



ЕЭК ООН



Исполнитель:

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Regional Workshop on Monitoring, Assessment and Information Sharing in Transboundary Basins in Central Asia

1-2 February 2023, Astana, Kazakhstan

OUTCOME DOCUMENT

On February 1-2, 2023, Astana hosted a Regional Workshop on Monitoring, Assessment and Information Sharing in Transboundary Basins in Central Asia. The workshop was organized by the International Water Assessment Centre (IWAC) in cooperation with the United Nations Economic Commission for Europe with the financial support of the Green Central Asia Program implemented by the German International Cooperation / Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH.

The workshop was attended by experts from five countries of Central Asia (Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan), representing state bodies and national services responsible for water resources, the environment and hydrometeorology, as well as specialists from scientific institutions, basin water management organizations and international organizations operating in the region according to the list of participants given in *Annex 1*.

The purpose of the workshop was to assist countries in studying international experience in monitoring, assessment and information sharing in transboundary basins and discussing opportunities for strengthening cooperation between Central Asian countries in the field of protection and use of water resources in transboundary basins.

The agenda of the workshop consisted of an opening session, five thematic sessions, panel discussions and a final session, *Annex 2 - Agenda*.

At the opening, Mr Arsen Zhakanbayev, Director of the Department of Transboundary Rivers of the Ministry of Ecology and Natural Resources of the Republic of Kazakhstan, Ms. Caroline Milow, GIZ Program Manager and Ms. Iulia Trombitcaia, Environmental Affairs Officer of the UNECE addressed the participants with welcoming words.

On the first day of the workshop, group work was organized to discuss and identify case studies that could be included in the new publication “Good practices and lessons learned in transboundary data exchange”. The results of the group discussions are presented in *Annex 3*.

On the second day after the thematic sessions, the group work was organized to discuss proposals to strengthen cooperation on the development of monitoring, assessment and data exchange on water in Central Asia. The results of the group discussions are presented in *Annex 4*.

As a result of the discussions, the participants of the discussion decided the following:

1. express gratitude to the Green Central Asia Program of the German International Cooperation (GIZ), the United Nations Economic Commission for Europe and the International Water Assessment Centre for organizing the workshop;
2. to note the relevance of studying international experience in monitoring, assessment and information sharing for the development of joint actions and a common vision for the use of water resources in Central Asia;

3. to note the relevance of using the publication “Strategies for Monitoring and Assessment of Transboundary Rivers, Lakes and Groundwaters” (Updated Edition), prepared under the Convention on the Protection and Use of Transboundary Watercourses and International Lakes, as a methodological tool for developing cooperation between the countries of Central Asia on the protection and use of water resources;
4. to note changes in hydrological conditions and water needs that require a joint assessment of their dynamics, and development of a transparent exchange of data and information, automated monitoring and modeling;
5. to emphasize the need for a phased approach to the development of interaction between the countries of Central Asia on data exchange in transboundary basins based on existing national monitoring systems, harmonization of methodology and standards for data collection, formation of a regional observation network, development of institutional mechanisms for regular data exchange in transboundary basins;
6. to note the relevance of developing bilateral/regional agreements on cooperation in the field of monitoring and assessment of water resources, providing for specific mechanisms for joint monitoring and regular data exchange;
7. to emphasize the need to carry out joint projects and scientific work to develop a system for monitoring water resources, including hydrological forecasting;
8. to note the relevance of consolidating the efforts of the Central Asian countries in combating the negative impact of climate change and developing joint measures to adapt to climate change in transboundary basins;
9. to emphasize the need to develop joint measures to create systems for prompt warning and response in case of pollution of transboundary waters;
10. to emphasize the relevance of developing cooperation between the countries of Central Asia in monitoring and exchanging data on transboundary groundwaters, especially in the context of achieving target 6.5 of the Sustainable Development Goals;
11. to request international organizations to assist the countries of Central Asia in capacity building, including: (1) conducting educational seminars, trainings, workshops and other events on issues of hydrological monitoring and cooperation on water quality in Central Asia; (2) development of joint methodological manuals for the analysis, processing and visualization of monitoring data; (3) holding practical events (including site visits) and regular meetings of experts to agree on approaches to monitoring and assessment of water resources; (4) organizing a meeting of hydrogeologists from Central Asian countries to identify existing gaps in the protection and use of transboundary groundwater and identify prospects for cooperation;
12. to recommend the experience of cooperation on data exchange in the Chu-Talas River Basin, the experience of the work of the Kazakh-Uzbek Working Group on Environment and Water Quality in the Syrdarya River Basin and experience of cooperation on the Pre-Tashkent aquifer as case studies for inclusion in the new publication of the Convention on the Protection and Use of Transboundary Watercourses and international lakes “Good practices and lessons learned in transboundary data exchange”;
13. to note the need for active high-level participation of the countries of Central Asia, as well as the stakeholders of the region, in the 2023 UN Water Conference in order to attract international attention to the achievements and needs of the region.

