Activity Area -5 Water Quality Data Exchange, Assessment and Management

| outcome | (At national level) increased cooperation and water quality data exchange, assessment and management. |
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| | |
| measure of | Number of Members running water quality monitoring programmes and performing water quality assessments. |
| success | |
| | |

| output | activity | ID | description | LTA | SOP | success criteria | time frame | responsibility | resources | partners | linkages | MOA | comments |
|---|---|-----------|---|-----|---|--|---|----------------|-----------|-----------------------------|-----------------------|-----|----------|
| Partnership at UN level exists and promotes provision of WQ data from NHSs to existing information systems (such as GEMS, IIWQ, ISI). | Establishing WMO- UNEP-UNESCO partnership/ mechanism on water quality building on the world water quality alliance | I.1. 1 | Responsibility on Water Quality at UN level is shared between WMO, UNESCO and UNEP. A joint coordinated effort needs to be established. Joint group should establish working procedures and develop it work plan. | 8 | 1.3, 4.3 | working procedure and work plan presented to Cg | 2023 | HCP, SG | | UNEP, UNESC O | INFCOM, SERCO M | | |
| | WHOS interconnection to GEMS/IIWQ | I.1. 2 | Water Quality data are registered and shared via WHOS interconnecting National and Global data portals. | 8 | 1.3, 2.1, 2.2,4. 1,4.2, 4.3 | Number of Members providing water quality data through WHOS | 2027 | INFCOM | | UNEP, UNESC O | INFCOM, WHOS | | |
| | Supporting WaterML-WQ development | I.1. 3 | WaterML-WQ format is further developed and adopted as standard for WQ data transfer and sharing | 8 | 1.3, 2.1, 2.2 | Standard adopted by Cg | 2027 | INFCOM | | OGC, UNEP, UNESC O | INFCOM, WHOS | | |
| Assumptions | | | | | | | | | | | | | |
| Risks | | | | | | | | | | | | | |
| Increased NHSs involvement in coproduction of water quality related data and products thanks to promotion of IWRM principles. | Water quality training materials development | I.2. 1 | After identification of the priority needs for training from Members initial training materials activities are developed to reply to the needs. | 8 | 1.3 | Basic training curricula for water quality available for Members by the end of 2025, at least 25 participants finalized (ecourse). | identifi cation of prioritie s - 2023, priority training materi als ready by 2025 | CDP | | UNEP | INFCOM, SERCO M | | |
| | Supporting building of national partnerships for water quality | 1.2. 2 | Compilation of success stories and good examples (EU, basin organizations, etc.), basic advice on modes of | 8 | 1.3 | How to handbook available to Members | 2023 | HCP | | UNEP | INFCOM, SERCO M | | |

| output | activity | ID | description | LTA | SOP | success criteria | time frame | responsibility | resources | partners | linkages | MOA | comments |
|--|---|-----------|---|-------|-------------|--|---------------|----------------|-----------|---------------------|-----------------------|-----|----------|
| | | | operation for partnerships of various organizations | | | | | | | | | | |
| | Support of development of data policies that support water quality monitoring and assessment | 1.2. | Review of essential data definition in the view of needs of water quality assessment | 8 | 1.3 | Hydrological data requirements for water quality monitoring programmes and essential water quality data identified and adopted in Annex to Res. 42 | 2023 | INFCOM | | UNEP | HCP, SERCO M | | |
| | Supporting basin organization in water quality agenda | 1.2. 4 | Compilation of success stories and good examples (EU, basin organizations, etc.), basic advice on water quality monitoring and assessment programmes and action plans | 8 | 1.3 | How to handbook available to Members | 2025 | HCP | | UNEP | SERCO M, INFCOM | | |
| | Supporting formulation of the National Water Quality Management Strategy, action plan and monitoring programs (Task #1) | 1.2. 5 | Guidelines supporting Members in developing complete frameworks for water quality monitoring from definition of strategy, through development of National Water Quality Management Plan/Framework, screening of relevant issues (pollutants, processes etc.) to design and systematic realization of monitoring programmes. | 8 | | Guidelines published | 2027 | INFCOM, HCP | | UNEP | | | |
| Assumptions | | | | | | | | | | | | | |
| Risks | | | | | | | | | | | | | |
| Increased joint water quantity and water quality assessment (monitoring and modelling) for operational management and for planning | Review of state of operational monitoring, modelling and assessment of water quality at Members and basin level | I.3. 1 | Based on 3.2 a review of the state of operational monitoring, modelling and assessment of water quality will be done to inform other activities (5.2, 5.3) | 6, 7, | 1.3, 4.1 | review presented to Cg | 2023 | HCP, SG | | UNEP, UNESC O | INFCOM, SERCO M | | |

