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Item 7 (e) of the provisional agenda

PRELIMINARY ASSESSMENT OF TRANSBOUNDARY RIVERS IN EASTERN EUROPE AND THE CAUCASUS DISCHARGING INTO THE BLACK SEA AND THEIR MAJOR TRANSBOUNDARY TRIBUTARIES

Submitted by the Chairperson of the Working Group on Monitoring and Assessment

Addendum

1. This preliminary assessment is an intermediate product that deals with major transboundary rivers discharging from Eastern Europe and the Caucasus into the Black Sea and some of their transboundary tributaries.

2. Based on the countries' responses to the datasheets [1] and data available from other sources, only a very limited number of watercourses have been dealt with so far as shown in the table below. The other watercourses will be included in the updated version to be submitted to the sixth Ministerial Conference "Environment for Europe" (Belgrade, October 2007). This update will also cover other transboundary rivers discharging into the Black Sea (e.g. Rezvaya, Velaka, Danube, Siret and Delta-Liman) and their major transboundary tributaries.

[1] The cut-off date was 1 September 2006.

Transboundary rivers discharging into the Black Sea and their major transboundary tributaries (Eastern Europe and the Caucasus, only)						
Basin/sub-basins	**Riparian countries**	**Recipient**	**Status of assessment**			
			Hydrology	Pressure	Impact	Trends
- Prut	MD, RO, UA	Danube	x	x	x	x
-- Lapatnic	UA, MD	Prut				
-- Drageste	UA, MD	Prut				
-- Racovet	UA, MD	Prut				
- Cahul	MD, UA	Lake Cahul (UA)				
- Ialpug	MD, UA	Lake Ialpug (UA)				
Sarata	UA, MD	Black Sea				
Kogilnik	MD, UA	Black Sea				
Citai	MD, UA	Black Sea				
Hadjider	MD, UA	Black Sea				
Dniester	UA, MD	Black Sea	x	x	x	x
- Iagorlic	UA, MD	Dniester				
- Cuchurgan	UA, MD	Dniester				
Dnieper	BY, RU, UA	Black Sea	x	x	x	x
- Pripyat	BY, UA	Dnieper	x	x	x	x
- Seym	RU, UA	Dnieper				
-- Desna	RU, UA	Seym				
-- Snov	RU, UA	Seym				
- Psyol	RU, UA	Dnieper				
Elancik	RU, UA	Black Sea				
Mius	RU, UA	Black Sea				
Don	RU, UA	Black Sea				
- Serverski Donez	RU, UA	Don	x	x	x	x
-- Oskol	RU, UA	Severski Donez	(x)			
Psou	RU, GE	Black Sea	(x)			
Chorokhi	GE, TR	Black Sea	x	x	x	x

The following abbreviations for country names are used: Belarus (BY), Georgia (GE), Republic of Moldova (MD), Romania (RO), Russian Federation (RU), Turkey (TR) and Ukraine (UA). The following abbreviations for the status of the assessment are used: x – draft assessment made; (x) – draft assessment partially made

I. ASSESSMENT OF THE OF TRANSBOUNDARY RIVERS IN THE DANUBE BASIN

A. Prut River [2]

3. Ukraine, Romania and the Republic of Moldova share the Prut River's catchment area. For some 2/3 of its entire length, the river forms the border between Romania and the Republic of Moldova.

Sub-basin of the Prut River			
Area	Countries	Countries' share	
22,100 km^2	Ukraine	8,840 km^2	32.1%
	Romania	10,989 km^2	39.9%
	Republic of Moldova	7,990 km^2	29.0%
Source: Ministry of Ecology, Constructions and Territorial Development of the Republic of Moldova.			

Hydrology

4. The Prut River is the second longest (967 km) tributary of the Danube, with its mouth just upstream of the Danube Delta. At the river delta, the average discharge is approximately 2.9 km^3/year (92.0 m^3/s).

5. The Prut River's main tributaries are the rivers Ceremosh, Derelui, Volovat, Baseu, Corogea (Ukraine), Jijia, Elanu, Liscov (Romania), Caugur, Camenca, Sovetul Mic, Sarata and Lapusna (Republic of Moldova[3]). Most of them are regulated by reservoirs.

