

**ASSOCIATED
PROGRAMME ON
FLOOD
MANAGEMENT**



FINAL ANNUAL REPORT 2018-2019

Date Issued: August 2019



WORLD METEOROLOGICAL ORGANIZATION

The World Meteorological Organization (WMO) is a specialized agency of the United Nations. It coordinates the activities of the meteorological and hydrological services of 193 countries and territories and is the authoritative voice on weather, climate and water.



ASSOCIATED PROGRAMME ON FLOOD MANAGEMENT

The Associated Programme on Flood Management (APFM) is a joint initiative of the World Meteorological Organization (WMO) and the Global Water Partnership (GWP). Since 2001 it promotes the concept of Integrated Flood Management (IFM) as an approach to flood management.



GLOBAL WATER PARTNERSHIP

The Global Water Partnership (GWP) is an international network whose vision is for a water secure world. The GWP mission is to advance governance and management of water resources for sustainable and equitable development. Created in 1996 the GWP network is open to all organizations that recognize the principles of integrated water resources management endorsed by the network.



Executive Summary

The Associated Programme on Flood Management (APFM), a joint initiative of the World Meteorological Organization (WMO) and the Global Water Partnership (GWP), has continued to advocate as well as support implementation of [Integrated Flood Management \(IFM\)](#) strategies worldwide. During the last year, the APFM Technical Support Unit (TSU) has been active in supporting or developing opportunities to apply the IFM concept in practice, amplifying its range of expertise and integrating IFM and Integrated Drought Management (IDM) approaches through initiatives such as the recently approved [Volta Flood and Drought Management\(VFDM\)](#) project for the Volta Basin. The APFM TSU through the IFM HelpDesk in close collaboration with the Support Base Partners (SBPs) has been instrumental in offering technical support to the HelpDesk users on Integrated Flood Management.

The APFM TSU has also been supporting the activities of the WMO Commission for Hydrology (CHy) on advancing End-to-End Early Warning Systems for Flood Forecasting (E2E-EWS-FF). This has been mainly through supporting the CHy Task Teams that are preparing the Flood Risk Mapping Manual, developing approaches to assess national requirements and capabilities for End-to-End Early Warning Systems for Flood Forecasting, and testing the assessment approaches in various countries through WMO initiatives including in the projects of the Climate Risk and Early Warning Systems ([CREWS](#)) initiative. At the same time the APFM and IDMP TSU provided technical expertise to Technical Workshops on *Project Preparation for Transformational Climate Resilient Water Projects* to 49 countries in Africa, Asia and the Mediterranean (with another one in Latin America and the Caribbean planned for the beginning of September 2019) to accelerate access to Green Climate Fund (GCF) resources.

APFM Institutional Developments

The Eighteenth Session of World Meteorological Congress agreed to implement the WMO Constituent Bodies Reform (CBR). This Reform disbands the eight Technical Commissions (TCs) by end of 2019. The new structure of WMO constituent and subsidiary bodies effective January 2020 is shown in the below Figure 1.

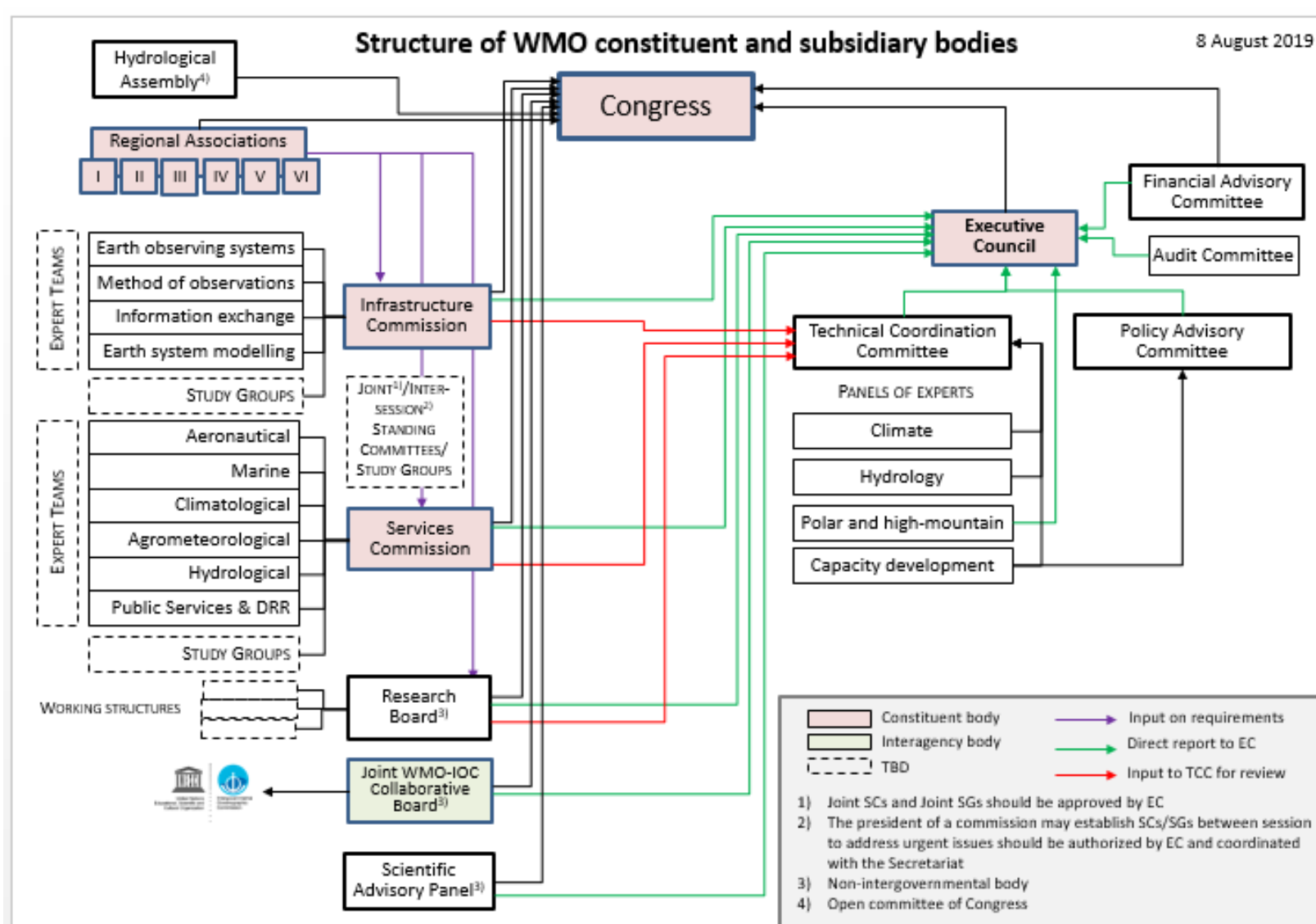


Figure 1 - Structure of WMO constituent and subsidiary bodies

The WMO CBR will affect the structure of the organization, its strategy and priorities, the alignment of its work programmes, its processes and finally the Secretariat. The new reform aims to coordinate systems of observation and data management, to standardize observations and measurements, to provide mechanisms for engaging with partners beyond the WMO community and to harmonize services for decision-making and socioeconomic benefits.

The Commission for Hydrology (CHy) met in an Extraordinary Session in February 2019 to discuss on the role of hydrology in the planned CBR process. CHy proposed and was agreed by Congress [under Resolution-24](#) that “In each session of Congress an open committee of Congress, entitled the WMO Hydrological Assembly, shall be convened. It should be attended as a rule by the Hydrological Advisers of Members (in accordance with Regulation 6 (b)) and by other representatives of National Hydrological Services or other national hydrological agencies as designated by Members” and as well approved the definition of the Operational Hydrology ([Annex 1 to Resolution-24](#)). The Eighteenth Congress established the Hydrological Assembly to provide advice to Congress on strategic decisions related to operational hydrological issues. Moreover, Congress also established the Hydrological Coordination Panel, with EC approving its Terms of Reference. This Panel will support and advise on the integrated delivery of WMO water-related activities and to undertake preparatory work for the Hydrological Assembly in relation to current and emerging scientific and technical water-related global challenges.

In the first Hydrological Assembly, which was held during the Eighteenth Congress, the long term ambitions ‘No one is surprised by a flood’ and ‘Everyone is prepared for drought’ highlighted the need for the APFM and IDMP programmes and their communities of SBPs to strengthen operational hydrological services of the WMO Members.

As the WMO reform will advance through [WMO CBR Transition Plan](#) to the new structure of the technical commissions by end of 2019, the existing Letter of Engagement (LoE) between the WMO and its Working Groups (WGs) and Partners (including SBPs) will be reviewed to identify linkages and scope of work under new different subsidiary bodies. The APFM has already revised its governance structure last year, and it will now review the existing LoE with the SBPs mainly identifying future scope of collaboration or partnerships in implementing the IFM strategies and achieving the APFM vision. Also during the Executive Council (EC) meeting in June 2019, [under resolution-5](#), it was agreed representatives of CHy in the major ongoing hydrological initiatives (including APFM Support Base Partners forum) will continue exercising their roles until such time when the appropriate body in the new WMO structure will define new representatives.

