OECD Water Governance Initiative
Thematic Working Group 3

Basin governance

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Scoping Note

Please send your comments and suggestions to

a.aureli@unesco.org and jf.donzier@oieau.fr
with copy to l.minelli@unesco.org and d.Valensuela@oieau.fr

This scoping note describes the objective and scope of the work to be carried out by the thematic working group "Basin governance" led by both INBO-OIEau and UNESCO-IHP as part of the OECD Water Governance Initiative

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RATIONALE

1. Climate change, floods, droughts, pollution, wastage, water-related diseases, food shortage, and destruction of ecosystems pose serious threats on the situation of many countries and require that comprehensive, integrated and consistent management of water resources, of aquatic ecosystems and of the lands which are their supply area, be implemented to prepare the future and meet the quickly increasing needs and adapt to global changes.

2. Global warming now seems to be unavoidable: the hydrological cycle and freshwater resources will be affected, with for announced consequences, in particular:

- increase of the extreme hydrological phenomena, such as droughts and floods, with the risk of huge human losses, displacement of populations, destruction and catastrophic economic damage,
- reduction of the snow cover in mountains, which thus will not be able to play their part of "water towers of the planet", by regulating the flows of the large rivers which are born there,

- decrease of rivers average annual runoff in many parts of the world, especially in arid areas,
- modification of the vegetable species and soil cover, which will result in increased erosion, and more evapotranspiration.
- rise of the ocean water level modifying the flow of rivers at their coastal mouth and increasing the salinity of aquifers.
- Increased temperatures will increase evaporation that conducts to pollution concentration in water bodies and will require more cooling which entails increased use of water.

3. At the level of large river basins, it is then necessary to develop or increase the means for observing evolutions and for modelling their probable effects, for assessing the resources available in the long term, for more effective management of the reserves, wetlands, soil cover, existing or planned hydraulic works, for controlling water demand and the various uses, for protecting agglomerations, collective infrastructures, areas of activity and arable lands against the damage caused by water.

Aquifers and river basins: unity of the hydrological cycle

4. A river catchment and an aquifer do not always coincide geographically. Hydrologists and hydrogeologists can easily determine the coincidence or non-coincidence of river catchments and aquifers given some basic data that defines the elements of the hydrological cycle. Deep aquifers can be partially disconnected from the river basins and have different recharge and discharge areas. Putting together all these elements and adding in the related depending ecosystems, permits the full identification of 'an aquifer system'. Correctly identifying the elements of the hydrological cycle in an aquifer system is a basic prerequisite to sustainable management of water resources that will permit ecosystems to continue to function, and will support the needs of humanity (UNESCO Atlas of Transboundary Aquifers, Puri and Aureli 2009). Water resource managers and users of freshwater are increasingly recognising the importance of correctly determining the coincidences or non-coincidence of river catchments and aquifer systems, so that when resources are limited they might be equitably utilised for the needs of natural and human ecosystems.

5. However most often, the hydrographical basin is used as unit for the organization of conjunctive management of surface and groundwater and of dependent freshwater ecosystems. Basins are then considered also often as geographical units to balance water uses and addressing conflicts between upstream and downstream stakeholders, or between rural and urban zones, are best done within a basin context. The same applies to developing local participation, increasing the ownership by the population and making decision closer to stakeholders and civil society.

6. Good water governance depends on many factors. One key factor is related to the adoption of the correct institutional framework for managing water resources. Therefore it is always essential to define the integrated surface waters and aquifer dynamics.

7. It is especially necessary to take into account the specific situation of transboundary rivers, lakes and aquifers whose basins are shared by two or more riparian countries; in the case of the Danube up to 18 countries.

8. In the world, 15% of the countries depend, at more than 50%, on the water resources of other upstream countries: some countries are particularly concerned: Botswana, Bulgaria, Congo, Egypt, Gambia, Hungary, Iraq, Luxembourg, Mauritania, Niger, Paraguay, the Netherlands, Romania, Sudan, Syria, Uzbekistan, they exceed the threshold of 2/3 of their water resources coming from outside their borders.

9. Transboundary surface and groundwater exist in all continents. As an example in Africa transboundary water resources account for 80% of surface water. Niger, Gambia, Botswana, Mauritania, Sudan, Chad, Egypt have a very significant share (exceeding 75%, and even up to 98%) of their resources coming from other countries. The Congo, Nile, Zambezi, Niger, Volta and Lake Chad basins concern between six and ten countries. The Gambia, Senegal, Limpopo, Orange and Okavango Rivers concern three or four States for each of them. There are, indeed, 59 transboundary basins in Africa, including 28 in West Africa, covering 80% of all the territory of the area. Except for Cape Verde and Madagascar, all the African States share at least a river with a neighbour. This results in a very strong sub-regional interdependence. This interdependence also exists for groundwater resources because there are also several tens of large transboundary aquifers, such as the transboundary aquifer of Northern Sahara that is shared by Algeria, Libya and Tunisia.