6. The rivers Lapatnic, Drageste and Racovet are transboundary tributaries; they cross the Ukrainian-Moldavian border and flow thereafter into the Prut.

7. The biggest reservoir on the Prut is the hydropower station of Stanca-Costesti (total length – 70 km, maximal depth - 34 m, surface - 59 km^2, usable volume – 450 million m^3, total volume 735 million m^3), which is jointly operated by Romania and the Republic of Moldova.

Pressure factors

8. Agriculture, supported by large irrigation systems, is one of the most important economic activities in the catchment area. The rate of soil erosion is high and nearly 50% of the lands used in agriculture suffer of erosion, thus polluting the surface water by nutrients.

[2] Information submitted by the Ministry of Ecology, Constructions and Territorial Development of the Republic of Moldova.
[3] Tributaries with catchment areas exceeding 400 km^2 are given for the Republic of Moldova.

9. The environmental problems include insufficient treated municipal wastewaters, discharged mostly from medium and smaller treatment facilities, which require substantial rehabilitation, as well as wastewater discharges from industries, many of them with outdated production mode.

10. In the Republic of Moldova, in particular the standards for organic pollution, heavy metals, oil products, phenols and copper are exceeded. During the warm season, a deficit of dissolved oxygen and increased BOD_5 levels occur additionally. Microbiological pollution is increasing.

11. In general, there is a moderate pollution in the upper and middle section of the Prut River; the lower part is substantially polluted. All tributaries are also substantially polluted.

Transboundary impact

12. Apart from water pollution, flooding remains a problem, despite water regulation by the many reservoirs.

13. The large wetland floodplain in downstream Moldova has been drained in favour of agriculture, but nowadays the pumping stations and dykes are poorly maintained, thus productive agricultural land is subject to water logging. Due to flow regulation and water abstractions, the water level in downstream river sections in south-Moldova, particularly in dry years, is low and the water flow to the natural floodplain lakes, including lakes designated as a Ramsar site, is often interrupted.

14. In case of significant increase of the Danube water level, flooding of downstream flood plains in Moldova can become a problem. Oil abstraction fields and oil installation, located near Lake Beleu, may thus be flooded and oil products may contaminate the Ramsar site.

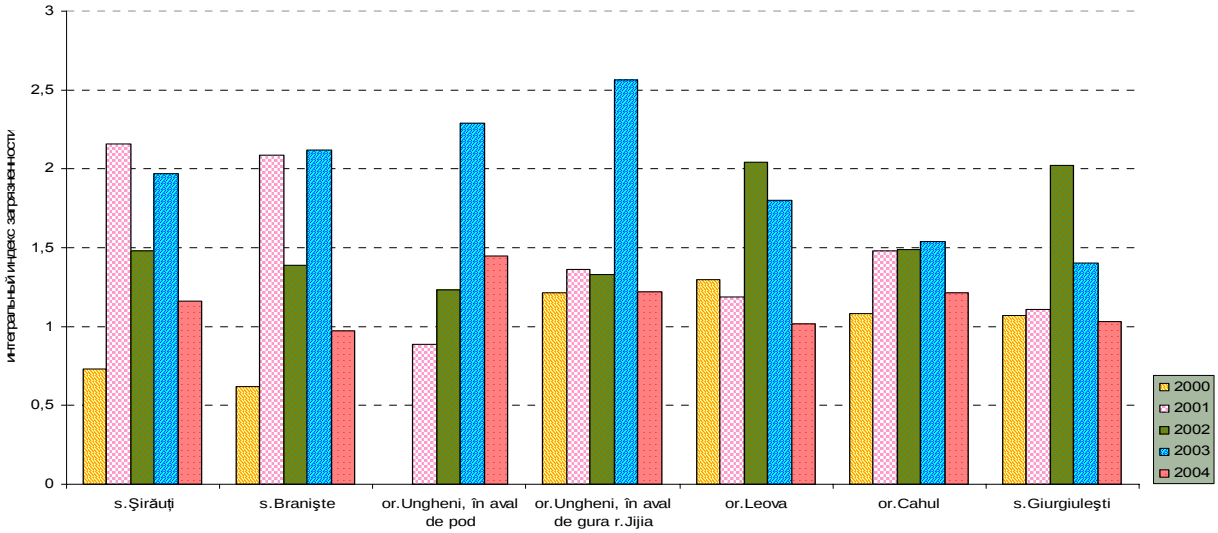
Trends [4]

15. Following measurements by the Republic of Moldova, there is a decreasing pollution level for almost all determinands, except for nitrogen compounds, copper containing substances and zinc, which show an increasing pollution level. The decrease of pollution is particular obvious in the lower part of the river.

