

**Report on the first meeting of the Coordination Group on Regional Information Space on
Water and Environment in Central Asia**

1-2 September, 2015, Almaty

Organized with the support of the United Nations Economic Commission for Europe and GIZ

Documents supporting the establishment of the Coordination Group

The meeting of the Inter-State Commission on Sustainable Development held in November 2014 in Dushanbe supported the establishment of the Coordination Group. Conclusions and recommendations of the Working Group Meeting on Information Management during the 63rd session of ICWC and the Statement of Intent signed between EC IFAS and the UNECE last October in Urgench also envisage joint efforts to improve information management at the regional level.

Date, venue and participants of the meeting

The first meeting of the Coordination Group, supported by the UNECE and GIZ took place on 1 and 2 September 2015 in Almaty. Participants included representatives of EC IFAS, the Secretariats of ICWC and ICSD, SIC ICWC, SIC ICSD, BVO Amudarya, BVO Syrdarya, the Coordinating Dispatch Centre Energy, the Regional Mountain Centre of Central Asia, the Regional Centre on Hydrology, the Central Asian Regional Environment Centre and the World Bank.

Agenda

The agenda of the meeting adopted by participants is attached as Annex I.

Executive Summary

The Coordination Group reviewed the present system and practice of management of information on water and energy resources and the environment in Central Asia. It acknowledged achievements and pointed out shortcomings. It outlined steps that would enable national and regional producers and users of information to move in a coordinated way towards a regional network of inter-connected portals and databases that would provide reliable and comprehensive information in agreed format on water and energy resources and the environment. Improved information management contributes to more effective decision support at the national and regional levels. Transparency assured by the information space further contribute to an informed public opinion on key issues of the management of water and energy resources and the environment. The information space would facilitate public participation in environmental decision making, among others by explaining the science behind decisions, regulations and other policy instruments.

Summary of the Discussion

In his introductory statement the representative of the UNECE explained that the objective of the Group is assist on-going work on a regional space for water and environmental information in Central Asia.

The **World Bank** introduced its Central Asia Water Resources Management Project (CA-WARM) aiming to improve the information, institutional and infrastructure foundation for water resources planning and management in the Central Asia region

UNEP presented its activities and plans in the area of environmental information management and sharing” including support to the Ecoportal and UNEP-Live.

CAREC introduced its regional knowledge hub. CAREC maintains a number of relevant information portals and participates in the implementation of such projects as MONECA, AWARE and SEIS.

GIZ has been supporting water information management in the region since 2009. It remains a priority issue during the present third phase of the Berlin Process.

UNECE presented the progress in the production and sharing of core environmental indicators. In the **SEIS** framework 67 indicators have so far been defined (air pollution – 25, climate change – 4, water resources – 20, biodiversity – 4, land resources – 2, energy – 4, waste – 4 – green economy – none) Evaluation is undertaken on the basis of on-line accessibility, regular renewal of data, methodology and data production, access to interpretation and access to sources.

The **Executive Committee of the International Fund for Saving the Aral Sea** had prepared the Third Aral Sea basin Program approved in December 2010 by the IFAS Board. It contains more than 300 national and regional projects. EC IFAS had recently requested information from the governments of member states, donors and partners on the state of implementation of projects contained in ASBP-3. A major problem of information management is caused by insufficient information flows and coordination both among various ministries and agencies at the national level (water, energy, environment, hydro-meteorology, etc.) and among regional organizations and institutions (EC IFAS and its branches, SIC ICWC, BVO Amudarya and BVO Syrdarya, RCH, SIC ICSD, CAREC, CDC Energy) as well as international organizations and donors. EC IFAS should play a coordinating role in information exchange supporting the unified information space.

SIC ICWC plays a central role in information management on water resources. **Cawater-info.net** is a portal and provides access to an on-line database covering key indicators and a knowledge base. It deals with basic aspects of water resources management within the mandate of ICWC. It prepares analyses for ICWC based on information from the BVO Syrdarya and BVO Amudarya and national authorities. Data and analyses include water balance, assessment of losses, implementation of water release regimes approved by ICWC, water distribution in major river basins, etc. The website contains a broad range of information, including forecasts for water supply and demand, analysis of the operation of major HPS and discussions on current problems of water resources management. SIC ICWC also develops methodologies for analysis and modelling and manages a broad knowledge base and database. It cooperates with CAREC, FLERMONECA, projects on small trans-boundary watersheds, ENVI online and UNRCCA.

