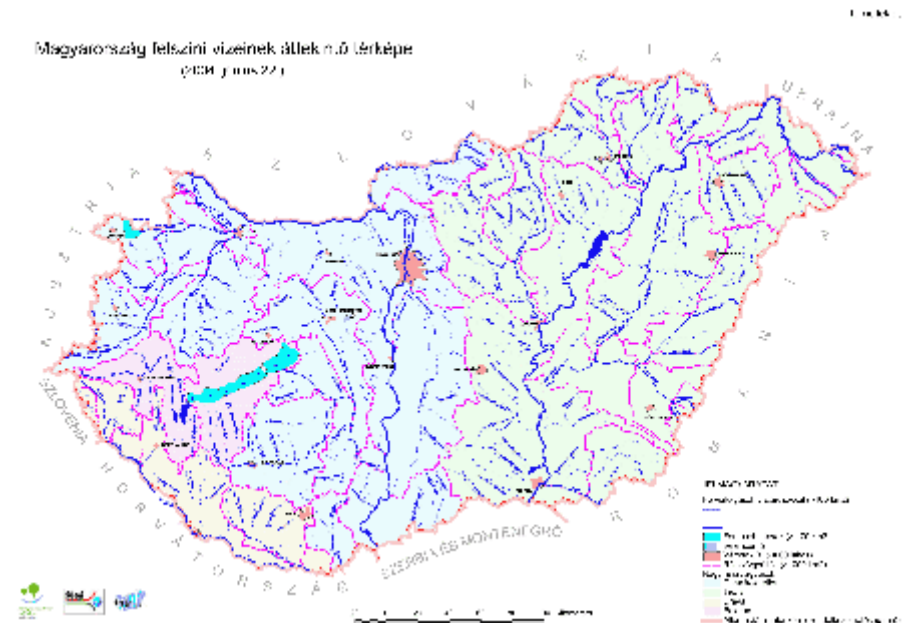


Magyarország vízgyűjtő kerületen belüli elhelyezkedése, térképi bemutatása

Magyarország teljes területe, a Duna vízgyűjtőkerület része. A nemzetközi szintű vízgyűjtőkerületen 18 ország osztozik, amelyek egyrészt európai tagállamok, csatlakozó országok és nem csatlakozó országok. Részletes bemutatását a Duna Védelmi Nemzetközi Bizottság (ICPDR) által készített "Roof Report" (2. melléklet) tartalmazza. Magyarország elhelyezkedését a Duna vízgyűjtőkerületen belül, szintén a "Roof Report"-ban (2. melléklet) található, átnézeti térkép mutatja be.

Magyarország felszíni vizeinek áttekintő térképe (1. melléklet) a nagy részvízgyűjtők (Duna közvetlen, Tisza, Dráva, Balaton) megjelenítése mellett, az 1000 km²-nél nagyobb részvízgyűjtők határait, valamint a 100 km²-nél nagyobb vízgyűjtővel rendelkező vízfolyásokat ábrázolja a rajtuk lévő, 0,5 km²-nél nagyobb vízfelületű, vízfolyásokon lévő víztározókkal együtt. Az országban két 100 km²-nél nagyobb vízfelületű tó található, a Balaton és az osztrák-magyar határral osztott Fertő tó. Az áttekintő térképen a Velencei tó is megjelenítésre került, amely felszíne ugyan nem éri el a 100 km²-t, de kartográfiai jelentősége miatt ábrázoltuk.



Az áttekintő térkép az M=1:500.000 léptékű digitális térképi adatbázisból - a fentiekben megadott értékeknek megfelelő leválogatással - készült. A térkép tartalmát a Víz Keretirányelv végrehajtásához készített és a - 2003. november 25-26-án Rómában tartott - Víz Igazgatói értekezleten elfogadott Jelentési Útmutató (továbbiakban: Jelentési Útmutató) B.2 táblázatában írtak alapján állítottuk össze.

Hatáskörrel rendelkező hatóság

1. A hatáskörrel rendelkező hatóság megnevezése, illetékessége

Hazánkban a keretirányelv előírásainak végrehajtására a Környezetvédelmi és Vízügyi Minisztérium (KvVM, H-1011 Budapest, Fő utca 44-50.), a hatáskörrel rendelkező hatóság.

A KvVM felelős:

- a koordinációért és a vízgyűjtő gazdálkodási terv elkészítéséért
- az Európai Unió Bizottsága felé történő jelentésért

A KvVM illetékessége a Duna vízgyűjtő kerületen belül, az ország teljes területére kiterjed.

2. A KvVM jogi háttere
 1. A minisztériumot létrehozó jogszabály

A KvVM intézményét a Magyar Köztársaság minisztériumainak felsorolásáról szóló 2002. évi XI. törvény hozta létre. A törvény teljes szövege a <http://www.parliament.hu> honlapon található meg.

2. A KvVM Víz Keretirányelv végrehajtásához kötődő feladatait meghatározó jogi háttér

Törvények:

- 1995. évi LIII. törvény a környezet védelmének általános szabályairól
- 1995. évi LVII. törvény a vízgazdálkodásról

Kormányrendelet tervezetek, amelyek a jelentés időpontjában a kormány előtt vannak:

- .../2004. (...) Korm. rendelet a vízgyűjtő-gazdálkodás egyes szabályairól
- .../2004. (...) Korm. rendelet a felszíni vizek védelméről

- .../2004. (...) Korm. rendelet a felszín alatti vizek védelméről
- 3. A KvVM egyéb feladatait meghatározó kormányrendeletek, amelyek a Vízi Keretirányelv végrehajtása szempontjából lényegesek, de nem közvetlenül a VKI végrehajtására vonatkoznak
 - 155/2002. (VII. 19.) Korm. rendelet a környezetvédelmi és vízügyi miniszter feladat és hatásköréről (<http://www.vizugy.hu>)
 - 3/2003. (XI. 5.) Korm. rendelet az Országos Környezet- és Vízügyi Főfelügyelőség, az Országos Környezetvédelmi, Természetvédelmi és Vízügyi Főigazgatóság és a környezetvédelmi és vízügyi miniszter irányítása alá tartozó területi szervek feladat- és hatásköréről (<http://www.vizugy.hu>)

A KvVM keretirányelvhez kapcsolódó felelősségi körök

Felelősségi körök a Jelentési Útmutató B.3. táblázatában foglaltak alapján:

- A víztestek azonosítása
- A mesterséges és az erősen módosított víztestek azonosítása
- A védett területek azonosítása
- A védett területek nyilvántartásának összeállítása és karbantartása
- A víztestek jellemzése és osztályozása
- A referencia feltételek meghatározása
- Az emberi tevékenységek hatásának (impact) áttekintése
- A vízhasználatok gazdasági elemzése
- Derogációk
- A felszíni vizek monitoringja
- A felszín alatti vizek monitoringja
- A védett területek monitoringja
- A vízi szolgáltatásokhoz kötődő költségek visszatérítése alapelvek érvényesítése
- A kibocsátások szabályozásának kidolgozása stb.
- A kibocsátás szabályozás alkalmazása
- Az intézkedési programok kidolgozása
- Az intézkedési programok végrehajtása
- a kibocsátások korábbi szabályozása
- A vízkivételek szabályozása
- A szennyezőanyagok felszín alatti vízbe való kibocsátási tilalmának betartása
- A közvélemény tájékoztatása
- Társadalmi konzultáció
- A különösen veszélyes anyagok (priority substances) szabályozásának alkalmazása

A fent felsorolt feladatok közül, azoknak a végrehajtásánál, amelyeknél ez szükséges (pl. az intézkedési programok végrehajtása) a KvVM minisztere köteles bevonni az illetékes minisztereket. Ezért a kormány úgy határozott, hogy a Vízi Keretirányelv feladatainak végrehajtására, az érintett tárcák bevonásával, létrehozta és működteti a Vízi Keretirányelv Stratégiai Tárcaközi Koordinációs Bizottságot. (2094/2001. (IV. 30.) Korm. határozat, "A közösségi cselekvés kereteinek meghatározásáról a vízügyi politika területén" tárgyú, az Európai Parlament és a Tanács 2000/60/EK irányelvvel kapcsolatos feladatok végrehajtásának megkezdéséről)

Nemzetközi kapcsolatok

1. Duna vízgyűjtő kerület szintű koordináció

A Duna Védelmi Nemzetközi Bizottság (ICPDR) a Vízi Keretirányelv végrehajtását koordináló Duna vízgyűjtőkerület szintű nemzetközi testület, amely a Duna védelmére és fenntartható használatára irányuló együttműködésről szóló, 1994. június 29-én, Szófiában létrehozott egyezmény keretei között működik. Az egyezmény hazánkban a 74/2000 (VII.31.) Korm. rendelettel került kihirdetésre. A keretirányelv előírásai végrehajtásához a koordináció szintjét és az együttműködés szervezeti, szakmai kereteit bővebben a "Roof Report" (2. melléklet) tartalmazza.

2. Kétoldalú együttműködések

Magyarországot hét szomszédos ország veszi körül, amelyek közül Szlovénia, Ausztria, és a Szlovák Köztársaság európai tagállamok, Románia csatlakozó ország, Horvátország csatlakozásra jelölt, Ukrajna és Szerbia-Montenegró állam nem csatlakozó országok. A szomszédos államok mindegyikével hatályos kétoldalú egyezményünk van, amelyeket az alábbiakban sorolunk fel:

Ausztria

- *Az egyezmény címe:* Egyezmény a Magyar Népköztársaság és az Osztrák Köztársaság között a határvidék vízgazdálkodási kérdéseinek szabályozása tárgyában
Hatálybalépés időpontja: 1959. július 31. Az Egyezmény a Magyar Népköztársaság Elnöki Tanácsának 1959. évi 32. számú törvényerejű rendeletével került kihirdetésre.
- *Az Egyezmény címe:* Szerződés a Magyar Népköztársaság és az Osztrák Köztársaság között a környezetvédelem területén való együttműködésről
Hatálybalépés időpontja: 1985. november 8. A Magyar Közlönyben közzétéve "1985/17. Nemzetközi szerződés az Országos Környezet és Természetvédelmi Hivatal elnökétől" cím alatt.

Szlovák Köztársaság

- *Az egyezmény címe:* Egyezmény a Magyar Népköztársaság Kormánya és a Csehszlovák Szocialista Köztársaság Kormánya között a határvidék vízgazdálkodási kérdéseinek szabályozásáról
Hatálybalépés időpontja: 1978. július 28. Az Egyezmény a Minisztertanács (MT) 55/1978.(XII.10.) számú rendeletével került kihirdetésre. Az Egyezmény megújítása folyamatban van.
- *Az egyezmény címe:* Egyezmény a Magyar Köztársaság Kormánya és a Szlovák Köztársaság kormányai között a környezetvédelem és természetvédelem terén való együttműködésről

Hatálybalépés időpontja: 1999. május 27. A Magyar Közlönyben közzétéve "1999/17. Nemzetközi Szerződés a környezetvédelmi miniszertől" cím alatt, a 2093/1999. (V.5.) Korm. határozat rendelkezései alapján

Ukrajna

- *Az egyezmény címe:* Egyezmény a Magyar Köztársaság Kormánya és Ukrajna Kormánya között a határvizekkel kapcsolatos vízgazdálkodási kérdésekről
Hatálybalépés időpontja: 1999. május 16. Az Egyezmény a Kormány 117/1999.(VIII.6.) számú rendeletével került kihirdetésre.
- *Az egyezmény címe:* Egyezmény a Magyar Köztársaság Kormánya és Ukrajna Kormánya közötti környezetvédelmi és területfejlesztési együttműködésről
Hatálybalépés időpontja: 1993. június 1. A Magyar Közlönyben közzétéve "1993/11. Nemzetközi szerződés a környezetvédelmi és területfejlesztési miniszertől" cím alatt

Románia

- *Az egyezmény címe:* Egyezmény a Magyar Köztársaság Kormánya és Románia Kormánya között a határvizek védelme és fenntartható hasznosítása céljából folytatandó együttműködésről (megújított egyezmény)
Hatálybalépés időpontja: 2004. május 17. (Kihirdetése folyamatban van)
- *Az egyezmény címe:* Egyezmény a Magyar Köztársaság Kormánya és Románia Kormánya között a környezet védelme terén való együttműködésről
Hatálybalépés időpontja: 2000. december 14. A Magyar Közlönyben közzétéve "2001/9. Nemzetközi szerződés a környezetvédelmi és területfejlesztési miniszertől" cím alatt

Szerbia és Montenegro

- *Az egyezmény címe:* Egyezmény a Magyar Népköztársaság és a Jugoszláv Szövetségi Népköztársaság Kormánya között a vízgazdálkodási kérdések tárgyában. (Az új egyezmény megkötésének kezdeményezése folyamatban van)
Hatályba lépés időpontja: 1956. május 19.

