**9th World Water Forum**

**Actions submission format for Action Group 3E**

**Action Group**: 3E Enhance North-South, South-South and triangular cooperation on data and information sharing, and capacity building

**Coordinators**: International Network of Basin Organizations (INBO)


**Pilot Group observer**: INBO, ICLEI

**ACTION I: Better cooperation for better water information sharing**

**Overall Objective**:
- Improve cooperation not only for better data availability, but also smoother data sharing as key necessities for sound implementation of water resources management.
- Disseminate new approaches and technologies to enhance and generalize data sharing processes
- Enlarge cooperation projects outside water communities and include ecosystem/nature/environment information and data in sharing processes

**Overall purpose and expected results**:

**Overall SDGs Alignment**:
- 6, 12.8, 16.10, 17.6, 17.9, 17.18

**PROJECTS INCLUDED**

**WITHOUT order of priority and level of impact**

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<tr>
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<tr>
<td><strong>Project I.1 - Enhance the use of satellite data for water resources monitoring through a dedicated think tank initiative</strong></td>
<td>Establish a think tank initiative for sharing good practices, case studies and experiences relating to satellite information use for water resources monitoring.</td>
<td>This think tank (would) gather initiatives and projects that promote satellite-based approach to water management, protection and associated parameters monitoring. Satellite information use and satellite altimetry in addition to in-situ measurements, emerge as a component of operational hydrology and its field of application can be extended to various parameters.</td>
<td>Identifying good practices to scaling-up and develop water monitoring based on satellite-based approach.</td>
<td>12.8, 16.10, 17.6, 17.9, 17.18</td>
<td>Workshops</td>
<td>OiEau, AEAG, CACG</td>
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<td>Project 1.2 - Water quality monitoring from space of the Lake Chad basin for peace and sustainable development</td>
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<td>Implement a satellite-based monitoring of water quality of the Lake Chad basin for peace and sustainable development</td>
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<td>In the framework of the BIOPALT project that is aimed to support the restoration of degraded water resources and ecosystems, an innovative approach based on Earth Observation data has been set up to monitor Lake Chad water quality and see its evolution with time.</td>
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<td>This satellite-based approach facilitate science-based policy-making for reducing water pollution and improving its sustainable management. Considering the lack of global water quality data and information, this approach can be implemented elsewhere to improve the knowledge on water quality of lakes and rivers. The use of satellite-based approach could be operate for disaster management as mining and industrial disaster.</td>
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<td>UNESCO World Water Quality Portal, workshops, political level conference</td>
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<td>CNES, UNESCO, CBLT, AFDB, OFB, IRD</td>
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<tr>
<th>Project 1.3 - Innovative monitoring of water resources through Earth observation satellites for adaptation to climate change in 4 African Transboundary River Basin – Senegal,</th>
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<td>Develop an innovative water resources monitoring based on support the building knowledge and the following of hydrological evolution in the Congo, Senegal,</td>
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<tr>
<td>Strengthen the hydrological information system of the 4 River Basin Organizations for decision making.</td>
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<td>Pilot applications with CICOS and NBA, platform for monitoring flows (at different time and scales), SWOT joint workshops</td>
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<td>AFD, OlEau, OMVS, CICOS, ABN, CBLT, CNES, IRD</td>
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</table>
Congo, Niger and Lake Chad

Earth observation satellites for adaptation to climate change in 4 African Transboundary River Basins (Senegal, Congo, Niger and Lake Chad).

Lake Chad and Niger River Basins through “multi-sensor” satellite data.

A working group gathering the expertise of French institutions has developed first spatial pilot applications with CICOS (Congo) and NBA (Niger) and future ones are planned with OMVS (Senegal) and LCBC (Lake Chad). These applications integrate both data from classical in situ monitoring networks and satellite altimetry data and users. Develop applications that enhance water information system for biodiversity preservation, water uses and climate change monitoring.

Project I.4 - Transboundary observatory for water and biodiversity information sharing in Guyana Plateau

Establish a shared governance for transboundary management of water and biodiversity data and information.

Technical exchanges for 2 transboundary basins (Oyapock, Maroni).

Creation of a joint observatory for water and biodiversity data monitoring.

12.8, 16.10, 17.6, 17.9, 17.18

Technical workshop, data exchange platforms, political level conference.

Brazil ANA, Surinam Anton de Kom University, Office de l’Eau de Guyane.