Also, the World Meteorological Organization (WMO) and Global Water Partnership (GWP) are increasing their long-standing cooperation to strengthen water resource management at a time when climate change, population shifts and environmental degradation are leading to more stress on water supplies and more water-related hazards.

The two organizations signed a Framework Memorandum of Understanding (MoU) on strategic collaboration to achieve the objectives of Integrated Water Resources Management. It was signed on 6 June 2019 during the opening of the Hydrological Assembly held at the Eighteenth World Meteorological Congress. The MoU has the objective to further strengthen collaboration on the joint initiative programs on integrated flood (APFM) and drought (IDMP) management.



The new WMO/GWP MoU identifies four priority areas for strategic collaboration:

- Strengthen the management of hydro-climatic extremes through the joint programs on flood (APFM) and drought (IDMP);
- Strengthen the capacity of countries to develop high priority bankable water and climate projects;
- Strengthen stakeholder engagement on developing water information and products at the regional and country level through on-going collaborations with other WMO programs ([GFCS](#), [HydroSOS](#), [HydroHub](#), World Water Data Initiative (WWDI)).
- Joint programs, project development, service delivery and joint resource mobilization such as the joint preparation and implementation of the VFDM project in the Volta Basin.

On July 11 2019, GWP introduced its [new six-year strategy \(2020-2025\)](#) at the High-Level Political Forum of the United Nations in New York (USA). The new GWP Strategy is shaped specifically to speak to the urgency of coordinated action across the 17 Sustainable Development Goals (SDGs) to help deliver water secure, inclusive, and climate-resilient development. The GWP strategy focuses on three main areas of work: water solutions for the Sustainable Development Goals, climate-resilient development, and transboundary water cooperation with integrated flood and drought management anchored in the climate resilience theme being a major area of bringing the strategy to life. As countries and development partners work to address major water challenges, GWP will mobilise key players and learn from new experiences to create and maintain momentum for coordinated action. The strategy also emphasises engaging with the private sector, ensuring that youth participate in decision-making, and taking a gender-inclusive approach to water secure development.

The High-Level Panel on Water (HLPW), through the Government of South Africa, commissioned GWP to develop a HLPW legacy water initiative for Africa. In response, the Africa Water Investment Programme (AIP) has been developed in collaboration with African Union and the African Development Bank (AfDB) Africa Water Facility. The APFM and IDMP have been approached to secure their technical expertise and respective communities for the implementation of the AIP ([link to AIP website](#)).

Implementation of the APFM Business model

The APFM TSU continued the implementation of a new Business Model in its activities, as highlighted during last SBPs forum in August 2018, bringing its technical and convening capacity to bear in initiatives financed by others (e.g. World Bank, Inter-American Development Bank (IDB) etc.), which require technical assistance and guidance on developing strategies or project proposals on the implementation of E2E-EWS-FF and IFM in general. The APFM with its SBPs will respond to WMO Members' needs for developing capacities of the NMHSs and other key stakeholders for managing floods and drought events using integrated approaches. The APFM Business model will be adopted for every source of funding (coming from the development of project proposals or implementation support (technical assistance), linkages with other WMO, GWP or SBP activities, core support from financial partners or in-kind support from the WMO and GWP resources to further strengthen resource mobilization and outreach) with the aim to ensure application of APFM tools and methodologies are in practice. (see Fig.1).



Figure 2 - main areas of the APFM business model

Volta Flood and Drought Management Project (October 2018-June 2020)

The Adaptation Fund during its 32nd Board Meeting (held in Bonn, Germany between 9-12 October 2018) endorsed the regional VFDM project proposal entitled “[Integrating Flood and Drought management and early warning for climate change adaptation in the Volta Basin](#)”, granting USD 7.92 million for its implementation.

The targeted project countries include Benin, Burkina Faso, Cote d’Ivoire, Ghana, Mali, and Togo. The VFDM project is the first large-scale and transboundary implementation of Integrated Flood and Drought Management strategies through the complete chain of End-to-End Early Warning System for Flood and Drought Forecasting.

Following are the activities which were carried out between October 2018 and June 2019 in the VFDM project:

Oct 2018

- Approval of the project by the Adaptation Fund Board
- Informing the contributing entities and project countries
- Press release and flyers



Jan 2019

- Signing of the agreement with the Adaptation Fund
- Opening of Trust Fund in WMO Discussion with the potential Partners



Feb-Apr 2019

- Selection process of the WMO project manager
- Discussion of next steps with the project executing partners (Volta Basin Authority (VBA) and GWP West Africa)
- Agreement of the dates for Inception Workshop



May 2019

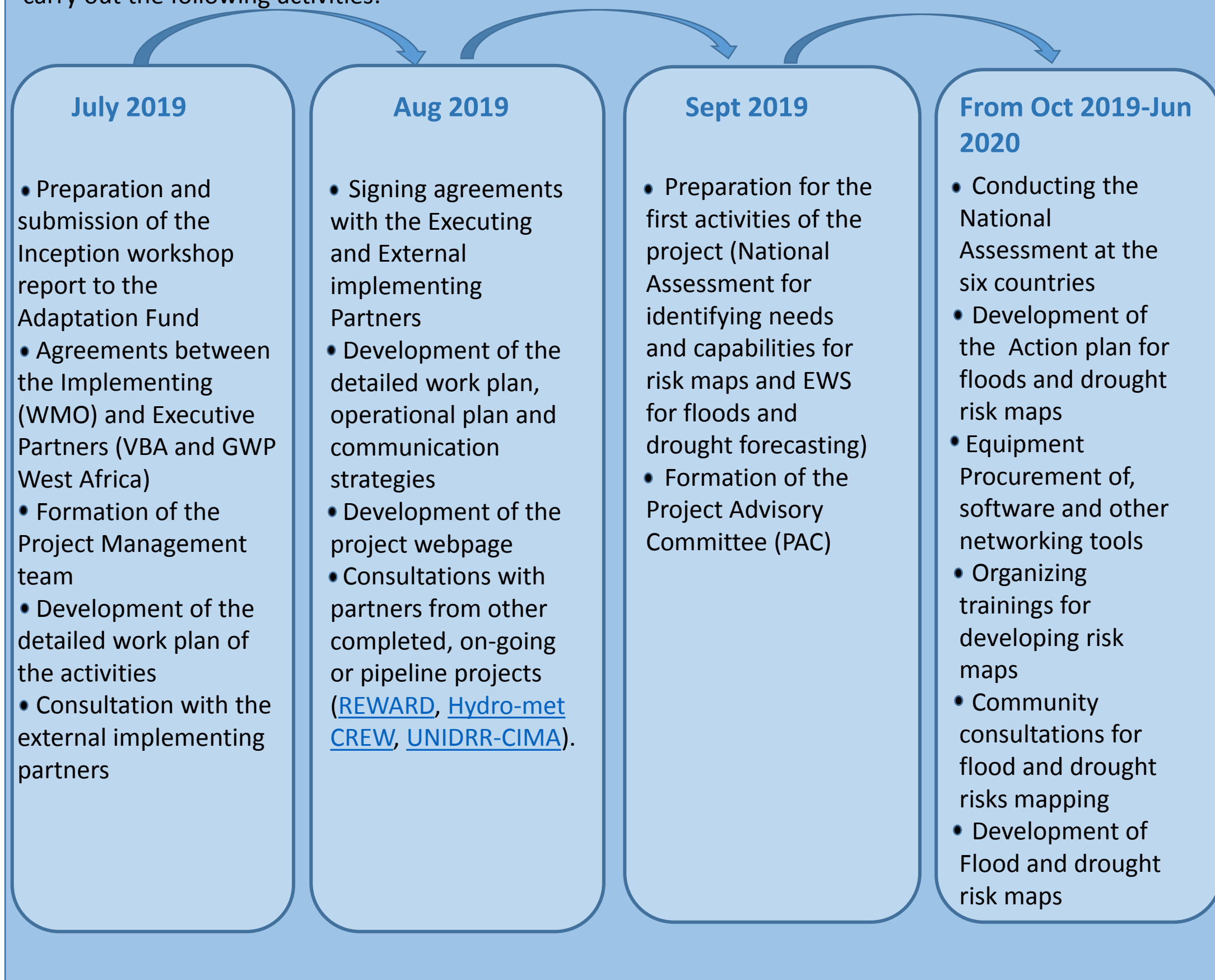
- Appointment of the WMO Project Manager
- Preparation for the project Inception Workshop (concept note, informing the participants, logistical arrangements)



Jun 2019

- Conducting the Inception workshop and executing partners meeting in Abidjan, Cote d’Ivoire (more than 50 participants attended from national and international agencies including SBPs)

The Inception Workshop (kick-off meeting) is marked as the official start of the Volta project. However, the first three months are scheduled as the Inception phase of the project. During this phase, it is planned to carry out the following activities:



Even though the funding for the project is approved for four years, the current financial support from the Adaptation Fund is provided only for the first year of the project. At the end of the year, the Implementing Partner (WMO) has to submit a detailed project performance report (PPR) with an activity progress report including financial expenditure and information on environment, social and gender risk compliances. Once this report is approved by the Adaptation Fund, the second instalment of the project funds will be made available to the Implementing Partner (WMO) for executing the activities planned for the second year in close coordination with the other two executing partners (Volta Basin Authority (VBA) and GWP West Africa).