16. Despite the improvement of water quality in the last decade, mostly due to decreasing industrial production, significant water-quality problems will remain. However, water-quality improvements as to nitrogen, microbiological pollution and the general chemical status are likely.

[4] Information submitted by the Ministry of Ecology, Constructions and Territorial Development of the Republic of Moldova

Figure 1: Water pollution index in monitoring stations in the Republic of Moldova



B. Cahul River

17. The Cahul River originates in the Republic of Moldova and flows into the Ukrainian Lake Cahul, one of the Danube lakes. Its assessment will be made at a later stage.

C. Ialpug River

18. The Ialpug River originates in the Republic of Moldova and flows into the Ukrainian Lake Ialpug, one of the Danube lakes. Its assessment will be made at a later stage.

II. ASSESSMENT OF THE STATUS OF TRANSBOUNDARY RIVERS IN THE SARATA BASIN

19. The area of the basin, shared by the Republic of Moldova and Ukraine, is 3,910 km^2. The assessment will be made at a later stage.

III. ASSESSMENT OF THE STATUS OF TRANSBOUNDARY RIVERS IN THE KOGILNIK BASIN

20. The area of the basin, shared by the Republic of Moldova and Ukraine, is 1,250 km^2. The assessment will be made at a later stage.

IV. ASSESSMENT OF THE STATUS OF TRANSBOUNDARY RIVERS IN THE CITAI BASIN

21. Of the basin's total area, shared by the Republic of Moldova and Ukraine, there are 150 km^2 in the Republic of Moldova. The assessment will be made at a later stage.

V. ASSESSMENT OF THE STATUS OF TRANSBOUNDARY RIVERS IN THE HADJIDER BASIN

22. Of the basin's total area, shared by the Republic of Moldova and Ukraine, there are 180 km2 in Moldova. The assessment will be made at a later stage.

VI. ASSESSMENT OF THE STATUS OF TRANSBOUNDARY RIVERS IN THE DNIESTER BASIN

A. Dniester River [5]

23. Ukraine and the Republic of Moldova are usually considered as the basin countries as Poland's share of the basin is very small.

Basin of the Dniester River			
Area	Countries	Countries' share	
72,100 km^2	Ukraine	52,700 km^2	73.1%
	Republic of Moldova	19,400 km^2	26.9%
	Poland	Poland's share is very small	
Source: Ministry of Ecology, Constructions and Territorial Development of the Republic of Moldova			

Hydrology

24. The River Dniester, with a length of 1,362 km, has its source in the Ukrainian Carpathians; it flows through the Republic of Moldova and reaches Ukraine again near the Black Sea coast.

25. At the river mouth, the discharge characteristics are as follows: 10.7 billion m^3 (during 50% of the year); 8.6 billion m^3 (during 75% of the year); and 6.6 billion m^3 (during 95% of the year). There is a significant, long-term trend of decreasing river flow, obviously due to climatic changes.

[5] Information submitted by the Ministry of Ecology, Constructions and Territorial Development of the Republic of Moldova

26. The maximum water flow at the gauging stations Zaleshshiki and Bendery was observed in 1980 with 429 m^3/s and 610 m^3/s, respectively; and the minimum flow at Zaleshshiki (1961) was 97,6 m^3/s and at Bendery (1904) 142 m^3/s.

