

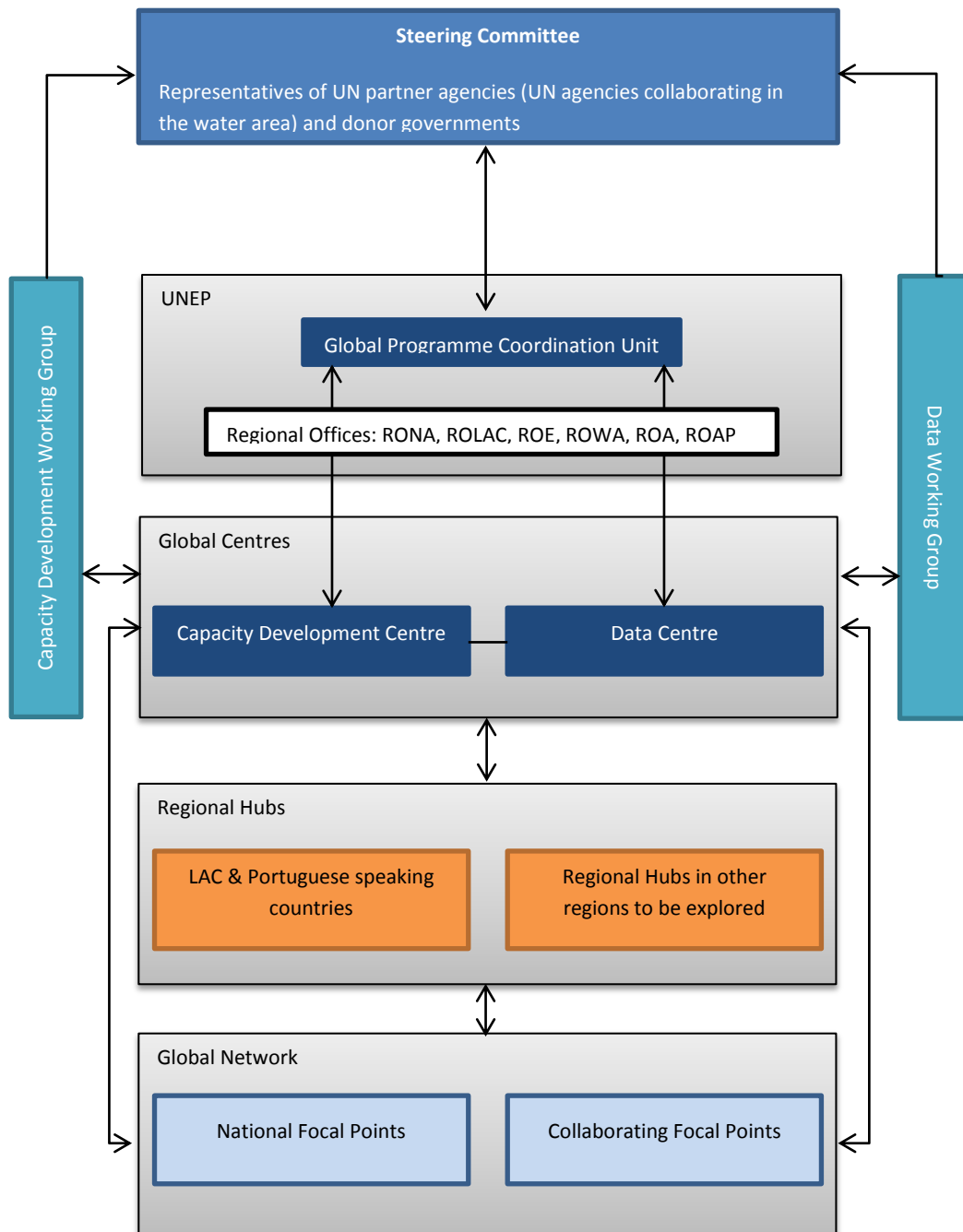
Draft Work Plan (2016-17) of the Global Environment Monitoring System, Water, Programme, UNEP GEMS/Water

The GEMS/Water programme was established in 1978 to collect global water quality data for assessments of status and trends in global inland water quality. With the co-operation of participating countries, the programme is creating a unique global water quality monitoring network that provides water quality data to a central database known as GEMStat. It also provides support and encouragement to developing countries that wish to establish monitoring programmes and conduct assessments of water quality, through the provision of capacity development in the form of training, advice and assessment tools. In 2014, the GEMS/Water Programme mandate was renewed and strengthened by UNEA Resolution 1/9 and it was restructured with new donors and three main operating centres: a Global Programme Co-ordination Unit (GPCU) in Nairobi, a Data Centre in Germany and a Capacity Development Centre in Ireland. Regional activities are supported by Regional Hubs, such as the National Water Agency in Brazil.