APFM SBPs Expert Service and Proposal Development:

SBPs such as CIMA and CERFE contributed throughout the preparation of the Volta project proposal by reviewing the concept note as well as the Environment and Social Impact Assessment (ESIA) report. The TSU will collaborate with both partners to receive their technical expertise in the implementation phase of the VFDM project as they have previously worked in the region as well as their implemented activities are similar to the project activities.

During the reporting period, few requests originating from SBPs have been received by the TSU to develop joint project proposals. The TSU looks forward to receiving requests for joint development of proposals from the SBPs under H2020 calls or any other funding mechanism.

Technical Assistance through IFM HelpDesk

The IFM Helpdesk continues to receive requests for support from users working on flood management during the reporting period.



Details about the HelpDesk request is presented in the below table (check Annex 1 for more information).

374 Since the inception Average: 37 per year	55 Requests received in 2018 and 2019 +33% compared to the average
Type for requests in 2018 and 2019 9 Assistance for the Strategy 20 Capacity Development 26 Rapid Guidance	Type of requesting Institutions 4 - Private companies/NGO's 15 - International Organizations 22 - Governmental Agencies 11 - Universities and Academia 3 - Others Others-Group of International experts

Some of the Expert Services provided through the IFM HelpDesk include:

IDB: The APFM TSU continued providing support to the Inter-American Development Bank (IDB) to perform hydrological assessments in Ecuador and Costa Rica. APFM was invited by IDB to present at the LATINOSAN conference in Costa Rica in early April 2019. This provided the opportunity to meet with relevant stakeholders at the national level in view of the future hydrological assessment in Costa Rica. The GWP country and regional partnerships have been linked for additional support.

ECOWAS-WA: The World Bank approached the APFM TSU (through the [CREWS](#) Technical Coordinator in WMO) to provide technical guidance and support in developing flood management strategies for the [15 ECOWAS Member countries](#), in joint collaboration with [WASCAL](#). The expert service is planned to be delivered during 2019. An agreement has been signed with the World Bank in June. The first Technical Meeting to discuss the Strategy was held in Dakar, Senegal in April 2019. A former TSU member attended the meeting in her capacity as an APFM Consultant.

IFM support in Mozambique: Following a request by the Permanent Representative of Mozambique to WMO to conduct a post-disaster assessment visit in the country, the TSU provided necessary support and expertise (involving GWP and SBPs such as TU Dresden and PROHIMET) to carry out a Country Assessment on current capabilities on E2E-EWS-FF and future strategies for Integrated Flood Management (IFM) in Mozambique.

Hydro-met services in Cote d'Ivoire: In the framework of the WMO Country Support Initiative (CSI), the TSU has been approached by the National Meteorological Service (NMS) of Cote d'Ivoire ([SODEXAM](#)) to provide support in developing a flood management strategy, including hydrological forecasting and early warning system, at the national level. A proposal has been submitted to SODEXAM; and the TSU is currently discussing the next steps with the WMO CSI team and the focal point of the SODEXAM.

E2E-EWS-FF support in Myanmar: Still under the CSI, WMO has signed an agreement with the Republic of the Union of Myanmar to provide technical assistance for the Modernization of the Department of Meteorology and Hydrology (DMH). The TSU will provide necessary support in the complete chain of the E2E-EWS-FF to improve the quality of weather, climate and hydrological information and services in Myanmar. This will include also expertise on IFM.

New Project Proposal Preparation (Chad, Malawi, Nigeria, Senegal)

The IFM HelpDesk has been one avenue for receiving requests to provide technical and implementation support in the overall framework of the Expert Service approach. The APFM TSU through the HelpDesk received a request from the Directorate of Flood Prevention and Management, Senegal for developing and implementing integrated flood management strategies at the national level. Similarly, a HelpDesk request was received from the Department of Climate Change and Meteorological Services of Malawi to provide information and support on IFM pilot projects. Based on the approval of the Integrated flood and drought management project in the Volta Basin (VFDM), the Nigerian Meteorological Agency and National Weather Research Centre has shown interest in replicating the VFDM activities in other basins of West Africa, such as the Niger Basin.

The TSU has made initial contacts with the above counterparts and will continue to identify needs and develop the next steps ensuring a cost recovery approach. The TSU has already involved GWP regional and national focal points in the initial discussions and will request support from the SBPs and other WMO programmes once the scope of activities are defined.

APFM Training Manual on Mainstreaming Gender and CBFM Phase-II proposals

- A Training Manual for Mainstreaming Gender in E2E-EWS-FF and IFM is currently under finalization. The draft manual will be adapted to the regional context of West Africa and will be tested in September 2021 under the framework of VFDM project. The TSU is looking for other regions where the manual could be tested, possibly in South Asia and Latin America, with support of potential donors.
- As mentioned in the previous SBP forum, the Community-based approaches for Flood Management (CBFM) Phase-II proposal has been drafted to ensure the sustainability of the activities carried out in the first pilot phase of the CBFM project between 2013-2016. APFM continues to seek potential donors to fund the project proposal for the second phase.

APFM linkages with other WMO and GWP initiatives

WMO Flood Forecasting Initiative (FFI)

APFM is continuously seeking linkages with other WMO activities, especially in the area of E2E-EWS-FF, to be integrated with the IFM activities mainly in the areas of national assessments, policies, strategies and capacity building for floods and drought management (through and in collaboration with the IDMP).

Also, under the FFI Advisory Group Work Plan for 2016-2019, a 'Community of Practice' approach for the Flood Forecasting Initiative is being requested to be implemented. Currently, with the WMO CBR, the FFI Advisory Group needs to be formalised again and a new work plan for 2019-2023 needs to be prepared (or to present the Action/Work Plan and a Declaration to be submitted to the Extraordinary Congress in 2021 which will be mainly hosted for the theme of Hydrology). The Action Plan for the Community of Practice may have the SBP Forum of APFM serve as a flood management discussion forum or 'thread' under this 'Community of Practice (CoP)' of the WMO Flood Forecasting Initiative.

The APFM TSU is also discussing with the Water Youth Network (WYN), which is a youth professional network working in disaster risk management, to provide support in the development of the CoP under the WMO FFI and the APFM and also provide regular monitoring to ensure participation and engagement of the community.

WMO Country Support Initiative (CSI)

The World Meteorological Congress during its eighteenth meeting approved the WMO Country Support Initiative, which aims to help developing countries overcome the major capacity constraints that they face in responding to rising demands for high-quality weather, climate, and hydrological services. Under this initiative, a technical advisory support to developing countries and development partners (Green Climate Fund, World Bank and other multilateral development banks) will be provided, harnessing the extensive knowledge and expertise within WMO institutional network with more than 2,000 specialists worldwide. The APFM, through its SBPs and GWP Regional and Country Water Partnerships experts, will look to provide technical support to development partners on strengthening Hydromet services in developing countries.

Technical Workshops on Project Preparation for Transformational Climate Resilient Water Projects

The APFM and IDMP TSU provided technical expertise to *Technical Workshops on Project Preparation for Transformational Climate Resilient Water Projects* in Africa, Asia and the Mediterranean (with another one in Latin America and the Caribbean planned for the beginning of September) to accelerate access to Green Climate Fund (GCF) resources. These workshops were convened by GWP jointly with regional development banks and technical inputs from the Green Climate Fund (GCF) and WMO. To date representatives of National Designated Authorities (NDAs) for the GCF, of GCF Direct Access Entities (DAEs), and of Water Ministries from 49 countries have participated in these workshops. At the workshop and in the follow-up APFM and IDMP guidance has been provided to the project ideas, which participating countries are currently developing.

Africa Water Investment Programme (AIP)

The High-Level Panel on Water (HLPW), through the Government of South Africa, commissioned GWP to develop a HLPW legacy water initiative for Africa. In response, the Africa Water Investment Programme (AIP) has been developed in collaboration with African Union and the African Development Bank (AfDB) Africa Water Facility.

In February 2018, the Governing Council of the African Ministers Council on Water (AMCOW) also adopted a Decision for transformation of Africa's water investment outlook through increased partnerships and implementation of an African Water Investment Programme (AIP). The Ministers called for continued cooperation of GWP and partners to implement the AIP and AMCOW Strategy 2018 - 2030 in pursuit of the vision of a water secure Africa.