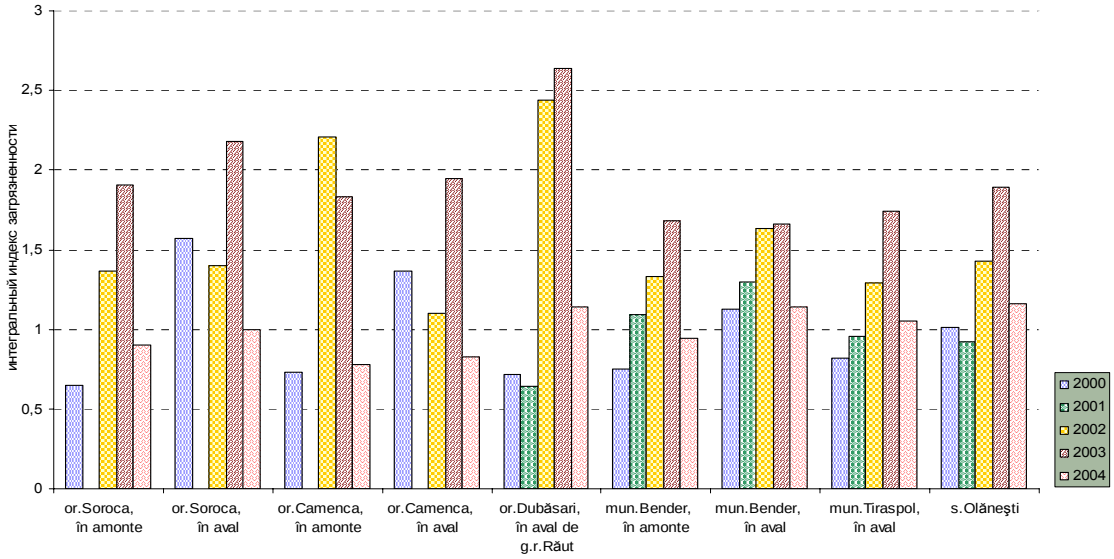
27. Flooding is common; up to five flood events occur each year with water levels rises of 3-4 meters, sometimes even more.

Pressure factors

28. The Dniester flows through densely populated areas with highly developed industry (mining, wood-processing and food industry). Aquaculture, discharges of municipal wasterwaters and diffuse pollution from agriculture are the other main pressure factors. Nitrogen compounds, heavy metals, oil products, phenols and copper are the main pollutants. During the warm season, a deficit of dissolved oxygen and increased BOD_5 levels occur additionally. Microbiological pollution is increasing.

28. Petrol mining and chemical industry (e.g. oil refining) cause water pollution by phenols and oil products. Their main sources are in the upper part of the basin, where petroleum mining takes place and oil-refineries are located. Due to the high migration ability of phenols and oil-products, elevated concentration are also found in the Middle Dniester.

Figure 2: Water pollution index in monitoring stations along the Dniester River in the Republic of Moldova



Transboundary impact

30. The Republic of Moldova assesses that the upper and middle Dniester basin are moderately polluted, whereas the Lower Dniester and the Dniester tributaries are assessed as substantially polluted.

31. In recent years, the technical status of wastewater treatment plants in the Republic of Moldova substantially decreased. Although wastewater treatment plants in cities continue to work with decreasing efficiency, most of the other treatment plants are out of order. For some cities (e.g. Soroki), new treatment plants are to be constructed. In addition, there is the great challenge to plan, create and correctly manage water protection zones in Moldova, including the abolishment of non-licensed dumpsites in rural areas.

Trends

32. Although there was an improvement of water quality over the last decade, mainly due to the decrease in economic activities, the water quality problems remain to be significant. A further decrease of water quality related to nitrogen and phosphorus compounds as well as the microbiological and the chemical status is to be expected.

33. In both countries, the construction of wastewater treatment plants and the enforcement of measures related to water protection zones are of utmost importance.

B. Iagorlic River

34. The Iagorlic River originates in Ukraine, crosses the Moldavian border and flows into the Dniester. Its assessment will be made at a later stage.

C. Cuchugan River

35. The Cuchugan River originates in Ukraine, forms for some length the Ukrainian-Moldavian border and flow into the Dniester on the territory of Ukraine. Its assessment will be made at a later stage.