**Regional Workshop on Monitoring, Assessment and Data Exchange in
Central Asia
February 1-2, Astana, Kazakhstan**

LIST OF PARTICIPANTS

№	Participant
Kazakhstan	
1	Arsen Zhakanbayev , Director, Transboundary Rivers Department, Ministry of Ecology and Natural Resources of the Republic of Kazakhstan
2	Sagathan Baimenov , Security Adviser to the Minister of Ecology and Natural Resources of the Republic of Kazakhstan
3	Elvira Sarieva , Chief Expert of the Transboundary Rivers Department of the Department of Transboundary Rivers of the Ministry of Ecology and Natural Resources of the Republic of Kazakhstan
4	Natalia Dauletyarova , Deputy Director of the Department of Environmental Policy and Sustainable Development of the Ministry of Ecology and Natural Resources of the Republic of Kazakhstan
5	Dana Agybayeva , Chief Expert of the Department of State Metrological and Analytical Control Committee on Environmental Regulation and Control of the Ministry of Ecology and Natural Resources of the Republic of Kazakhstan
6	Chinghiz Yesengaziyev , Head, Department of hydrogeology and engineering geology, Committee for geology, Ministry of Industry and Infrastructure Development of the Republic of Kazakhstan
7	Shonan Zhankylysh , Chief Expert of the Department of Hydrogeology and Engineering Geology of the Committee for geology of the Ministry of Industry and Infrastructure Development of the Republic of Kazakhstan
8	Kalamkas Duzbayeva , Head of the Division of Transboundary Water Resources of the Department of International Law of the Ministry of Foreign Affairs of the Republic of Kazakhstan
9	Yerlan Auezbekov , Advisor, Department of Transboundary Rivers, International Legal Department, Ministry of Foreign Affairs of the Republic of Kazakhstan
10	Algash Ospanov , Advisor, Department of Transboundary Rivers, International Legal Department, Ministry of Foreign Affairs of the Republic of Kazakhstan
11	Yerlan Ermekov , Head of the Department of Enterprise Operation and Water Conservation of RSE "Kazvodkhoz" of the Committee on Water Resources, Ministry of Ecology and Natural Resources of the Republic of Kazakhstan
12	Rauza Aschanova , Head of the Department of State Water Cadastre and Hydrological Research of the Department of Hydrology of RSE "Kazhydromet"
13	Gulbarshyn Bekbenbetova , Head of the Department of Surface Water Data Analysis of the Department of Environmental Monitoring of RSE "Kazhydromet"
14	Kuanyshbek Kaukenov , Senior Engineer of the Hydrological Monitoring Department of the Department of Hydrology of RSE "Kazhydromet"
15	Anel Serik , Engineer of the Surface Water Data Analysis Department of the Environmental Monitoring Department of RSE "Kazhydromet"
16	Meiram Arystanov , Acting Director of the branch of the D.Kunaev Great Almaty Canal RSE Kazvodkhoz of the Committee on Water Resources, Ministry of Ecology and Natural Resources of the Republic of Kazakhstan
17	Mukhtar Zhakenov , Head of Transboundary Rivers Division, JSC Foreign Policy Research Institute under the Ministry of Foreign Affairs of the Republic of Kazakhstan
18	Ayagoz Aipova , Head of the Water Resources Monitoring Department of the Emergency and Natural Resources Monitoring Department of JSC NC "Kazakhstan Garysh Sapary"