The APFM and IDMP have been approached to secure their technical expertise and respective communities for the implementation of the AIP.

The goal of the AIP programme is to transform and improve the investment outlook for water security and sustainable sanitation for a prosperous, peaceful and equitable society. The overall objective is to enhance job creation through Gender sensitive investments in water security, industrialization and climate resilient development.

The expected outcomes of the programme are:

- Delivery of critical infrastructure and project preparation accelerated, meeting the needs of water dependent growth sectors and the poor.
- African Water and Sanitation Investment Guarantee Fund established
- SDG 6 'Investments Cases' on water and sanitation developed and support job creation, gender empowerment and industrialisation
- Gender Transformative Water security, sustainable sanitation and climate resilience integrated in development
- Bankable projects prepared on water-energy-food-ecosystems nexus and governance assisted to access finance for implementation
- Transaction management related blockages and log-jams removed for transformational transboundary and national water projects
- Innovative public-private partnerships, knowledge and capacity of institutions strengthened for improved water governance at all levels

With the following headline results and impact:

1. \$30 billion leveraged by 2030 towards water and sanitation related investments
 2. Africa Investment Guarantee Fund established and operationalized
 3. 250 million people benefit from economic opportunities generated through investments
 4. 4 million indirect jobs for vulnerable and poor youth, women and girls
 5. 1 million direct jobs created through investments in water and sustainable sanitation
 6. Priority water infrastructure projects under PIDA and AWF prepared to bankability and financing
- ([Further information is on the AIP website](#))

Interaction with and support to the High-level Experts and Leaders Panel on Water and Disasters (HELP)

GWP organized upon the request of the High-level Experts and Leaders Panel on Water and Disasters (HELP) and funding from the Ministry of Land, Infrastructure, Transport and Tourism (MLIT) of Japan and the National Graduate Institute for Policy Studies (GRIPS), Japan, five regional consultations on the proposed HELP Principles on Investments and Financing for water-related disaster risk reduction. The consultations were led by the HELP Secretariat with support by five GWP regional secretariats and the GWP global secretariat, which provided a platform of stakeholders and facilitated the discussions. The concept of integrated flood management came out strongly in the consultations ([link to report of consultations](#)).

Through the GWP network experts were also mobilized to contribute case studies to the [HELP Global Report on Water and Disasters 2019](#) on Cyclones Idai and Kenneth in South African Region in March and April, 2019; Floods in Kerala, India in September, 2018 and Floods in Nigeria in July, 2018, providing lessons on integrated flood management.

Linkages with other WMO and GWP projects

Assessment of National needs and capabilities in Burkina Faso under Climate Risk and Early Warning System (CREWS) initiative:

The tools, methodologies, findings and external experts used for the national needs and capabilities assessment for E2E-EWS-FF that has been undertaken in Burkina Faso will be used to develop the approaches to be undertaken as part of the Volta project. This would extend the assessment to the other 5 countries, namely Benin, Cote d'Ivoire, Ghana, Mali and Togo, and may result in complementary work being undertaken in Burkina Faso. The national assessment of needs and capabilities for the E2E-EWS-drought will be developed, building on the work of the existing assessment approach for floods, and this effort will draw upon the expertise and knowledge of the APFM and IDMP SBPs.

Assessment of National needs and capabilities for E2E-EWS-FF in Dominican Republic under CREWS

The National needs and capabilities assessment for E2E-EWS-FF has been undertaken in Dominican Republic between January –May 2019 using the Assessment Matrix developed by the CHy task team and carried out by external consultants, for which the APFM TSU (in the wider framework of the Hydrology and Water Resources Programme of WMO) provided necessary technical support in the formulation of the assessment plan. It is planned in mid-August 2019 to present the findings of the assessment as well as propose and finalize next steps with the experts of the national hydrological and meteorological agencies of Dominican Republic.

APFM contribution to the Hydrological Services proposal:

The CREWS steering committee recently approved the CREWS Togo component and APFM TSU provided necessary technical support for developing the proposal ensuring the IFM concept is integrated with other climate related services. Also, the APFM TSU is assessing if and how the VFDM project activities can provide complementarities or build synergies with the activities of CREWS Togo.

Lake Chad EWS/HYCOS:

The GWP regional partnership and the Lake Chad Basin Commission (LCBC) with support from the APFM and IDMP TSUs started the development of a project for the Lake Chad basin, which was endorsed at the sidelines of the UN General Assembly in fall 2018 in New York as one of Africa Adaptation Initiative (AAI) "Flagship" projects ([link here](#)). This project will include elements related to the strengthening of the hydrometric network and reinforcement of early warning systems. Work has started involving closely WMO, GWP Central Africa and the Lake Chad Basin Commission to tap funding opportunities. Elements have been included in a July 2019 submission of UNDP, GWP, WMO and UNITAR project to the German funded International Climate Initiative (IKI). Other funding channels are also actively explored including a link to the WMO/World Bank Lake Chad CREWS project currently also under development.

Integrated flood management initiative with the Lancang Mekong Water Resources Cooperation Center (LMWRCC)

The APFM TSU provided technical expertise and knowledge resources on integrated flood management project preparation to a GWP - Lancang Mekong Water Resources Cooperation Center (LMWRCC) workshop on flood and drought management in Dali, China in December 2018. Development of a project is being discussed by project partners, which have been informed of the APFM's readiness to engage.

Resource Mobilization and Outreach

APFM is consistently looking for opportunities to attend appropriate events and conferences where its available resources and expertise can be presented to the wider audience. The programme outreach will help in identifying new avenues for partnerships. Some of the events actively attended by the TSU are highlighted below:

Second Multi-Hazard Early Warning Conference (MHEWC-II) 13 - 14 May 2019, Geneva

The APFM TSU participated in the side events 'Bridging disciplines and building networks to future-proof MHEWS - young professional's perspective' to promote the APFM approach in involving youths in the EWS development and dissemination. The APFM TSU took this opportunity to meet with the young professions working in different areas of disaster risk management and also shared with them information on the APFM programme, its objectives, strategies and partners.

Global Platform on Disaster Risk Reduction

The APFM TSU participated in the Global Platform on Disaster Risk Reduction (GPDRR), 15-17 May 2019 of UN DRR, co-organizing an official session on '[Integrated Risk Management, Ecosystems and Water-Related Risks](#)' and through GWP publishing a GPDRR Issues Brief "[Water Management - Transforming Disaster Management from Response to Preparedness and Resilience](#)" promoting the approach of the APFM and IDMP.

LATINOSAN APFM was invited by the IDB to present its activities at the LATINOSAN conference in April 2019 in Costa Rica. The panel discussion proved successful and was attended by around 300 participants.

Global Adaptation Week

The APFM presented in several side events and was active throughout the Global Adaptation Week, which included the National Adaption Plan (NAP) Expo 2019 organized by the by the Least Developed Countries Expert Group (LEG) under the UNFCCC, in collaboration with various bodies and organisations from 8 to 12 April in Songdo, Republic of Korea. The aim of the NAP Expo is to exchange experiences and foster partnerships between a wide range of actors and stakeholders on how to advance National Adaptation Plans (NAPs). Taking place in the host city of the Green Climate Fund (GCF), APFM-IDMP-GCF collaboration was discussed with GCF staff. The [second edition of the NAP Water Supplement "Addressing Water in National Adaptation Plans - Water Supplement to the UNFCCC NAP Technical Guidelines"](#), which features APFM and IDMP developed tools and resources for adaptation planning was also launched during the week.

United Nations Climate Change Conference COP-24

The APFM TSU attended the United Nations Framework Convention on Climate Change Conference of the Parties (UNFCCC COP24) event held between 2 and 15 December 2018 in Katowice and presented the APFM tools and publications to the other participants. The COP provided opportunity to network with other participants working in the field of flood management as well other activities related to climate change events.

Participation to the ANYWHERE Annual workshop

APFM is a member of the stakeholders board of the [ANYWHERE project](#), attended the third meeting of the project at the end of November 2018 held in Barcelona.

The participation to the progress workshop provided opportunity to review the products and tools developed and delivered through the project as well as build contacts with professionals of various organizations working in the area of hydrology and meteorology services. The APFM TSU has been invited to attend the fourth and final stakeholders board meeting, to be held in Brussels during October 2019.

ICFM-8

APFM has been invited to be an organizing partner for the 8th International Conference on Flood Management, to be held in Iowa City, USA, in the summer of 2020. Discussions are currently ongoing to organize special sessions in cooperation with other partners of the International Flood Initiative (e.g. UNESCO-IHP, ICHARM, etc.).

Catalogue of Services (CoS)

The CoS is important for showcasing the products and expertise of APFM and its partners. The APFM TSU requested the SBPs to provide new information (trainings/workshops, pilot projects, tools etc.) which can be added to the CoS that is currently available on the APFM website. This will help the APFM TSU as well as a multiple of others visiting the site to know about the new products and services offered by the SBPs.