VII. ASSESSMENT OF THE STATUS OF TRANSBOUNDARY RIVERS IN THE DNIEPER BASIN

A. Dnieper River [6]

36. The Russian Federation, Belarus and Ukraine are located in the Dnieper basin as follows:

[6] Based on information published at http://www.dnipro-gef.net/expedition/exp2001.php and http://www.encyclopediaofukraine.com/pages/D/N/DnieperRiver.htm

Basin of the Dnieper River			
Area	Countries	Countries' share	
504,000 km^2	Russian Federation	90,700 km^2	18%
	Belarus	121,000 km^2	24%
	Ukraine	292,300 km^2	58%
Source: http://www.dnipro-gef.net/expedition/exp2001.php and and ECE/MP.WAT/16			

Hydrology

37. The River Dnieper flows from the Russian Federation through Belarus and then Ukraine. It is the third largest in Europe (after the River Volga and the River Danube). Its length is 2,200 km, of which 115 km form the border between Belarus and Ukraine.

38. Over the last 800 km of the river, there is a chain of consecutive reservoirs. The Dnieper is connected with the Bug River through the Dnieper-Bug Canal.

Discharge characteristics of the Dnieper River at the gauging station Dnieper Hydropower Plant (6980800)		
Q_{av}	1,484 m^3/s	1952-1984
Q_{max}	8,080 m^3/s	
Q_{min}	362 m^3/s	
Source: http://www.dnipro-gef.net/expedition/exp2001.php		

At the river mouth, the discharge amounts to 1,670 m^3/s (52.7 km^3/a).[7]

Pressure factors

39. In all three riparian countries, a great number domestic waste dumps and industrial waste storage facilities are located in the Dnieper basin.

40. Following estimates[8] in 2001, some 8.5 billion tonnes of industrial waste is accumulated in waste storage facilities (up to 50 % of these waste products are accumulated in the territory of Ukraine, up to 10 % in the territory of Belarus, and about 40 % in the territory of the Russian Federation). There is an estimated annual increase in accumulated industrial waste of 8 to 10 %.

[7] ECE/MP.WAT/16.
[8] See Internet sources in the above footnote.

41. The storage facilities contain up to 40 % of especially hazardous industrial waste, including salts of heavy and non-ferrous metals (lead, cadmium, nickel, chromium, etc.) as well as oil products (up to 2.5 %).

42. After the Chernobyl catastrophe, a large amount of radioactive caesium was deposited in reservoir sediment.

Transboundary impact

43. Discharges of insufficiently treated municipal and industrial wastewaters as well as pollution from waste disposal sites and from agriculture have an adverse impact on the water quality of the Dnieper River as well as its major transboundary tributaries.

Trends

44. Hydropower stations, nuclear power stations and manufacturing industries have caused ecological damage at a sub-regional scale. The environmental and human health problems both in the Dnieper river basin and the Black Sea region as a whole are worsened by large-scale development of timberland, and draining of waterlogged lands for agriculture, and the intensive growth of cities where sewage purification is insufficient.

B. Pripyat River

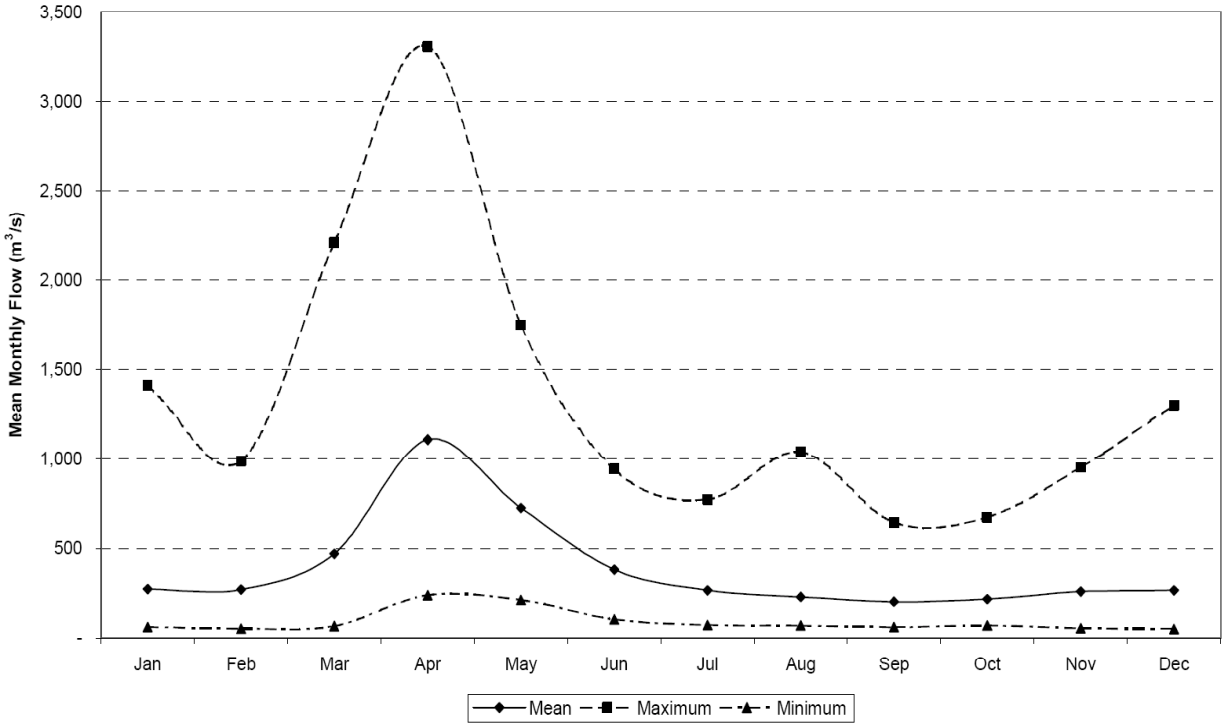
45. The River Pripyat (approximately 710 km length) rises in Ukraine in the region of the Shatsk Lakes. It flows into Belarus before re-entering Ukraine upstream of Chernobyl. A large number of smaller transboundary rivers are part of Pripyat's catchment area. There are some 50 dams in the Pripyat catchment area.