The work of the **BVOs** Amudarya and Syrdarya are hindered by communication and IT problems and they need capacity building for their experts.

The recent modernization of **ICSD's Ecoportal**, supported by the Kazakh Branch of SIC ICSD has significantly improved the scope and quantity of information and made the site more user-friendly. Further modernization must address the following issues: increasing the physical memory of the site to 30-50 Gigabyte; registering a new domain name for the portal; preparation and adoption of an agreed modernization plan; translating the content of the site into English and possibly other languages; develop a feedback function, link up with popular social sites to increase popularity of the site. Modernization of the site is going to include identification of reliable sources of information, synchronization with the UNEP website and sites of other organizations, uploading of information in a systemized format, covering among others sustainable development, water resources, air pollution, green economy, biodiversity and land degradation. Information on key projects should also be added as well as information on SEIS and UNEP Live. The site should make possible the introduction of accountability for ICSD activities. Persons responsible for the work of the site should be appointed in other Central Asian countries and an algorithm for the regular uploading of materials on the portal should be developed.

The publication and exchange of **hydro-meteorological information** in Central Asia is conducted on a solid legal basis, often enshrined in the constitution of the states. Presently the hydro-meteorological services of Kazakhstan, Uzbekistan, Kyrgyzstan, Tajikistan and the Russian Federation are exchanging information concerning the Aral Sea Basin. This information exchange includes operative hydro-meteorological information as well as forecast information. Information provided by a significant number of hydro-posts and hydrological objects is exchanged among Kazakhstan, Uzbekistan, Kyrgyzstan and Tajikistan. Such exchange includes information on precipitation, forecasts for water flows, amount of water entering the Priaralya, etc. A Project for the modernization of hydro-meteorological services of Central Asia is being implemented by the World Bank. The project has three components: a) strengthening regional cooperation and exchange of information b) improvement of hydro-meteorological services of Kyrgyzstan and c) improvement of hydro-meteorological services of Tajikistan. The project supports the improvement of technical and organizational potential of national hydro-meteorological services, improves the training of experts, supports better meteorological forecasting and provides assistance (in the form of consultancy) to better system integration. Results achieved so far include infrastructure development for hydro-meteorological monitoring, improved communication and IT, development of data exchange protocols, introduction of digital forecasting, better qualified experts, autonomous operation by national hydro-meteorological services and new services provided by them.

At the same time, several shortcomings remain: lack of information on the use of water resources, lack of operative information on the quantity and quality of river flows and their ecological status, the energy sector and agro-climatology; delays in the provision of information on the operation of reservoirs; lack of information on environmental security, insufficient information on water sharing and the lack of discussion on water and energy problems of the region.

It was suggested that the unified information space could cover the following issues: fight against soil degradation, desertification and floods, climate change and its effects on water

resources, management of trans-boundary water flows, rapid melting of glaciers, use of underground water resources, hydro-electricity, water supply and canalization, ecological conditions of water flows, quality and accessibility of water and forecasting of river flows.

The first steps towards a unified information space in Central Asia could include: signing of a regional agreement on information exchange, modernization of national hydro-meteorological services and free access to operative information, forecasting and flow regimes, development of long term plans on regional cooperation, introduction of IWRM, sharing of experiences on sharing trans-boundary water resources, regional discussions on the building of water management infrastructure, establishment of regional centers for the training of experts. Governments need to approve plans for the development of a regional information space.

Participants emphasized that information is a sine qua non for the effective management of water resources. No single information system is able to provide the very broad range of complex data, analysis and forecasts that is required by the various stakeholders and various levels of decision makers working in various areas. Presently there are a great number of stakeholders who produce or use information. These stakeholders need to work together in a coordinated way to develop a unified information space. Only by combining and coordinating the presently available compartmentalized information within the unified information space would enable decision-makers and other users have access to comprehensive information.

The Group discussed how effectively IFAS organizations and institutions as well as national authorities use **information as a decision support tool**. Participants underlined that Central Asian states need to exchange data and analytical information in order to facilitate substantive consultations that can build confidence and identify rational and mutually advantageous solutions to existing and emerging challenges. A unified regional information space would facilitate discussions, analysis and research. It could cover overarching issues like problems of regional security, support the exchange of strategic information, facilitate the joint use of water and energy resources through coordination between the water and energy sectors and help satisfy environmental requirements. It would improve early warning and management of natural disasters and contribute to the development of a regional strategy to achieve sustainability in the Aral Sea Basin.

