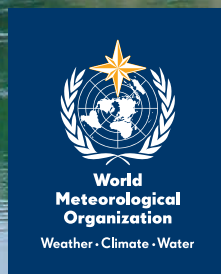




INTERNATIONAL SAVA RIVER BASIN COMMISSION

# POLICY ON THE EXCHANGE OF HYDROLOGICAL AND METEOROLOGICAL DATA AND INFORMATION IN THE SAVA RIVER BASIN



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# SIGNATORY ORGANISATIONS

BOSNIA AND HERZEGOVINA	
	Federal Hydrometeorological Service
	Sava River Watershed Agency
	Republic Hydro-Meteorological Service of Republic of Srpska
MONTENEGRO	
	Institute of Hydrometeorology and Seismology
REPUBLIC OF CROATIA	
	Meteorological and Hydrological Service
REPUBLIC OF SERBIA	
	Republic Hydrometeorological Service of Serbia
	Agency for Environmental Protection
REPUBLIC OF SLOVENIA	
	Slovenian Environment Agency



# Policy on the Exchange of Hydrological and Meteorological Data and Information in the Sava River Basin

The Signatories to this Policy (hereinafter: *Signatories*),

**Recognising** the vital importance of trans-boundary co-operation on hydrometeorological data and information for the sustainable management of the Sava River Basin;

**Referring to** the Framework Agreement on the Sava River Basin of 3 December 2002;

**Taking into account** the significant progress made in relation to the sharing of hydrological and meteorological data and information since the formation of the International Sava River Basin Commission;

have agreed as follows:

## 1. Definitions

1.1. In this Policy, unless otherwise stated, all terms are defined in accordance with the WMO/UNESCO International Glossary of Hydrology (WMO, No. 385, 3rd Edition, 2012).

1.2. The terms below shall have the following meanings:

“Data”	Output resulting from the measurement or observation of variables.
“Information”	Result of analysing or integrating data.
“Sava River Basin”	The geographical area determined by the watershed limits of the Sava River and its tributaries, which comprises surface and ground waters, flowing into a common terminus.
“The States”	States whose territories include part of the Sava River Basin.
“The Commission”	International Sava River Basin Commission.
“Data Provider”	Any organisation listed in Annex A which provides data or information for exchange under this policy.
“Data Receiver”	Any organisation listed in Annex A which receives data or information exchanged under this policy.
“Redistribution”	Dissemination by a Data Receiver of data or information exchanged under this Policy to a third party. Including the sale and free dissemination, either physically or electronically, of data and information.

## 2. **Context**

- 2.1. Exchange of hydrological (and meteorological) data and information within the Sava River Basin is vital for the sustainable management of water resources and mitigation of water-related hazards.
- 2.2. Through Resolution 25 (Cg-XIII) - Exchange of Hydrological Data and Products, and Resolution 40 (Cg-XII) - Policy and Practice for the Exchange of Meteorological and Related Data and Products, the World Meteorological Organization encourages its Members to provide on a free and unrestricted basis<sup>1</sup> those hydrological data and products which are necessary for the provision of services in support of the protection of life and property and for the well-being of all peoples. Resolution 25 recognises the right of Governments to choose the manner by which, and the extent to which, they make hydrological data and products available domestically and internationally.
- 2.3. Under Articles 9 and 12 of the Convention on Cooperation for the Protection and Sustainable use of the Danube River (Danube River Protection Convention), the Contracting Parties have agreed to the exchange of data related to the Danube River Basin and cooperation in the field of monitoring and assessment.
- 2.4. As agreed in Article 4 of the Framework Agreement on the Sava River Basin (hereinafter: the FASRB), the Parties to that Agreement shall, on a regular basis, exchange information on the water regime of the Sava River Basin, the regime of navigation, legislation, organisational structures, and administrative and technical practices.
- 2.5. To date, different data management procedures and data accessibility issues within the Sava River Basin have resulted in problems affecting the implementation of the FASRB.
- 2.6. The States' current legal statutes regarding the collection and exchange of hydrological (and meteorological) data and information differ however; international cooperation on this matter within the Sava River Basin provides benefits to all States and their hydrometeorological institutions. In this regard, the *Signatories* will, within the constraints of their States' legal statutes, comply with the principles and practices detailed in this Policy.
- 2.7. Through the regular exchange of data and information as outlined in this Policy, the *Signatories* will – both individually and through the Commission – take steps toward the improved water management in the Sava River Basin.