Yes, replicability of the Guyana example at least for other shared rainforest ecosystems.

Addressing Latin American Amazon region.

Project I.5 - Dissemination of INBO/UNESCO Handbook on Water Information Systems at basin scale

Disseminate principles of shared data management.

INBO/UNESCO handbook presents recommendations and case studies for sounder shared Water Information Systems.

Enhanced knowledge sharing processes, enhanced shared governance of data management.

12.8, 16.10, 17.6, 17.9, 17.18

Pilot projects for data sharing and associated services; dissemination and training initiatives.

INBO network and partners.

Yes, for subnational as well as transboundary basin organizations.

The handbook addresses all regions of the world. Following actions open and relevant worldwide.

Project I.6 - The African Water Information System (AWIS): developing data and information

Building capacity on water.

Update of the shared information platform.

New AWIS webplatform.

12.8, 16.10, 17.6, 17.9, 17.18

UNESCO WINS Platform implementation, data sharing workshops.

ANBO, UNDP, GEF, UNESCO, OIEau.

Yes.

Africa.
sharing in Africa

ter data pro-
duction and
sharing at Af-
rican level
dedicated to wa-
ter resources
management for
African basin or-
organizations
online, synchroni-
zation African
water data with
the global plat-
form of UNESCO

ACTION II: From research communities to end-users and citizens, launching new cooperative networks

Overall Objective:
- Addressing specific issues of specific territories or water users through enhanced and more cooperative experience sharing tools and approaches
- Disseminating the results of research and innovation projects, involving research communities and water users, including cities
- Involving all actors, including the public at large, using social networks
- Raising awareness through more intense and cooperative information processes

Overall purpose and expected results:

Overall SDGs Alignment:

Coherence with other Priorities:

PROJECTS INCLUDED

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<td>Project II.1</td>
<td>AfriWatSan is a 5-year capacity-strengthening (2015-2020) and cross-disciplinary research collaboration tackling the fundamental challenge of sustaining low-cost water supply and sanitation systems in urban Africa and strengthen the capacity of individuals and institutions to conduct this vital research.</td>
<td>AfriWatSan is establishing a Network of Urban Groundwater Observatories comprising a town (Lukaya, Uganda), a city (Kisumu, Kenya), and a mega-city (Dakar, Sénégal). Each conurbation is underlain by a shallow aquifer comprising un-consolidated alluvium and/or volcanic-sedimentary sequences that provide a low-cost source of safe water and relies substantially on the use of on-site sanitation.</td>
<td>Capacity building • (PhD, technicians) New knowledge &amp; data • Characterisation of urban land-use and subsurface environments in a town, city and megacity; • Assessed performance of on-site and small-scale urban sanitation as well as faecal waste management; • Development of groundwater models to support integrated water resource management and urban groundwater governance; • Identified relationships among 12.8, 16.10, 17.6, 17.9, 17.18</td>
<td>Capacity building • (PhD, technicians) New knowledge &amp; data • Characterisation of urban land-use and subsurface environments in a town, city and megacity; • Assessed performance of on-site and small-scale urban sanitation as well as faecal waste management; • Development of groundwater models to support integrated water resource management and urban groundwater governance; • Identified relationships among 12.8, 16.10, 17.6, 17.9, 17.18</td>
<td>Un. Cheikh Anta Diop, Dakar Sénégal, Un. Nairobi, Kenya, Un. Makerere, Kampala, Un. College London, London, GB, Royal Society, London, UK aid</td>
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<td>Project II.2 - Afralliance: Boosting and match-making research &amp; innovation needs and solutions for preparedness to climate change in Africa</td>
<td>Joining forces to share knowledge, strengthen capacity and generally accelerate innovation to better prepare Africa to meet future climate change and water security challenges.</td>
<td>Identification of innovation needs and solutions</td>
<td>Knowledge hub, policy briefs, social innovation factsheets</td>
<td>12.8, 16.10, 17.6, 17.9, 17.18</td>
<td>Identification of innovation needs and solutions</td>
<td>Yes</td>
<td>Africa, Europe</td>
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<td>Project II.3 - Create a network for mutual education and data, good practices and experiences exchange between civil society stakeholders in sustainable development and lifestyles</td>
<td>Create, from digital platforms, networks of civil society stakeholders for the exchange of knowledge, data, good practices and experiences aimed at sustainable development and lifestyles.</td>
<td>Spreading relevant, accurate and successful information, raising awareness among digital communities, improving international cooperation, expanding access to science, technology and innovation.</td>
<td>Promote international cooperation (north-south, south-south and triangular) in a more simple and organic way, and finally, it will allow maintaining a history of each of these exchanges, which will translate into the ability to access information timely.</td>
<td>12.8, 16.10, 17.6, 17.9, 17.18</td>
<td>Creation and development of high-quality and relevant content based on the knowledge, experiences, data and good practices of stakeholders in a simple and easy-to-learn format that can be viralized using social media platforms.</td>
<td>Youth United in Action, Latin American and the Caribbean Youth Parliament for Water</td>
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<td>Project II.4 – Creation of a Basin Islands Network</td>
<td>Better answer to specific and identified needs and gaps of “basin islands” or other similar territories</td>
<td>Exchange of experiences and good practices, development of adapted tools, production of recommendations, promotion of training programs for executives and dedicated tools and exchange of practices addressing the specificities of island basins.</td>
<td>Workshops, conferences and training sessions, electronic/data exchanges and publication of reports</td>
<td>12.8, 16.10, 17.6, 17.9, 17.18</td>
<td>Office de l’Eau de Martinique, INBO</td>
<td>Yes, worldwide replicability...for insular contexts!</td>
<td>Focus on the Caribbean region, but global ambition</td>
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</table>
### ACTION III: Promoting capacity development through enhanced exchanges and training