Following UNEA Resolution 1/9 a revised GEMS/Water Programme has been developed for adoption by the United Nations Environment Assembly at its second session (UNEP/EA.2/8) to which this draft work plan refers. It highlights the work plans and work flows including milestones for each of the components organized in work packages, related tasks and timelines.

Project Scope

Project Implementation Structure



Roles and functions

Global Programme Coordination Unit

Functions: The Global Programme Coordination, GPCU, is in charge of the overall coordination of the UNEP GEMS/Water programme and the day to day management. It supports the Steering Committee and Working Groups, and liaises with key executing partners, the UNEP Regional Offices, and donors. The GPCU oversees reporting obligations in the UNEP Programme of Work (PoW) and works with executing partners, donor governments and institutions as well as with the financial and administrative officers and the Steering Committee to meet external reporting requirements.

In executing GEMS/Water the GPCU assists the Programme Steering Committee as well as the Data and Capacity Development Working Groups and is in charge to implement their strategic and operational decisions. The GPCU assists in the development of the annual and multi annual work plans, embedding GEMS/Water in the Programme of Work and in the organization of workshops on national and regional level. It works with the committees on the design and implementation of a GEMS/Water funding strategy and reaches out to donors on governmental and other levels as well as to executing partners to provide for supporting agreements.

The GPCU liaises with, maintains and expands the network of GEMS/Water National and Collaborating Focal Points (NFPs and CFPs; <http://www.unep.org/gemswater/GlobalNetwork/NFPRegistry/tabid/78531/Default.aspx>). It works with Regional Hubs and partners on the design of water quality monitoring schemes, capacity development and assessments as well as providing services to inform policy making and water management.

The GPCU supports the GEMS/Water website and content management and coordinates public outreach of the programme globally. It provides information to science policy interface processes and institutions such as the United Nations Environment Assembly and sessions of UNEP's Country Permanent Representatives (CPR). It works with executing partners and Regional Offices to promote information flow into UNEP Live – UNEP's knowledge management and information platform.

The GEMS/Water GPCU is actively involved in UNEP's interdivisional water group and coordinates activities with the Chief of the Freshwater Ecosystems Unit in the Division of Environmental Policy Implementation, DEPI. It coordinates contribution to and collaboration with UN-Water in general and specifically in the implementation of the SDG 6 coherent monitoring programme GEMI (Monitoring Water and Sanitation in the 2030 Agenda for Sustainable Development).

Composition: In the revised UNEP GEMS/Water the Global Programme Coordination Unit, GPCU, is accommodated in the Division of Early Warning and Assessment (DEWA) at UNEP Headquarters in Nairobi. It is supported by: (1) a Senior Programme Officer providing oversight and coordination internally and externally; (2) a Programme Officer in a supportive role; (3) one Associate Programme Officer, and potentially an additional United Nations Volunteer, UNV, engaged from partner governments whenever the opportunity arises; (4) support from the Fund Management Office (FMO) and one general support staff to assist the programme activities, committees, partners and day to day management .

Point of Contact: Hartwig Kremer, Senior Programme Officer, UNEP DEWA, hartwig.kremer@unep.org and Kilian Christ, Associate Programme Officer, UNEP DEWA, kilian.christ@unep.org

Capacity Development Centre

Functions: Under the revised structure for GEMS/Water, the Capacity Development activities relating to water quality monitoring and assessment are co-ordinated and delivered by the newly-established GEMS/Water Capacity Development Centre (CDC) in Cork, Ireland under a five-year project co-operation agreement that was signed in September 2015. The functions of the Centre are to encourage a standardized approach to data generation by participating countries through providing guidance and training on all aspects of water quality monitoring and quality assurance of monitoring activities. The aim is to ensure compatibility and comparability of data for use in national, regional and global assessments. The GEMS/Water CDC will maintain the coherence of the overall GEMS/Water programme by ensuring standardization of approach across all regions, through production of standard methods, overseeing training course content and training staff where required. All capacity development initiatives will be planned and implemented in close co-operation with the UNEP GPCU and UNEP Regional Offices to ensure they are appropriately and sensitively targeted and delivered.

Composition: The Centre is based in the Environmental Research Institute (ERI) of University College Cork (UCC) and is a partnership between three constituent Universities of the National University of Ireland (UCC, Trinity College Dublin and National University of Ireland Galway), Dublin City University, the Institute of Technology in Sligo and the Environmental Protection Agency (EPA) of Ireland. The Centre has five staff including the Director: four staff are scientists with experience and expertise in water quality monitoring and/or analytical chemistry and the other is an instructional designer who works with the other staff and partners to design and produce on-line training materials. Two of the scientific staff have international experience in teaching and training at technical and higher levels, including on-line delivery.