## 3. **Objectives of the Policy**

- 3.1. This Policy provides the technical and conceptual principles required to promote data exchange and interoperability within the Sava River Basin. Establishment of this Policy ensures the freedom to access

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<sup>1</sup> "Free and unrestricted" means non-discriminatory and without charge. "Without charge", in the context of this resolution means at no more than the cost of reproduction and delivery, without charge for the data and the product themselves.

and disseminate hydrological (and meteorological) data and information for the purpose of sustainable transboundary water management in the Sava River Basin.

- 3.2. This Policy is intended to provide a framework within which *Signatories* will exchange data and information. While it outlines a minimum level of data and information exchange (Annex C), this is not to be seen as all-inclusive and *Signatories* agree to work (both bilaterally and through the Commission) to further develop other data and information exchange.

#### 4. **Organisations covered by the Policy**

- 4.1. The organisations which may provide (Data Providers) or receive (Data Receiver) data or information under this Policy are listed in Annex A. This list should comprise all current *Signatories*, the Commission and any other organisation mutually agreed by all current *Signatories* and approved by the Commission.

#### 5. **Data covered by the Policy**

- 5.1. This Policy covers all data or information listed in Annex B which are collected by the *Signatories* at monitoring sites in geographical locations covered by Clause 6.
- 5.2. All data and information listed in Annex B which are currently collected or held by the *Signatories* are included. The Policy recognises that some *Signatories* do not currently collect or hold all of the data and information listed in Annex B. Where data is not currently collected the relevant *Signatory* will consider whether extension of current monitoring (and/or data processing) programmes would be possible in order to supply such data and/or information in future.
- 5.3. The Commission will maintain and publish a listing of the *Signatories* within each State responsible for the collection and management of the data and information covered by this Policy. The listing will include an indication of whether data is collected/held by a *Signatory* and, where it is stored and details of a current named contact (or contacts) responsible for its collection and management. Each *Signatory* will review this list annually and provide the Commission with updated information as required.

#### 6. **Monitoring locations covered by the Policy**

- 6.1. The monitoring locations covered by this policy should normally include all observation stations within the Sava River Basin. Additional observation stations in the surrounding geographical area may be included where the data or information is to be used in the management of the Sava River Basin.
- 6.2. It is recognised that in some cases, exchange of data or information may be limited by controls on the dissemination of observations from certain locations or other limiting factors. Where possible, *Signatories* will make efforts to minimise such exclusions of monitoring locations so as to maximise the data and information available for the management of the Sava River Basin.

6.3. The Commission will maintain a listing of all locations within the Sava River Basin (and the surrounding area) where data or information listed covered by this Policy is monitored or held by the *Signatories*. All *Signatories* will provide this metadata to the Commission and ensure that it is reviewed, and where necessary updated, annually. The metadata to be included will be agreed between the *Signatories* and the Commission.

## 7. **Data to be exchanged**

7.1. The principles and procedures contained within this Policy may be used to exchange any data and information covered by Clause 5. *Signatories* agree to make any such data or information available to all other *Signatories* (and the Commission) where possible.

7.2. The Policy specifies a minimum level of data and information exchange in Annex C. Exchange of the data and information outlined in Annex C is deemed essential for the effective management of the Sava River Basin. Where *Signatories* currently collect or hold any of the data and information listed in Annex C they agree to the regular exchange of this in accordance with procedures and timetables outlined therein.

7.3. Where organisations are exchanging data or information under this Policy other than specified under Annex C, they are expected to mutually agree the contents between themselves in accordance with Clauses 8-17.

