					
Wetland non-food products	Other	Medium					
Wetland non-food products	Livestock fodder	Low					

Regulating Services

Ecosystem service	Examples	Importance/Extent/Significance
Maintenance of hydrological regimes	Groundwater recharge and discharge	Medium

Cultural Services

Ecosystem service	Examples	Importance/Extent/Significance
Recreation and tourism	Recreational hunting and fishing	Medium
Recreation and tourism	Picnics, outings, touring	Low
Recreation and tourism	Nature observation and nature-based tourism	Low
Recreation and tourism	Water sports and activities	Low

Supporting Services

Ecosystem service	Examples	Importance/Extent/Significance
Nutrient cycling	Carbon storage/sequestration	Medium

Other ecosystem service(s) not included above:

This is an area with a complex groundwater recharge, due to all caves and underground rivers.

The watercourse and the surrounding area are used for recreation; sports fishing, birdwatching, canoeing and hunting. The site is only in a minor degree used by residents and tourists.

Local bird-watchers register bird species every year, otherwise no activity.

There are agricultural areas within the protected area, and some simple roads for farming purposes. A small part of the site is used for agricultural purposes; 2,7 % is cultivated land where grass is harvested. Small parts of the area are used for grazing by livestock, but there mainly is no land-use.

Have studies or assessments been made of the economic valuation of ecosystem services provided by this Ramsar Site?

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	
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	
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	С

<no data available>

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

		owners	
I UL	JIIC	OWITEIS	HIIP

Category	Within the Ramsar Site	In the surrounding area
National/Federal government	✓	✓

Private ownership

Category	Within the Ramsar Site	In the surrounding area
Other types of private/individual owner(s)	2	✓

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

Within the Ramsar site: Private and state (a minor part). In the surrounding area: Private and state (a minor part).

5.1.2 - Management authority

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

Statsforvalteren i Nordland

Postal address: Pb 1405

8002 BODØ

E-mail address: sfnopost@statsforvalteren.no

5.2 - Ecological character threats and responses (Management)

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

Agriculture and aquaculture

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Livestock farming and ranching	Low impact	Medium impact	✓	No change	2	No change

Biological resource use

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Hunting and collecting terrestrial animals	Low impact	Low impact	✓	No change		No change
Logging and wood harvesting	Low impact	Low impact	₽	No change		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	Low impact	2	No change		No change

Natural system modifications

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Dams and water management/use	Medium impact	Medium impact	✓	No change		No change

ilivasive and other problem	nalic species and genes					
Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Invasive non-native/	Low impact	Medium impact	✓	No change	✓	No change

Pollution

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Agricultural and forestry effluents	Low impact	Medium impact	2	No change	/	No change

Please describe any other threats (optional):

The area is mainly utilized for agricultural purposes, reindeer husbandry and moose hunting.

Additionally, parts of Langvatnet (in the lower parts of the protected area) is used for energy production and the water level is regulated and maintained at 2.7 m.

24,6 hectares are arable land. There is also interest in increasing this area inside the protected area. The area northeast of Nordelva is also used as pasture for cattle, sheep and goat. Large parts of the area are also autumn- and spring grazing grounds for reindeer.

5.2.2 - Legal conservation status

National legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Landscape Protected Area	Glomådeltaet		whole

5.2.3 - IUCN protected areas categories (2008)

	la Strict Nature Reserve
	lb Wilderness Area: protected area managed mainly for wilderness protection
	Il National Park: protected area managed mainly for ecosystem protection and recreation
	Natural Monument: protected area managed mainly for conservation of specific natural features
	/ Habitat/Species Management Area: protected area managed mainly for conservation through management intervention
	Protected Landscape/Seascape: protected area managed mainly for landscape/seascape conservation and recreation
_	Managed Resource Protected Area: protected area managed mainly

5.2.4 - Key conservation measures

Legal protection

Measures	Status		
Legal protection	Implemented		

Other

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The Glomåga River is protected against the building of hydropower and other physical interventions in or related to the river.

5.2.5 - Management planning

Is there a site-specific management plan for the site? In preparation $% \left(1\right) =\left(1\right) \left(1$

for the sustainable use of natural ecosystems

Has a management effectiveness assessment been undertaken for the site?

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

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

Poster with information about the protected area, ecological and biological facts and information on the regulations of activities in the site has been put up.

5.2.6 - Planning for restoration

Is there a site-specific restoration plan? Please select a value

5.2.7 - Monitoring implemented or proposed

Monitoring	Status	
Birds	Implemented	

Local bird-watchers register bird species every year, otherwise no activity.

6 - Additional material

6.1 - Additional reports and documents

6.1.1 - Bibliographical references

Directorate for Nature Management 2007. Kartlegging av naturtyper – Verdisetting av biologisk mangfold. Link: http://www.dirnat.no/publikasjoner/handbok 13/

Artsdatabanken (2021, 24. november). Norsk rødliste for arter 2021. https://www.artsdatabanken.no/lister/rodlisteforarter/2021/

Artsdatabanken (2018). Norsk rødliste for naturtyper 2018. Hentet (11.07.2022) fra https://www.artsdatabanken.no/rodlistefornaturtyper

Moen, A. 1998. National Atlas of Norway: Vegetation. Norwegian Mapping Authoroty, Hønefoss

Note from Rana museum regarding birds and mammals in the delta. Kjell A. Meyer, 1999. Elvedeltabasen, http://www.elvedelta.no/

Naturbasen, www.naturbase.no

http://nordland.miljostatus.no/msf themepage.aspx?m=1578#8430

Ran a Kommune http://www.rana.kommune.no/natur_og_miljo/natur/Sider/side.aspx

Høringsutkast til forvaltningsplan. 2017-2026. Miljøvernadvedlingen, fylkesmannen i Nordland

Gaarder, G. 2013. Naturverdier i Glomådeltaet landskapsvernområde i Rana kommune. Miljøfaglig Utredning rapport 2013-9. 34 s. + vedlegg. ISBN 978-82-8138-637-2.

Helgeland Museum: FUGLER OG FUNKSJONSOMRÅDER I GLOMÅDELTAET LANDSKAPSVERNOMRÅDE, Rapport til Fylkesmannen i Nordland (2012), Per Ole Syvertsen

Miljøstatus i Nordland: Glomådeltaet landskapsvernområde, 2007

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

<2 file(s) uploaded>

6.1.3 - Photograph(s) of the Site

Please provide at least one photograph of the site:



Aerial view of Glomådeltael (Norwegian Evironment Agency, 12-10-2017)

6.1.4 - Designation letter and related data

Designation letter

<1 file(s) uploaded>

Date of Designation 2010-11-12