Horvát Köztársaság

- *Az egyezmény címe:* Egyezmény a Magyar Köztársaság Kormánya és a Horvát Köztársaság Kormánya között a vízgazdálkodási együttműködés kérdéseiben
Hatálybalépés időpontja: 1995. március 3. Az Egyezmény a Kormány 127/1996.(VII.25.) számú rendeletével került kihirdetésre. (A jogszabály szövege a <http://www.vizugy.hu> honlapon található)

Szlovén Köztársaság

- *Az egyezmény címe:* Egyezmény a Magyar Köztársaság Kormánya és a Szlovén Köztársaság Kormánya között a vízgazdálkodási kérdések tárgyában
Hatálybalépés időpontja: 1995. május 27. Az Egyezmény a Kormány 41/2001.(III.14.) számú rendeletével került kihirdetésre

A kétoldalú határvízi kapcsolatokról bővebb információ a <http://www.vizugy.hu> honlap "Nemzetközi vízügyi együttműködés" menüpontjában található.

Danube River Basin District

Part A - Roof report

Information required according to Art. 3 (8) and Annex I of the EU Water Framework Directive
Reporting deadline: June 22, 2004

INTRODUCTION

Situation in the Danube River Basin District

The Danube River Basin is the second largest river basin of Europe¹ covering 801 463 km² and territories of 18 states including EU-Member States, accession states and non accession states. Where a river basin district extends beyond the territory of the Community, the Water Framework Directive 2000/60/EC (WFD) requests the Member State or Member States concerned to "endeavour to establish appropriate coordination with the relevant non-Member States, with the aim of achieving the objectives of this Directive throughout the river basin district." (Art. 3.5 WFD).

The International Commission for the Protection of the Danube River (ICPDR) serves as the platform for coordination to develop and establish the Danube River Basin Management Plan (DRBMP). In November 2000 all Contracting Parties of the "Convention on Cooperation for the Protection and Sustainable Use of the Danube River" (Danube River Protection Convention, DRPC) stated their commitment to implement the WFD within their jurisdiction and to cooperate in the framework of the ICPDR to achieve a single, basin-wide coordinated Danube River Basin Management Plan. For states with territories of less than 2 000 km² in the Danube River Basin (DRB) the ICPDR has attempted to establish appropriate bilateral coordination

At the time of reporting eight states in the Danube River Basin are EU-Members, two are in the accession process and one has applied for EU-Membership (see Table 1). By the time the deadline for the completion of the River Basin Management Plan is reached in December 2009 probably two more Danube states will have become EU Members.

Table 1 States in the Danube River Basin District

State	ISO-Code	Status in the European Union²
Albania	AL	-
Austria	AT	Member State
Bosnia-Herzegovina	BA	-

Bulgaria	BG	Accession State
Croatia	HR	Accession Applicant (February 2003)
Czech Republic	CZ	Member State
Germany	DE	Member State
Hungary	HU	Member State
Italy	IT	Member State
Macedonia	MK	-
Moldova	MD	-
Poland	PL	Member State
Romania	RO	Accession State
Serbia-Montenegro	CS	-
Slovak Republic	SK	Member State
Slovenia	SI	Member State
Switzerland	CH	-
Ukraine	UA	-

The EU candidate countries in the Danube River Basin, which are scheduled to join on May 1, 2004, have committed themselves to transpose and implement the WFD without any specific transposition provisions, i.e. in the same deadlines as for Member States. Only when the WFD refers to another piece of Community legislation where a transitional period has been granted, e.g. the Urban Waste Water Treatment Directive (91/271/EEC), this period applies. Legal transposition is currently taking place in all candidate countries at different paces, similar to the EU Member States. All of the accession states are committed to completing transposition by the date of accession. For the candidates, which may join in 2007, the WFD is part of the 'acquis communautaire'. So far, no transitional periods have been requested by these states. Croatia has applied for accession to the European Union in February 2003. They have no reporting obligations but they are following the process.

Status of this report

This report was agreed by all Contracting Parties under the Danube River Protection Convention and Bosnia-Herzegovina at the 6th Ordinary Meeting of the ICPDR on December 1-2, 2003 in Vienna.

STRUCTURE OF THE REPORT

Due to the large number of states and the coordination requirements in the Danube River Basin District (DRBD) it is necessary to divide the Danube River Basin Management Plan into two parts. Part A (roof of the DRBMP) gives relevant information of multilateral or basin-wide importance, whereas Part B (national input to DRBMP) gives all relevant further information on the national level as well as information coordinated on the bilateral level.

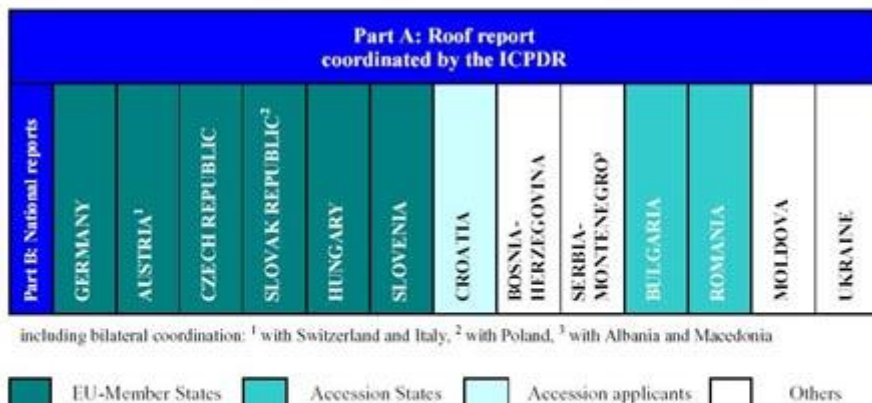


Figure 1: Structure of the report for the Danube River Basin District

³ This figure reflects the situation at the time of reporting (June 2004).

The ICPDR has a coordinating and supporting function, but does not report on its own. Each state will deliver the roof report (Part A) and its own national report (Part B). This approach is also undertaken for the delivery of information required according to Art. 3 (8) and Annex I WFD. In addition, the ICPDR will informally send a copy of the roof report and a copy of the national reports (Part B) of those countries not obligated to report to the European Commission.