A major problem is the **lack of coordination between the water and energy sectors and between national and regional organizations**. The creation of a unified information space would require the definition of, and agreement on primary sources of information, agreed protocols and formats for data exchange, harmonized methodology for the processing of information and preparation of analytical reports and an agreed set of criteria and algorithms for modelling and forecasts. First steps could include a comparative study and classification of existing information systems and data exchange practices, elaboration of agreed rules for data exchange and exchange protocols, modernization of key information systems so they would meet the requirements of the unified information space.

Regional cooperation, supported by effective information management would enable Central Asian countries to use their water and energy resources to the fullest possible extent, striking a balance between the needs of irrigated agriculture and the energy sector. Complex modelling of

regional management of water and energy resources, taking into account economic (including electricity trade) and environmental factors is not yet available. Such modelling could lead to the development of a long-term approach (including the development of multi-year regulating capacity) allowing the achievement of greater stability over a longer period encompassing high-water and low-water years.

Participants underlined that the mounting challenges (demographic growth, economic development, climate change) are forcing governments to seek cooperative solutions and develop strategies for the joint management of water and energy resources. The evolving dialogue among Central Asian countries could give rise to new ideas and coordinated management tools. **Improved information management would support the negotiation process** among Central Asian countries to achieve a balance among the interests of the water and energy sectors and the environment. There is a need to generate readiness to use information for decision support: this would require high-level decisions.

The Groups briefly reviewed the necessity to strengthen / complement the existing **legal basis** to develop a regional information space. Ideally the legal basis should include harmonized, agreed monitoring requirements and agreements on data sharing and management. Participants agreed on the necessity to ensure the sustainable **financing** of the regional information space.

Several participants emphasized the need to ensure transparency, including the provision of relevant, easy to interpret information for the public, the academic and research community and the media.

Annex I.

Agenda of the first meeting of the Coordination Group



First Meeting of the Coordination Group on a Regional Information Space for Water and Environment in Central Asia

(Almaty, Kazakhstan, 1-2 September 2015)

ANNOTATED AGENDA

Tuesday, 1 September 2015

10.00 First session: Setting the scene

Co-chairs: Sh. Talipov (EC IFAS) and Bo Libert (UNECE)

The objective of the Group is to provide guidance for and coordinate the work on a regional space for water and environmental information in Central Asia. The regional space is to provide open, comprehensive and easy to interpret information in a transparent manner and in agreed format to be used by the Governments of Central Asian countries and the International Fund for Saving the Aral Sea and its organizations and institutions as a decision support tool (information for policy implementation and assessment). The information space should also serve public participation: the academic community, education institutions and the civil society should have free access to information with the possible exception of data that has been declared confidential in accordance with agreed rules.

Opening statement by the Representative of the UNECE – Improving decision support, transparency and dialogue through a regional information space

EC IFAS: Better decision support in IFAS through improved information management

GIZ: The role of information management in strengthening regional cooperation

The World Bank: Central Asia Water Resources Management Project (CA-WARM) – Improving the information, institutional and infrastructure foundation for water resources planning and management in the Central Asia region

UNEP: UNEP's activities and plans in the area of environmental information management and sharing"

UNECE: Progress in the production and sharing of core environmental indicators

11.15 Coffee break

11.30 Second session: Achievements and problems in data production, analysis and information exchange

Co-chairs: Muhamet Durikov (SIC ICSD) and Svetlana Shivareva (Hydromet)

The Group is expected to review the present practice of the management of water and environmental information in Central Asia, point out successes and identify shortcomings including ways to overcome these.

SIC ICWC

SIC ICSD / Kazakhstan Branch of SIC ICSD

Regional Centre of Hydrometeorology

BVO Amudarya

BVO Syrdarya

13.00 Lunch break

15.00 Third session: Principles, common criteria and structure of the information space

Co-chairs: Vadim Sokolov (SIC ICWC) and Alexandr Nikolayenko (GIZ)

The Coordination Group is expected to discuss how to ensure that information on the regional space meets common criteria like accuracy, validity, reliability, timeliness, relevance, completeness, comparability and coherence over time.