10. In March 2011, UNESCO-IHP and INBO joined the OECD-led Good Governance Core Group as part of the 6th WWF preparatory process and led two taskforces that produced the following good governance targets:

> *Basin Management Plans as Instruments for Water Governance: Increase by 30% the number of river basin management plans by 2021*
>
> *By 2015, increase the number of countries with water security diagnoses and governance tools, based on existing (local, national, international) regulatory and legislative frameworks and IWRM mechanisms*

11. In addition, as part of the "Cooperation and Peace" Group, the following target was developed:

> *Increasing the number of institutions within the transboundary basins or aquifer systems capable of ensuring sustainable management of water resources*

12. Despite the wide recognition and progress of the concept and the application of basin management, we have to recognise that the effective basin organisations in the world are still not enough developed, or not enough efficient, as regard to the number of countries and the number of transboundary rivers, lakes and aquifers.

OBJECTIVES

13. This project aims at developing actions for promoting good governance in river, lake and aquifer basins. One of the objectives of the working group is to propose a methodological framework to reinforce existing basins organizations based on a set of indicators to assess their **overall performance** in terms of efficiency, effectiveness, and sustainability. This will lead to the design of **overarching principles or guidelines** in support of basin organizations with a strong capacity to manage water resources within their national or transboundary basin of river, lake and aquifer, and in line with the wider objectives in terms of economic benefits, social inclusion and environmental sustainability.

14. The project will also contribute to identify successful existing examples of water resources governance. The project will rely on a baseline on the water governance in the basins (surface and groundwater) around the world. A **set of indicators on governance** will be designed based on what is existing in this field (namely KPI and UNESCO-TWAP indicators); those indicators will be used for developing this baseline. This baseline should address the transboundary basins and the countries situated in OECD region plus BRIC.

15. Based on the baseline, it would be possible to identify and prioritize the gaps which are hampering the development of basin organizations, and then to **propose a set of principles** to be adopted and implemented by the relevant countries. The existing documents such as Handbook on IWRM at basin level, Handbook on IWRM in transboundary basin, Methodological Guidebook "Towards the joint management of transboundary aquifer systems", will be used in this process.

16. A particular focus will be placed on the conjunctive management of surface and groundwater and furthermore, mechanisms, tools and instruments for this will be developed.

METHODOLOGY & OUTPUTS

17. The project will be structured in four pillars:

1. Definition of indicators of governance
2. Establishment of the baseline on the status of the governance in the basins in the countries of the OECD and in the BRIC countries
3. Design of a methodological framework for establishment and reinforcement of basin organizations
4. Dissemination of results / outputs

18. The outputs:

- adoption of a set of Indicators of Governance
- baseline and status of water governance in majority of basins in the world
- methods, tools for developing basin organizations

19. INBO and UNESCO will lead the working group and will partner with other relevant partners to produce the expected outputs.

20. A road map and timeline will be defined during the meeting of the working group, taking into account possible synergies with meetings scheduled in 2013 and 2014, such as:

1. Community of water professionals Conference in Moscow, Russia 8-9 November, organised jointly by the Eastern European, Caucasus and Central Asian Network of Basin Organizations - EECCA-NBO - and the Global Water Partnership – CACENA; as the conference is about "a framework for interstate water cooperation", communication on the project should be made;
2. The 11th International "Europe-INBO 2013" conference in Plovdiv, Bulgaria, from 13 to 16 November 2013: it will be the opportunity to look at the progress in EU country members about the implementation of the WFD and all other directives which are in the heart of the water governance process;

3. Seminar of the World Water Council on Transboundary Cooperation, in Strasbourg, France, 11 December 2013, occasion for exchanges at political level on the issue of water governance at transboundary basin scale;
4. First International Environment Forum for Basin organisations, in Bangkok, Thailand, 26-28 November 2014;
5. 17th International River Symposium in Camberra, Australia, 2014.