A. Roof report

The roof report contains information on issues of multilateral or basin-wide importance and demonstrates the basin-wide coordination arrangements. This report will be sent by the states to the European Commission with the national reports.

It is identical for all states. The ICPDR serves as the platform for coordination. The content of the management plan results from the work of the ICPDR expert groups and is approved by the ICPDR Ordinary Meetings.

The roof report addresses those issues of Annex I WFD relevant on the basin-wide scale, i.e. information concerning the

- Name and address of the competent authorities
- Geographical coverage of the Danube River Basin District, and
- International relationships.

B. National report

The national report gives all relevant further information on the national level as well as information coordinated on the bilateral level. It addresses all issues listed in Annex I WFD. Regarding points 1., 2. and 6. the national information is given in addition to the information in Part A.

The information needed to fulfill the requirements of Art. 3 (8) and Annex I WFD will be covered in Part A (roof report) and Part B (national reports) as follows:

	Part A Roof report	Part B Roof report
1. Name and address of the competent authorities	X	X
2. Geographical coverage of the river basin district	X	X
3. Legal status of competent authority		X
4. Responsibilities		X
5. Membership		X
6. International relationships	X	X

Regarding 1. Name and address of the competent authorities the information given in Part A will be for information purposes, in Part B for reporting purposes. Regarding 2. Geographical coverage of the river basin district an overview of the Danube River Basin District will be given in Part A. Part B will add further information on the national level.

Regarding 6. International relationships Part A will describe the international relationships to ensure basin-wide coordination and will include an overview on existing bi- or multilateral agreements of the Danube states. Part B will contain further information on bi-/multilateral agreements and other forms of cooperation.

INFORMATION GIVEN IN THE ROOF REPORT

1. Competent authorities

The competent authorities are designated by the states. The link between these on the international level is ensured through the ICPDR and its Contracting Parties. The ICPDR serves as the platform for coordination for the implementation of the WFD in the Danube River Basin District on issues of basin-wide importance (see chapter 3.2). A list of the (national) competent authorities is attached in Annex 1 (overview).

2.

1. Geographical coverage of the Danube River Basin District

The Danube River Basin District covers 1) the Danube River Basin, 2) the Black Sea coastal catchments on Romanian territory, and 3) the Black Sea coastal waters along the Romanian and partly the Ukrainian coast (see Table 2).

Table 2 Area of the Danube River Basin District

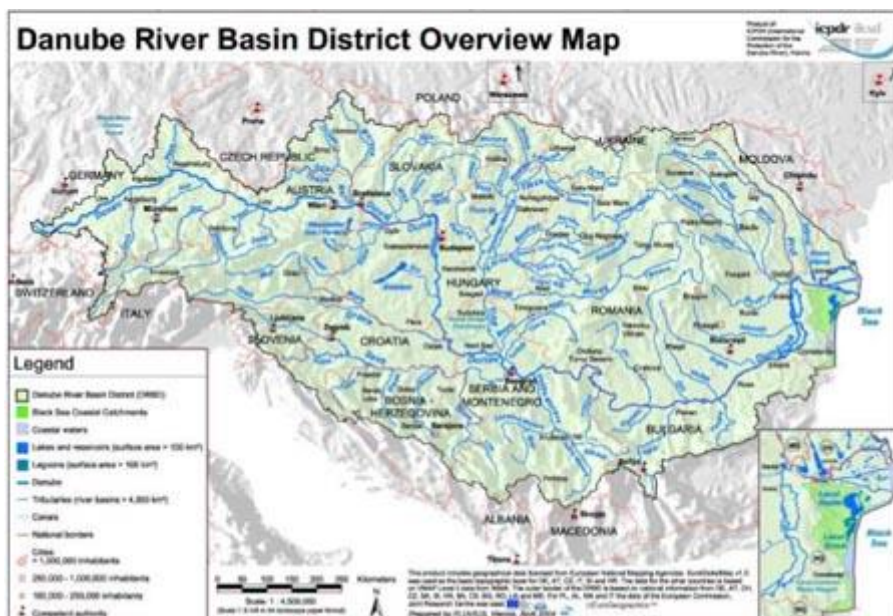
	Territory	Official area [km ²]	Digitally determined
Danube River Basin (DRB)	18 countries (see Table 3)		801 463
Black Sea coastal river basins	Romania	5 198	5 122
Black Sea coastal waters	Romania and Ukraine		1 242
Danube River Basin District (DRBD)			807 827

For the purpose of comparison the areas were calculated using GIS on the basis of the DRBD overview map. The value for the Black Sea coastal river basins differs slightly from the official data, since other methods of calculation have been used.

Figure 2 shows the geographical coverage of the Danube River Basin District. The outer boundary of the Danube River Basin District was defined taking into consideration the hydrological boundaries of the surface waters and groundwater. In a few small places the district boundaries of groundwater and surface waters are not aligned (Germany, Slovenia and Bulgaria). Details can be found in the respective national reports.

In addition to the Danube River Basin, the small coastal basins of the Black Sea tributaries lying on Romanian territory between the Eastern boundary of the DRB and the coastal waters of the Black Sea have been included in the Danube River Basin District. Here also lies the Danube-Black Sea Canal (Canal Dunarea-Marea Neagra), which diverts part of the water of the Danube River directly to the Black Sea. These coastal catchments were included in the DRBD, because they influence the coastal waters along the Romanian coastline. The other Danube states agreed with including the Black Sea tributaries on Romanian territory into the DRBD.

The coastal waters of the DRBD extend along the full length of the Romanian coastline and along part of the Ukrainian coast up to the hydrological boundaries of the Danube River Basin. The Romanian coastal waters were included in the DRBD, because the water quality and the morphology of the seashore are substantially influenced by the Danube River. The Romanian coastal waters are delineated at 1 nautical mile from the baseline, which is defined along 9 points within the territorial sea of Romania as laid down in the Romanian Law No. 17/1990, modified by Romanian Law No. 36/2002. A detailed description of the coastal waters is contained in the Romanian national report (Part B). The Ukrainian coastal waters are not defined by Ukrainian law. For WFD implementation the coastal waters are defined in line with Art. 2.7 WFD at 1 nautical mile from the baseline.