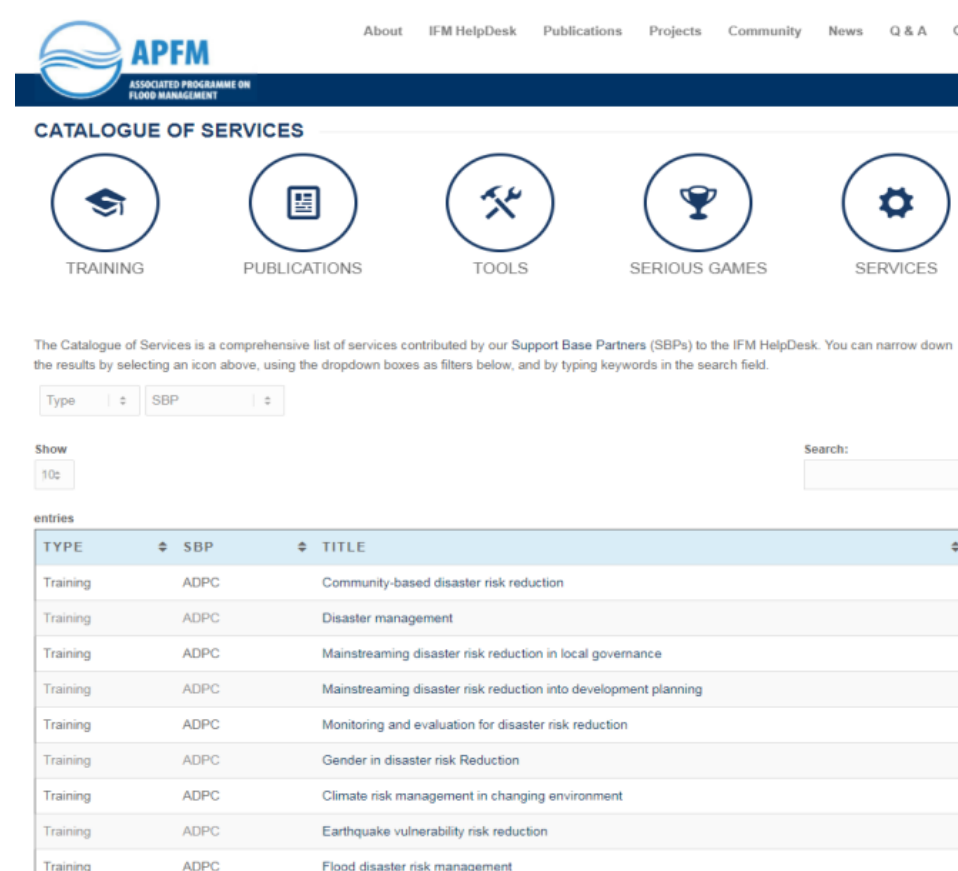


Figure 3 - Screenshot of CoS under the APFM website



Completion of the 'Preparing our Home'–Water Youth Network (WYN)- Canada

The Preparing our Home project has been successfully completed by the Xetoclaw community school, winner of the WYN competition in 2017. The APFM communication officer provided necessary support in designing the layout of the project Brochure. The project Brochure is available at the APFM website for other users who could potentially use the methodologies in their region. The APFM TSU will explore the possibility with donors of implementing a cost-effective approach to replicating the Preparing our Home project in other regions and communities.


Restructuring of APFM Website

As informed during last year's APFM SBP forum as well as in the first SBPs virtual forum held in January 2019, the APFM website is in the process of being restructured to improve its usability as well as harmonize the user experience with the website of the APFM's sister programme, the Integrated Drought Management Programme (IDMP). Given that a communication officer is no longer available in the APFM (nor in general in the CLW Department of WMO), the restructuring of the APFM website is currently on hold. Within the APFM website, it was also decided to host the VFDM project webpage for the donor as well as for all other stakeholders of the project. This could possibly provide the opportunity to synergize the use of project funds in revamping the APFM website. The APFM TSU is currently exploring ways to outsource the communication and outreach related activities to an external organization or an independent consultant.

SBPs forum LinkedIn group page and Community of Practice

The last SBP forum meeting and previous Advisory Committee and Management Committee (AC/MC) meetings suggested that APFM should find ways of communicating with SBPs regularly in addition to the yearly face-to-face meeting. In light of this, the TSU developed a LinkedIn page named 'Flood & Drought Management SBP Community Forum' ([link to group](#)) and invited SBPs to join the group page. Despite several personal emails, as of the time of writing this report, only 16 members have joined, out of which 6 are current or former APFM TSU or WMO/GWP staff. The remaining ten members are from only 5 SBPs. On the LinkedIn group page, the TSU regularly provides updates on the activities of the APFM and also requested SBPs feedbacks or support on some activities. During the APFM SBPs meeting on 23 August 2019 in Stockholm, participants will be requested to provide feedback and suggestions for improving the visibility of and participation in the LinkedIn group page. Otherwise, should levels of participation remain low, a new mechanism for regular communication will need to be identified.

As explained above the WMO Flood Forecasting Initiative (FFI) Action Plan for the Community of Practice may have the SBP Forum of APFM serve as a flood management discussion forum or 'thread' under this 'Community of Practice (CoP)'. Discussions with the Water Youth Network to provide support in the development of the CoP under the WMO FFI and the APFM and regular monitoring to ensure participation and engagement of the community is being discussed.



Flood & Drought Management SBP Community Forum
Unlisted group


Ramesh R Tripathi
Flood manager and smart & sustainable communities/cities designer
2h

For the Volta Flood and Drought Management project, we are going to have a Project Advisory Committee (PAC) providing strategic guidance and support to the project team ensuring activities results meet the project's objectives. The Terms of Reference and other information of the PAC is available in the attachment.

We are currently looking for potential individuals or organizations who could be part of the PAC. The APFM TSU is looking forward to receiving potential names from the SBPs.

Annex 8: Terms of Reference for the Project Technical Advisory Committee and proposed meeting and reporting mechanism

The main task of the Project Advisory Committee (PAC) is to provide strategic guidance and support to the project team ensuring activities results meet the project's objectives.




Ramesh R Tripathi
Flood manager and smart & sustainable communities/cities designer
3w • Edited

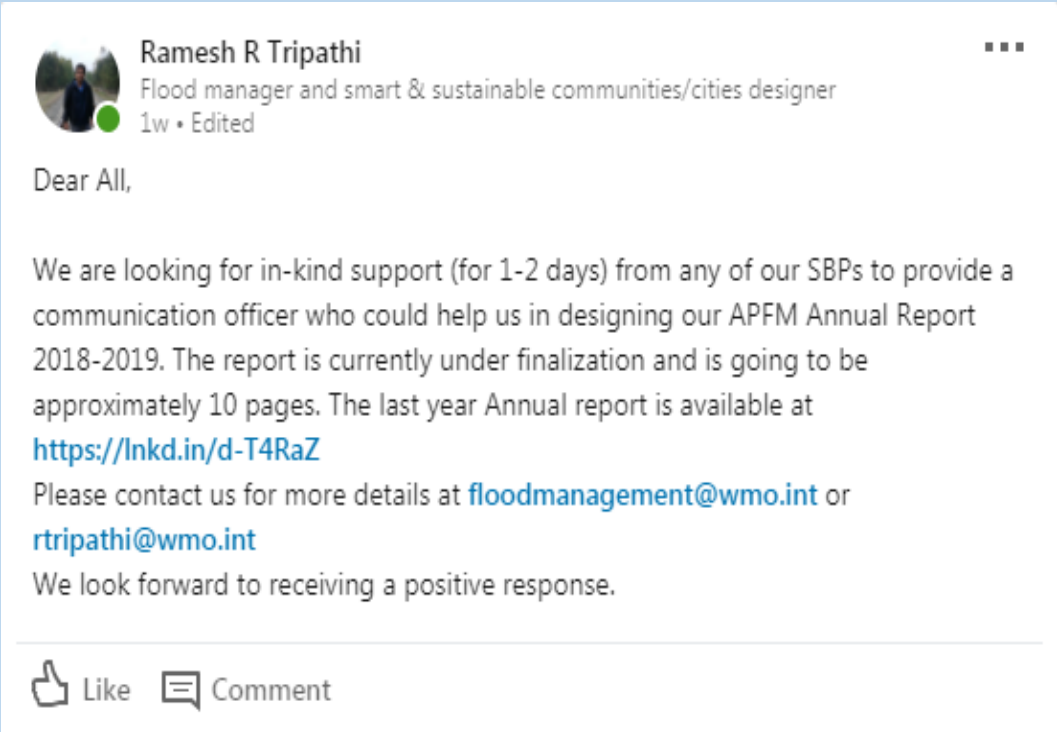
Dear All,

The Inception workshop and executive partners meeting under the framework of the Volta flood and drought management (VFDM) project has been successfully conducted and completed on 25th and 26th June 2019. The workshop was attended by more than 40 participants from the six project countries along with the executive partners (WMO, GWP-WA, VBA), APFM TSU and SBPs (CIMA, Cerfe). The inception workshop report is currently under preparation and will be shared soon with everyone.

