

**UNEP GEMS/Water Programme  
Technical Advisory Group (TAG) Meeting  
29 – 30 September 2003  
Burlington, Ontario Canada**

**Draft Minutes**

**Present**

Dr. Steve Lonergan, UNEP-Division of Early Warning and Assessment (DEWA)  
Dr. Salif Diop, UNEP-Division of Early Warning and Assessment (DEWA)  
Mr. Patrick M'mayi, UNEP-Division of Early Warning and Assessment (DEWA)  
Mr. Martin Adriaanse, UNEP-Global Programme of Action (GPA), via e-mail  
Dr. John Chilton, British Geological Survey (BGS)  
Mr. Neils Henrik Ipsen, UNEP Collaborating Centre on Water and Environment (UCC-Water) and Global Water Partnership (GWP)  
Mr. Takeo Jimbow, UN World Water Assessment Programme (WWAP)  
Mr. Seiki Igarashi, National Institute for Environmental Studies (NIES) GEMS/Water Japan  
Mr. Shigeru Kariya, National Institute for Environmental Studies (NIES) GEMS/Water Japan  
Dr. Yosuke Yamashiki, advisor National Institute for Environmental Studies (NIES) GEMS/Water Japan  
Dr. Thomas Maurer, Global Runoff Data Centre (GRDC) WMO  
Dr. Michel Meybeck, Université de Paris, International Geosphere-Biosphere Programme (IGBP) Water Group

Dr. Richard Robarts, Director, UNEP GEMS/Water Programme

*Observers included all GEMS/Water staff.*

**Regrets**

Dr. Jamie Bartram Water, Sanitation and Health Programme, World Health Organization (WHO)  
Dr. Avinash Tyagi, Hydrology and Water Resources Department, World Meteorological Organization (WMO)  
Dr. Andras Szöllösi-Nagy, Mr. Mike Bonell, Division of Water Sciences, International Hydrology Programme (UNESCO-IHP)  
Mr. Halifa Drammeh UNEP– Division of Policy Development and Law (DPDL)  
Dr. Rafik Hirji, Senior Water Resources Management Specialist, World Bank  
Dr. Jean-Marc Faurès, Land and Water Development Division Food and Agriculture Organization (FAO)  
Mr. Ingvar Andersson, UN Development Programme (UNDP)  
Dr. Pradeep Aggarwal Isotope Hydrology Section, International Atomic Energy Agency (IAEA)  
Dr. Jac A. M. van der Gun, International Groundwater Resources Assessment Centre (IGRAC)  
Dr. Vitaly Kimstach, Arctic Monitoring and Assessment Programme (AMAP)  
Mr. Hiroya Kotani International Lake Environment Committee (ILEC)

**1.0 Welcome and Introductory Remarks**

The terms of reference for the Technical Advisory Group (TAG) were set by the Steering Committee in October 2002. The TAG is composed of representatives from the UN agencies on the SC and the implementing, assessment and capacity-building partners and other organizations as deemed necessary to provide effective technical leadership to GEMS/Water. These include, but are not limited to, GRDC, ILEC, NIES, BGS, UCC-Water, WWAP, GIWA, GPA, MA, UNDESA, GEO, AMAP, GWP, IGBP, MARC. The biannual meetings (odd numbered years) will permit group members to provide updates on their programmes, linkages with GEMS/Water, initiatives and activities, which have served to fulfill GEMS/Water's mandate and identify new opportunities for joint projects. Recommendations and

advice on such project proposals and specific technical issues will be provided to GEMS/Water for implementation. The TAG should ensure that the GEMS projects are well managed and implemented.

The first Technical Advisory Paper was initiated as a background information tool used to guide the TAG meeting discussions. Specific technical advice resulting from the meeting is reflected in the final TAG Paper, in conjunction with official minutes.

As a senior UNEP official must chair the sessions, Dr. Lonergan opened the meeting, and welcomed the members. His opening words were followed by Dr. Jim Mcguire A/Director General, National Water Research Institute. Dr. Mcguire welcomed the group to Burlington. There was a brief report on progress made with the new GEMS/Water and the status of the Programme. Dr. Salif Diop chaired the meeting on the second day.