## 8. **Exchange routes**

8.1. This Policy covers the transfer of data or information from one Data Provider to one or more Data Receiver.

8.2. The Commission may develop an on-line data portal to facilitate the exchange of data and information between the *Signatories*.

8.3. *Signatories* may only exchange data or information under this Policy which has been collected by their own organisation (unless covered by Clause 8.2).

## 9. **Exchange procedures**

9.1. The normal procedure for exchange of data or information (other than under Annex C) is for the organisation requiring data to lodge a request for an individual or repeated exchange, in writing, with the relevant Data Provider. Requests should be addressed to the relevant named contact point (see Clause 5.3).

9.2. Requests should precisely and unambiguously define what data or information is required and by when, including details of the parameter, time period, reporting interval and monitoring station required.



9.3. The intended use of the data or information should be defined in the request and if the supplied data or information is subsequently to be used for other purposes than expressed, new permission should be sought from the Data Provider.

9.4. *Signatories* will respond to all requests within 15 days of receiving a written request for data or information, providing details on when and how the data or information will be provided or otherwise outlining the reasons why it cannot be provided.

#### 10. **Timetable for provision**

10.1. Where organisations are exchanging data or information (other than under Annex C), the Data Provider is expected to supply this within a maximum of 30 days of receiving a written request. This deadline may be extended to 60 days for information which requires significant processing prior to exchange.

10.2. Where repeated exchanges are established, or (near) real-time data is required, the Data Provider and Data Receiver should agree a timetable for regular delivery.

#### 11. **Format and transfer method**

11.1. Data and information should be transferred in a format mutually agreed between the Data Provider and Data Receiver. It is expected that this will be by electronic transfer in most cases.

#### 12. **Metadata**

12.1. Appropriate metadata should be provided with any data or information exchanged under this Policy, in particular detailing the measurement method and describing the quality and reliability of the data.

12.2. The metadata to be provided should be mutually agreed between the Data Provider and Data Receiver and should include, but not be limited to, the information specified in WMO Technical Regulations<sup>2</sup>.

#### 13. **Data quality and measurement standard**

13.1. Through the use of quality control procedures, Data Providers agree to make efforts to maintain and improve the quality and consistency of data and information being transferred under this Policy.

13.2. Where data and information is exchanged that has not undergone full quality control and is considered to be provisional, the Data Provider will inform the Data Receiver at the point of transfer.

13.3. Appropriate use of data and information exchanged under this Policy is the responsibility of the Data Receiver. The Data Provider accepts no liability for any loss or damage, cost or claims arising directly or indirectly from their use.

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<sup>2</sup> For example: for hydrological observing stations, where applicable, this should include information specified in WMO Technical Regulation, Volume III, Section D.1.1.5.

#### 14. **Storage**

14.1. Data Receivers may store data or information provided under this Policy for future use but, in discussion with the Data Provider, efforts should be made to regularly update these records where they may have changed (for example, as a result of further quality control).

#### 15. **Use and redistribution**

15.1. Data or information exchanged under this policy may be used by the Data Receivers in connection with any activities which aid the management of the Sava River Basin.

15.2. Data Receivers (other than the Commission) may not redistribute data or information exchanged under this Policy to any third party without the prior agreement or consent of the Data Provider.

15.3. The Commission may publish data or information exchanged under this Policy in its publications (for example: Hydrological Yearbooks; Hydrological Studies; River Basin Management/Flood Protection/Sediment Management Plans). The Commission may also redistribute data and information publicly via its online web-portal for navigational use and other uses covered by the FASRB.

#### 16. **Ownership and acknowledgment**

16.1. The provision of data or information under this Policy confers only a right for the Data Receiver to use it as detailed in Clause 15. Ownership of the data or information will not be transferred.

16.2. In any publications, reports or products arising from use of the data or information, the Data Receiver undertakes to acknowledge the Data Provider as the source.