**Overall Objective:**
- Structuring capacity development and experience sharing benefits through the dissemination of cooperative peer-to-peer/peer review approaches
- Enhancing cooperation among educative and academic partners interested in the development of more “application oriented” exchanges and teaching tools and practices
- Raising awareness on the importance of educative and training capacity development

**Overall purpose and expected results:**
Overall SDGs Alignment:
Coherence with other Priorities:

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<td><strong>Project III.1 - Support water cooperation to improve water resources management in 6 countries of Eastern Europe and Caucasus</strong></td>
<td>Assisting Armenia, Azerbaijan, Belarus, Georgia, Moldova, and Ukraine in bringing their legislation and practices closer to European Union policy in the field of water management, with a main focus on the management of transboundary river basins</td>
<td>Legislation, policy development and institutional strengthening, laboratory and monitoring systems, River Basin Management Plans, public awareness, communication, and stakeholders involvement.</td>
<td>River Basin Management Plans are developed; The water sector is equipped with the necessary human and technical capacity; The water sector has an enabling legal and regulatory framework</td>
<td>12.8, 16.10, 17.6, 17.9, 17.18</td>
<td>Development and implementation of pilot river basin management plans, building on the improved policy framework, strengthening local capacities and ensuring a strong participation of local stakeholders</td>
<td>OIEau, UBA, OECD, UNECE</td>
<td>Yes, for operational implementation of transboundary governance</td>
<td>Eastern Europe, Caucasus</td>
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strong academic focus and science centered. Assuming the quality of this kind of training is in general rather high it is not demand-driven and fails quite often to meet the needs of real world problems. This might be especially of importance for developing and emerging countries where hands-on approaches and solution-focused training is needed.

<table>
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<tr>
<th>Project III.3 - Capacity development for water and sanitation jobs and consolidation of water training centers</th>
<th>Support creation and development of sustainable training centers</th>
<th>Reinforce sustainable training capacities in the field of water utilities as well as water resources management</th>
<th>Analysis of new water jobs and related training needs</th>
<th>Enhanced training capacities at local, national or regional levels. Creation of new training centers</th>
<th>INWTC (International Network of Water Training Centers) and partners</th>
<th>Yes. North-South and South-South cooperation can be mobilized.</th>
<th>Yes. Involvement of existing or projected training centers from Europe, Africa, Asia, Latin America.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project III.4 - Peer-to-peer learning: sharing experiences through peer-review exchanges in order to improve the implementation of European Water Framework Directive</td>
<td>Disseminate and upscale European practices of peer-to-peer exchanges in the field of water resources management</td>
<td>Extensive proposal of peer-to-peer exchanges as useful tools for capacity development</td>
<td>Organizing expert exchanges and visits, assessing and comparing practices</td>
<td>Enhanced dissemination of experiences among practitioners of water resources management</td>
<td>OIEau, MENBO, INBO</td>
<td>First circle of the project addressing European stakeholders. More broadly, taking stock of European experiences for worldwide initiatives</td>
<td>Yes. Implementation addressing all regions</td>
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