This meeting marked the first Technical Advisory meeting to take place, and the 25<sup>th</sup> anniversary of the Programme. (GEMS/Water was established at NWRI in 1978.)

## **2.0 Roundtable Introduction of Members**

All participants introduced themselves, and briefly outlined their association, and organizational linkages with GEMS/Water. There was some discussion on the membership of the Group as a whole, and the need to fill any perceived gaps and recommend potential new members.

## **3.0 2002-2007 Strategic Business Plan Version 2**

Dr. Robarts presented a briefing on the *2002-2007 Strategic Business Plan*, after one year of implementation. The Plan v.2 has been revised to reflect the international agenda, as well as to adjustments within internal priorities and activities. Linkages were outlined with water and sanitation of the Commission on Sustainable Development (CSD-12), the UN's targets in achieving the MDGs and the WSSD implementation plan.

GEMS/Water has achieved several successes over the past year. At present, ongoing challenges and new opportunities influence programming activities. Forward planning and priorities provide a platform for interagency participation in fully implementing the Plan. The *2002-2007 Strategic Business Plan Version 2* will be presented to the Steering Committee for their endorsement in December 2003.

The Group expressed support for the overall scientific directions that GEMS/Water has initiated.

## **4.0 Technical Issues and Initiatives**

The scientific and technical aspects of the Programme were raised in the context of four core activity areas: a) global water quality data, b) assessments, c) data quality (QA/QC) and d) building water quality capacity.

## **5.0 Partnerships, Collaboration and Advice**

Several members made brief presentations including organizational updated, new information and opportunities. These presentations highlight specific partnerships and ongoing activities. These included WWAP, UKGS, GEMS/Water-Japan, and GRDC, all partners of GEMS. These information overviews provided the context for technical recommendations and follow-up activities.

### ***WWAP-WWDR***

The environmental indicators as published in the UN World Water Development Report (**WWDR**) were discussed, in particular, water quality indicators. The methodology used by the Environmental Sustainable Index (ESI) in developing the water quality indicators for countries could have been improved. It was suggested that the World Water Assessment Programme (WWAP) should seek more collaboration from the UN partners. GEMS/Water and other partners should be extensively consulted. Such effort would significantly strengthen the next WWDR process and report.

GEMS/Water has been invited to represent UNEP at UN-Water and associated indicators development meetings. GEMS participates in UNEP's indicator projects.

### ***Typology of Global River Systems (IGBP-TYGRIS Atlas)***

The GRS is an excellent example of interactive digital communication technology being harnessed for environmental information and science. Using the River Nile as an example, it was pointed out that there is need to take into consideration water flow sediment transfer, climate change and history of the watershed, in analyzing the results obtained from sampling stations. It was also pointed out that duplication with other similar initiatives should be avoided.

GEMS/Water is interested in developing an interactive web-based interface, so that users can access data in more useful and relevant ways.

### ***UCC-Water support to UNEP's Water Policy and Strategy***

The UCC-Water's key objective is to support UNEP's strategy and water policy. UCC-Water has made valuable input into GIWA, to IWRM, at regional level West Africa and to GEMS/Water. There is a need for strengthening the working relationship on specified areas with GEMS. Many of the strengths of UCC-water were outlined. One highlight involves the networks of laboratories in Africa with capacity building projects in place. UCC-Water could assist UNEP in capacity building in various regions.

The potential links with GEMS/Water are very strong in terms of both data sourcing as well as laboratory development.

### ***The Global Runoff Data Centre (GRDC)***

The GRDC hydrological linkages with GEMS/Water and data available from GRDC were presented and discussed. Several proposals were given with regards to ways and means of strengthening the data input and sharing common sampling points with GEMS/Water.

GEMS/Water could learn from GRDC's experience and approach where it has been successful in aspects related to data and information exchange.

### ***The British Geological Survey (BGS) – Groundwater***

BGS underscored the importance of carefully planning data collection taking into consideration land use activities that should be included in the parameters to be collected. The land use information collection methods, including the selection of sampling stations, were discussed.

With respect to groundwater, it was noted that GEMS/Water activities should not duplicate those of others, for example IGRAC. It was recommended that BGS gets information on the progress made by the International Groundwater Resources Assessment Centre (IGRAC) on groundwater quality monitoring and assessment. Members felt that there is still a need for GEMS/Water to be involved in Groundwater activities (assessment and monitoring aspects).

