# Designation date: 13/06/12 Ramsar Site no. 2065

# **Information Sheet on Ramsar Wetlands (RIS)**

# 2009-2012 version

# Confluenta Olt-Dunare

<ol> <li>Name and address of the compiler of this form</li> </ol>	m:
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ROMANIA
2. Date this sheet was completed/updated:
16 February 2012
3. Country:
Romania
4. Name of the Ramsar site:
Olt – Danube Confluence (Local name: Confluenta Olt – Dunăre)
5. Designation of new Ramsar site or update of existing site:
This RIS is for (tick one box only):
a) Designation of a new Ramsar site X□; or
b) Updated information on an existing Ramsar site $\square$
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 $\Box$ ; or
ii) the boundary has been extended $\Box$ ; or
iii) the boundary has been restricted**

and/or

If the site area has changed:

i) the area has been measured more accurately

ii) the area has been extended ; or

iii) the area has been reduced\*\* □

# 7. Map of site:

- a) A map of the site, with clearly delineated boundaries, is included as:
  - i) hard copy (required for inclusion of site in the Ramsar List): yes
  - ii) digital (electronic) format (optional): yes
- b) Describe briefly the type of boundary delineation applied:

In the South the boundary of the site is made up by the Bulgarian/Romanian border, while in the North the limit is dictated by the national road DN6. In the east, the limit is set by the Olt valley and in the West boundary goes near the road DJ 642, which links from north to south the localities Stoenesti, Slaveni, Gostavatu, Babiciu, Plaviceni, Jieni, Rusanesti, Tia Mare, Doanca, Izbiceni, Giuvarasti, than go to Olt valley and near the road DN 54 which links Garcov to Corabia.

 $\square$ ; or

The present's site surface (46623 ha) covers the lower part of Olt river, as well as its surroundings to Danube. The surface of the site is almost the same as the Natura 2000 ROSPA 0024 Confluenta Olt-Dunare site perimeter (20960 ha) and ROSCI0044 site perimeter (9256 ha) combined (see map for further details).

**8. Geographical coordinates** (latitude/longitude):

43°45'43" N, 24°43'53" E

#### 9. General location:

The site Confluenta Olt-Dunare is situated in the South of Romania. Large administrative units: Olt County, Teleorman County. The nearest large town is Turnu Măgurele (31646 inhabitants), 2.5 km east of the site.

### 10. Elevation (m):

Min: 3, Max 53, Med: 29.

11. Area: (in hectares)

46623 ha

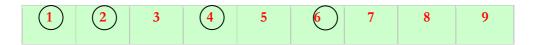
Wetlands area: 7,302 ha

#### 12. Overview:

The present site was one of the natural sectors of Lower Olt meadow, with little influence of human presence. Olt river flows in Danube at 604 kilometre, between Turnu Magurele and Islaz towns, on Teleorman County territory. On the Eastern side of Islaz town, the meadows of the rivers join together, creating a lower and wider surface, where the ecological characteristics of the meadows of Olt and Danube are interacting creating a typical landscape. On Olt's last kilometres to Danube there is the only sector that maintains the natural appearance of the river, with shores with no concrete consolidation, steep, washed by flows, randomly edged with poplars, willows, acacias and alders. In this sector there are a few sand islands, many old branches of the river and temporary lakes which form ideal habitats for the aquatic birds species and contributes to the maintaining of a high biodiversity.

The site is an Important Bird Area named Olt – Danube Confluence and it was declared as a special protection area in 2007 as well as Site of community interest. It is very important for the conservation of the habitats of 33 birds species listed in the Annex I of the Birds Directive, 50 birds species protected by the Bonn Convention and 1 that is globally threatened. **Pygmy Cormorant** *Phalacrocorax pygmeus* and **European Roller** *Coracias garrulous* are finding very good conditions for nesting in this area, but the site is also a station for the migration of ducks, geese, pelicans and swans. Because it's situated at the Romanian border with Bulgaria, the site can be subject of a transboundary management.

#### 13. Ramsar Criteria:



# 14. Justification for the application of each Criterion listed in 11 above:

#### **Criterion 1:**

In this sector of the Lower Danube, the natural and seminatural habitats remained after the transformations from the last 40 years are represented by: Galleries with Salix alba and Populus alba, Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno- Padion, Alnion incanae, Salicion albae), Riparian mixed forests of Quercus robur, Ulmus laevis and Ulmus minor, Fraxinus excelsior or Fraxinus angustifolia, along the great rivers (Ulmenion minoris) and Alluvial meadows of river valleys of the Cnidion dubii. All these habitats are representative for the floodplains and protected at European level by Habitat Directive (92/43/CEE), the Ramsar site overriding also the ROSCI0044 Corabia-Turnu Măgurele.