#### 17. **Charging**

17.1. Data and information exchanged under Annex C is done so freely and without charge. When exchanging other data and information under this Policy, Data Providers and Data Receivers should agree any charges between themselves.

17.2. It is expected that most data will be exchanged free of charge and handling charges will only be levied where data requires significant manual processing prior to exchange. In all cases charges should be limited to reproduction and delivery costs only. All data and information for research or educational use should be provided free of charge.

17.3. *Signatories* agree to develop and maintain clear policies on any charges which will apply to data or information transferred under this Policy (other than under Annex C) and make this information available to all other *Signatories* (and the Commission) on request.

#### 18. **Future harmonization of data and information**

18.1. The main providers of hydrological (and meteorological) data and information for the management of the Sava River Basin are the States' hydrometeorological institutions. While recognising current differences in the collection and management of hydrological (and meteorological) data by these

organisations, historically similar legislation and practice mean that similar datasets exist across the Sava River Basin. The *Signatories* agree to work together, through the Commission, to further standardise the collection and management of the data and information covered by the Policy. It is expected that this will include, where possible, harmonisation of data measurement methods, units of observation, transfer formats and metadata.

#### **19. Disputes**

19.1. If a dispute arises between two or more *Signatories* about the interpretation or implementation of this Policy, they shall seek a solution by negotiation.

#### **20. Come into effect**

20.1. This Policy will come into effect upon acceptance by the Commission and be concluded for an indefinite period of time.

#### **21. Changes to the Policy**

21.1. Changes to this Policy, other than to the Annexes, must be agreed by the Commission.

21.2. The Commission will amend Annex A in light of new or withdrawing *Signatories*, and other required changes. The Commission will inform all *Signatories* of any changes to Annex A within one calendar month.

21.3. Annexes B and C will be reviewed, and where necessary amended, by the Commission upon proposal of the Expert Group for Hydrological and Meteorological Issues (established by the Commission) at least once every 2 years to ensure they reflect current Sava River Basin management needs. The Commission will inform all *Signatories* of any changes to these Annexes within one calendar month.

#### **22. New signatories**

22.1. The *Signatories* to this Policy should normally include, but are not limited to, the States' national hydrometeorological institutions - or equivalent organisation responsible for the collection and/or management and distribution of a States' national hydrological (and meteorological) data or information. Additional organisations which operate in one (or more) of the States, in connection with the management of the Sava River Basin, may become a *Signatory* to the Policy at the invitation of the Commission.

#### **23. Termination and withdrawal**

23.1. This Policy may be terminated by mutual agreement of all *Signatories*.

23.2. Any *Signatory* to this Policy may withdraw from this Policy by giving at least 90 days written notice to the Commission, who shall communicate it to all other *Signatories* without delay.

24. **Other**

24.1. The Policy does not affect arrangements for the exchange of data and information between the Signatories provided for in other bilateral or multilateral agreements.

24.2. The Annexes to this Policy shall constitute an integral part thereof. The Annexes are as follows:

Annex A: Organisations Covered by the Policy

Annex B: Data Types Covered by the Policy

Annex C: Minimum Level of Agreed Data Exchange

24.3. The Policy shall be deposited at the Commission.

In faith whereof duly authorized representatives have signed this Policy on behalf of their respective institutions listed in the Annex A.

This Policy is signed in a single copy, in English language, which shall remain deposited in the archives of the International Sava River Basin Commission, and certified true copies of which shall be delivered to all Signatories.

**Annex A Organisations covered by the Policy**

**A.1 International Sava River Basin Commission (ISRBC)**

**A.2 Signatory organisations:**

<b>State</b>	<b>Name of organisation</b>	<b>Abbreviation</b>
Bosnia and Herzegovina	Federal Hydrometeorological Service	FHMZFBIH
	Sava River Watershed Agency	AVPSAVA
	Republic Hydro-Meteorological Service of Republic of Srpska	RHMZRS
Montenegro	Institute of Hydrometeorology and Seismology	IHMS
Republic of Croatia	Meteorological and Hydrological Service	DHMZ
Republic of Serbia	Republic Hydrometeorological Service of Serbia	RHMZ
	Agency for Environmental Protection	
Republic of Slovenia	Slovenian Environment Agency	ARSO