Sub-basin of the Pripyat River			
Area	Countries	Countries' share	
114,300 km^2	Ukraine	65,151 km^2	57%
	Belarus	49,149 km^2	43%
Source: Ministry for Environmental Protection of Ukraine			

Hydrology

46. The average flow of the River Pripyat at the gauging station "Mosyr" for the period 1881 to 2001 was 390 m^3/s (12.3 km^3/a). Little damage is being caused by the snow-melt flood, but occasional floods that are the result of spring or summer rainfall can be destructive.

Figure 3: Average flow characteristics at the station “Mosyr” on the Pripyat River



Pressure factors

47. The Pripyat is a largely rural basin, with little industrial development. However, there are a number of significant sources of pollution, including municipal sewage treatment works that are no longer working efficiently. This is most significant in the upper catchments of the Pripyat tributaries, especially in Ukraine, where larger settlements are located towards the edge of the basin.

48. Pollution by oil products in the lower catchment area from the oil processing plant at Mosyr and pollution from a salt pit and a fertilizer plant at Salihorsk are issues of concern.

49. Radioactive contamination following the accident at Chernobyl in 1986 remains a serious issue as the fallout was heaviest over the lower Pripyat catchment area, which is special “exclusion zone”. Run-off from this area is still radioactive, and will be for many decades.

50. There are also a number of other anthropogenic causes of pollution sources, such as the use of agricultural chemicals (although the use of pesticides has considerably reduced in the last decade) as well as the drainage of water from peat areas.

Transboundary impact

51. The major issue in the lower Pripyat arises from the fall-out from the nuclear accident at Chernobyl in 1986, which contaminated much of the lower catchment, and radioactive material continues to work its way through the runoff processes into the river.

52. There is a threat of potential contamination by the nuclear power station at Rivno on the Styr River, a transboundary tributary, which is based on the same technology as the plant at Chernobyl.

53. Eutrophication of surface waters in the Pripyat river basin is caused by various factors, such as use of agrochemicals, lack of treatment of domestic wastewater and soil erosion.

Trends

54. Water-quality problems will continue to exist; they stem from poor natural water quality (high natural organic content, high acidity and colour), especially in areas where the density of peat and mires is highest, as well as from insufficient municipal wastewater treatment, and occasionally, industrial waste disposal and spillage problems.

C. Seym River

55. The Seym River originates in the Russian Federation, crosses the Russian-Ukrainian border and flows into the Dnieper. It has two transboundary tributaries (rivers Snov and Desna), which also originate in the Russian Federation. Their assessments will be made at a later stage.

D. Psyol River

56. The Psyol River originates in the Russian Federation, crosses the Russian-Ukrainian border and flows into the Dnieper. Its assessment will be made at a later stage.