The inception workshop is considered as the official start of the project.



Like Comment



Ramesh R Tripathi
Flood manager and smart & sustainable communities/cities designer
1w • Edited


Dear All,

We are looking for in-kind support (for 1-2 days) from any of our SBPs to provide a communication officer who could help us in designing our APFM Annual Report 2018-2019. The report is currently under finalization and is going to be approximately 10 pages. The last year Annual report is available at <https://lnkd.in/d-T4RaZ>

Please contact us for more details at floodmanagement@wmo.int or rtripathi@wmo.int


We look forward to receiving a positive response.

Like Comment



Frederik Pischke • 1st
GWP/WMO Senior Programme Officer
2mo

What do you think about the UN Global Assessment Report on Disaster Risk Reduction 2019 (#GAR19) released last week at #GP2019Geneva. A. Sezin Tokar, Edith Bonilla Lopez, Firas ALJANABI, Jose Alfredo Garza, Giacomo Teruggi, Ramesh R Tripathi, Antonio Parodi and colleagues? Can it help us give further impetus to implement IFM?



Welcome to the Global Assessment Report
gar.unisdr.org

Like Comment

The way forward

For the next period, the APFM TSU, through the VFDM Project Manager based in Geneva, along with the other executing partners, namely the GWP-WA and VBA, and some of the SBPs will work on implementation of the Volta project activities planned between July 2019 to June 2020 and beyond. The TSU requests all SBPs to provide requested support and guidance in the implementation of the project activities through tools, methodologies and expertise.

In parallel, the APFM TSU will identify new opportunities focussing on E2E-EWS-FF (Integrated Flood and Drought management in general) in various regions (national, transboundary) to develop new project proposals through GWP, particularly its Regional and Country Water Partnerships (RWPs and CWP), WMO initiatives and the SBPs. These would be submitted to the relevant financial institutions. This will complement the existing provision of Expert Services to other WMO and GWP initiatives such as CREWS, CSI, WB Hydromet technical support, Africa Investment Programme, joint workshops with the Green Climate Fund (GCF) and regional development banks etc.

Furthermore, the APFM TSU will liaise with the Office of Development Partnerships in WMO, which is in charge of developing the Expert Services strategy and its implementation, to provide it with information on the type of services and expertise that are available through the network of APFM SBPs. This will hopefully lead to additional opportunities and collaborations on a number of initiatives on provision of expert services to Development Banks and other Financial Institutions such as the Green Climate Fund (GCF) as currently foreseen under the Country Support Initiative (CSI).

The APFM TSU will continue to identify potential donors or financial institutions to support the core activities of the APFM such as the IFM HelpDesk management, Communication and Outreach, and Coordination with the SBPs. Furthermore, APFM will regularly collaborate with the SBPs through the virtual SBP forum, for example, through videoconference meetings to be held after 5 months of the face-to-face SBPs forum. This would allow periodical engagement with the SBP network to brainstorm and discuss possible synergies in project proposal development, expertise service, communication and outreach. More frequent videoconference meetings would be arranged as required.

The APFM TSU will identify communication expertise for completing the restructuring of the APFM website, as well as other communication related activities. The IFM Helpdesk will be restructured to include E2E-EWS-FF aspects and align it with the Integrated Drought Management HelpDesk to realize greater synergies. This will be dependent on availability of funding for the core activities. The discussion with the Water Youth Network (WYN) will be carried out to see how best its young professionals could be engaged in developing and maintaining the CoP as part of the APFM and the WMO FFI initiatives linking the IFM and IDM activities.

Annex I – List of IFM HelpDesk Requests

As per the recommendations of the Advisory and Management Committees of 2015, the lists of HelpDesk requests have been aggregated into a single list, independent of the channel through which the request has been received. Criteria on the consistency of aggregated data are provided at the beginning of Annex I in the APFM Annual Report 2015-2016 (APFM Report No. 39).

Since 2009, and as of July 2019, 374 requests have been received with an average of 37 per year. Of these 374, 28 were not fully addressed due to inappropriate requests (e.g. request for conference sponsorship, withdrawal, spam or lack of follow-up) from the requesting party. This translates into a rate of fulfilment of HelpDesk requests of more than 92%.

As shown in Figure 1 the most abundant type of request has been the "rapid guidance" (167 requests - 44.65%), followed by capacity building (130 requests - 34.76%). The category "assistance for strategy" covers almost one- fifth of the total requests 20.59% (77 requests) from 2009 to July 2019.

Regarding the requesting institutions, "International Organizations" (134 requests - 36.10%) is the category that made the most use of the HelpDesk, as shown in Figure 2. The remaining requests were from governmental agencies (21.39%), universities or academic institutions (25.30%), NGOs or private consulting companies (16.58%) and from others¹ (0.8%).

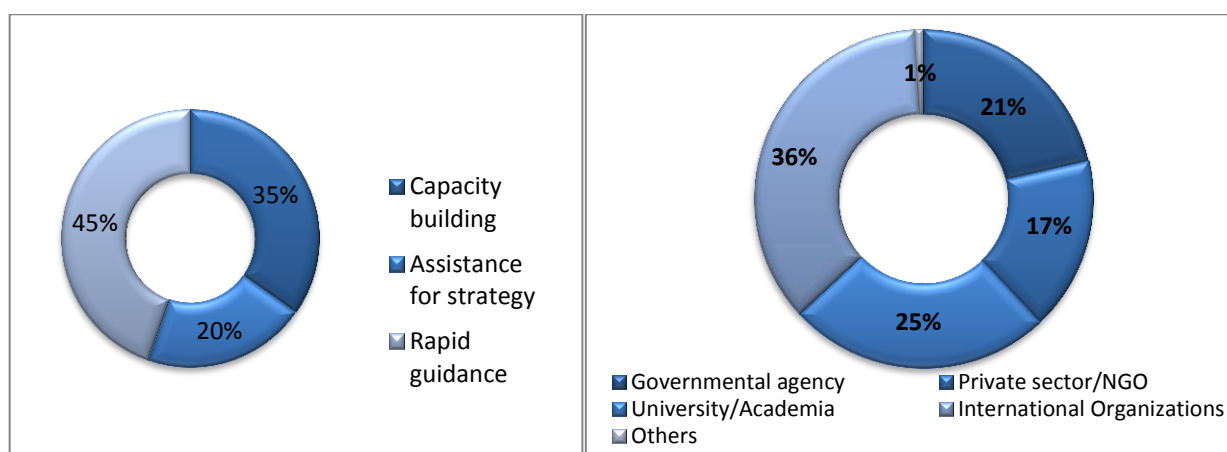


Figure 1: Percentage of requests by type between 2009-2019

Figure 2: Percentage of requests by institution type between 2009-2019

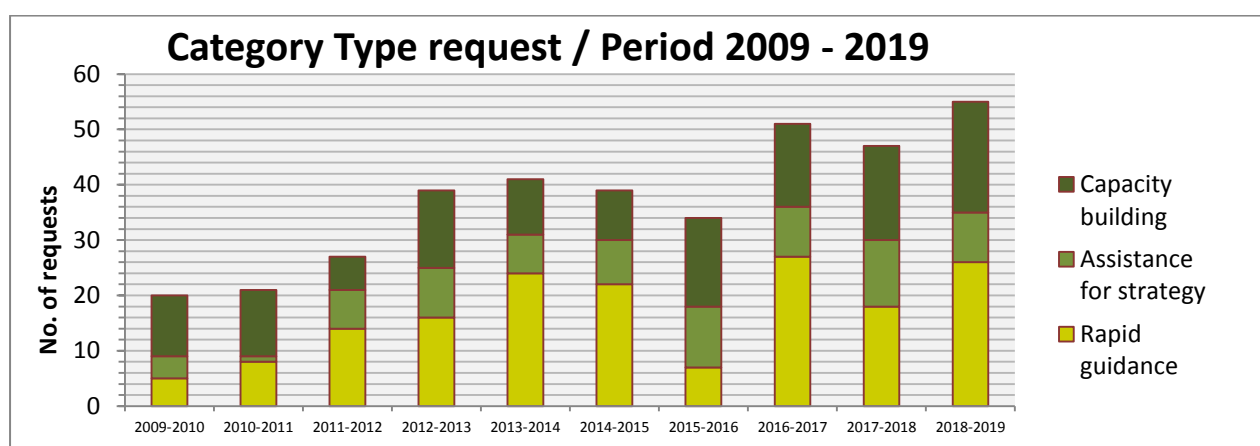


Figure 3. No. of requests among the three category types and reporting period (2009-2019)

¹ Others category include technical assistance provided to the group of expertise (for e.g. HELP check in the below table of HelpDesk request 2018-2019 for more information) working on specific activities related Integrated Flood Management.

