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| **Expected Result 1** **Improved service quality and service delivery** |
| Enhanced capabilities of Members to deliver and improve access to high quality weather, climate and water and related environmental predictions, information and services in response to users' needs and to enable their use in decision-making by all relevant societal sectors |
| **Key Outcome 1.1** | **Increased availability of high quality weather, climate, water and related environmental information and products in accordance with the needs of users** |
| **KPI 1.1.1** | **Number of Members able to demonstrate socio-economic benefits of their services through the use of WMO endorsed methodology**  |  |  |  |
| **KPI 1.1.2** | **Number of NMHSs providing products for decision-making by users following the WMO Strategy for Service Delivery** |  |  |  |
| ***Deliverables*** | ***Activities*** | ***RA6 WG*** | ***TT*** | ***2016*** | ***2017*** | ***2018*** | ***2019*** | ***WMO Progr.*** | ***WMOComm.*** |
| 1.1.1  | Support possible pilot SEB studies with a view to optimize monitoring of the contents and results  | **WG SDP** | SEB | **x** | **x** |  |  | PWSP | CBS |
|  | Ensure professional exchange & co-operation between meteorologists economists so as to broaden and deepen the expertise base on which SEB studies depend | **WG SDP** | SEB | **x** |  |  |  | PWSP |  |
|  | Develop a platform for dissemination and learning with regard to SEB topics | **WG SDP** | SEB | **x** |  |  |  | PWSP |  |
| 1.1.2 | Ensure a harmonised and synchronised regional implementation of the Strategy on Service Delivery by the Members | **WG SDP** | SDM |  |  |  |  | PWSP |  |
| **Key Outcome 1.2** | **Improved delivery of high quality weather, climate, water and related environmental products and services to users’ communities, especially for aviation** |
| **KPI 1.2.1** | **Number of Members compliant with the requirements for QMS for aviation meteorological services** |
| **KPI 1.2.2** | **Number of Members compliant with the competency requirements for the aeronautical MET personnel**  |
| ***Deliverables*** | ***Activities*** | ***WG*** | ***TT*** | ***2016*** | ***2017*** | ***2018*** | ***2019*** | ***WMO Progr.*** | ***WMOComm.*** |
| 1.2.1 | Organise an European Conference on meteorological service provision to civil aviation | **WG SDP** |  | **x** |  |  |  |  |  |
| 1.2.2 | Monitor regional activities and developments related to civil aviation meteorology | **WG SDP** | Ad hoc  | **x** | **x** |  |  | AeMP | CAeM in close cooperation with TT QMS |

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| **Expected Result 2****Reduced Disaster Risk** |
| Enhanced capabilities of Members to reduce risks and potential impacts of hazards caused by weather, climate and water and related environmental elements  |
| **Key Outcome 2.1** | **'Multi-hazard early warning systems are implemented'** |
| **KPI 2.1.1** | **Increase in the number of NMHSs integrated into national and Regional Disaster Risk Management structures** |
| **KPI 2.1.2** | **Improved products and services for disaster risk reduction by developing country Members** |
| **KPI 2.1.3** | **Improved cross-border exchange of warnings and data related to Disaster Risk Management** |  |  |  |
| **KPI 2.2.3** | **Number of Members with Climate Watch Systems in place.** |  |  |  |
| ***Deliverables*** | ***Activities*** | ***RA6 WG*** | ***TT*** | ***2016*** | ***2017*** | ***2018*** | ***2019*** | ***WMO Progr.*** | ***WMOComm.*** |
| 2.1.1 | Develop and establish a mentoring pilot project in the field of weather warnings  | **WG SDP** | WARN | **x** | **x** |  |  | PWSP | CBS |
| 2.1.2 | Provide best practice examples of severe weather warning verification with a view to advice on effective verification procedures | **WG SDP** | WARN | **x** |  |  |  | PWSP | CBS |
| 2.1.3 | Advice on possible warning improvements using data-exchange standards like CAP. | **WG SDP** | WARN | **x** | **x** |  |  | DRR | CBS |
| **Key Outcome 2.2** | **National integrated flood management plans are developed** |
| **KPI 2.2.1** | **Number of Members establishing flood management plans** |
| **KPI 2.2.2** | **Number of regional hydrological forecasting systems established in transboundary basins** |
| ***Deliverables*** | ***Activities*** | ***WG*** | ***TT*** | ***2016*** | ***2017*** | ***2018*** | ***2019*** | ***WMO Progr.*** | ***WMOComm.*** |
| 2.2.1 | Mapping and comparison of the use of hydrological models in RAVI | **WG CH** | HMFW | **x** | **x** |  |  | HWRP | CHy |
| 2.2.2 | Follow up of, coordination with and support to EFAS and FFGS as well as other WMO-CHy and EC related activities  | **WG CH**  | HMFW | **x** | **x** |  |  | HWRP | CHy |
| 2.2.3 | Exchange best practices and training materials for warning systems  | **WG CH** | HMFW |  | **x** |  |  | HWRP | CHy |
| **Key Outcome 2.3** | **Improved drought early warning and management systems** |
| **KPI 2.3.1** | **Number of national and regional centres for issuing drought early warnings** |
| **KPI 2.3.2** | **Increase in the number of satisfied users of drought early warnings issued by national and regional centres** |
| ***Deliverables*** | ***Activities*** | ***WG*** | ***TT*** | ***2016*** | ***2017*** | ***2018*** | ***2019*** | ***WMO Progr.*** | ***WMOComm.*** |
| 2.3.1 | Review and strengthen drought monitoring systems, especially development and implementation on methodologies as well as application of related information by users, in RA VI countries, considering existing mechanisms as well as deficits in drought information services | **WG CH** | WSD | x | **x** |  |  | WCP/HWRP | CHy |
| 2.3.2 | Identify the scope for, and implementation of, Integrated drought management w.r.t. water resources and agriculture | **WG CH** | WSD | x | **x** |  |  | WCP/HWRP | CHy |