State	Code	Official coverage in DRB [km²]	Digitally determined coverage in DRB [km²]	Percentage of DRB [%]	Percentage of DRB in state [%]	Population in DRB [Mio.]	Percent of population in DRB [%]
Albania	AL		126	<0.1	0.01	<0.01	<0.01
Austria	AT		80423	10.0	96.1	7.7	9.51
Bosnia-Herzegovina	BA		36636	4.6	74.9	2.9	3.58
Bulgaria	BG		47413	5.9	43.0	3.5	4.32
Croatia	HR		34965	4.4	62.5	3.0	3.71
Czech Republic	CZ		22870	2.9	31.1	2.8	3.46
Germany	DE		56184	7.0	16.8	9.3	11.49
Hungary	HU	93030		11.6	100.0	10.2	12.60
Italy	IT	565		<0.1	0.2	0.02	0.02
Macedonia	MK		109	<0.1	0.2	<0.01	<0.01
Moldova	MD		12834	1.6	35.6	1.1	1.36
Poland	PL		430	<0.1	0.1	0.04	0.05
Romania	RO		232193	29.0	97.4	21.0	25.94
Serbia-Montenegro	CS		88635	11.1	90.0	9.8	12.11
Slovak Republic	SK	47084		5.9	96.0	5.2	6.42
Slovenia	SI	16422		2.0	81.0	1.7	2.10
Switzerland	CH		1809	0.2	4.3	0.02	0.02
Ukraine	UA		30520	3.8	5.4	2.65	3.27
Total						80.95	100

1. For the purpose of comparison the coverage of the states was calculated using GIS based on the DRBD overview map. These values differ slightly from the official data of some countries, since other methods of calculation have been used.
 2. Data source: Autonomous Province of Bozen - South Tyrol.

The coastal waters of Bulgaria are not included in the DRBD, since their characteristics are substantially influenced by rivers on Bulgarian territory flowing into the Black Sea and by processes in the Black Sea itself. The Bulgarian Water Law of 1999 designates 4 river basin districts in the country. Their boundaries are based on the hydrological boundaries of the watersheds (surface water and groundwater) between the river basins. Following these hydrological considerations, and the provisions of Article 3 (1) of the WFD, Bulgarian coastal waters are assigned to the Black Sea River Basin. The latter covers 25.2 % of the country's surface area and includes all rivers on Bulgarian territory flowing into the Black Sea, coastal waters and territorial waters (Article 152 (1) 2 of the Water Law). The other Danube States agreed with the inclusion of the coastal waters of Ukraine and Romania into the DRBD and the exclusion of Bulgarian coastal waters.

The Danube River Basin District overview map depicts:

- the outer boundary of the Danube river basin district,

- the boundaries of the Danube River Basin and of the Black Sea coastal catchments,
 - the boundaries of the coastal waters belonging to the DRBD,
 - all rivers with catchments larger than 4000 km²,
 - all lakes, lagoons and reservoirs with a surface area of at least 100 km²,
 - the main canals used for navigation,
 - the main cities including the capitals of the countries, and
 - the locations of the competent authorities.
2. Characteristics of the Danube River and its main tributaries

The **Danube** River Basin is the second largest river basin of Europe, covering 801 463 km² and territories of 18 countries (see Table 3). The Danube is 2870 km long and has an average discharge of 6460 m³/sec at its mouth in the Danube Delta. Some of its largest tributaries are characterised below. Their key hydrologic characteristics are listed in Table 4.

The **Inn** is the third largest by discharge and the seventh longest Danube tributary. At its mouth in Passau, it brings more water into the Danube than the latter itself. However, its catchment area of 26 130 km² is only nearly half as big as the Danube at this point. The main tributary of the Inn is the Salzach River.

The **Morava/March** River is a left hand tributary of the Danube. Its catchment area of 26 658 km² covers parts of the Czech Republic, Slovakia and Austria. In terms of geological structure, this basin forms a boundary between the Bohemian Highlands, the Carpathians and the Pannonian Province. It is an ecologically valuable area with high diversity of species and landscape types.

The **Drau/Drava** is the fourth largest and fourth longest Danube tributary. It rises in the southern Alps in Italy but is the dominant river of southern Austria, eastern Slovenia, southern Hungary and Croatia. Main Austrian sub-tributaries are Isel, Möll, Lieser and Gurk, and the Mur/Mura with its mouth at the Croatian-Hungarian border.

The **Tysa/Tisza/Tisa** River basin is the largest sub-basin in the Danube River Basin (157 186 km²). It can be divided into three main parts:

- the mountainous Upper Tysa in Ukraine (upstream of the Ukrainian-Hungarian border),
- the Middle Tisza in Hungary (receiving the largest tributaries: Bodrog River and Slaná/Sajó River collecting water from the Carpathian Mountains in Slovakia and Ukraine as well as the Somes/Szamos River, the Crisul/Körös River System and Mures/Maros River draining Transylvania in Romania), and
- the Lower Tisa (downstream of the Hungarian-Serbian border, where it receives the Bega/Begej directly, and other tributaries indirectly through the Danube - Tisza - Danube Canal System).

The Tysa/Tisza/Tisa River is also the longest tributary (966 km). By flow volume it is second largest after the Sava River.

The **Sava** River is the largest Danube tributary by discharge (average 1564 m³/sec) and the second largest by catchment area (95 419 km²). It rises in the western Slovenian mountains and passes through Croatian lowland before forming the border between Croatia and Bosnia-Herzegovina. Continuing through Serbia-Montenegro it reaches its confluence with the Danube in Belgrade. Its main sub-tributaries are Krka, Kupa, Una, Vrbas, Bosna, Drina and Kolubara.

The **Iskar** is the largest Danube tributary on Bulgarian territory. It springs from the Rila mountain passes, flows through the outskirts of Sofia, crosses the Balkan mountains and continues its 368 km long way to the Danube. Its catchment area is 8 684 km².

The **Siret** River Basin has the third-largest catchment area and is situated to the east of the Carpathians. Its source lies in Ukraine and it flows through the territory of Ukraine and Romania. Its main sub-tributaries are Suceava, Moldova, Bistrita, Trotus, Barlad and Buzau.

The **Prut** River is the second longest (950 km) and the last tributary of the Danube, with its mouth just upstream of the Danube Delta. Its source is in the Ukrainian Wood Carpathians. Later it forms the border between Romania and Moldova. Main sub-tributaries are Ceremosh, Derelui, Volovat, Baseu, Corogea, Jijia, Chineja, Ciugur and Lapusna.

