Activity Area - 4 Hydrological information of adequate resolution for informed decisions on SDG

outcome	Members implemented reliable water resources assessment systems to deliver and share information on water resources availability
measure of success	Number of Members providing their water resources assessment through HydroSOS *by 2030.* *Annual reports of global water resources status published from 2025 onwards*

output	activity	ID	description	LTA	SOP	success criteria	time frame	responsibility	resources	partners	linkages	MOA	comments
Current status / assessment of water resources is available at different spatial and temporal scales, including river and surface resources, snowpack, soil moisture, groundwater, lakes, and reservoirs	*Implementation of HydroSOS at global scale,*	G.1.1	*HydroSOS is implemented according to its implementation plan - water resources assessment activities at national scale provide inputs to the HydroSOS.*	*6*		*Number of Members contributing to HydroSOS*	*2021 - 2030*	*HCP*			*INFCOM, SERCOM*		*for any other comment if needed*
Assumptions													
Risks													
WMO community informs high-level policy discussions at global scale with (e.g. a global assessment or hot spot report)	*Developing format and specification for general advisory (specification of the aim, users, content, template, frequency of production, responsibilities) developed*	G.2.1	*Concept note on general advisory will be developed as an initial step for operalization*	*6*		*Concept note presented to EC in 2022*	*2022*	*HCP, SERCOM*			*RAs*		*for any other comment if needed*
	Support network/structure for production of advisory is established (preferably building on regional and global centers of GDPFS) based on G.2.1	G.2.2	*Based on a concept note, a framework and process for production of advisory*	*6*		*Framework established by 2023*	*2023*	*SERCOM, HCP*			*RAs*		
	Launch of the product and support of its use and sharing	G.2.3		*6*		*First report launched for year 2023*	*2024*	*SERCOM, HCP, SG*			*RAs*		
Assumptions													
Risks													

output	activity	ID	description	LTA	SOP	success criteria	time frame	responsibility	resources	partners	linkages	MOA	comments
Data, products and model results, at adequate spatial and temporal resolutions, are available for actionable planning and operations at the local scale	Global products for local use - RHSC of GDPS provides to Members WRA products, including training of use, tools for interpretation .	G.3.1	Develop a system of GDPFS centers that produce data and information specialized to support water resources assessment of Members, based on their requirements. Members are provided with training materials and tools if needed to interpret GDPFS products for national and local applications for WRM.	6, 2, 3		At least one GDPFS center provides WRM supporting products at global scale.	2025	SERCOM, INFCOM			HCP		
Assumptions													
Risks													
Increased national capacities to collect water-related data and transform them to useful/relevant products through capacity building

(The staff of NMHSs understands the importance of water resources assessments for various stakeholders, is well informed on the technologies available for them to best carry out their | Development and implementation of WRA community of practice (which provides up-to-date information, promotion and enables knowledge transfer in the field of water resources assessment) | G.4.1 | Community of practice for water resources assessment supports NMHSs including support to apply available tools and products (such as DWAT), Community of practice is vital sharing of knowledge and tools across Members. | 6 | | Number of Members participating to activities of the community | | SERCOM | | | HCP | | |

output	activity	ID	description	LTA	SOP	success criteria	time frame	responsibility	resources	partners	linkages	MOA	comments
tasks and are expert in those that best suit their key applications)	In frame of G.4.1 a decision tree/check list (comparison engine) is developed to enable selection of proper methodologies and tools for WRA by Members	G.4.2		6		Check list available through the community by 2024	2024	SERCOM					
	Training curriculum for WRA developed as a part of capacity development strategy of the WMO	G.4.3	Needs (topical, and on form) of Members are properly identified to propose curricula of courses and training materials in support of capacity building in the domain of WRA	6, 2, 3		Capacity development strategy updated2023	2023	CDP			HCP, SERCOM		
	E-learning training course(s) for water resources assessment,	G.4.4	Based on curricula, courses and training materials are developed	6, 2, 3		Review of progress presented to Hydrological Assembly/Cg	2025	CDP			SERCOM		
	Twinning projects targeted at WRA skills	G.4.5	Twinning projects between Members target WRA and WRM	6		Review of progress presented to Hydrological Assembly/Cg	2025	SERCOM			HCP		Linked to output 9 activity area 2
	Compendium of societal, economic and ecologic relations/dependency on water/hydrological cycle	G.4.6	Compendium will be based on based on review of existing studies, synergising and collating information.	6		Compendium presented	2005	RB, SERCOM			HCP		
	WRA 'manual' published	G.4.7	Finalization of WRA manual and its publication	6		WRA manual published	2023	SERCOM			HCP		
Assumptions													
Risks													