19	Valentina Rakhimova , Senior Researcher, U.M.Akhmedsafin Institute of Hydrogeology and Geocology
20	Oleg Podolny , Hydrogeoecological research and design company “KazHYDEC”
21	Nurlan Atshabarov , Chairman of the Association of Legal Entities «Association of Water Management of Kazakhstan»
22	Kaisar Alimzhanov , Advisor to the Director of the International Training Center for the Safety of Hydraulic Structures
Kyrgyzstan/Кыргызстан	
23	Gulmira Satymkulova , Head of the Kyrgyz part of the Secretariat of the Chu-Talas Commission, Water Resources Service under the Ministry of Agriculture of the Kyrgyz Republic
24	Gulnara Zhunusova , Chief Specialist of the Department of Water Resources Protection Ministry of Natural Resources, Ecology and Technical Supervision of the Kyrgyz Republic
25	Mira Elalova , Chief Specialist of the Hydrology Department of the Hydrometeorological Service under the Ministry of Emergency Situations of the Kyrgyz Republic
Tajikistan/Таджикистан	
26	Akmal Rajabov , Leading Specialis, Department of Water and Energy Policy, Development of science and Technologies, Ministry of Energy and Water Resources of the Republic of Tajikistan
27	Sukhbatullo Saidov , Head of the State Institution "Scientific Research Center for the Protection of Water Resources" under the Committee for Environmental Protection under the Government of the Republic of Tajikistan
28	Safarkhon Sharofiddinov , Head of the Hydrological Forecasts Department of the Hydrometeorological Forecasts Center of the Agency for Hydrometeorology of the Republic of Tajikistan
Turkmenistan/Туркменистан	
29	Allamyrat Toraev , Engineer of the Institute "Turkmensuvylymtaslama" of the State Committee of Water Management of Turkmenistan
30	Nazar Bayramov , Deputy Head of the Department of Environmental Protection and Hydrometeorology, Ministry of Agriculture and Environmental Protection of Turkmenistan
31	Akmammet Bazarov , Head of the Hydrometeorological Center of the Balkan Velayat of the Hydrometeorological Service of the Ministry of Agriculture and Environmental Protection of Turkmenistan
Uzbekistan/Узбекистан	
32	Shukhrat Haidarov , Head of the Department of the Ministry of Water Resources of the Republic of Uzbekistan
33	Golib Shukurov , Chief Specialist of the Department of Protection of Water, Land Resources and Subsoil of the Ministry of Natural Resources of the Republic of Uzbekistan
34	Natalia Strakhova , Head of the Hydrological Forecasts Department of the Hydrometeorological Service Center of the Republic of Uzbekistan
35	Bobir Aitmetov , Head of the Center for Monitoring and Cadastre of Groundwater, State Committee of the Republic of Uzbekistan on Geology and Mineral Resources
Slovakia/Словакия	
36	Robert Kirnag , Ambassador plenipotentiary and extraordinary of the Slovak Republic to the Republic of Kazakhstan
37	Pavol Kovacovsky , economic diplomat of the Embassy of the Slovak Republic to the Republic of Kazakhstan
Regional Organizations/ Региональные организации	
38	Alisher Nazariy , Deputy Director of the Scientific and Information Center of the Interstate Coordinating Water Management Commission in Central Asia
39	Jamshed Hamidullozoda , Chief specialist of information and analytical department of EC IFAS
40	Serik Bekmaganbetov , Representative from the Republic of Kazakhstan in the Executive Committee of IFAS