### ***National Institute for Environmental Studies (NIES) GEMS/Water-Japan***

The state of monitoring, analysis and dissemination of water quality results in Japan was presented and discussed. The comprehensive plan of the country water quality sampling is effectively handled by different ministries and prefectural governments. There are 23 sampling sites/stations out of over 8800 monitoring stations whose data are sent to GEMS/Water.

GEMS/Water is very supportive of NIES and Japan for their strong support over the years. The members were very pleased with the proposed study for the Mekong River. The region should be encouraged to ensure that their station coverage provides a comprehensive representation for Japan as well as the Mekong riparian countries.

A website is under construction for Japanese audiences with information about monitoring sites, results obtained and linkages with the GEMS/Water Programme. Its objective is to help the people to be well informed about GEMS/Water.

## **6.0 Technical Recommendations and Activities**

TAG members spent considerable time discussing the four activity areas of GEMS, within the broader context of interagency linkages and opportunities. Many concrete recommendations were made for strengthening GEMS/Water activities, and can be summarized as follows:

Geospatial and temporal coverage of GEMS/Water core data should be expanded.

Technical Advisor Group (TAG) members should encourage National Focal Points where there are data gaps to make their country contributions in to the GEMS/Water data bank.

Encourage efficient and productive contribution to GEMS data and information through increased regional presence and activity around the world. The Mekong River initiative by GEMS/Water – Japan is a good example/model.

It was recommended that steps should be taken by UNEP-DEWA, through its links with Global Environment Facility (GEF), to facilitate the creation of historical archives of GEF data once their project has been completed, and to be deposited in the GEMS/Water data bank.

To increase its visibility, it was recommended that GEMS/Water's achievements made and progress and future activities are published in an international journal regularly (e.g. Internal Geosphere Biosphere Programme (IGBP) newsletter).

Emphasis should be placed on Water Quality Assessment. GEMS/Water should be consulted in the use of Indicators by WWAP and approve them in preparation of future publication/s. There is need to be proactive in follow up of assessment issues e.g. indicator development.

Countries that contribute data to GEMS/Water in consultations with GEMS/Water should be rated and the different selected stations categorized for their use and applicability.

Member countries working together with GEMS/Water Programme should be encouraged to submit more data on micro-pollutants, organics and microbial pathogens though it is understandably difficult.

Member countries in consultations with the Programme should provide the optimal number of stations required to adequately/reliably assess the state of water quality in a country

The Programme supported by UNEP should present issues for data access and other relevant issues that need policy level agreement at the Governing Council.

GEMS/Water should follow up on WSSD and MDGs targets and assist in achieving at least 50% of the targets set. A goal should to be set in line with MDGs and WSSD plan of implementation. GEMS/Water should prepare and make an input into the CSD 12 meeting in April 2004

GEMS/Water, UNEP and partners in the UN Family should develop capacity building projects/training courses for developing countries both in terms of human resources and material resources capacity.

GEMS/Water will help WWAP write its next report on governance. WWAP needs to provide a timeline for preparation of the document.

Many more detailed recommendations and proposed initiatives are captured in the Technical Advisory Paper No.1, as the report from the meeting.

## **7.0 Conclusions and Report (TAG Paper No.1)**

Members of GEMS/Water TAG were satisfied at the way the meeting was effectively organized. GEMS/Water programme received valuable advice from TAG members with many suggestions offered for it to effectively achieve the activities given in its business plan. It was clear that GEMS/Water programme has made significant efforts in achieving its work plan.

Once the Technical Advisory Paper No.1 is completed, it will take into full consideration the discussions and recommendations for action that were raised during the course of the meeting. Other follow-up actions could result from the proceedings. Members may wish to suggest ways of strengthening future TAG processes and meetings.

The Group was heartily thanked for their continued commitment to, participation in, and support for, GEMS/Water. Such international recognition is vital to the future success of the programme.

## **8.0 Next meeting**

The Technical Advisory Group is designed to convene every two years. The Group agreed that the next meeting should be tentatively scheduled for spring 2005, and should be notified adequately in advance.