21. List of events that could be added

November 5-8	Sarajevo, Bosnia and Herzegovina	The International Roundtable on Water and Energy Nexus in transboundary basins in Southeastern Europe	German Ministry of Environment, Nature Conservation and Nuclear Safety, the Regional Cooperation Council, the Global Environment Facility (GEF) IWLEARN and the Global Water Partnership Mediterranean.
November 14-15	The Hague	Water Security and Peace	
December 11	Strasbourg	Seminar on transboundary water cooperation per the UN year on water cooperation	World Water Council and the European Parliament
December 9-11	Montevideo	TWAP LAC Launching Workshop	
January 20-22	Abu Dhabi	International Water Summit	Joint session IHP / RAMSAR
April 9-10 (tbc)	Geneva	Second Workshop UNECE joint Bodies	
May	Istanbul	3rd International Water Forum	Session IHP + AMCOW
November 5-8	Adelaide, Australia	Freshwater governance for Sustainable development	Prof McKay

IMPLEMENTATION TASKFORCE

UNESCO-IHP	INBO / OIEAu
Mrs. Alice Aureli a.aureli@unesco.org	Mr. Jean-François Donzier jf.donzier@oieau.fr
Ms. Lucilla Minelli l.minelli@unesco.org	Mr. Daniel Valensuela d.Valensuela@oieau.fr

LIST OF CONTRIBUTORS

National Government Representatives		
Turkey Water Institute	KERC Alishan TIKANSAK Osman	aslihan.kerc@suen.gov.tr osman.tikansak@suen.gov.tr
Japan - Ministry of Land, Infrastructure, Transport & Tourism	YUHARA Asako	Yuhara-a92ta@mlit.go.jp
South Africa – Water Research Commission	KARAR Eiman NAIDOO Dhesigen	eimank@wrc.org.za dhesn@wrc.org.za
Portugal	NUNES CORREIA	fnc@civil.ist.utl.pt
France - ONEMA	LACROIX François MARTINI Dominique	francois.lacroix@onema.fr frederique.martini@onema.fr
Basin, local and regional actors & their networks		
Network of Asian River Basin Organisations (NARBO)	KAWASAKI Tadashige BIN ABDULLAH Keizrul	keizrul@gmail.com tadashige_kawasaki@water.go.jp
Jucar River Basin Authority	ESTRELA Teodoro	testrela@chj.es
Association Française des Établissements Publics Territoriaux de Bassin	MARCOVITCH Daniel GREMILLET Catherine	Daniel.marcovitch@eptb.asso.fr catherine.gremillet@eptb.asso.fr
Agence de l'Eau Rhône Méditerranée Corse	FAYEIN Laurent	laurent.fayein@developpement-durable.gouv.fr
Arno River Basin Authority – Italy	FIUMI Lucia	l.fiumi@adbarno.it
Murcia Water Agency – Spain	MARTINEZ NIETO Antonio RODENAS CANADA Miguel Angel	amnieto@um.es Miguela.rodenas@carm.es
Regulators & their networks		
Turin School of Local Regulation	BECCHIS Franco VANIN Elisa	franco.becchis@fondazioneambiente.org elisa.vanin@fondazioneambiente.org
Donors & International Financial Institutions		
USAID	VOLK Richard	rvolk@usaid.gov ckosnik@usaid.gov chholmes@usaid.gov
Service providers & their networks		
EDF – France	URSAT Xavier	xavier.ursat@edf.fr
Non-governmental organisations		
Action contre la Faim	EYRARD Julien	jeyrard@actioncontrelafaim.org
WaterLex	SCHMITZ Tobias	t.schmitz@waterlex.org
Butterfly Effect – Green Cross International	VERCAMBRE Marie-Laure	marie-laure.vercambre@gci.ch
International organisations		
FAO	UNVER Olcay	Olcay.Unver@fao.org Louise.Whiting@fao.org Alexander.mueller@fao.org
UN Decade Programme on Advocacy	MAETSU Josefina	maestu@un.org

and Communication		
Academic, Independent experts, Think Tanks		
International Association for Water Law (AIDA)	BURCHI Stefano	Stefano.burchi@gmail.com
Independent expert	WINPENNY Jim	Wychwood.consult@virgin.net
AgroParisTech	RICHARD Sophie	sophie.richard@agroparistech.fr
Griffith Law School	TAN Poh-Ling	p.tan@griffith.edu.au
UNESCO-IHE	SMIT Hermen	u.wehndemontalvo@unesco-ihe.org
Water Resources Research Centre	MEGDAL Sharon	smegdal@cals.arizona.edu
Udall Centre for Studies in Public Policy	VARADY Robert	rvarady@email.arizona.edu
AQUASEC		
Scientific Information Centre of Interstate Commission for Water Coordination – Central Asia	DUKHOVNY Victor ZIGANSHINA Dinara	dukh@icwc-aral.uz dinara.ziganshina@gmail.com