Likewise, the proportion remains relatively stable during the last three years with the highest number of requests, i.e. 2018-2019 (55 total requests), 2016-2017 (51 total requests), and 2017-2018 (47 total requests) as shown in Figures 3 and 4.

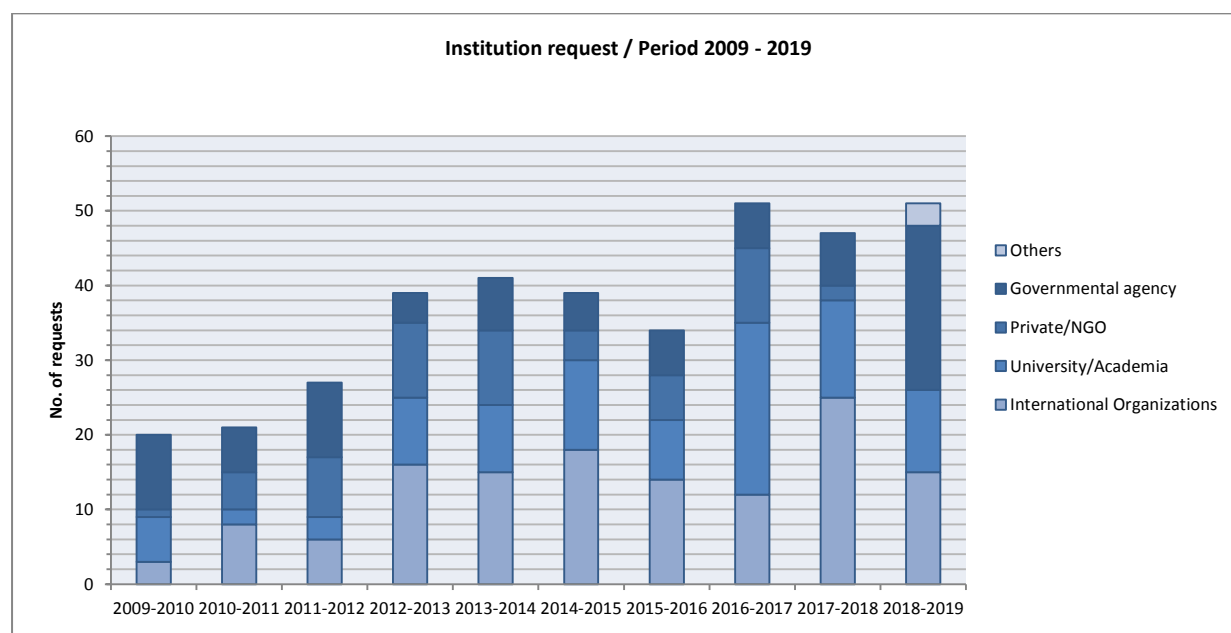


Figure 4. No. of requests by Institution requesting and reporting period (2009- 2019)

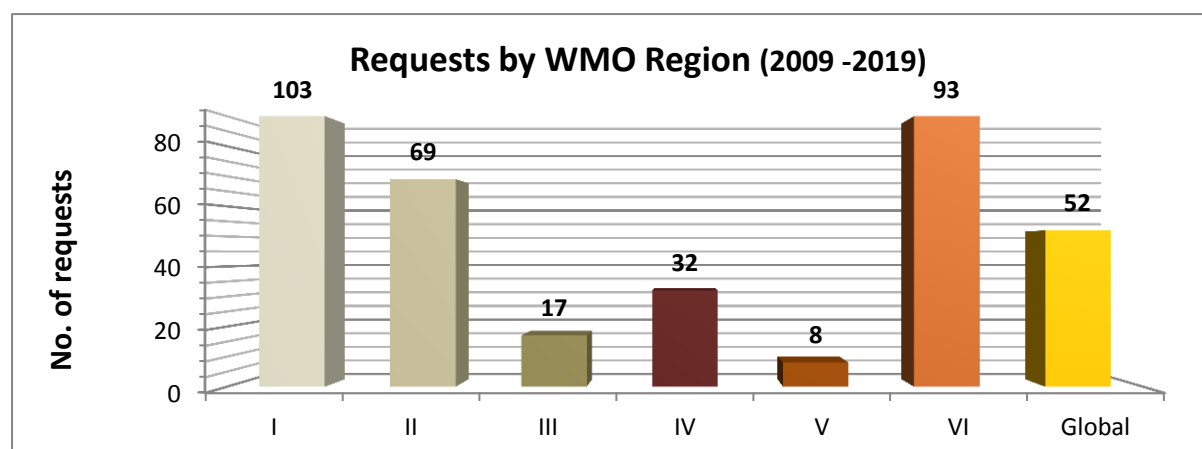


Figure 5. No. of requests by geographical distribution since 2009

In terms of countries targeted as a result of HelpDesk requests, Figure 5 shows RA I – Africa as the region that has mostly benefitted from APFM interventions (103 requests since HelpDesk inception), followed by RA VI - Europe (93 requests), RA II – Asia (69 requests), RA IV (32), RA III (17) and RA V (8). In addition, 52 requests fall under the new category “Global”, which might reflect activities impacting the global, regional or transboundary level. A distribution by year is also provided in Figure 6.

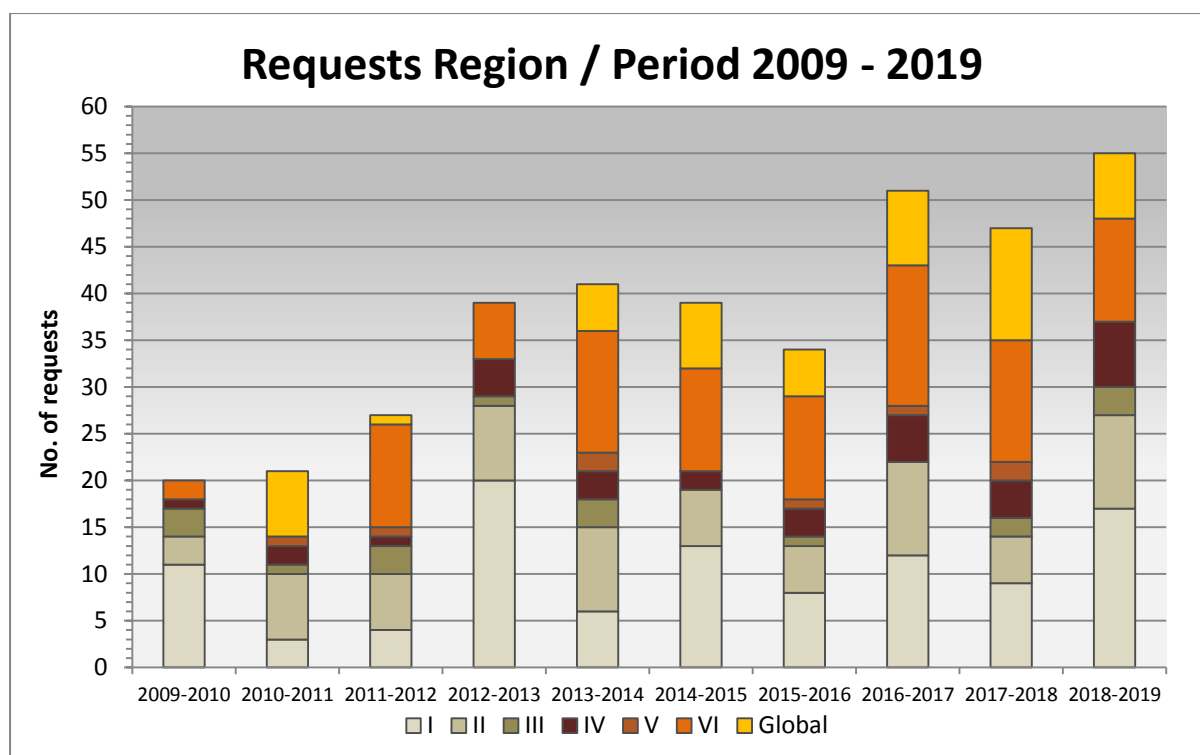


Figure 6. No. of requests by geographical distribution and reporting period

During the reporting period (August 2018-July 2019) 55 requests were received: of these, 3 requests were discarded/rejected, 9 are ongoing implementation.

A brief summary of the 55 HelpDesk requests received in the reporting period is provided in the table below. Prior to this reporting period, 319 requests were made and documented in previous annual reports. The majority of the 55 requests have been addressed. Nine requests are either ongoing or action is planned for the next reporting period.