outcome	Hydrological information of adequate resolution, quality and timeliness is available and being used for informed decisions on sustainable development at all scales.
measure of success	Number of Members including hydrological aspects and water budget information to their development plans at national level. Number of Members reporting on SDG using reliable hydrological data and indicators

output	activity	ID	description	LTA	SOP	success criteria	time frame	responsibility	resources	partners	linkages	MOA	comments
Improved data policies, financing schemes, and enhanced political arrangements to collect hydrologic data and derived products	*Implementation of resolution 42 at members level (assessment of compliance to provision of essential and desirable data) to enhance the quality of local/national/regional/global observation networks and delivery systems*	H.1.1	*See crosscutting activities*	6,7									*Activity needs to reflect ongoing work on data policy by SG-DIP*
	Recognition mechanism of centennial station in hydrology	H.1.2		6,7		*First hydrological stations are recognized by Cg*	2023	*INFCOM*			*HCP*		
	for additional see action area on NHSs for cross-cutting data activities												
Assumptions													
Risks													
Intensified national, basin, transboundary and international cooperation and activities to meet SDG	*Supporting building of national, basin and transboundary partnerships for WATER SDGs*	H.2.1	*Compilation of success stories and good examples (EU, basin organizations, etc.), basic advice on modes of operation for partnerships of various organizations*	7		*Document ready by 2025*	2025	*HCP*					*for any other comment if needed* *OUTPU ON meeting SDG*
	Partnership with FAO (AquaStat) and UNESCO established to develop a plan for data/information/products definition to be produced from Members to be collected in global	H.2.2		7		*Joint plan developed*	2024	*SG, HCP*		*FAO, UNESCO, WHO, UNWATER*			

output	activity	ID	description	LTA	SOP	success criteria	time frame	responsibility	resources	partners	linkages	MOA	comments
	databases supporting the SDG												
	Define set of parameters to monitor and support sustainable development on a long-term scale in cooperation with relevant organisations	H.2.3		*7*		*Set of parameters agreed by WMO, UNESCO and FAO*	*2024*	*SG, HCP, INFCOM?*		*FAO, UNESCO, UNWATER*	*INFCOM*		
Assumptions													
Risks													
Basic tools to assist members are created, including an archive of relevant information, tools for transforming data to information, and maintenance of essential "treasury/heritage" variable to support SD	*Concept note for WMO hydrology cloud developed (for storage of essential data of Members (based on review of Data centers role))*	H.3.1	*Feasibility study of Hydrology cloud to support SDG and Members – will, need, requirements from Members, viable technical and organisational solutions to be describe*	*6,7*		*Feasibility study submitted to EC for decision*	*2024*	*INFCOM*			*WHOS, HCP*		
	Eventual implementation if agreed by Cg	H.3.2											
	Sharing of data from recognized centennial/reference (GBON-hydrology and Data centers) stations in hydrology	H.3.3	*Need to be updated based on concept of data resolution implementation for hydrology – see also crosscutting activities*	*6,7*				*INFCOM*			*WHOS, HCP*		*need to reflect results of review of Data centers role*
	SW (cloud solution?) for computation of parameter defined under7.3	H.3.4	*Supporting Members with automatic computation of selected parameters based on data they measured*	*6,7*		*Feasibility study presented to EC, possibly jointly with 8.1*	*2024*	*INFCOM*			*WHOS, HCP*		
	Presentation of datasets for evaluation - web presentation of datasets for SDG	H.3.5		*6,7*		*Web page launched*	*2027*	*INFCOM*			*WHOS, HCP*		
Assumptions													
Risks													