41	Marat Narbayev , Head of the Department of Water Resources of the ED IFAS in the Republic of Kazakhstan
42	Firuz Ibrokhimov , Monitoring and Assessment Specialist, Regional Environmental Centre for Central Asia
43	Irina Yugay , Water Initiatives Support Program Specialist, Regional Environmental Centre for Central Asia
44	Ysmayl Dairov , Director of Regional Mountain Center in Central Asia
	International Organizations and Experts/Международные организации и эксперты
45	Arnaud Sterckx , Groundwater Specialist, International Groundwater resources Assessment Center
46	Susanne Brüggén , Environment Agency of the federal state of North Rhine-Westphalia, Germany
47	Anna-Stiina Heiskanen , Director Freshwater Centre, Finnish Environmental Institute
48	Jos Timmerman , Lead Expert, Ministry of Infrastructure and Water Management, Netherlands
49	Paul Haener , Expert in Water Information Systems, International Office for Water/International Network of Basin Organizations (INBO)
50	Fatih Kaya , World Meteorological Organization (WMO)
51	Liudmila Belavina , World Meteorological Organization (WMO)
52	Mirza Sarač , International Sava River Basin Commission
53	Daniel Kull , Senior Disaster Risk Management Specialist, World Bank Group
54	Lisa Gampp , Regional Water and Climate Change Advisor for Central Asia, Embassy of Switzerland in Uzbekistan
55	Boris Minarik , expert of Slovakia
56	Peter Panenka , Slovak Water Management Construction
57	Bibigul Izbaier , Senior Project Assistant of the Department of Economics and Ecology of the OSCE Programme Office in Astana
58	Ekaterina Strikeleva , Chief of Party at USAID Regional Water and Vulnerable Environment Activity
59	Tobias Siegfried , Hydrosolutions GmbH, Switzerland
60	Serikzhan Atanov , Regional Project Implementation Support Associate with the CACILM2 project, FAO
	Organizers/Организаторы
61	Iulia Trombitcaia Environmental Affairs Officer Water Convention Secretariat
62	Erik Salminen Associate Environmental Affairs Officer Water Convention Secretariat
63	Sara Datturi , Associate Environmental Affairs Officer, UNECE
64	Caroline Milow , Programme Manager, Green Central Asia - Transboundary dialogue on climate, environment and security in Central Asia and Afghanistan GIZ
65	Alexandr Nikolayenko , Senior Regional Adviser, Green Central Asia - Transboundary dialogue on climate, environment and security in Central Asia and Afghanistan GIZ
66	Muzaffar Ernazarov , Water resources management advisor, Green Central Asia - Transboundary dialogue on climate, environment and security in Central Asia and Afghanistan, GIZ
67	Zhanar Mautanova , Director of IWAC
68	Serik Akhmetov , Deputy Director of IWAC

69	Kulpash Zhaken , Chief Expert, IWAC
70	Araylim Alimusina , PR specialist, IWAC

Annex 2

Regional Workshop on Monitoring, Assessment and Information Sharing in Transboundary Basins in Central Asia

1-2 February 2023

Hotel Hilton Garden Inn, Kabanbai batyr avenue, 15, Astana, Kazakhstan

AGENDA

<i>Day 1: 1 February 2023, Wednesday</i>	
09:45– 10:00	Registration
Opening session <i>Chairman: Mr Serikali Mukatayev, Vice-Minister of Ecology and Natural Resources of the Republic of Kazakhstan</i>	
10:00 – 10:15	Welcome speeches: <ul style="list-style-type: none"> • <i>Mr Serikali Mukatayev, Vice-Minister of Ecology and Natural Resources of the Republic of Kazakhstan</i> • <i>Ms Caroline Milow, GIZ Programme Manager</i> • <i>Ms Iulia Trombitcaia, Environmental Affairs Officer, UNECE</i> <p>Introduction to the goals and objectives of the workshop, <i>Ms. Zhanar Mautanova, Director of IWAC</i></p>
Session 1. Existing practice of monitoring and assessment of water resources in Central Asia <i>Chairman: Mr. Serikali Mukatayev, Vice-Minister of Ecology and Natural Resources of the Republic of Kazakhstan</i>	
10:15 – 11:20	Hydrological monitoring and water quality regulation system in Central Asia, presentations of countries <i>Ms Rauza Aschanova, Head of the Department of State Water Cadastre and Hydrological Research of the Department of Hydrology of RSE "Kazhydromet" and Ms. Gulbarshyn Bekbenbetova, Head of the Department of Surface Water Data Analysis of the Department of Environmental Monitoring of RSE "Kazhydromet"</i> <i>Ms Mira Elalova, Chief Specialist of the Hydrology Department of the Hydrometeorological Service under the Ministry of Emergency Situations of the Kyrgyz Republic</i> <i>Mr Safarkhon Sharofiddinov, Head of the Hydrological Forecasts Department of the Hydrometeorological Forecasts Center of the Agency for Hydrometeorology of the Republic of Tajikistan</i> <i>Mr Nazar Bayramov, Deputy Head of the Department of Environmental Protection and Hydrometeorology of the Ministry of Agriculture and Environmental Protection of Turkmenistan.</i> <i>Ms Natalia Strakhova, Head of the Hydrological Forecasts Department of the Hydrometeorological Service Center of the Republic of Uzbekistan</i> Q&A, discussion
11:20 – 11:40	Coffee break