The **Danube Delta** is largely situated in Romania and partly in Ukraine. The entire protected area covers 679 000 ha including floodplains and marine areas. The core of the reserve (312 400 ha) has been established as a "World Nature Heritage" in 1991. There are 668 natural lakes larger than one hectare covering 9.28 % of the Delta's surface. The Delta is an environmental buffer between the Danube River and the Black Sea, filtering out pollutants and enabling both water quality conditions and natural habitats for fish in the Delta and in the environmentally vulnerable shallow waters of the north-western Black Sea. Moreover, it is Europe's largest remaining natural wetland - a unique ecosystem.

Table 4 The Danube and its main tributaries (catchments > 4 000 km²) in the order of their confluence with the Danube from the source to the mouth (data source: Competent authorities in the DRB unless marked otherwise)

River	Mouth at Danube km	Length [km]	Size of catchment [km ²]	Average discharge [m ³ /sec]	Time series for discharge values
Danube	0	2780	801463	6460	(1914-2003)
Lech	2497	254	4125	115	(1982-2000)
Naab	2385	191	5530	49	(1921-1998)
Isar	2282	283	8964	174	(1926-1998)
Inn	2225	515	26130	735	(1921-1998)
Traun	2125	153	4257	150	(1961-1999)
Enns	2112	254	6185	200	(1961-1999)
Morava/March	1880	352	26658	110	(1961-1999)
Raab/Rába	1794	240	14349	63	(1901-2000)
Vah	1766	398	18296	161	(1931-1980)
Hron	1716	278	5463	55	(1931-1980)

Ipel/Ipoly	1708	197	5108	22	(1931-1980)
Sió	1498	124	14693	39	(1931-1970)
Drau/Drava	1382	893	41238	577	(1946-1991)
Tysa/Tisza/Tisa	1214	966	157186	794	(1946-1991)
Sava	1170	861	95419	1564	(1946-1991)
Tamis/Timis	1154	359	10280	47	(1946-1991)
Morava (CS)	1103	430	37444	232	(1946-1991)
Timok	846	180	4630	31	(1946-1991)
Jiu	694	339	10080	86	(1921-2003)
Iskar	636	368	8684	54	(1936-1998)
Olt	604	615	24050	174	(1921-1995)
Yantra	537	285	7879	47	(1936-1998)
Arges	432	350	12550	71	(1914-2003)
Ialomita	244	417	10350	45	(1915-2003)
Siret	155	559	47610	240	(1921-2003)
Prut	132	950	27540	110	(1928-2003)

1 For the purpose of comparison the size of the catchments was calculated using GIS on the basis of the DRBD overview map. These values may differ slightly from the official data, because other methods of calculation have been used.

Figure 3 is based on data calculated with the "Danube Water Quality Model", which was developed during the Danube River Pollution Reduction Programme in 1999. It shows the relative contribution of run-off into the Danube divided by the states where the run-off originates from. Austria shows by far the largest contribution (22.1 %) followed by Romania (17.6 %). This reflects the high precipitation in the Alps and in the Carpathian mountains. In the upper part of the Danube the Inn contributes the main water volume adding more water than the Danube has at the point of confluence with the Inn. In the middle reach it is the Drava, Tisza and Sava, which together contribute almost half of the total discharge that finally reaches the Black Sea.

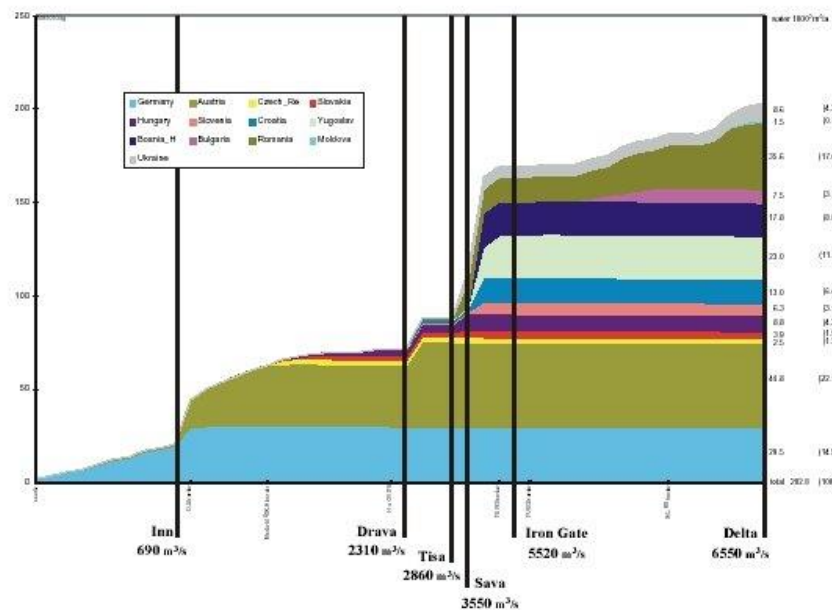


Figure 3 Contribution of the water from each state (in %) to the cumulative discharge of the Danube (in Mio m³/year), based on data for 1994-1997 using the 'Danube Water Quality Model'

Figure 3 Contribution of the water from each state (in %) to the cumulative discharge of the Danube (in Mio m³/year), based on data for 1994-1997 using the .Danube Water Quality Model.

3. International relationships in order to ensure coordination
 1. General overview

BG -RO border In view of the size and number of states that have territories in the Danube basin coordination is required on different levels in order to fulfil "the environmental objectives established under Article 4, and in particular all programmes of measures" (Art. 3.4 WFD). "In the case of an international river basin district extending beyond the boundaries of the Community, Member States shall endeavour to produce a single river basin management plan, and, where this is not possible, the plan shall at least cover the portion of the international river basin district lying within the territory of the Member State concerned." (Art. 13.3 WFD).

The roof report covers transboundary issues of basin-wide relevance. Other transboundary issues will be dealt with in the national reports (i.e. issues with limited transboundary impacts).

For the development of the Danube River Basin Management Plan different international coordination mechanisms are in place:

Framework for cooperation	Area of cooperation
International Commission for the Protection of the Danube River (ICPDR)	Danube River Basin
Bilateral/multilateral cooperation	All other transboundary issues not covered by the ICPDR

The ICPDR serves as the platform for coordination in the implementation of the WFD in the Danube River Basin District on issues of basin-wide importance. Transboundary issues not covered by the ICPDR are solved at the appropriate level of cooperation e.g. in the frame of bilateral/multilateral river commissions. Local issues remain a national task. Generally, coordination will take place at the lowest level possible so that the coordination via the ICPDR can be limited to those issues necessary on the basin-wide level.