**A.3 Other organisations:**

<b>State</b>	<b>Name of organisation</b>	<b>Abbreviation</b>

## Annex B Data types covered by the Policy

### B.1 List of data and information types covered by the Policy:

Parameter	Temporal Resolution (Statistic <sup>3</sup> )	Units
River, Lake or Reservoir Level/Stage	Daily (Mean) Hourly	cm
River Discharge	Daily (Mean) Hourly	m <sup>3</sup> s <sup>-1</sup>
Water Temperature	Daily (Mean)	°C
Suspended Sediment Discharge	Daily (Mean)	kg s <sup>-1</sup>
Groundwater Level	Daily Every 5/10th Day	cm
Ice Condition	Daily	% of river cross section or text description
Precipitation	Annual (Total) Monthly (Total) Daily (Total) 6/12 Hourly (Total) Hourly (Total)	mm
Air Temperature	Daily (Mean) Hourly	°C
Relative Humidity	Daily Hourly	%
Wind (Speed and Direction)	Daily Hourly	m/s
Snow Depth	Daily	cm
Evaporation	Daily (Total)	mm
Solar Radiation	Daily	J m <sup>-2</sup>
Sunshine	Daily (Total)	Hours
Atmospheric Pressure	Daily	hPa

<sup>3</sup> Where a statistic is not defined for a particular temporal resolution (for example: Mean for Daily River Discharge) this implies an instantaneous measurement of the parameter.

## Annex C Minimum level of agreed data exchange

### C.1 Purpose

C.1.1 This Annex outlines a minimum level of agreed data and information exchange to be concluded under this Policy.

### C.2 General

C.2.1 *Signatories* will make the data and information outlined in this Annex available without charge to all other organisations covered by the Policy for the management of the Sava River Basin.

C.2.2 Unless otherwise specified, data and information exchanged under this Annex is done so in line with the principles and procedures outlined in the Policy.

C.2.3 All data and information listed in this Annex shall be in compliance with Clause 5.1.

C.2.4 The data and information detailed in Section C.3 of this Annex includes, but is not limited to, all data published by the Commission in the Hydrological Yearbooks of the Sava River Basin.

### C.3 Data to be exchanged

C.3.1 All data and information outlined in the following table, which are currently collected or held by the *Signatories* for the monitoring locations specified in C.4, will be exchanged:

Parameter		Temporal Resolution (Statistic)	Units
P1	Water Stage	Daily (Mean)	cm
P2	River Discharge	Daily (Mean)	m <sup>3</sup> s <sup>-1</sup>
P3	Water Temperature	Daily (Mean)	°C
P4	Suspended Sediment Discharge	Daily (Mean)	kg s <sup>-1</sup>
P5	Precipitation	Daily (Total)	mm
P6	Air Temperature	Daily (Mean)	°C
P7	Water Stage	Current Stage	cm
P8	River Discharge	Current Discharge	m <sup>3</sup> s <sup>-1</sup>
P9	Water Temperature	Current Temperature	°C

## C.4 Monitoring stations included

C.4.1 Full period of record, data and information from the monitoring stations in the following table will be exchanged:

State	Monitoring Location	Parameter									Data Provider
		P1	P2	P3	P4	P5	P6	P7	P8	P9	
BA-Fed	Una - Martin Brod	✓	✓	✓							AVPSAVA
BA-Fed	Una - Kralje	✓	✓					✓			AVPSAVA
BA-Fed	Una - Otoka	✓	✓								AVPSAVA
BA-Fed	Unac - Rmanj Manastir	✓	✓					✓			AVPSAVA
BA-Fed	Sana - Ključ	✓	✓								AVPSAVA
BA-Fed	Sana - Sanski Most	✓	✓	✓				✓			AVPSAVA
BA-Fed	Vrbaš - Daljan	✓	✓	✓							AVPSAVA
BA-Fed	Vrbaš - Kozluk Jajce	✓	✓	✓							AVPSAVA
BA-Fed	Bosna - Reljevo	✓	✓								FHMZFBIIH
BA-Fed	Bosna - Raspotočje	✓	✓	✓							AVPSAVA
BA-Fed	Bosna - Zavidovići	✓	✓	✓							AVPSAVA
BA-Fed	Bosna - Maglaj	✓	✓	✓							AVPSAVA
BA-Fed	Željeznica - Ilidža	✓	✓	✓							AVPSAVA
BA-Fed	Miljacka - Sarajevo	✓									FHMZFBIIH
BA-Fed	Lašva - Merdani	✓	✓								AVPSAVA
BA-Fed	Krivaja - Olovo	✓	✓								AVPSAVA
BA-Fed	Krivaja - Zavidovići	✓	✓								AVPSAVA
BA-Fed	Usora - Kaloševići	✓	✓	✓							AVPSAVA
BA-Fed	Drina - Goražde	✓	✓	✓				✓			AVPSAVA
BA-Fed	Vrbaš - Gornji Vakuf							✓			AVPSAVA
BA-Fed	Spreča - Strašanj							✓			AVPSAVA
BA-Fed	Spreča - Karanovac							✓			AVPSAVA
BA-Fed	Tinja - Srebrenik							✓			AVPSAVA
BA-Fed	Drvar					✓	✓				FHMZFBIIH
BA-Fed	Sanski Most					✓	✓				FHMZFBIIH
BA-Fed	Lušci Palanka					✓	✓				FHMZFBIIH
BA-Fed	Bihać					✓	✓				FHMZFBIIH
BA-Fed	Bugojno					✓	✓				FHMZFBIIH
BA-Fed	Jajce					✓	✓				FHMZFBIIH
BA-Fed	Bjelašnica					✓	✓				FHMZFBIIH
BA-Fed	Sarajevo-Bjelave					✓	✓				FHMZFBIIH
BA-Fed	Olovo					✓	✓				FHMZFBIIH



State	Monitoring Location	Parameter									Data Provider
		P1	P2	P3	P4	P5	P6	P7	P8	P9	
BA-Fed	Zenica					✓	✓				FHMZFBIH
BA-Fed	Tuzla					✓	✓				FHMZFBIH
BA-Fed	Gradačac					✓	✓				FHMZFBIH
BA-RS	Sava - Gradiška	✓									RHMZRS
BA-RS	Sava - Srbac	✓						✓			RHMZRS
BA-RS	Una - Novi Grad-uzvodno	✓		✓							RHMZRS
BA-RS	Una - Novi Grad-nizvodno	✓	✓	✓							RHMZRS
BA-RS	Sana - Prijedor	✓	✓	✓							RHMZRS
BA-RS	Sana - Donji Ribnik	✓									RHMZRS
BA-RS	Vrbas - Banja Luka	✓	✓								RHMZRS
BA-RS	Vrbas - Delibašino Selo	✓	✓	✓							RHMZRS
BA-RS	Bosna - Doboj	✓	✓	✓							RHMZRS
BA-RS	Vrbanja - Vrbanja	✓	✓								RHMZRS
BA-RS	Drina - Foča-nizvodno	✓									RHMZRS
BA-RS	Novi Grad					✓	✓				RHMZRS
BA-RS	Prijedor					✓	✓				RHMZRS
BA-RS	Banja Luka					✓	✓				RHMZRS
BA-RS	Gradiška					✓	✓				RHMZRS
BA-RS	Srbac					✓	✓				RHMZRS
BA-RS	Doboj					✓	✓				RHMZRS
BA-RS	Bijeljina					✓	✓				RHMZRS
BA-RS	Drinić					✓	✓				RHMZRS
BA-RS	Ribnik					✓	✓				RHMZRS
BA-RS	Mrkonjić Grad					✓	✓				RHMZRS
BA-RS	Šipovo					✓	✓				RHMZRS
BA-RS	Sokolac					✓	✓				RHMZRS
BA-RS	Han Pijesak					✓	✓				RHMZRS
BA-RS	Višegrad					✓	✓				RHMZRS
BA-RS	Foča					✓	✓				RHMZRS
BA-RS	Čemerno					✓	✓				RHMZRS
HR	Sava - Jesenice 2	✓	✓					✓			DHMZ
HR	Sava - Podsused-žičara	✓	✓		✓			✓			DHMZ
HR	Sava - Zagreb	✓	✓	✓				✓			DHMZ
HR	Sava - Rugvica	✓	✓					✓			DHMZ
HR	Sava - Crnac	✓	✓	✓				✓			DHMZ
HR	Sava - Jasenovac	✓	✓		✓			✓			DHMZ