Session 2. Experience of cooperation on monitoring, assessment and exchange of information on water in Central Asia	
<i>Moderator: Mr. Safarkhon Sharofiddinov, Head of the Hydrological Forecasts Department of the Hydrometeorological Forecasts Center of the Agency for Hydrometeorology of the Republic of Tajikistan</i>	
11:40 – 13:00	<p><i>Presentations and interventions of commissions/working groups about cooperation on monitoring, assessment and exchange of information on transboundary basins in Central Asia</i></p> <p>Cooperation of the Chu-Talas River basin within the framework of the working group on environmental protection, <i>Ms Gulmira Satymkulova, Secretariat of Chu-Talas Commission</i></p> <p>Activities of the Kazakh-Uzbek Working group on environmental protection and water quality of the Syr Darya river, <i>Ms Dana Agybayeva, Chief Expert of the Department of State Metrological and Analytical Control Committee on Environmental Regulation and Control of the Ministry of Ecology and Natural Resources of the Republic of Kazakhstan</i></p> <p>Monitoring of water resources in transboundary rivers of the Aral Sea basin using the SIC ICWC Regional Information System, <i>Mr Alisher Nazari, Deputy Director, SIC ICWC</i></p> <p>Outcomes of space monitoring of water resources in Kazakhstan, <i>Ms Ayagoz Aipova, Head of Water Resources Monitoring of JSC “National Company Kazakhstan Garysh Sapary”</i></p> <p>Q&A, discussion</p>
13:00 – 14:00	Lunch break
Session 3. Guidelines for monitoring and assessment of transboundary rivers, lakes and groundwaters under the Water Convention	
<i>Moderator: Ms. Gulmira Satymkulova, Secretariat of Chu-Talas Commission</i>	
14:00 – 15:30	<p>Activities under Programme Area “Supporting monitoring, assessment and information-sharing in transboundary basins”, <i>Ms Anna-Stiina Heiskanen, Co-Chair of the Working Group on Monitoring and Assessment under the Water Convention and Director of the Freshwater Centre, Finnish Environment Institute</i></p> <p>Updated Strategies for Monitoring and Assessment of Transboundary Rivers, Lakes and Groundwaters, <i>Mr Jos Timmerman, Lead Expert, Ministry of Infrastructure and Water Management, the Netherlands</i></p> <p>Updated Strategies for Monitoring and Assessment of Transboundary Rivers, Lakes and Groundwaters: focus on groundwater, <i>Mr Arnaud Sterckx, Groundwater Specialist, International Groundwater Resources Assessment Centre (IGRAC)</i></p> <p>Updated Strategies for Monitoring and Assessment of Transboundary Rivers, Lakes and Groundwaters: focus on water information systems and procedures for integrated and shared water data management at transboundary level, <i>Mr Paul Haener, Expert in Water Information Systems, International Office for Water/International Network of Basin Organizations (INBO) (virtual)</i></p> <p>Q&A, discussion</p>
15:30 – 16:00	Coffee break
Group Discussions	
16:00 – 17.15	<p>Process to develop a new publication “Good practices and lessons learned in transboundary data exchange”, inputs required and next steps, <i>Ms Sara Datturi, Associate Environmental Affairs Officer, UNECE (virtual)</i></p> <p>Introduction to work in groups <i>The participants will be divided to groups to discuss cases for the new publication “Good</i></p>

