

**AGREEMENT**  
**on cooperation in the field of hydrometeorology between the State**  
**Hydrometeorological Service of the Republic of Moldova and the**  
**Ukrainian Hydrometeorological Center**

The State Hydrometeorological Service of the Republic of Moldova represented by Deputy Director Mihail Grigoras and the Ukrainian Hydrometeorological Center represented by Director Mykola Kulbida hereinafter referred to as the *Parties*,

- guided by the principles of interstate bilateral relations,
- attaching great importance to the development of cooperation in the field of hydrometeorology, and following the principles and procedures of the World Meteorological Organization (WMO);
- recognizing the importance of the functioning of observing systems, the development and improvement of systems for obtaining and using hydrometeorological information in the interests of ensuring the safety of the population and the economy of their countries, and striving for coordinated actions in the exchange of hydrometeorological information, including information on adverse hydrometeorological phenomena;
- giving great importance to the development of joint research and development in the field of hydrometeorology,
- agreed to unite their efforts to solve problems of mutual interest, and concluded this Agreement on cooperation in the field of hydrometeorology between the Parties (*further -Agreement*).

**I. Subject of the Agreement**

1. This Agreement establishes the framework of cooperation between the State Hydrometeorological Service of the Republic of Moldova (*further -SHSRM*) and Ukrainian Hydrometeorological Center (*further- UHMC*) to fulfill the tasks assigned to the Parties following the laws of the countries and to increase the effectiveness of actions for their implementation.

2. The Agreement regulates the process of bilateral cooperation between the Parties, including the exchange of data and information, experience and best practices, the organization of events of common interest.

**II. Main directions of cooperation**

3. The Parties define the following areas of common interest:

- 1) Cooperation for the exchange and use of the results of meteorological and hydrological observations;

- a) support of joint programs and projects in the field of meteorological and hydrological observations and forecasting;
  - b) formation of favorable conditions and promotion of cooperation in the field of exchange of experience and methodologies in the field of meteorological and hydrological observations and forecasting of adverse hydrometeorological phenomena;
  - c) improvement of the processes of preparing predictive information about the danger of adverse meteorological and hydrological phenomena to make timely decisions to reduce possible damage;
  - d) bilateral participation in meetings organized at local, regional, and international levels on topics of common interest.
- 2) Operational cooperation:
- a) operational exchange of information between the Parties following the procedure established additionally for the performance of legal powers arising from the specific task and activity of each Party;
  - b) cooperation in the process of research and analysis of problems, for a more detailed study of the situation in areas of common interest, to improve the image of the Parties;
  - c) mutual consultations on current issues arising in connection with the implementation of legislation in the spheres of competence of the Parties;
  - d) mutual exchange of information on decisions taken by the Parties, under the legal authority of each of the Parties, on identified issues of common interest.

### **III. Collaboration Tools**

4. Cooperation takes place through:
- a) exchange of data and specialized information in the prescribed manner, as well as specialized documents, draft regulations, and other materials related to the activities of the Parties, in compliance with the provisions of current legislation;
  - b) establishment, if necessary, of joint expert groups to achieve the objectives of this Agreement;
  - c) cooperation in the process of conducting market knowledge research to identify and access local development funds, with the aim of possible coordinated implementation and management of common projects, internal/external assistance.
5. Data exchange takes place following the Program of Cooperation between the State Hydrometeorological Service of the Republic of Moldova and the

Ukrainian Hydrometeorological Center in the field of hydrometeorology (Annex 1).

6. The Parties undertake to apply the cooperation tools provided for in this Agreement at all stages of solving problems that may have consequences for relations related to the maintenance and development of common interests.