State	Monitoring Location	Parameter									Data Provider
		P1	P2	P3	P4	P5	P6	P7	P8	P9	
HR	Sava - Stara Gradiška	✓	✓					✓			DHMZ
HR	Sava - Mačkovac	✓	✓					✓			DHMZ
HR	Sava - Davor	✓	✓					✓			DHMZ
HR	Sava - Slavonski Kobaš	✓	✓					✓			DHMZ
HR	Sava - Slavonski Brod	✓	✓	✓	✓			✓			DHMZ
HR	Sava - Slavonski Šamac	✓						✓			DHMZ
HR	Sava - Županja	✓	✓					✓			DHMZ
HR	Sutla - Zelenjak	✓	✓	✓							DHMZ
HR	Krapina - Kupljenovo	✓	✓		✓						DHMZ
HR	Kupa - Brodarci	✓	✓								DHMZ
HR	Kupa - Karlovac	✓									DHMZ
HR	Kupa - Jamnička Kiselica	✓	✓								DHMZ
HR	Kupa - Farkašić	✓	✓								DHMZ
HR	Una - Kostajnica	✓	✓								DHMZ
HR	Una - Dubica	✓	✓								DHMZ
HR	Orljava - Pleternica	✓	✓								DHMZ
HR	Krapina					✓	✓				DHMZ
HR	Križevci					✓	✓				DHMZ
HR	Zagreb Grič					✓	✓				DHMZ
HR	Puntijarka					✓	✓				DHMZ
HR	Parg					✓	✓				DHMZ
HR	Karlovac					✓	✓				DHMZ
HR	Ogulin					✓	✓				DHMZ
HR	Sisak					✓	✓				DHMZ
HR	Daruvar					✓	✓				DHMZ
HR	Sl. Brod					✓	✓				DHMZ
HR	Gradište-Županja					✓	✓				DHMZ
ME	Lim - Bijelo Polje	✓	✓								IHMS
ME	Tara - Trebaljevo	✓	✓								IHMS
ME	Kolasin					✓	✓				IHMS
ME	Bijelo Polje					✓	✓				IHMS
ME	Berane					✓	✓				IHMS
RS	Sava - Jamena	✓	✓	✓				✓	✓		RHMZ
RS	Sava - Sremska Mitrovica	✓	✓	✓				✓	✓		RHMZ
RS	Sava - Šabac	✓		✓							RHMZ
RS	Sava - Beljin	✓									RHMZ