	<p><i>practices and lessons learned in transboundary data exchange”, including following questions:</i></p> <ul style="list-style-type: none"> - <i>Do you have good practices or good examples in place in your country and basin on transboundary data exchange within shared rivers, lakes or aquifers? If yes, what type of data do you share? How often? Are these activities based on a bilateral or multilateral agreement?</i> - <i>What are the challenges that you encounter in sharing data and information on transboundary lakes, groundwaters and rivers? What data and information are not shared?</i> - <i>What are the three main lessons learned that you would like to share with your colleagues about transboundary data exchange?</i>
17:15 – 18:00	<p>Presentation of the results of group work</p> <p>Plenary discussion on good practices and challenges in transboundary data exchange</p> <p>Summing up the outcomes of the first day, <i>Mr. Serik Akhmetov, deputy director of the IWAC</i></p>
Day 2: 2 February 2023, Thursday	
Session 4. International practice of monitoring, assessment and data exchange in transboundary basins	
<i>Moderator: Mr Golib Shukurov, Chief Specialist of the Department of Protection of Water, Land Resources and Subsoil of the Ministry of Natural Resources of the Republic of Uzbekistan</i>	
10:00 – 11:15	<p>Lessons learned on monitoring, assessment and data exchange in the Rhine Basin, <i>Dr Susanne Brügggen, deputy of the department High-Performance Liquid Chromatography/Non-Target Analytics of the Environment Agency of the federal state of North Rhine-Westphalia, Germany</i></p> <p>Transboundary data and information exchange: Finland’s experience, <i>Ms Anna-Stiina Heiskanen, Director of the Freshwater Centre, Finnish Environment Institute</i></p> <p>Challenges and good practices about the exchange of data and information on transboundary groundwater, with a focus on Central Asia, <i>Mr Arnaud Sterckx, Groundwater Specialist, IGRAC</i></p> <p>Exchange of data and information on Pretashkent Transboundary Aquifer, <i>Ms Valentina Rakhimova, Senior Researcher, U.M.Akhmedsafin Institute of Hydrogeology and Geoecology</i></p> <p>Automated groundwater information system in Uzbekistan, <i>Mr Bobir Aitmetov, Head of the Center for Monitoring and Cadastre of Groundwater, State Committee of the Republic of Uzbekistan on Geology and Mineral Resources</i></p> <p>Experience of Slovakia on cooperation in the Danube River basin, <i>Mr Peter Panenka, Deputy director, Vodohospodarska Vystavba (virtual)</i></p> <p style="text-align: center;">- presentation rescheduled to 14:00-15.00 (session 5)</p> <p>Lessons learned on monitoring, assessment and data exchange in Sava Basin, <i>Mr Mirza Sarač, Advisor for protection against detrimental effects from waters and extraordinary impacts on the water regime of the International Sava River Basin Commission (virtual)</i></p> <p style="text-align: center;">- presentation rescheduled to 14:00-15:00 (session 5)</p> <p>Q&A, discussion</p>
11:15 – 11:45	Coffee break
Session 5. Strengthening regional cooperation on monitoring, assessment and exchange of information on water in Central Asia	
<i>Moderator: Mr Serik Bekmaganbetov, Representative of the Republic of Kazakhstan in EC IFAS</i>	
11:45 – 12:30	<p><i>Presentations and interventions of international and regional organizations on activities related to development of regional cooperation on monitoring, assessment and exchange of information on water in Central Asia</i></p> <p>Modernization of hydrometeorological services in Central Asia, <i>Mr Serik Bekmaganbetov, Representative of the Republic of Kazakhstan in EC IFAS</i></p>