### Criterion 2:

The site supports the following species of the Bird Directive Annex I:

		Breeding	Winter	Migrants
	Common name	(pairs)	(individuals)	(individuals)
Scientific name				
Alcedo atthis	Common Kingfisher	4-6		
Aquila pomarina	Lesser Spotted Eagle			1-5
Ardea purpurea	Purple Heron			1-5
Ardeola ralloides	Squacco Heron	4-5		
Aythya nyroca	Ferruginous Duck	15-17	2-5	

Burhinus oedicnemus	Stone-curlew	4-10		
Buteo rufinus	Long-legged Buzzard			1-3
Chlidonias hybridus	Whiskered Tern			80-150
Chlidonias niger	Black Tern			50-100
Ciconia ciconia	White Stork			1-5
Circus aeruginosus	Marsh Harrier	1-2		1-5
Circus cyaneus	Hen Harrier		17-25	
Coracias garrulus	Roller	16-20		
Cygnus cygnus	Whooper Swan			1-5
Dendrocopos medius	Middle Spotted Woodpecker	6-10		
Egretta (Casmerodius) alba/-us	Great Egret	5	1-5	
Egretta garzetta	Little Egret	10-12		
Falco vespertinus	Red-footed Falcon			60-80
Himantopus himantopus	Black-winged Stilt			20-30
Lanius collurio	Red-backed Shrike	1-3		
Lullula arborea	Wood Lark	1-5		
Luscinia svecica	Bluethroat			1-3
Milvus migrans	Black Kite			4-5
Nycticorax nycticorax	Black-crowned Night Heron	12-20		
Pelecanus crispus	Dalmatian Pelican			7-10
Phalacrocorax pygmeus	Pygmy Cormorant	350-450	60-70	
Philomachus pugnax	Ruff			800-1000
Picus canus	Grey-headed Woodpecker	6-10		
Platalea leucorodia	Spoonbill			30-60
Plegadis falcinellus	Glossy Ibis	7-10		15-20

Sterna albifrons	Little Tern		70-140
Sterna hirundo	Common Tern		200-400
Tringa glareola	Wood Sandpiper		500-1000

Some of the globally vulnerable and near threatened bird species occurring on this lake are: the Dalmatian Pelican (*Pelecanus crispus*) (VU, IUCN), the Roller (*Coracias* garrulus) (NT, IUCN), the Red-footed Falcon (*Falco* vespertinus) (NT, IUCN), the Curlew (*Numenius* arquata) (NT, IUCN), the Ferruginous Duck (*Aythya nyroca*) (NT, IUCN).

Scientific name	Common name	Breeding (pairs)	Passage migrant (individuals)	Winter (individuals)	2004 Global IUCN Red List Category	Birds Directive
Pelecanus crispus	Dalmatian Pelican		7-10		VU	Ι
Coracias garrulus	Roller	16-20			NT	Ι
Falco vespertinus	Red-footed Falcon		60-80		NT	Ι
Numenius arquata	Curlew		3-10		NT	-
Aythya nyroca	Ferruginous Duck	15-17		2-5	NT	Ι
Phalacrocorax pygmeus	Pygmy Cormorant	350- 450		60-70	LC	Ι

The data presented above was collected between 2000 and 2010, referenced from the following bibliography:

- Munteanu, D., (coord.), 2004 Arii de importanță avifaunistică din România Documentații.
   Societatea Ornitologică Română;
- 2. H.G. 971/2011 Hotărâre de Guvern pentru modificarea □i completarea H.G. nr. 1284/2007 privind declararea ariilor de protec□ie specială avifaunistică ca parte integrantă a re□elei ecologice europene Natura 2000 în România;
- 3. Papp, T., Fantana, C., editors (2008) Important Bird Areas in Romania published in cooperation by the Romanian Ornithological Society and Association "Milvus Group";
- 4. PETRESCU, A., 2002 Preliminary list of the avifauna from the Danube Meadow, between the flowing mouth of the Olt and Suhaia Lake (South of Romania). Travaux du Museum National d'Histoire Naturelle "Grigore Antipa", Vol. 44: 375-389;
- 5. "Romanian Ornithological Society" database;