VIII. ASSESSMENT OF THE STATUS OF TRANSBOUNDARY RIVERS IN THE ELANCIK BASIN

57. The area of the basin, shared by the Russian Federation and Ukraine, is 900 km^2. The assessment will be made at a later stage.

IX. ASSESSMENT OF THE STATUS OF TRANSBOUNDARY RIVERS IN THE MIUS BASIN

58. The area of the basin, shared by the Russian Federation and Ukraine, is 6,680 km^2. The assessment will be made at a later stage.

X. ASSESSMENT OF THE STATUS OF TRANSBOUNDARY RIVERS IN THE DON BASIN

A. Severski Donez [9]

59. The Russian Federation (upstream country) and Ukraine (downstream country) are riparian countries as follows:

Sub-basin of the Severski Donez River			
Area	Countries	Countries' share	
98,900 km^2	Russian Federation	44,500 km^2	45%
	Ukraine	54,400 km^2	55%
Source: http://www.jointrivers.org/eng/docs/final/sevdon			

Hydrology

60. The River Severski Donez originates in the central Russian upland, north of Belgorod, flows south-east through Ukraine (traversing the oblasts of Kharkiv, Donetsk and Luhansk) and then again into the Russian Federation to join the River Don in the Rostov oblast below Konstantinovsk, about 100 km from the Sea of Azov. Its length is 1,053 km.[10] The average density of the river network is 0.21 km/km^2.

61. The maximum registered discharge of the Severski Donez (gauging station Lisichansk) was 3,310 m^3/s. The minimum average discharges during the summer/autumn low-flow period are 2.9 m^3/s in the upper reaches (gauging station Chuguev), 14.0 m^3/s in the middle segment (Lisichansk town), and 15.8 m^3/s in the lower reaches (gauging station Belaya Kalitva).

Pressure factors

62. In the Russian Federation, the main pollution sources of the Severski Donez and its tributaries on the territory of the Belgorod Oblast are domestic wastewaters and wastewaters from municipal sources, metal extraction and processing, the chemical industry and from the processing of agricultural products. On the territory of Rostov Oblast, the main pollution sources include coal mining, metallurgical and machine building plants, chemical enterprises, communal municipal services and enterprises for agricultural products' processing. In the Rostov Oblast, the river also passes through an area of well-developed agriculture.

63. In Ukraine (town of Volchansk and Kharkiv Oblast), the main pollution sources are municipal wastewater treatment plants, which increase the polluting load by BOD, ammonium

[9] Source: Joint River Management Programme Severski-Donez Basin Report at http://www.jointrivers.org/eng/docs/final/sevdon.
[10] ECE/MP.WAT/16.

and phosphates. Only some 20 % of wastewater discharges comply with the permit conditions. In the Donetsk and Lugansk oblasts, municipal wastewater treatment plants and a large number of chemical plants discharge into the river. Certain enterprises store liquid waste and release it during periods of flooding. Around 80 % of the Ukrainian part of the catchment is agricultural land.

Transboundary impact

64. A number monitoring station provides data on water quality. The following table gives an overview on the chemical status of the river at the Ukrainian monitoring station "Ogurtsovo village" at the Ukrainian/Russian border (2001) in comparison with the Ukrainian MPC values.[11] From the determinands monitored, total iron, manganese, copper, nitrites, sulphates, phenols, zinc, oil products, chromium (6+) and BOD_5 are of particular concern.

Chemical status of the Severski Donez at the Ukrainian monitoring station "Ogurtsovo village" at the Ukrainian/Russian border in 2001 [12]