	<p>Project on prevention of accidental pollution of water resources in the Syr Darya river basin, Ms Kulpash Zhaken, chief expert, IWAC</p> <p>CAREC experience: support for joint water quality monitoring in the Syrdarya River basin and improvement of data management in transboundary basins, Ms Irina Yugay, Water Initiatives Support Program Specialist, Regional Environmental Centre for Central Asia (virtual)</p> <p>Q&A, discussion</p>
12:30 – 14:00	Lunch break
Session 5. Strengthening regional cooperation on monitoring, assessment and exchange of information on water in Central Asia (continued)	
<i>Moderator: Mr Serik Bekmaganbetov, Representative of the Republic of Kazakhstan in EC IFAS</i>	
14:00 – 15:00	<p><i>Presentations and interventions of international and regional organizations on activities related to development of regional cooperation on monitoring, assessment and exchange of information on water in Central Asia</i></p> <p>Activities, challenges and good practices about the modernization of meteorological services, with a focus on in Central Asia, Mr Fatih Kaya and Ms Liudmila Belavina, World Meteorological Organization (WMO) (virtual)</p> <p>SAPPHIRE Project - Building Smart Bridges between Devices and Institutions for more Effective Water Monitoring, Dr Tobias Siegfried, hydrosolutions GmbH, Zurich, Switzerland (virtual)</p> <p>Presentations from session 4</p> <p>Towards the United Nations 2023 Water Conference: objectives, process, outcomes, Ms Iulia Trombitcaia, Environmental Affairs Officer, UNECE</p> <p>Q&A, discussion</p>
Group discussions	
15:00 – 16:30	<p>Working in groups to discuss proposals to strengthen cooperation on the development of monitoring, assessment and data exchange on water in Central Asia</p> <p><i>1 - What obstacles and opportunities exist for the development of cooperation in the field of monitoring, assessment, and data exchange in Central Asian transboundary basins?</i></p> <p><i>2 - What steps are required to enhance the data collection, processing, and transmission system for quantitative indicators of surface water resources?</i></p> <p><i>3 - What steps are required to enhance the data collection, processing, and transmission system for surface water resource quality?</i></p> <p><i>4 - How to improve collaboration for groundwater monitoring development?</i></p> <p>Presentation of the results of work in working groups. Plenary discussion of proposals</p>
16:30 – 17:00	Coffee break
Closing session	
17:00 – 17:40	Summing up and closing, Ms Zhanar Mautanova, director of the IWAC

Conclusions of the group discussions - Day 1

Question 1. - Are there good practices or good examples of transboundary data exchange within shared rivers, lakes or aquifers in your country and basin? If yes, what data do you share? How often? Is this activity based on a bilateral or multilateral agreement?

Question 2. - What are the challenges that you encounter in sharing data and information on transboundary lakes, groundwaters and rivers? What data and information are not shared?

Question 3. What are the three main lessons learned that you would like to share with your colleagues about transboundary data exchange?

1. There is a positive trend in data exchange in transboundary basins in Central Asia, in particular:

- the countries have formed a regulatory and legal framework that allows monitoring the qualitative and quantitative indicators of water resources;

- there are common methods, mechanisms for joint work, bilateral and regional agreements, an institutional framework that has been formed for interaction on monitoring and data exchange between countries.

2. The most illustrative example of cooperation in data exchange in Central Asia is the interaction between Kazakhstan and Kyrgyzstan on the Chu-Talas River Basin. Cooperation between Kazakhstan and Uzbekistan is developing positively within the framework of the work of the Joint Working Group on Environment and Water Quality in the Syrdarya River Basin.

3. Insufficient funding, poor material and technical equipment and other factors limit proper monitoring of water resources and data exchange in Central Asia.

4. In practice, the countries of the region face problems in the exchange of predictive data on water content. It is necessary to strengthen the interaction of countries to study approaches to hydrological forecasts and develop joint measures, as well as the implementation of joint scientific projects in the field of monitoring water resources.

5. There is a problem of access to information and openness of data on water resources monitoring in the region. At the same time, countries are striving for openness. For example, in Kazakhstan, progress is being made in this part as data and information are available on the website of the national hydrometeorological service.