#### **Criterion 4:**

Being located on a major migratory route, Olt – Danube Confluence territory represents an important area for resting and feeding of rare bird species. Protected bird species effectives were recorded as following:

- a) Annex I Bird Directive species: 33;
- b) Globally threatened species:1;

The site is important for breeding populations of the following species: *Phalacrocorax pygmaeus, Coracias garrulus, Alcedo atthis, Burhinus oedicnemus, Dendrocopos medius, Ayhtya nyroca, Nycticorax nycticorax and Picus canus.* 

During migration, the site is important for the following species: Aquila pomarina, Ardea purpurea, Buteo rufinus, Chlidonias hybridus, Chlidonias niger, Ciconia ciconia, Cygnus cygnus, Falco vespertinus, Himantopus himantopus, Luscinia svecica, Milvus migrans, Pelecanus crispus, Philomachus pugnax, Platalea leucorodia, Plegadis falcinelus, Sterna albifrons, Sterna hirundo, Tringa glareola, as well as for over 20000 individuals of other migratory waterfowl.

Please see the justification of Criterion 2 for the list of bird species.

The site is highly important for waterfowl's habitat, sheltering sedentary wild birds on one hand, as well as northern population that rest during migration periods.

The site additionally supports a number of species protected in Europe, including species listed in *the EU Habitat Directive*:

**Fish:** Cobitis taenia (An. II), Gymnocephalus schraetzer (An. II, V), Misgurnus fossilis (An. II), Rhodeus sericeus amarus (An. II), Alosa immaculate (AN. II, V), Zingel zingel (An. II, V), Gobio albipinnatus (An. II), Pelecus cultratus (II, V), Zingel streber (II), Aspius aspius (V), Gobio kessleri (II), Gymnocephalus baloni (II)

Amphibians: Bombina bombina (II, IV), Triturus dobrogicus (II)

Mammals: Spermophilus citellus (II, IV)

#### Criterion 6:

Around 350 - 450 pairs (700 - 900 individuals) of Pygmy Cormorant (*Phalacrocorax pygmeus*) are present on the lake during migration, which represents over 1 % of the entire world population.

The data presented above was collected between 2000 and 2008, referenced from the following bibliography:

- H.G. 971/2011 Hotărâre de Guvern pentru modificarea □i completarea H.G. nr. 1284/2007 privind declararea ariilor de protec□ie specială avifaunistică ca parte integrantă a re□elei ecologice europene Natura 2000 în România;
- 2. Papp, T., Fantana, C., editors (2008) Important Bird Areas in Romania published in cooperation by the Romanian Ornithological Society and Association "Milvus Group";
- 3. "Romanian Ornithological Society" database;

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

# a) biogeographic region:

Europe: Continental

b) biogeographic regionalisation scheme (include reference citation):

1) Habitat Directive 92/43/EEC (1992)

### 16. Physical features of the site:

**Geology and geomorphology**: The site is a specific meadow landscape with non-concreted banks, sand islands and old river branches. The Olt's meadow is very large in this area, but the altitudes are very low and they are not surpassing 53 m. The area was formed by the gravel and the sand deposits transported by the Olt and the Danube rivers. The main geomorphologic process is the fluvial one, the area being flooded in the spring time, causing the sedimentation of the river bed and the erosion of the banks. The wetland has natural origins, it is a part of the Olt meadow which was very little affected by the human intervention.

Soil type and chemistry range: The soils are from the azonal soil class: they are formed from flood sediments, they are recent and have increased moisture. In the arable areas, the soils are from the chernozoms class.

Origins: Natural and anthropic

# Hydrology:

Olt and Danube represent the main water bodies in the area. In the Olt floodplain, phreatic waters are permanently interconnected with the river being situated in the mixt horizon of sand and gravel at depths between 2.2m and 6.1m. Along Olt River there are around 25 storage reservoirs used for hydroelectricity production, all of them influencing the flow regime of the river. However, the sector included in the Ramsar site is strongly bended and very dynamic, the riverbed drifting to the west.

In this sector, the Danube river bed breaks out in arms closing among them many islands. In front of Islaz and Gârcov villages there is Balta Geraiului, an wetland area remnant of the former Danube floodplain. In the site area, the most part of the phreatic waters are stored in the terrace deposits at 15 - 20 m depth and in floodplain deposits deeply linked with the water flow in Danube.

# Water quality:

Most part of the Olt water in this area is in a good status, and the remaining part is in a moderate status.