#### **IV. Consultations and information exchange, technologies and equipment**

7. The Parties undertake the obligation to exchange urgent information on adverse hydrometeorological phenomena that have arisen in the territory of one Party and threaten with a negative impact on the territory of the other Party.
8. If it is necessary to resolve issues of mutual interest, as well as in emergencies, the Parties may create temporary joint teams, expeditions, laboratories, working groups.
9. The Parties will exchange data or information (within the scope of competence) requested within the period specified in the request letter, or within another time mutually agreed by the Parties, if this is necessary to fulfill their legal obligations.
10. The parties ensure, based on additional documents, the introduction and use of high-performance technologies and equipment to strengthen certain areas of activity.
11. The intellectual or other property of one of the Parties transferred free of charge under this Agreement to the other Party cannot be used for profit or transfer to a third Party without the prior consent of the Owning Party.
12. The conditions, forms, and procedure for financing ongoing joint work, transfer, and use of the results obtained in the implementation of cooperation programs, and ownership of them will be determined by agreement of the Parties, under national legislation.

#### **V. Framework for consultations and contacts**

13. At the initiative of either Party, meetings will be held (including online) between their representatives to discuss any issues, as well as any aspects of cooperation between the Parties.
14. For any organizational and logistics issues, the Parties appoint contact persons by written notifications.

## VI. Final provisions

15. The relations between the Parties are governed by the principles of justice, goodwill, and the development of relations of sustainable cooperation.
16. The validity period of this Agreement is 4 (four) years from the date of signing. After this period, the Agreement may be revised and extended with the consent of the Parties.
17. The Parties are responsible for organizing the implementation of the provisions of this Agreement.
18. The Parties will immediately inform each other about the occurrence of circumstances that hinder or may hinder the fulfillment of obligations under this Agreement, and coordinate measures to solve the problems that have arisen.
19. This Agreement may be supplemented or amended by the consent of both Parties. Additions and changes are formalized by protocols, which come into force from the date of their signing.
20. In the event of a reorganization, changes in contacts, or other data specified in the Agreement, the Parties are obliged to inform each other about the changes that have occurred, within three calendar days.

This Agreement is concluded in two copies with equal legal force, one copy for each Party.

**Deputy Director  
of the State  
Hydrometeorological Service  
of the Republic of Moldova**

Mihail Grigoras

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**Director  
of the Ukrainian  
Hydrometeorological  
Center**

Mykola Kulbida

” \_\_\_\_\_ ” 2021



**APPROVED**

Director of the Ukrainian Hydrometeorological Center,  
Permanent Representative of Ukraine to WMO



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**APPROVED**

Deputy Director of the State  
Hydrometeorological Service of the Republic of  
Moldova,  
Permanent Representative of the Republic of  
Moldova to WMO



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**COOPERATION PROGRAM OF THE STATE HYDROMETEOROLOGICAL SERVICE OF THE REPUBLIC OF  
MOLDOVA AND THE UKRAINIAN HYDROMETEOROLOGICAL CENTER  
IN THE FIELD OF HYDROMETEOROLOGY**

**FOR 2021-2025**

Guided by the principles of good-neighborliness and cooperation in the spirit of the traditions of the World Meteorological Organization (WMO), the Ukrainian Hydrometeorological Center (hereinafter - UHMC) and the State Hydrometeorological Service (SHS) of the Republic of Moldova adopt the following Cooperation Program between UHMC and the SHS:

### 1 Data transfer from UHMC to the SHS of the Republic of Moldova

No.	Type of information	Number of locations	Abbreviated title TTAAii CCCC, e-mail	Form	Code form	Observation period (UTC)	Control period (UTC)	The list of stations or the content of the processed data
1	2	3	4	5	6	7	8	9
1.1	Surface-based Meteorological Observation Data	9	SMUR10 UKMS 17100 SIUR20 UKMS 27110		KH-01  <b>I</b>	00, 06, 12, 18, 03, 09, 15, 21		<b>33:</b> 317, 393, 506, 587, 658, 662, 663, 791, 837
		4	SMUR11 UKMS 17101 SIUR21 UKMS 27111		KH-01  <b>II</b>	00, 06, 12, 18, 03, 09, 15, 21		<b>33:</b> 415, 429, 526, 562
		9	ISM D10 UKMS ISID10 UKMS		BUFR	00, 06, 12, 18, 03, 09, 15, 21		<b>33:</b> 317, 393, 506, 587, 658, 662, 663, 791, 837
		4	ISM D11 UKMS ISID11 UKMS		BUFR	00, 06, 12, 18, 03, 09, 15, 21		<b>33:</b> 415, 429, 526, 562
1.2	Upper-air data	1	USUR10 UKMS UKUR10 UKMS ULUR10 UKMS UEUR10 UKMS		KH-04	00 According to the radiosounding plan	01.30 - 01.35	33837
1.3	Meteorological message warnings (Vinnytsa, Odessa, Khmelnitsky, Chernivitsi regions)	7	WWUR95 UKMS WOUR95 UKMS WWUR75 UKLN WOUR75 UKLN	by FTP	WAREP	The beginning of the phenomenon The end of the phenomenon		<b>33:</b> 548, 658, 663, 833, 837, 877, 889
1.4	Warnings about unfavorable meteorological events			by FTP	Text			Odessa and Vinnytsa regions