6. Interagency disunity and poor coordination of interaction between national authorities in countries often do not allow for a proper data exchange. It is necessary to take measures to strengthen intersectoral interaction and form unified national databases on the use of the water fund.

7. The experience of bilateral cooperation in joint monitoring and data exchange existing in the region should be expanded and all countries of the region should be involved in this process.

8. There are no agreements on cooperation in the field of protection and use of groundwater in the region. At the same time, there is a positive trend in cooperation between Kazakhstan and Uzbekistan on the joint use of water resources in the basin of the Pre-Tashkent transboundary aquifer. It is necessary to develop cooperation between countries in the field of protection and use of groundwater, to consider the possibility of replicating Kazakhstan's experience in creating a groundwater atlas and Uzbekistan's experience in automating information on the use of groundwater in other countries.

9. In Central Asia, the negative impact of climate change on water resources is particularly evident. Countries need to consolidate their efforts to combat the negative impacts of climate change and take joint adaptation measures.

10. The activities of the mining industry in the region are associated with a high risk of polluting the water resources of transboundary rivers, which requires coordinated measures from all riparian countries. Countries should take measures to exchange data and information, as well as to establish a joint mechanism for the prevention and response to water pollution from industrial accidents.

11. Cooperation on data exchange in transboundary basins should be developed step by step. To begin with, it is necessary to determine the form of interaction between countries on a regular basis, for example, organizing practical meetings of experts, joint field trips, using a platform for national dialogues on water policy in countries, implementing pilot projects in selected basins or sub-basins, etc.

Conclusions of the group discussions - Day 2

Question 1 - What obstacles and opportunities exist for the development of cooperation in the field of monitoring, assessment, and data exchange in Central Asian transboundary basins?

Question 2 - What steps are required to enhance the data collection, processing, and transmission system for quantitative indicators of surface water resources?

Question 3 - What steps are required to enhance the data collection, processing, and transmission system for surface water resource quality?

Question 4 - How to improve collaboration for groundwater monitoring development?

In Central Asia, the problems of monitoring water resources do not receive sufficient attention. There is a lack of funding for relevant activities. Poor material and technical equipment and low human resources limit the development of cooperation in the field of monitoring and assessment of water resources.

To improve the system for collecting, processing and transmitting data on quantitative and qualitative indicators of water resources in Central Asia, the following is required:

1. to develop cooperation between countries in stages: firstly, to establish data exchange within the framework of national monitoring systems, secondly, to introduce a unified data exchange system, thirdly, to harmonize the system, and fourthly, to strive for integration with the international monitoring system;

2. to develop bilateral/regional agreements on cooperation in the field of water resources monitoring and data exchange in transboundary basins, including those providing for the introduction of a unified automated monitoring of water resources;

3. to develop a joint roadmap for the implementation of obligations under bilateral and regional agreements in terms of cooperation in monitoring and data exchange;

4. to consider the possibility of creating a joint body to coordinate cooperation on monitoring and assessment of water resources in all countries of the region, as well as to implement joint projects to improve the monitoring system within the framework of the activities of such regional organizations as IFAS, ICWC, ICSD, etc.

5. to attract sufficient funding for the development of water monitoring systems in countries and cooperation on data exchange in transboundary basins;

6. to strengthen the material and technical base of national services that monitor the qualitative and quantitative indicators of water, ensure the consistent introduction of modern management technologies;

7. to strengthen the coordination of interaction between all bodies involved in the management of water resources and water management systems at all levels;

8. to organize trainings and trips for specialists from countries to study international best practices in the field of monitoring and assessment of water resources and data exchange;

9. to widely cover the problems of monitoring water resources in the media and raise public awareness about the problems of protection and use of water resources;

10. to organize meetings of hydrogeologists from Central Asian countries to identify existing gaps in the protection and use of transboundary groundwater and determine the prospects for cooperation;

11. to consider the possibility of establishing a regular exchange of monitoring data, primarily in the following transboundary aquifers: Pre-Tashkent, Pre-Irtysh and Chu-Talas.