# Depth, fluctuations and permanence of water:

Water area: 1119 ha

Climate: The climate is temperate continental, with sub Mediterranean influences. The temperature annual average is the highest in the country, 11.5° C, while the January average is -2.3° C. The average

temperature in July is 23.4° C but the values can very often reach 40-42° C. The annual rainfall average is 500 mm, but in the summer the level of aridity is high and the drought very frequent. The dominant winds are from West, but there is also Austrul, a local dry wind, which blows from South direction.

### 17. Physical features of the catchment area:

Area: Danube and Olt floodplains

Geological characteristics: The catchment area's main geomorphological characteristic is the existence of the Danube terraces combined with the Olt's terraces. The terraces were created because of the fluctuation in the level sea caused by the Ice Ages from the Quaternary Period. Their altitudes vary from 60 to 175 meters. Another geomorphological aspect in the catchment area is the existence of a diversity of micro-relief features: islands, beaches, sand dunes, shaped by the winds etc. The sand and the gravel layers, covered by a thin layer of loess, represent the general geology. The origin of the loess is related to the winds, which used to blow in the Ice Ages.

**Soil type:** The soils are recent; some of them are rich in nutrients because they are formed from the alluvia transported by the Olt and the Danube. On the terraces, the soil belong to the chernozems class, they are rich in humus and appropriate for the agriculture.

Land use: Agriculture, forestry, hydropower

Climate: The climate is temperate continental, with sub Mediterranean influences. The temperature annual average is the highest in the country,  $11.4^{\circ} - 11.8^{\circ}$  C, while the January average is -2° C. There are three months with negative temperature values (December-February). In the summer, the temperature can reach  $40-42^{\circ}$  C. The annual rainfall average is 500 mm.

# 18. Hydrological values:

As it was described above, the site Confluenta Olt-Dunare is a part of the natural meadow of the Olt river and its ecological functions are given by the interactions between the environmental particularities of the Danube and Olt meadows. Because it was very little transformed by the human intervention, the area has an important role for the flood diminishing. Due to the low declivity, the water speed is low, which causes the trapping of the sediments and the formation of the sand islands and sand beaches.

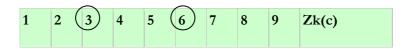
## 19. Wetland Types

## a) presence:

#### Inland:



#### Human-made:



b) dominance: Xf, M, O, P, Tp, Ts, 6, 3

Xf - Freshwater tree-dominated marshes – 15.5%

O – Seasonal freshwater lakes – 5%

M, P - Permanent rivers and seasonal freshwater lakes – 4.4%

Tp, Ts - Permanent and seasonal freshwater marshes – 1.3%

3 - Rice fields - 0.1%

# 20. General ecological features:

In this site, many natural and seminatural habitats have not been affected by the changes of forestry management from the past 40 years. This is especially the case of the soft wood forests with willow and poplar that are interdependent of hydrological regime of the rivers. These forests preserve their biogeochemical and ecological functions and have a great importance in biodiversity maintenance. There is especially the case of birds, many species of community interest nesting in the area: Recurvirostra avosetta, Himantopus, Stena hirundo, Sterna albifrons, Nycticorax, platalea leucorodia etc.

21. Noteworthy flora: No

22. Noteworthy fauna: No

#### 23. Social and cultural values:

There are two villages inside the site, Islaz and Moldoveni. On the same place where Islaz is today, there was a small community in the dacian period. Islaz is an important bench-mark for the Romanian revolution which took place in 1848, because in this village the first step was made to start the revolution in Walachia.

#### 24. Land tenure/ownership:

- a) within the Ramsar site:
- 65 % of the land are private property and 35 % is public.
- b) in the surrounding area:

Most of the land in the surrounding area is private.

### 25. Current land (including water) use:

a) within the Ramsar site:

Within the Ramsar site the most important activities are agriculture, forestry, fishing and energy production.

b) in the surroundings/catchment:

In the surrounding area the most important human activities are related with agriculture, forestry and energy production.

# 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:

Hydropower plants construction, cutting of the small trees used for nesting, destruction of the vegetation by setting fire, the abandonment of the waste, the poaching.

b) in the surrounding area:

Hydropower plants construction, use of fertilizers, cutting of the small trees used for nesting, poaching.