| output | activity | ID | description | LTA | SOP | success criteria | time frame | responsibility | resources | partners | linkages | MOA | comments |
|--|---|-----------|--|------------|-----------------------------|--|---------------|----------------|-----------|----------------------------------|--|-----|----------|
| | Development of joint WMO-UNEP-UNESCO strategy to increase water quality assessment availability from Members and basins | 1.3. | SDGs 3.9, 11.6, 12.4, 14.1, 14.2, 6.3, 6.5 are closely related to water quality. Their achievement demands for coordination of effort of all involved UN agencies to aim in their development projects to establish sustainable system of monitoring and assessment of water quality in countries, where such system doesn't exist yet. Definition of how to best coordinate in this issue needs to be the first step. Should be part of work plan developed under 3.1 | 6, 7, | 1.3, 4.1 | strategy adopted by Cg/EC | 2024 | HCP, SG | | UNEP, UNESC O | INFCOM, SERCO M | | |
| | Development of concept paper for inclusion of WQ to HydroSOS | I.3. 3 | Based on 5.2 a concept paper on how to enlarge the scope of HydroSOS by Water Quality information made by Members will be developed | 6, 7, 8 | 1.3, 4.1 | concept paper presented to Cg/EC | 2025 | SERCOM | | UNEP, UNESC O | INFCOM, HCP | | |
| | Country Profile Data Base collects basic information on Water Quality monitoring programmes | 1.3. | Optimized structure of information on water quality monitoring and assessment is used for evaluation of performance and needs for development and supporting activities of WMO/UNEP/UNESCO partnership on water quality | 8 | 1.3, 2.1, 4.1, 4.3 | Water quality monitoring network and assessment report | 2023 | HCP, SG | | Member states | communit y of practice, INFCOM, SERCO M | | |
| Assumptions | | | , | <u>I</u> | | | • | | | | | • | |
| Risks | | | | | | | | | | | | | |
| Water quality aspects are included in country support activities/ projects in the spirit of IWRM and in cooperation with other organizations | Partnership with UNEP, UNESCO, UNDP and WB on how to implement water quality aspects to development projects | 1.4. | SDGs 3.9, 11.6, 12.4, 14.1, 14.2, 6.3, 6.5 are closely related to water quality. Their achievement demands for coordination of effort of all involved UN agencies to aim in their development projects to establish sustainable system of monitoring and assessment of water quality in countries, where such system doesn't exist | 8 | 1.3, 4.1, 4.2, 4.3 | 50 % of country support projects in hydrology include water quality aspect | 2023 | SG, HCP | | UNEP, UNESC O, WB, UNDP | | | |

| output | activity | ID | description | LTA | SOP | success criteria | time frame | responsibility | resources | partners | linkages | MOA | comments |
|---|---|-----------|---|-----|-----------------------------|--|-----------------|----------------------------|-----------|----------------------------------|---|-----|---|
| | | | yet. Definition of how to best coordinate in this issue needs to be the first step. | | | | | | | | | | |
| | Definition of minimum requirements/ checklist for water quality aspects to be included in country support activities based on 1.4.1 | I.4. 2 | | 8 | 1.3, 4.1, 4.2, 4.3 | 50 % of country support projects in hydrology include water quality aspect | 2023 | SG, HCP | | UNEP, UNESC O, WB, UNDP | | | |
| Assumptions | | | I. | | 1 | 1 | | 1 | | 1 | | 1 | |
| Risks | | | | | | | | | | | | | |
| Partnership at UN level delivers co- produced guidelines related to water quality | 4.1 Establishing WMO-UNEP partnership/ mechanism on guidelines delivery and updating | I.5. 1 | Responsibility on Water Quality at UN level is shared between WMO and UNEP. Building on existing UNEP work (guidelines) a joint coordinated effort needs to be established to compile guidelines and for operational hydrological services. Joint group should establish working procedures and develop it work plan. | 8 | 1.3, 4.1, 4.2, 4.3 | Joint group established and plan of work and deliverables (guidelines, etc.) | 2023 | INFCOM (JET/HYDMO N) | | UNEP, UNESC O-IHP | SERCO M (SC- HYD) if water quality assessm ent issues are considere d | | likely to be part of activity 3.1 |
| | 4.2 Development of Technical Regulation Annex on water quality | 1.5. | New structure of the Technical Regulation vol.III foresee to develop ANNEX on Water Quality. It shall be developed via mechanism of cooperation between WMO and UNEP (4.1). | 8 | 1.3, 4.1, 4.2 | Annex adopted by Cg | based on 4.1 | INFCOM (JET/HYDMO N) | | UNEP, UNESC O-IHP | SERCO M (SC- HYD) if water quality assmt. issues are considere | | |
| | 4.3 Development of guidelines according to 4.1. | 1.5. | Based on identification of joint work group (4.1) necessary guidelines supporting NHSs involvement in water quality monitoring and assessment will be developed. | 8 | 1.3, 4.1, 4.2, | guidelines published | based on 4.1 | INFCOM (JET/HYDMO N) | | UNEP, UNESC O-IHP | SERCO M (SC- HYD) if water quality assessm ent issues are considere | | |
| Assumptions | | | I | 1 | ı | 1 | I | 1 | <u> </u> | 1 | | 1 | <u> </u> |
| Risks | | | | | | | | | | | | | |