Point of Contact: Deborah Chapman, Director GEMS/Water Capacity Development Centre, University College Cork, Ireland, d.chapman(at)ucc.ie

Data Centre

Functions: Established in early 2014, the GEMS/Water Data Centre (DC) is coordinating and delivering the monitoring data collection, processing and dissemination activities relating to the global water quality monitoring database and information system GEMStat. The main function of the Centre is to mobilize and support the generation, collection, sharing and access to quality-assured data on the water quality of freshwater resources through the GEMS/Water Global Network to enable assessments of the state and trends of water quality at the regional and global scale such as the World Water Quality Assessment (WWQA) supported by UNEP and UN-Water.

It supports standardization and harmonization efforts of water quality data collection, analysis and exchange through collaboration with the World Meteorological Organization (WMO) and the Hydrology Domain Working Group (HDWG) of WMO and the Open Geospatial Consortium (OGC). The DC develops water quality indicators in support of large-scale assessments such as GEO and the monitoring of the 2030 Agenda for Sustainable Development.

Composition: The Data Centre is managed by the International Centre for Water Resources and Global Change (ICWRGC) hosted by the Federal Institute of Hydrology (BfG) in Koblenz, Germany. It operates under a 10-year co-operation agreement between UNEP and the Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB) that was signed in June 2015 and an inter-ministerial agreement between the BMUB and the Federal Ministry of Transport and Digital Infrastructure (BMVI).

The Data Centre has five scientific and technical staff: (1) a Scientific Officer for the coordination of the Centre, (2) a Scientific Officer for data analysis and product development, (3) a Scientific Officer for data collection, processing, product generation and public relations, (4) a Scientific Officer for the development and coordination of IT and data management and (5) a Technical Officer for database and information system maintenance.

Point of Contact: Siegfried Demuth, Director International Centre for Water Resources and Global Change, demuth(at)bafig.de, Philipp Saile, GEMS/Water Data Centre, saile(at)bafig.de

Regional Hubs

Regional Hubs will promote broad-based collaboration with partner institutions that have similar interests in water quality management and will contribute to the implementation of UNEP GEMS/Water activities at the regional level. As opposed to the past centralised organisation, the decentralised approach through regional hubs is expected to increase efficient delivery of water quality services and products in response to specific needs of countries. The model will also enhance international cooperation (north-south and south-south), regional ownership and partnership with governments, universities, centres of excellence, and individual experts. The focus of assistance provided by the GEMS/Water programme will be mainly on developing countries and countries with economies in transition.

GEMS/Water Regional Hub(s) collaborate closely with the GPCU. They are expected to carry out or participate actively in water quality monitoring and assessments, and to work closely with host country partners and the GEMS/Water Capacity Development and Data Centres to facilitate tailored regional/national training in water quality monitoring and analyses. They participate in the development and application of GEMS/Water capacity building tools, encourage and spearhead submission of regional or country level water quality data to the UNEP Live platform, and to contribute to the Programme's fundraising efforts by carrying out resource mobilisation at the regional level; and assist in organising WQ outreach activities. UNEPs regional Offices will work closely and follow up on activities of regional hubs and will assist the GPCU in coordination of activities at this level.

Proposed criterion for a country to qualify as a Regional Hub/ a champion country/ institution

A country/Institution within a champion country that is able and willing to act as a regional/sub-regional champion and having the following criterion could be considered as a Hub.

- 1) Having many highly trained experts in water quality compared with other countries in the region/sub-region
- 2) Volume of research in water quality related issues and well-equipped or set-up laboratory facilities with qualified personnel and expertise
- 3) Ability to carry out its own regular water quality sampling, analysis and monitoring activities and to harmonise water quality data.
- 4) Having a network of regional partners and able to facilitate regional capacity building trainings and WQ assessment projects in collaboration with the UNEP GEMS/Water Programme.
- 5) Able to host a secretariat for capacity building/training

- 6) A regional water quality centre able to better identify and address regional issues.
- 7) Able to Link Water Basin Authorities to GEMS/Water
- 8) Able to assist and partner with regional NFPs to use/disseminate statistical tools/GEMStat

Point of Contact: current Regional Hub for the LAC Region, Marcelo Pires da Costa, National Water Agency of Brazil, marcelo(at)ana.gov.br

Focal Points

The UNEP GEMS/Water Programme collaborates with a network of local water authorities and agencies through designated National Focal Points (NFPs) and Collaborating Focal Points (CFPs).