ICWC Secretariat

ICSD Secretariat

EC IFAS

Coordination and Dispatch Centre “Energo”

Regional Mountain Centre of Central Asia

Central Asian Regional Environmental Centre

16.15 Coffee break

16.30 Fourth session: Better decision support based on reliable, agreed upon information

Co-chairs: Natalia Alexeeva (UNEP) and Manon Cassara (World Bank)

The Group is expected to discuss how effectively IFAS organizations and institutions use information as a decision support tool, including preparation of work plans, agendas, assessment of implementation of decision, project preparation, management and evaluation, donor coordination and participation in international events. The Group should develop recommendations on how to use the regional information space for improving the effectiveness of decision support within governments and IFAS organizations and institutions.

18.00 End of the meeting

Wednesday, 2 September 2015

10.00 Fifth session: Scope of information

Co-chairs: Malika Babadzanova (ICWC Secretariat) and Batyr Hajiyev (UNECE)

The Group should define the scope of data / information posted on the portals that would constitute the regional information space. This might include among others information on water resources, information on the state of the environment, implementation of environmental laws, agreements and recommendations, information on social and economic aspects of environmental protection, meetings and decisions of IFAS organizations and institutions, project database, international events.

11.15 Coffee break

11.30 Sixth session: Geographical coverage and sources of information

Co-chairs: Djalil Buzrukov (SIC ICSD Tajikistan) and Bakyt Makhmutov (SDC)

The Group should develop recommendations on the geographical coverage and structuring of information (e.g. Aral Sea basin, Syr Darya basin, Amu Darya basin, smaller river basins, etc.) including the possibility of progressive inclusion of Afghanistan and other neighbours.

The optimal combination of sources of information to be posted on the regional portal should also be discussed, including information provided by IFAS member States, information (analysis) provided by IFAS organizations and institutions as well as openly available information, including information provided by international partners.

13.00 Lunch break

15.00 Seventh session: Legal basis and financing

Co-chairs: Saghit Ibatullin (Implementation Committee of the Water Convention) Denis Sorokhin (SIC ICWC)

The Groups should review the necessity to strengthen / complement the existing legal basis to develop a regional information space. Ideally the legal basis should include harmonised, agreed monitoring requirements (including comparability) and regulations on data sharing and

management. The monitoring criteria should allow member states and organizations to develop and agree on unified methods to be used at all levels.

The Group should also elaborate recommendations on financing of the regional space. Financing could include donor support for an initial period but the long-term objective should be financing through an IFAS operational budget or a dedicated budget replenished by assessed contributions of States.

16.15 Coffee break

16.30 Eight session: Transparency, access by academia, universities and the civil society

Co-chairs: Alexey Kobzev (CAREC) and Marton Krasznai (UNECE)

The Group should elaborate recommendations on ensuring full transparency of information, including the provision of relevant, easy to interpret information for the public, the academic and research community and the media. The information space should facilitate public participation in environmental decision making, among others by explaining the science behind decisions, regulations and other policy instruments.

17.45 Conclusions by the Chairperson

18.00 End of the meeting

Annex II.

List of participants of the Coordination Group

Annex III.

Summary of the Chair of the Coordination Group

- Participants recognize the importance of better information management, including through the development of the existing information space on water and environment in Central Asia for improving decision support of member states and institutions of IFAS, as a regional platform supported both at the political level and by other interested parties within their mandates;
- Participants believe that transparency, including free access of the civil society, the academic community and the media to reliable, relevant, easy to interpret information on water resources and the environment can contribute to a better understanding of problems

and opportunities and facilitate public participation in decision making related to sustainable development;

- Participants agreed that the geographical scope of the information space should include the whole Central Asia (and in perspective also Afghanistan). They are convinced that no single information system, no single organization is capable to provide the extremely broad range of data, analyses, prognoses and modelling that is required by the great number of stakeholders who are involved in various levels of decision making. This task can be successfully fulfilled only by linking all providers and users of information in the framework of a regional space for water and environmental information.
- Participants agreed on the expediency of establishing the Coordination Group and recommended continuing multilateral consultations on the development of the regional space on water and environmental information in this format, including the development of agreed procedures and conditions for data exchange, harmonized monitoring requirements and principles of information sharing and management;
- Participants agreed that the work of the Coordination Group has great importance as it creates conditions for data exchange, information management, the coordinated work of all participants as well as the development of the concept of a shared regional information space for Central Asia.
- Participants agreed that closer coordination and harmonization of efforts to improve information management at the national and regional levels is a key precondition of success. During the initial phase bilateral and multilateral memoranda of understanding (between ICSD, ICWC, CAREC and others) could serve as instruments of coordination.
- Participants believe that the work of the Coordination Group should be coordinated with the time table of meetings of regional organizations (including IFAS, CAREC, the Coordinating dispatch centre “Energy” and others) in order to broaden opportunities and increase the effectiveness of efforts.
- Therefore participants request the UNECE to invite to the next meeting of the Coordination Group (in the first quarter of 2016) representative of interested donors and partners who are presently providing assistance to the improvement of information management at the national and regional levels in order to ensure better coordination and harmonization of efforts.
- Participants underlined the importance of cooperation with international agencies and projects aimed at developing an information space in Central Asia. Particular attention