2. Coordination of WFD implementation at the basin-wide level

The Danube River Protection Convention forms the overall legal instrument for cooperation and transboundary water management in the Danube River Basin (see Annex 2). The main objective of the convention is the sustainable and equitable use of surface waters and groundwater and includes the conservation and restoration of ecosystems. The Contracting Parties cooperate on fundamental water management issues and take all appropriate legal, administrative and technical measures, to maintain and improve the quality of the Danube River and its environment. Presently, Austria, Bulgaria, Croatia, the Czech Republic, Germany, Hungary, Moldova, Romania, the Slovak Republic, Slovenia, Serbia and Montenegro, Ukraine and the European Community are Contracting Parties to the DRPC. Bosnia and Herzegovina has an observer status.

To facilitate the implementation of the DRPC, the Danubian states agreed that with its entry into force the ICPDR is established. The ICPDR is therefore the framework for basin-wide cooperation (see Figure 4).

Organisational Structure under the Danube River Protection Convention

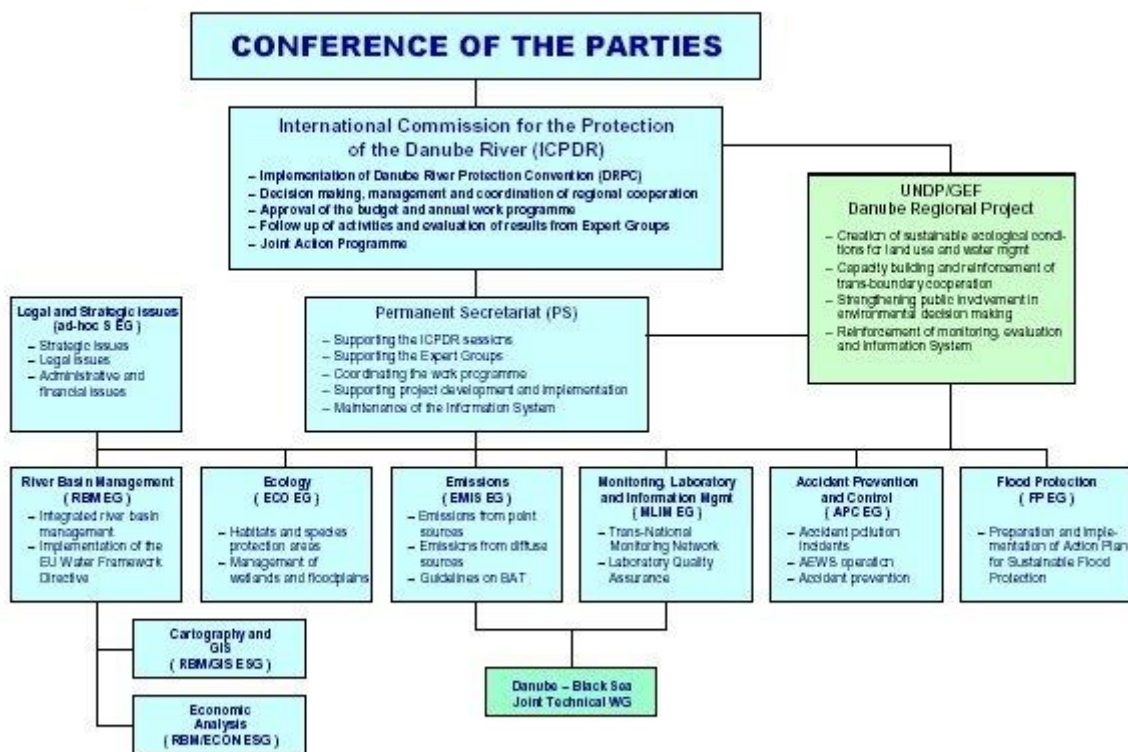


Figure 4: Organisational structure under the Danube River Protection Convention

Figure 4: Organisational structure under the Danube River Protection Convention

At its 3rd Ordinary Meeting on November 27-28, 2000 in Sofia the ICPDR made the following resolutions:

- The ICPDR will provide the platform for the coordination necessary to develop and establish the River Basin Management Plan for the Danube River Basin.
- The Contracting Parties ensure to make all efforts to arrive at a coordinated international River Basin Management Plan for the Danube River Basin.

In the ICPDR all Contracting Parties and Bosnia-Herzegovina as an observer support the implementation of the WFD in their territories and cooperate in the framework of the ICPDR to achieve a single, basin-wide coordinated Danube River Basin Management Plan. The ICPDR President has addressed the other DRB countries not cooperating under the DRPC to commit themselves to cooperate with the ICPDR to achieve a basin-wide coordinated DRBMP. Poland, Switzerland, Macedonia and Albania have offered their support (see Annex 3). From Italy no response was received. On the

operational level, it is the obligation of the Contracting Parties to ensure the necessary coordination with their DRB neighbours not cooperating under the DRPC.

The River Basin Management Expert Group was created to prepare and coordinate the necessary activities for the implementation of the WFD. All states cooperating under the DRPC are represented in the River Basin Management Expert Group. The group jointly agrees on the necessary actions for the development of the Danube River Basin Management Plan, e.g. the development of a strategy for establishing the RBM Plan, development of the roof report to the European Commission or identifying needs for harmonisation of methods and mechanisms (see Figure 5).

The Danubian states cooperating under the DRPC report regularly to the ICPDR on the progress of WFD implementation in their own states. These national reports serve as a means for exchanging information between the states and for streamlining the implementation activities on the national level. At each of its Ordinary Meetings and Standing Working Group Meetings the ICPDR deals with the step-wise implementation of the WFD in the Danube River Basin and takes the necessary decisions.