The primary function of the NFP is to provide a national environmental water quality data and information service from the operating base of a governmental water quality monitoring centre. The national centre should provide easy public access to wide-ranging and authoritative information on water quality data and information for state and trends of the inland aquatic environment.

The NFP should at minimum submit national water quality data and information on a variety of parameters, on a yearly (one time per year) basis. Both the content and format of the substantive information provided should be compatible with the user needs, and with the methods and procedures provided in the GEMS/Water Operational Guide.

In practice, many NFPs are located in a national environmental information centre or a water resource branch of the Ministry of Environment, Ministry of Water Resources, or other governmental ministry, agency, commission, with strong environmental water resources mandate. UNEP GEMS/Water Programme officially recognizes the designation of an NFP or CFP. This may be in the form of a letter of agreement; a memorandum of understanding can be put in place if required.

Each national government is invited and encouraged to designate a NFP and to communicate its name, representative and address to the Global Programme Coordination Unit of the UNEP GEMS/Water Programme. The location and organizational structure of the NFP is the prerogative of the participating government. GEMS/Water is designed to be sufficiently flexible to allow for many focal point variants. In keeping with its catalytic role, GEMS/Water assists NFPs to participate effectively in the programme by offering training opportunities, prototypes of publicity materials, technical documentation, consultancy services, QA/QC tools etc.

Collaborating Focal Points, CFPs, are participating and supporting organizations or institutions which can be of different kind. CFPs are designated on a case by case basis, with roles and outputs determined by mutual agreement. CFPs can be regional or sub-regional in scope and activity.

Steering Committee

Terms of reference:

1. The Steering Committee consists of representatives from Donor Governments and UN agencies which also work in water related areas and have a mutual interest in GEMS/Water. Key executing partners, i.e. those hosting GEMS/Water components, representatives of Regional Hubs and the UNEP GEMS/Water Global Programme Coordination Unit, GPCU, participate as ex-officio members.

2. The SC will provide overall strategic guidance, advice, direction and focus to the GPCU based at UNEP Headquarters.
3. It will offer guidance on how best to synergise with other and complementary programmes/activities, and assist in soliciting wide support for implementation as well as partnerships in order to build stronger networks of collaborators.
4. The SC will meet physically at least once every year. It will agree on its own operational arrangements, e.g. modes of communication, frequency of consultation, selection of new members etc. The SC is assisted by the UNEP GEMS/Water GPCU.
5. The SC will ensure that the UNEP GEMS/Water Programme fits into UNEP's terms under existing and future legal instruments, i.e. currently with Ireland's DFAT and DECLG and the project cooperation agreement with University College, Cork, the Agreement with BMUB, Germany, supporting GEMStat, and the MOU with the National Water Agency of Brazil, ANA .
6. It will ensure that the UNEP GEMS/Water Programme coordinates with the Freshwater and Ecosystems Unit, FEU, in the UNEP Division of Environmental Policy Implementation, DEPI.
7. It will facilitate strategic issues, receive and discuss reports provided by the thematic Working Groups for Data and Capacity Development and make linkages with UN bodies and potential funders as required.

Working Groups

GEMS/Water will receive technical support and guidance by two thematic Working Groups dealing with data related issues and capacity development respectively. The Working Groups provide targeted input to the SC during its meetings and when required between meetings.

Capacity Development Working Group:

The Capacity Development Working Group agrees the CD workplan on an annual basis and assists with prioritising activities and ensuring that the objectives of the GEMS/Water Programme are met. The Working Group comprises water experts from Irish Universities, government agencies and the host University, together with representatives from GEMS/Water partners and UNEP Regional Offices as appropriate. The terms of reference for the Working Group are to:

- Implement the work plan to deliver on the overall strategic objective of building knowledge and skills for the monitoring and analysing of water quality at institutional, national, regional and global level.
- Carry out an analysis of the Centre's strategic plan and ensure that, as appropriate, all opportunities are exploited and all risks are mitigated.
- Consult and collaborate with the Data Working Group and the GPCU to develop and agree a joint yearly work plan of activities for the GEMS/Water programme, based on the resources available.
- Participate in the development, delivery and implementation of various projects, research, workshops and training events.
- Ensure that all reporting requirements to the GEMS/Water Steering Committee and UNEP are met in a timely fashion.
- Work with the GPCU to secure funding from other sources.

- Report to the SC on the implementation of the work plan and recommendations for future steps

Data Working Group:

The Data Working Group agrees the data workplan on an annual basis and assists with prioritising activities and ensuring that the objectives of the GEMS/Water Programme are met.

(ToR to be provided following the inaugural meeting)

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