Determinands	Maximum concentration in mg/l	Minimum concentration in mg/l	Average concentration in mg/l	MPC for fish in mg/l	MPC for drinking water in mg/l
Ammonia	0.42	0.06	0.22	0.5	…
Iron, total	0.26	0	0.16	0.1	0.3
Manganese	45	14.6	23.0	40	…
Copper	0.01	0	0.003	0.001	1
Nitrates	11.3	0.09	3.55	40	45
Nitrites	0.195	0.016	0.109	0.08	3
Surfactants	0.081	0.009	0.031	0.3	0.5
Sulphates	144.1	86.5	106.9	100	500
Phenols	0.001	0	0.0002	0.001	0.25
Chlorides	47.9	28.4	38.7	300	350
Zinc	0.127	0.003	0.020	0.001	0.25
Calcium	112.2	80.2	95.5	180	…
Oil products	0.5	0	0.2	0.05	0.1
Dry residues	598	452	517	…	1000-1500
Phosphates	1.84	0.51	1.02	…	3.5
Chromium 6+	0.006	0	0.001	0.001	0.1
DDE	0	0	0	…	…
DDT	0	0	0	…	…
BOD_5	3.56	1.4	2.69	2	…
Suspended solids	26.7	4.7	8.6	…	…

[11] Source: http://www.jointrivers.org/files/final/eng/Vol2a.pdf
[12] Data from the Joint River Management Programme Severski-Donez Basin Report at http://www.jointrivers.org/eng/docs/final/sevdon, adapted by the secretariat

Trends

65. The industrial decline since 1992 makes it very difficult for many industries to invest in pollution control measures. In recent years, low flows in the river reduced dilution for pollutants.[13]

B. Oskol River

66. The Oskol River, a transboundary tributary to the Severski Donez, originates in the Russian Federation and joins the Severski Donez in Ukraine. At the gauging station Ninivka village, its maximum registered discharge amounts to 2,300 m^3/s. Its assessment will be made at a later stage.

XI. ASSESSMENT OF THE STATUS OF TRANSBOUNDARY RIVERS IN THE PSOU BASIN

A. Psou River

67. The Russian Federation and Georgia share the Psou River basin. Its total area is 420 km^2 and the average discharge is in the order of 17.3 m^3/s.[14] The assessment will be made at a later stage.

B. Other transboundary rivers in the Psou basin

68. Information on other transboundary rivers and their assessment will be provided at a later stage.

XII. ASSESSMENT OF THE STATUS OF TRANSBOUNDARY RIVERS IN THE CHOROKHI BASIN

A. Chorokhi River

69. Turkey and Georgia share the basin of the Chorokhi (Coruh) River, which has a total length of 438 km (412 km in Turkey; 26 km in Georgia).

[13] Source: Joint River Management Programme Severski-Donez Basin Report at http://www.jointrivers.org/eng/docs/final/sevdon.
[14] ECE/MP.WAT/16.

Basin of the Chorokhi River			
Area	Countries	Countries' share	
22,100 km^2	Turkey	19,910 km^2	90.5%
	Georgia	2,090 km^2	9.5%
Source: Ministry of Environment of Georgia			

Hydrology

70. From the former 5 gauging stations in Georgia, only one station ("Mirveti") is currently operational and provides data on water levels, water temperature, water discharges (weekly or monthly) as well as suspended matter and silt contents. Precipitation (twice or more a day) is also measured.

Discharge characteristics of the Chorokhi River at the gauging station Erge [15] (15 km upstream of the river mouth; latitude:41^0 33$'$; longitude: 41^{0}42$'$)		
Q_{av}	278 m^3/s	1930-1992
Q_{max}	409 m^3/s	1930-1992
Q_{min}	159 m^3/s	1930-1992
$Q_{absolute\ max}$	3,840 m^3/s	8 May 1942
$Q_{absolute\ min}$	44.4 m^3/s	12 August 1955
Source: Ministry of Environment of Georgia		

Pressure factors

71. In Georgia, the river basin is covered by forests and used for agriculture. Except sediment flow, there are however no data available on the quality of the river and its biological characteristics.

Transboundary impact

72. The sediment flow in the Chorokhi River is estimated at 5 million m^3/year. About 46% of these sediments form the sand beach at the Black Sea coast and are an important resource, as tourism is of prime importance to Georgia's earnings. [16]

[15] The gauging station ceased its operation in 1992.
[16] http://www.fao.org/ag/agl/aglw/aquastat/countries/georgia/index.stm

Trends

73. Turkey is presently planning to construct a cascade of 11 dams on the Chorokhi River, which will affect the water and sediment flow and thus the beaches on the Georgian shore next to Batumi.

B. Other transboundary rivers in the Chorokhi basin

74. Information on other transboundary rivers and their assessment will be provided at a later stage.