No.	Type of information	Number of locations	Abbreviated title TTAAii CCCC, e-mail	Form	Code form	Observation period (UTC)	Control period (UTC)	The list of stations or the content of the processed data
1	2 (orange II and red III hazard levels)	3	4	5	6	7	8	9
1.5	Weather forecast for 24h		3ФУР40 КИЕВ	by FTP	Text			across Ukraine
1.6	Up-to-date weather forecast for 24h		3ФУР40 КИЕВ	by FTP	Text			across Ukraine
1.7	Weather forecast for 2-3 days		3ФУР42 КИЕВ	by FTP	Text			across Ukraine
1.8	Synoptic weather charts		ОУРА98 УКМС	by GTS		00 03 06 09 12 15 18 21	H+01.10	
1.9	Hydrological river observations data	22 (H) daily water levels	SRUR44 UKMS hidro@meteo.gov.md		KH-15 (KC-15)	daily	5.20 (summer) 6.20 (winter)	42:137, 140, 148, 187, 191, 194, 198, 801, 804, 808; 81: 017, 028, 030, 033, 036, 041, 921, 923, 052, 087, 108, 109, 42: 137, 140, 148, 187, 191 81: 033, 036, 041, 052
		9 (H) elevated water levels					immediately	
		13 (Q) daily discharge					5.20 (summer) 6.20 (winter)	
		18 (X) precipitation					5.20 (summer) 6.20 (winter)	
		17 (L) Ice phenomena, ice thickness (cm)					6.20 (winter)	
12 (Q measured)						After measurement		42:137, 148, 187, 198

No.	Type of information	Number of locations	Abbreviated title TTAAii CCCC, e-mail	Form	Code form	Observation period (UTC)	Control period (UTC)	The list of stations or the content of the processed data
1	2	3	4	5	6	7	8	9
1.10	Data results of the roadway of snow surveys	29	SUUR44 UKMS		KH-24	Decade: 10, 20, 30(31) numbers from the beginning of the formation of the snow cover until 31.12 Pentad: 5, 10, 15, 20, 25, 30 (31) numbers from 5.01 until the snow cover disappears	13.20 – 13.30	42: 148, 191, 198, 136, 176 81: 015, 017, 028, 030, 033, 041, 078, 085, 087, 092, 108, 203, 206 33: 392, 511, 513, 516, 536, 557, 409, 524, 651, 657, 663
1.11	Warnings about dangerous and severe hydrological phenomena (different levels of danger)		hidro@meteo.gov.md	010 6000/	text	After drawing up	As it is compiled	Rivers of the Dniester and Prut basins
1.12	Forecast of spring flood elements		hidro@meteo.gov.md		text	After making the forecast	22.02, 27.02	Rivers of the Dniester and Prut basins
1.13	Forecast of the volume of water inflow to the Dniester reservoir		hidro@meteo.gov.md		text	After making the forecast	27.02	Dniester reservoir
1.14	Forecasts of the average monthly inflow of water to the Dniester reservoir (30 - 35 days in advance)		hidro@meteo.gov.md		text	monthly	Last day of the month	Dniester reservoir
1.15	Forecast of the average daily inflow of water in the alignment of the Zaiishchiki hydrological post and the lateral inflow (1 - 2 days in advance)		hidro@meteo.gov.md		text	monthly	until 08.00 winter 09.00 summer	Dniester reservoir