#### 27. Conservation measures taken:

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

The Ramsar Site boundary combines the two Natura 2000 sites Confluenta Olt-Dunare ROSPA0024 and Corabia – Turnu Măgurele, ROSCI0044 (except for a few small differences in boundary). Parts of the Ramsar site received the favourable approval of Romanian Academy for being declared as avian protection site in 2005 for Frunzaru accumulation lake and in 2006 for Ostrovul Mare, while Izbiceni accumulation lake has been declared avian protection site by HG 2151/2004. In 2007, all these avian protection sites have been included in the Natura 2000 site ROSPA0024 under HG 1284/2007 for which the surface was 21285 ha. Later, HG 971/2011 regarding the modification and completion of HG 1284/2007 regarding the declaration of Special Protected Areas as part of Natura 2000 network reduced the area of the SPA to 20960 ha. In 2010, the SPA site has been given in custody to Echilibru Association that developed the Natura 2000 site regulation and management plan.

The Ramsar site overlaps totally with the Confluenta Olt – Danube IBA.

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

Ia  $\square$ ; Ib  $\square$ ; II  $\square$ ; III  $\square$ ; IV  $\square$ ; V  $\square$ ; VI X

The IUCN category VI is applied for Izbiceni accumulation lake - 1095 ha

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

A management plan has been prepared, but the Ministry of Environment and Forests has not approved it vet.

d) Describe any other current management practices:

N/A

28. Conservation measures proposed but not yet implemented:

N/A

29. Current scientific research and facilities:

Romanian Ornithological Society monitors the site in the framework of the LIFE project "Cross-border conservation of *Phalacrocorax pygmeus* and *Aythya nyroca* at key sites in Romania and Bulgaria" – 2009 - 2012.

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

Educational activities took place during the LIFE project "Cross-border conservation of *Phalacrocorax pygmeus* and *Aythya nyroca* at key sites in Romania and Bulgaria" in 2010 with scholars from Giuvără 🗆 ti and Gârcov where the "Cormorant club" has been established.

### 31. Current recreation and tourism:

The site offers recreational and visiting possibilities especially on weekends. The frequency grows during summer for fishing or recreation. However, occasional bird watching schedules are taking place for waterfowl.

#### 32. Jurisdiction:

Ministry of Environment and Forests B-dul.Libertatii nr.12, sector 5, Bucuresti

#### 33. Management authority:

Asociatia Echilibru Bucuresti, Vladimir Toncea Bd. Mircea Vodă, nr. 40, bl. M11, sc 2, ap. 50 0213204927, 0723873525, fax-0213204927 asoc.echibru@gmail.com, www.asociatiaechilibru.ro

# 34. Bibliographical references:

- 1. BirdLife Interational, 2001, Important Bird Areas and potential Ramsar sites in Europe, BirdLife International, Wageningen, The Netherlands;
- 2. Council Directive 79/409/EEC on the Conservation of Wild Birds, "Bird Directive";
- H.G. 971/2011 Hotărâre de Guvern pentru modificarea □i completarea H.G. nr. 1284/2007 privind declararea ariilor de protec□ie specială avifaunistică ca parte integrantă a re□elei ecologice europene Natura 2000 în România;
- 4. International Union for Conservation of Nature (IUCN);
- 5. Lars Svensson, Killian Mullarney, Dan Zetterstrom, 2010 "Collins Bird Guide 2<sup>nd</sup> Edition";
- 6. Munteanu, D., Toniuc, N., Weber, P., Szabo, J. & Marinov, M., 1989 Evaluarea efectivelor păsărilor acvatice în cartierele lor de iernare din România (1988, 1989). *Ocrot. Nat.* 33, 105-112;
- 7. Munteanu, D., Szabo J. Jr., 2001 Cursul inferior al Oltului la confluența sa cu Dunărea, Buletin. A. I. A. nr. 11;

- 8. Munteanu, D., (coord.), 2004 Arii de importanță avifaunistică din România Documentații. Societatea Ornitologică Română;
- 9. Orzața N., 2004 Observații ornitologice la vărsarea Oltului în Dunăre, Scripta Ornitologica Romaniae, vol. I;
- 10. OUG 57/2007 Ordonan□a de urgen□ă privind regimul ariilor naturale protejate, conservarea habitatelor naturale, a florei □i faunei sălbatice;
- 11. Papp, T., Fantana, C., editors (2008) Important Bird Areas in Romania published in cooperation by the Romanian Ornithological Society and Association "Milvus Group";
- 12. PETRESCU, A., 2002 Preliminary list of the avifauna from the Danube Meadow, between the flowing mouth of the Olt and Suhaia Lake (South of Romania). Travaux du Museum National d'Histoire Naturelle "Grigore Antipa", Vol. 44: 375-389;
- 13. "Romanian Ornithological Society" database;