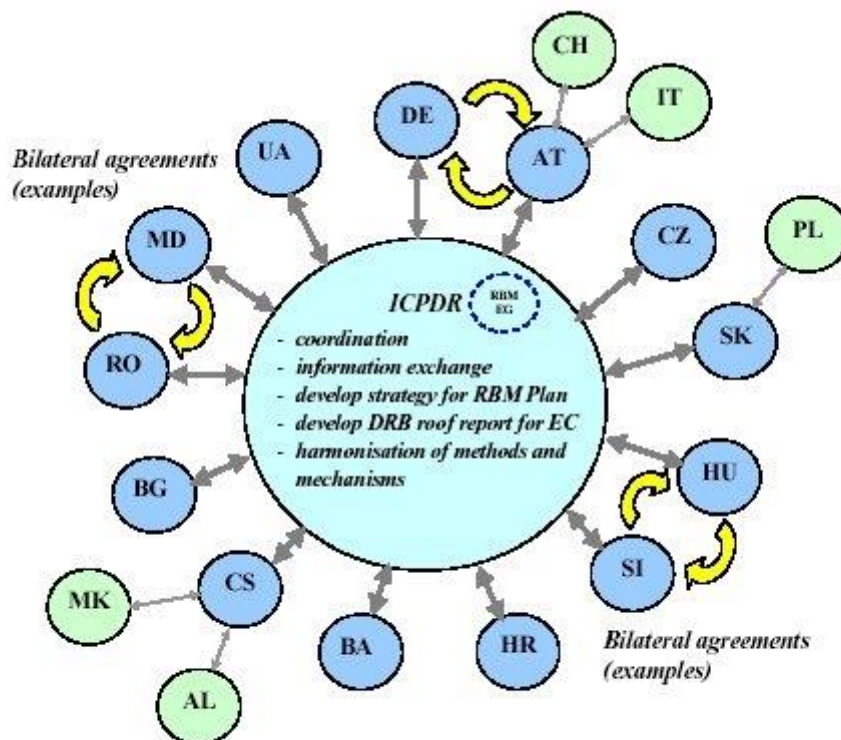


Figure 5 Coordination mechanisms for WFD implementation in the Danube River Basin (for an overview of existing bilateral agreements see Table 5)

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3. Bilateral and multilateral cooperation

Bilateral agreements are in place between almost all states in the Danube River Basin District, but it is important to note that these agreements were not "established in order to ensure coordination" as stated in WFD Annex I, 6. These are generally older treaties that deal with specific issues of transboundary cooperation, which in many cases includes water management issues. Some of these agreements have been adapted to cover issues related to WFD implementation, but generally they are only used as the platform for coordination needed to fulfil the requirements of the WFD.

Bilateral agreements are in place between almost all the States that participate in the implementation of the WFD in the Danube River Basin District. A very recent multilateral agreement is the "Framework Agreement on the Sava River Basin" (entry into force at present pending). On the Tisza River a multilateral cooperation has been initiated in the frame of the "Environmental Programme for the Tisza River Basin" and the "Budapest Declaration" (Tisza Water Forum).

Like the DRPC the bilateral and multilateral agreements at present do not - with the exception of the Sava River Basin Agreement and the Environmental Programme for the Tisza River Basin - make reference to the WFD. Nevertheless, the fora based on these agreements are utilised for the implementation of the WFD just as in the case of the ICPDR. They therefore serve as a platform for cooperation for those issues that are best dealt with at the sub-basin level.

Table 5 gives an overview of the existing agreements and on the commissions based on them that are being used for WFD implementation. There are cases where no formally approved bilateral agreements and commissions implementing them exist, but regular meetings serve to facilitate cooperation. Detailed information on the modes of cooperation at the bilateral and multilateral level will be given in the national reports. The reports of Slovenia, Croatia, Serbia-Montenegro and Bosnia- Herzegovina will include a short summary of the "Framework Agreement on the Sava River Basin".

Table 5 Overview of bilateral agreements and bilateral cooperations for WFD implementation in the Danube River Basin District

Table 5 Overview of bilateral agreements and bilateral cooperations for WFD implementation in the Danube River Basin District

	AL	AT	BA	BG	CH	CS	CZ	DE	HR	HU	IT	MD	MK	PL	RO	SI	SK	UA
AL						X												
AT					(X)		X	X		X	(X)					X	X	
BA									X									
BG						X							X		X			
CH		(X)																
CS	X			X						X					X			
CZ		X						X						X			X	
DE		X					X											
HR			X							X						X		
HU		X			X				X						X	X	X	X
IT		(X)																
MD															X			X
MK				X														
PL							X										X	X
RO				X		X				X		X						X
SI		X							X	X								
SK		X					X			X				X				X
UA										X		X		X	X		X	

X = formal agreement between neighbouring states, (X) = bilateral cooperation without formal agreement

4. Cooperation of the ICPDR with the Black Sea Commission (ICPBS)

Eutrophication is one of the principle causes for the degradation of the Black Sea. The land-based input of nutrients via the Danube River into the Black Sea is claimed to be the most important driving force for its eutrophication. In view of these cause-effect relationships a Memorandum of Understanding (MoU) was signed by the ICPDR and the International Commission for the Protection of the Black Sea (ICPBS) on November 26, 2001 in Brussels (see Annex 4) .

For its implementation the Danube-Black Sea Joint Technical Working Group was charged with the task, to assure the implementation of all technical measures of the MoU with particular attention to the assessment of nutrient inputs into the Black Sea and the ecological status of the Black Sea.

Relevant information will be utilised in this context as much as possible. However, the ICPDR does not cooperate with the ICPBS in a legal context relating to the implementation of the WFD within the Danube River Basin District. The MoU is used as a basis to join the efforts of the states participating in the commissions' activities to implement the WFD.

LIST OF ACRONYMS

DRB	Danube River Basin
DRBD	Danube River Basin District
DRBMP	Danube River Basin Management Plan
DRPC	Danube River Protection Convention
EU	European Union
GEF	Global Environment Facility
ICPBS	International Commission for the Protection of the Black Sea
ICPDR	International Commission for the Protection of the Danube River
MoU	Memorandum of Understanding
UNDP	United Nations Development Programme
WFD	Water Framework Directive

ANNEXES

Annex 1: List of competent authorities on the national level (overview)

Annex 2: Convention on Cooperation for the Protection and Sustainable use of the Danube River (Danube River Protection Convention)

Annex 3: Letters of commitment of Danube River Basin states, that have not signed the Danube River Protection Convention, to cooperate with the ICPDR to implement the WFD

Annex 4: Memorandum of Understanding between the International Commission for the Protection of the Black Sea (ICPBS) and the International Commission for the Protection of the Danube River (ICPDR) on common strategic goals

Roof Report, July 02, 2004

For more information please visit the Hungarian version!

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