State	Monitoring Location	Parameter									Data Provider
		P1	P2	P3	P4	P5	P6	P7	P8	P9	
RS	Sava - Beograd	✓		✓				✓			RHMZ
RS	Drina - Bajina Bašta	✓	✓	✓				✓	✓		RHMZ
RS	Drina - Radalj	✓	✓					✓	✓		RHMZ
RS	Lim - Brodarevo	✓	✓					✓			RHMZ
RS	Lim - Prijepolje	✓	✓	✓				✓	✓		RHMZ
RS	Lim - Priboj	✓	✓								RHMZ
RS	Vapa - Čedovo	✓	✓								RHMZ
RS	Jadar - Lešnica	✓	✓					✓	✓		RHMZ
RS	Bosut - Batrovci	✓									RHMZ
RS	Kolubara - Valjevo	✓	✓					✓	✓		RHMZ
RS	Kolubara - Slovac	✓	✓					✓	✓		RHMZ
RS	Kolubara - Draževac	✓	✓					✓	✓		RHMZ
RS	Ljig - Bogovađa	✓	✓					✓	✓		RHMZ
RS	Tamnava - Ćemanov Most	✓	✓					✓	✓		RHMZ
RS	Beograd-Vračar					✓	✓				RHMZ
RS	Loznica					✓	✓				RHMZ
RS	Sjenica					✓	✓				RHMZ
RS	Sremska Mitrovica					✓	✓				RHMZ
RS	Valjevo					✓	✓				RHMZ
RS	Zlatibor					✓	✓				RHMZ
SI	Sava - Radovljica I	✓	✓	✓				✓	✓	✓	ARSO
SI	Sava - Šentjakob	✓	✓	✓				✓	✓	✓	ARSO
SI	Sava - Litija I	✓	✓	✓							ARSO
SI	Sava - Čatež	✓	✓	✓							ARSO
SI	Sora - Suha	✓	✓	✓	✓			✓	✓	✓	ARSO
SI	Sotla - Rakovec	✓	✓								ARSO
SI	Kolpa - Metlika	✓	✓	✓							ARSO
SI	Ljubljanica - Moste I	✓	✓	✓				✓	✓	✓	ARSO
SI	Savinja - Nazarje	✓	✓	✓				✓	✓	✓	ARSO
SI	Savinja - Veliko Širje I	✓	✓	✓	✓			✓	✓	✓	ARSO
SI	Krka - Podbočje	✓	✓	✓				✓	✓	✓	ARSO
SI	Sava - Medno							✓	✓	✓	ARSO
SI	Sava - Hrastnik							✓	✓	✓	ARSO
SI	Sava - Jesenice na Dolenjskem							✓	✓	✓	ARSO
SI	Savinja - Letuš							✓	✓	✓	ARSO
SI	Savinja - Medlog							✓	✓	✓	ARSO

State	Monitoring Location	Parameter									Data Provider
		P1	P2	P3	P4	P5	P6	P7	P8	P9	
SI	Savinja - Laško							✓	✓	✓	ARSO
SI	Ljubljana-Bežigrad					✓	✓				ARSO
SI	Novo mesto					✓	✓				ARSO
SI	Celje					✓	✓				ARSO
SI	Krvavec					✓	✓				ARSO
SI	Lesce					✓	✓				ARSO

## C.5 Timetable for provision

C.5.1 *Signatories* will make the data and information available in accordance with the schedule outlined in the following table:

Parameter	Frequency of exchange	Maximum delay between end period of observation and data/information being available to other <i>Signatories</i>
P1	Annual	Within 1 year of the end of the calendar year of observation.
P2	Annual	Within 2 years of the end of the calendar year of observation.
P3	Annual	Within 1 year of the end of the calendar year of observation.
P4	Annual	Within 1 year of the end of the calendar year of observation.
P5	Annual	Within 1 year of the end of the calendar year of observation.
P6	Annual	Within 1 year of the end of the calendar year of observation.
P7	Constant	Near real-time transfer of more recent observation.
P8	Constant	Near real-time transfer of more recent observation.
P9	Constant	Near real-time transfer of more recent observation.

## C.6 Format of data

C.6.1 Data and information outlined in this Annex will be made available electronically in a format to be agreed by the Commission's Expert Group for Hydrological and Meteorological Issues by June 2015.

## C.7 Transfer method

C.7.1 The *Signatories* will make the data and information outlined in this Annex available via on-line transfer or arrange transfer by email.

## **C.8 Metadata**

C.8.1 Appropriate metadata should be provided with data and information exchanged under this Annex, in accordance with Clause 12.1. The metadata to be provided will be agreed by the Commission's Expert Group for Hydrological and Meteorological Issues by June 2015.