2. Data transfer from SHS of the Republic of Moldova to UHMC:

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No.	Type of information	Number of locations	Abbreviated title TTAAii CCCC, e-mail	Form	Code form	Observation period (UTC)	Control period (UTC)	The list of stations or the content of the processed data
1	2	3	4	5	6	7	8	9
2.1	Surface-based Meteorological Observation Data	16	SMRM11 LUKK SIRM20 LUKK		KH-01	00, 06, 12, 18, 03, 09, 15, 21		33: 664, 678, 679, 744, 745, 748, 749, 754, 815, 821, 829, 881, 883, 885, 886, 892
		16	ISMDD01 LUKK		BUFR	00, 06, 12, 18		33: 664, 678, 679, 744, 745, 748, 749, 754, 815, 821, 829, 881, 883, 885, 886, 892
2.2	Radar observation data	1		.png		00 every 10 minutes		33815
2.3	Upper-air data*	1			KH-04	00 12 (According to the radiosonding plan)		33815
2.4	meteorological message warnings	7	WWUR95 LUKK WWUR95 LUKK	by FTP	WAREP Code		The beginning of the phenomenon - The end of the phenomenon	33: 885, 815, 745, 883, 829, 754, 892
2.5	Warnings about unfavorable meteorological events (orange and red hazard levels)			by FTP	text			on the territory of the Republic of Moldova
2.6	Weather forecast for 1-3 days			by FTP	text			on the territory of the Republic of Moldova
2.7	Hydrological river observations data	14 (H) daily water levels	SRRM40 LUKK hydro@meteo.gov.ua		KH-15	daily	5.20 (summer) 6.20 (winter)	42: 157, 165, 252, 914 81: 054, 055, 056, 904, 907, 059, 065, 068, 071**, 074
		5 (H) elevated water levels				When the criteria are met	immediately	42: 165,252 81: 055, 068, 074

No.	Type of information	Number of locations	Abbreviated title TTAAii CCCC, e-mail	Form	Code form	Observation period (UTC)	Control period (UTC)	The list of stations or the content of the processed data
1	2	3 6 (Q) daily discharge	4	5	6	7 daily	8 5.20 (summer) 6.20 (winter)	9 42: 157, 165, 914 81: 055, 907, 071**
		7 (X) precipitation				daily	5.20 (summer) 6.20 (winter)	42: 157, 165, 914 81: 055, 059, 068, 074
		13 (L) Ice phenomena, ice thickness				In the winter period	5.20 (summer) 6.20 (winter)	42: 157, 165, 252, 914 81: 054, 055, 056, 904, 907, 059, 065, 068, 074
		3 (Q measured) measured discharge				After measurement		42: 157, 165 81: 071**
2.8	Data results of the roadway of snow surveys	21	SURM40,41,42 LUKK		KH-24	Decade: 10, 20, 30(31) numbers from the beginning of the formation of the snow cover until 31.12 Pentad: 5, 10, 15, 20, 25, 30 (31) numbers from 5.01 until the snow cover disappears	13.20 - 13.30	33: 664, 678, 679, 744, 745, 748, 749, 754, 679, 815, 821, 824, 829, 881, 883, 885, 886, 892 42: 157 54: 519, 504
2.9	Warning messages of dangerous hydrological phenomena		hydro@meteo.gov.ua		text			Rivers of the Dniester and Prut basins
2.10	Forecast of spring runoff characteristics		hydro@meteo.gov.ua		text			Prut River
2.11	Forecast of the average daily inflow of water with a lead time of 1 day		hydro@meteo.gov.ua		text	daily	After drawing up until 09.00 winter 08.00 summer	Dubossary reservoir

Note: \* information will be transmitted when the station is reopened

\*\* information will be transmitted after equipping the Rascaceti hydrological post using the classical method.