was paid to the projects presented during the first meeting of Information Group: CAWARM of the World Bank as well as activities by UNEP, GIZ and the CAREWIB project.

- Participants requested the UNECE to prepare an informal summary of the discussions that includes proposals made by participants and distribute it to members of the Coordination Group. This paper will have no legal status and will be treated as a working document of the Group. Participants requested EC IFAS and the Secretariats of ICSD and ICWC to bring this document, in accordance with established practice, to the attention of relevant national authorities for information.
- Participants agreed to continue exchanging relevant information and proposals between sessions of the Coordination Group in writing through a dedicated page on the UNECE website;
- The Coordination Group decided to form a working group composed of representatives of EC IFAS, ICSD, ICWC, CAREC and the Coordination and dispatch centre “Energy” and task it with drafting the mandate and rules of procedure of the Coordination Group as well as draft documents for the next meeting. Participants request UNECE to support the working group in the development of the above documents and in their presentation for consideration by EC IFAS, ICSD and ICWC;
- Participants expressed their gratitude to UNECE and GIZ for supporting the meeting and requested it to continue assisting their efforts to improve information management at the regional level.

Annex IV.

Conclusions by the Coordination Group

Information management is hindered by insufficient information flows and coordination both among various ministries and agencies at the national level (water, energy, environment, hydro-meteorology, etc.) and among regional organizations and institutions (EC IFAS and its branches, SIC ICWC, BVO Amudarya and BVO Syrdarya, RCH, SIC ICSD, CAREC, CDC Energy) as well as international organizations and donors.

Modernization of the Ecoportal requires identification of reliable sources of information, synchronization with the UNEP website and sites of other organizations, uploading of information in a systemized format, covering among others sustainable development, water resources, air pollution, green economy, biodiversity and land degradation. Information on key projects should also be added as well as information on SEIS and UNEP Live.

There is a lack of information on the use of water resources, lack of operative information on the quantity and quality of river flows and their ecological status, the energy sector and agro-climatology; delays in the provision of information on the operation of reservoirs; lack of information on environmental security, insufficient information on water sharing and the lack of discussion on water and energy problems of the region.

There is a need for the signing of a regional agreement on information exchange, modernization of national hydro-meteorological services and free access to operative information, forecasting and flow regimes, development of long term plans on regional cooperation, introduction of IWRM, sharing of experiences on sharing trans-boundary water resources, regional discussions on the building of water management infrastructure, establishment of regional centers for the training of experts. Governments need to approve plans for the development of a regional information space.

A major problem is the **lack of coordination between the water and energy sectors and between national and regional organizations**. The creation of a unified information space would require the definition of, and agreement on primary sources of information, agreed protocols and formats for data exchange, harmonized methodology for the processing of information and preparation of analytical reports and an agreed set of criteria and algorithms for modelling and forecasts. First steps could include a comparative study and classification of existing information systems and data exchange practices, elaboration of agreed rules for data exchange and exchange protocols, modernization of key information systems so they would meet the requirements of the unified information space.

There is a need to generate readiness to use information for decision support: this would require high-level decisions.

Annex V.

Issues to be placed on the agenda of the first meeting of the working group

- a) Review of existing agreements of data / information exchange

Presentation of on-going work to improve the legal basis of information exchange among hydro-meteorological services

Presentation of decisions by ICWC on information management

- b) Development of recommendations on harmonized national and legal frameworks (protocols, formats) for data and information exchange, recommendations on harmonized methodology for information processing

At the national level: covering the water and energy sectors, environmental agencies and hydro-meteorological services

At the regional level: covering EC IFAS, ICWC, ICSD, BVO Amudarya, BVO Syrdarya, Coordinating Dispatch Centre Energy and their institutions

List of participants