Requests received by TSU in the framework of the HelpDesk						
Requests (No 1-319) not displayed)		Received from 06/2009 to 07/2019 (see previous annual reports)			Status: 296 Completed, 19 discarded, 4 on-going	
No.	Date	Institution, Country	Category (Request came through contacts in WMO or in GWP)	Impact (Region or Global)	Type of request	Status
320	Aug-18	INA, Argentina (Government Agencies)	Rapid Guidance (WMO)	III	Request for publication	Completed
321	Sept-18	DTU, Denmark (Universities and Academia)	Rapid Guidance (WMO)	VI	Request for contacts on the FloodLabel project	Completed

322	Sept-18	Student, Italy (Universities and Academia)	Capacity Development (WMO)	VI	Request for work opportunities	Completed
323	Sept-18	Flood Forecasting Centre, UK (Government Agencies)	Rapid Guidance (WMO)	VI	Request for tool on assessing needs and capabilities for E2E-EWS-FF	Completed
324	Sept-18	21 African countries (Government Agencies)	Capacity Development (GWP)	I	GCF Project preparation workshop for Africa (held in Pretoria in September)	Completed
325	Oct-18 – Apr19	High-level Experts and Leaders Panel on Water and Disasters (HELP) (Others)	Capacity Development (GWP)	Global	5 regional consultations on the HELP Principles on Investments and Financing for water-related disaster risk reduction	Completed
326	Oct-18	B-Air, USA (Private companies)	Capacity Development (WMO)	IV	Request for posting publications	Rejected (Spam)
327	Oct-18	VU University, Amsterdam (Universities and Academia)	Rapid Guidance (WMO)	VI	Request for presenting Thesis on mapping of flood and drought risk	Completed
328	Oct-18	18 Asian countries (Government Agencies)	Capacity Development (GWP)	II	GCF Project preparation workshop for Asia (held in Manila in October)	Completed
329	Nov-18	Neptune Solutions, United Kingdom (Private companies)	Assistance for Strategy (WMO)	VI	Proposal for using fluid retention device	Rejected (Out of Scope)
330	Nov-18	World Bank , USA (International Organizations)	Assistance for Strategy (WMO)	I	Technical guidance and support for developing IFM Strategy for ECOWAS	On-going
331	Nov-18	BLG Consulting, (Private companies)	Rapid Guidance (GWP)	I	request for information on activities in the Mekong basin	Completed
332	Nov-18	Piedmont Regional Environment Protection Authority (Government Agency)	Rapid Guidance (GWP)	VI	rapid guidance on publications to the Piedmont Regional Authority	Completed
333	Dec-18	Lancang Mekong Water resources cooperation centre (International Organizations)	Capacity Development (GWP)	II	IFM project preparation workshop in Dali-China	Completed
334	Dec-18	UNITAR, Geneva (International)	Rapid Guidance	Global	Request for information on IFM	Completed

		Organizations)	(WMO)		and APFM	
335	Dec-18	UNU-INWEH, Canada (International Organizations)	Rapid Guidance (WMO)	IV	Request for peer review on IFM	Completed
336	Dec-18	PreventionWeb, (International Organizations)	Rapid Guidance (WMO)	VI	Request for reposting of publication	Completed
337	Dec-18	IIHR, Iowa University, USA (Universities and Academia)	Capacity Development (WMO)	Global	Request to co-organize ICFM8	Ongoing
338	Jan-19	Mississippi University USA (Universities and Academia)	Rapid Guidance (WMO)	IV	Request for information on drought Indices	Completed
339	Jan-19	CIMA, Italy (Universities and Academia)	Rapid Guidance (WMO)	VI	Technical specification on data loggers	Completed
340	Jan-19	UNU-INWEH, Canada (International Organizations)	Rapid Guidance (WMO)	IV	Request for writing paper	Rejected
341	Feb-19	Private company, USA (NGO and Private Companies)	Rapid Guidance (WMO)	IV	Request for information on data format	Completed
342	Feb-19	SEGOB, Mexico (Government Agency)	Rapid Guidance (WMO)	IV	Request for information on EWS strategies	Completed
343	Feb-19	RA VI Newsletter Editorial Board (International Organizations)	Rapid Guidance (WMO)	VI	Request for information on Hydrological activities in WMO region VI	Completed
344	Feb-19	AFD, France (Government Agency)	Rapid Guidance (WMO)	VI	Request for methodology on evaluation of E2E EWS	Completed
345	Feb-19	NiMet, Nigeria (Government Agency)	Rapid Guidance (WMO)	I	Request for information on FFGS and DEWETRA	Completed
346	Mar-19	Hydro-Met Service, Senegal (Universities and Academia)	Assistant for Strategy (WMO)	I	Request for IFM strategy	On-going
347	Mar-19	Student, University of Bamenda, Cameroon	Rapid Guidance (WMO)	I	Request for information of flood adaptation structures	Completed
348	Mar-19	MEDRC, Oman (International Organizations)	Capacity Development (GWP)	II	Request for presenting IFM concept in a workshop	Completed
349	Mar-19	Karolinska Institute, Stockholm (Universities and Academia)	Rapid Guidance (WMO)	VI	Request for information on flooding data	Completed
350	Mar-19	Nigeria (Government Agencies)	Capacity Development (WMO)	I	Request for Capacity Building on IFM	Completed Check last year
351	Mar-19	UNEP-DHI	Rapid	I	Request for	Completed

		(International Organizations)	Guidance (WMO)		information on the VFDM project	
352	Mar-19	Met Service, Malawi (Government Agencies)	Capacity Development (WMO)	I	Request for pilot project on IFM	On-going
353	Mar-19	IDB (International Organization)	Capacity Development (WMO)	III, IV	Request to present on IFM and E2E EWS at the LATINOSAN Conference	Completed
354	Apr-19	GWP (International Organization)	Capacity Development (GWP)	Global	Input to the second edition of the NAP Water Supplement "Addressing Water in National Adaptation Plans - Water Supplement to the UNFCCC NAP Technical Guidelines"	Completed
355	Apr-19	PR to WMO, Mozambique (Government Agencies)	Assistance for Strategy (WMO)	I	Request for IFM strategy after flood event	Completed (Two SBPs involved)
356	April-19	CENAPRED, Mexico (Government Agency)	Rapid Guidance (WMO)	III	Request for Community-based EWS	Completed
357	Apr-19	Student, University of Bamenda, Cameroon (Universities and Academia)	Rapid Guidance (WMO)	I	Request for information on assessment of standards of flood adaptation strategies	Completed
358	Apr-19	World Bank (International Organizations)	Rapid Guidance (WMO)	II	Request for information on EWS	Completed
359	Apr-19	TU, Nepal (Universities and Academia)	Capacity Development (WMO)	II	Request for attending conference/workshop	Completed
360	May-19	Zimbabwe Met Service (Government Agency)	Assistance for Strategy (WMO)	I	Request for IFM strategy after flood event	Completed
361	May-19	University of Michigan, US (Universities and Academia)	Rapid Guidance (WMO)	IV	Request for information on data related to great lakes	Completed
362	May-19	GWP Eastern Africa (International Organizations)	Capacity Development (GWP)	I	Request for information on developing training modules related to IFM	Completed
363	May-19	High-level Experts and Leaders Panel on Water and Disasters (HELP)	Capacity Development (GWP)	Global	Case studies for HELP Global Report on Water and Disasters 2019 on Cyclones Idai and Kenneth in South African Region 2019; Floods in Kerala, India 2018 and Floods in	Completed

					Nigeria in 2018	
364	June-19	Nigeria	Assistance for Strategy (WMO)	I	Request for IFM/IDM project similar to VFDM	On-going
365	June-19	SODEXAM, Côte d'Ivoire (Government Agency)	Assistance for Strategy (WMO)	I	Request to provide advisory services on IFM	Ongoing
366	June-19	North Korea Permanent Mission (Government Agency)	Assistance for Strategy (WMO)	II	Request for assisting in developing strategy on E2E-EWS-FF	On-going
367	June-19	10 Mediterranean countries (Government Agency)	Capacity Development (GWP)	I	GCF Project preparation workshop for the Mediterranean (held in Brussels in June)	Completed
368	June-19	High-level Experts and Leaders Panel on Water and Disasters(HELP) Other	Rapid Guidance (WMO)	Global	Request for literature review	Completed
369	June-19	Ministry of Science and Technology, Iran (Government Agency)	Rapid Guidance (WMO)	II	Request to translate and publish APFM publication	Completed
370	June-19	National Water Resources Management Agency, Sierra Leone (Government Agency)	Assistance for Strategy (WMO)	I	Request for assistance in setting up a National Hydrological Service	Ongoing
371	June-19	JICA, Japan (Government Agency)	Capacity Development (WMO)	II	Request for presentation material on IFM and FFGS	Completed
372	July-19	GWP South Asia (International Organizations)	Capacity Development (WMO)	II	Request for contacts and information on EWS and FFGS	Completed
373	July-19	Research Institute of Meteorology, Hydrology and Environment, Mongolia (Government Agency)	Capacity Development (WMO)	II	Request for contact with CIMA	Completed
374	July-19	IUCN (International Organization)	Rapid Guidance (WMO)	Global	Request to be part of the IUCN NBS strategies in IUCN Congress 2020	Ongoing