### 3. Exchange of hydrological information

#### 3.1 Exchange of regime hydrological information

No.	River	Post	Index	Type of information	No.	River	Post	Index	Type of information
<i>Ukrainian Hydrometeorological Center</i>					<i>State Hydrometeorological Service of the Republic of Moldova</i>				
1	Prut	Chernivtsi	42148	H, Q, Q <sub>measured</sub> , Q(H)	1	Prut	Sirauti	42157	H, Q, Q <sub>measured</sub> , Q(H)
2	Danube	Reni	42801	H, Q, Q <sub>measured</sub> , Q(H)	2	Prut	Ungheni	42165	H, Q, Q <sub>measured</sub> , Q(H)
3	Dniester	Halych	81033	H, Q, Q <sub>measured</sub> , Q(H)	3	Dniester	Hrusca	81055	H, Q
4	Dniester	Zalishchyky	81041	H, Q, Q <sub>measured</sub> , Q(H)	4	Dniester	Rascaceti*	81071	H, Q, Q <sub>measured</sub> , Q(H)
					5	Dniester	Tudora	81074	H

Note: \* the information will be transmitted after equipping the Rascaceti hydrological post by the classical method.

Legend:

H – (average) daily water levels;

Q – (average) daily *пачходы* *водлы*;

Q<sub>measured</sub> – *нзмеasured* discharge;

Q(H) – coordinates of the flow rate dependence on the water level.

Note:

The exchange is carried out annually until September 1 in a tabular form by e-mail:

for UHMC - E-mail: [hydro@meteo.gov.ua](mailto:hydro@meteo.gov.ua),

for SHS of the Republic of Moldova – E-mail: [hidro@meteo.gov.md](mailto:hidro@meteo.gov.md)

3.2 Exchange of hydrometeorological observation data of automatic posts in the Dniester river basin:

UHMC: Sambir, Galich, Zhuravno, Zalishchyky, Matkov  
SHS of the Republic of Moldova: Vadul-Iui-Voda, Goian, Causeni, Criuleni, Merenii-Noi, Nimeruca \*, Naslavcha, Rascaeti \*,  
Senetluca, Soroca, Talmazza, Tudora, Ungheni

Note: information is posted on the website of the UHMC and of the SHS of the Republic of Moldova,

\*information will be transmitted after the restoration of the work of hydrological posts.

3.3 UHMC and SHS of the Republic of Moldova annually, by December 20, agree and approve a schedule for joint measurements of water flow rates.

Joint measurements of water discharge are carried out on the Dniester River in the alignment of the existing hydrological posts Mogilev Podolsky - Otaci during the absence of ice formations.

#### **4. Cooperation in the field of hydrometeorology**

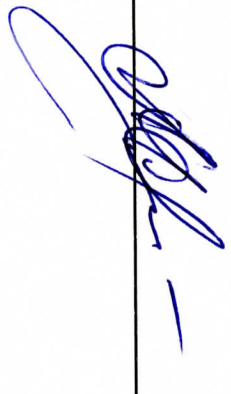
1. Participation of the parties in meetings, seminars on meteorology, climatology, hydrology, agrometeorology.
2. Exchange of developments on the improvement and modernization of forecasts of crop yields, scientific and methodological developments carried out by the parties, on changes and improvements in the production of agrometeorological observations in modern conditions, in the field of studying the regional climate and its changes;
3. Exchange of climate data from border weather stations for mapping meteorological elements;
4. Exchange of methods for calculating climatic characteristics for solving applied problems.
5. Organization of joint expeditions to perform hydrographic, hydromorphological and bathymetric studies in the basins of the Prut and Dniester rivers.
6. Organization of bilateral meetings to discuss programs on hydrological research, exchange of information and data.

7. Exchange of experience on the implementation of the European Water Directive (2000/60 / EC) and the Directive on the assessment and management of flood risk (2007/60 / EC).

8. Exchange of experience in the field of information and geoinformation technologies.

**Agreed:**  
from the Ukrainian Hydrometeorological Center

Deputy Director  
Anatolii Procopenko \_\_\_\_\_



**Agreed:**  
from State Hydrometeorological Service  
of the Republic of Moldova

Head of the Meteorological Center  
Lidia Trescilo \_\_\_\_\_  
Head of the Hydrological Center  
Alexandru Coronovschi \_\_\_\_\_