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| **Expected Result 3****Improved Data Processing, Modelling and Forecasting** |
| Enhanced capabilities of Members to produce better weather, climate, water and related environmental information, prediction and warnings to support in particular climate impact and adaptation strategies |
| **Key Outcome 3.1** | **Improved operational forecast products including also long-range forecasts and long-term projections**  |
| **KPI 3.1.1** | **Number of Members providing standardized products (e.g. monthly and seasonal predictions, climate watches)** |  |  |  |
| **KPI 3.1.2** | **Increased awerness of improvements in forecast model development**  |  |  |  |
| ***Deliverables*** | ***Activities*** | ***WG*** | ***TT*** | ***2016*** | ***2017*** | ***2018*** | ***2019*** | ***WMO Progr.*** | ***WMOComm.*** |
| 3.1.1 | Include downscaled LRF products in RCOFs practice and provide training on downscaling technologies to NMHSs | **WG CH** | RCOF | **x** | **x** | **x** |  | WCP/RP | CCl |
| 3.1.2 | Monitor developments in data processing and forecasting systems, particularly with regard to EPS and severe weather events forecasting. | **WG TDI** | Rapporteur DPFS |  |  |  |  |  |  |
| 3.1.2 | Make recommendations to strengthen collaboration and reperesent the Region in CBS Inter Commission Team on GDOFS | **WG TDI** | Rapp. DPFS |  |  |  |  |  |  |
| **Key Outcome 3.2** | **Improved delivery of climate information and prediction products for climate adaptation and risk management - implementation of GFCS at regional and national level** |
| **KPI 3.2.1** | **Number of products of RCCs used at the national level** |
| **KPI 3.2.2** | **Number of operational NCCs developing and disseminating products at national level and providing input to RCCs** |
| **KPI 3.2.3** | **Number of products of NCCs** |
| ***Deliverables*** | ***Activities*** | ***WG*** | ***TT*** | ***2016*** | ***2017*** | ***2018*** | ***2019*** | ***WMO Progr.*** | ***WMOComm.*** |
| 3.2.1 | Develop methods and mechanisms to analyze requirements and feedback on effectiveness, gaps and improvement of RCOF and RCC services | **WG CH** | RCC | **x** | **x** |  |  | WCP/RP | CCl |
| Identify new services, including hydrological and agrometeorological, for WMO RAVI RCC | **WG CH** | RCC | **x** | **x** |  |  | WCP/RP | CCl |
| 3.2.2 | Assistance in strengthening RCOF mechanisms in RA VI considering (i) inclusion of hydrological and agrometeorological information and users as well as (ii) implementation of .g. Mediterranean and Arctic COFs, under the technical guidance of WMO RCCs | **WG CH** | RCC |  | **x** |  |  | WCP/RP | CCl |
| **Key Outcome 3.3** | **Hydrological information and products including water resource assessments are improved** |
| **KPI 3.3.1** | **Volume of data available to users from regional hydrological data bases developed in transboundary river basins** |
| **KPI 3.3.2** | **Number of Members developing and disseminating drought management products and services** |
| ***Deliverables*** | ***Activities*** | ***WG*** | ***TT*** | ***2016*** | ***2017*** | ***2018*** | ***2019*** | ***WMO Progr.*** | ***WMOComm.*** |
|  | Promote MET institute collaboration to improve input into hydrological products | **WG CH** | DM | **x** | **x** |  |  | WCP/HWRP/RP | **CHy** |

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| **Expected Result 4****Improved Observations and Data Exchange** |
| Enhanced capabilities of Members to access, develop, implement and use integrated and interoperable surface-based and space-based systems for weather, climate and hydrological observations, as well as related environmental observations, based on world standards set by WMO. |
| **Key Outcome 4.1** | **Progress in implementation of WMO Integrated Global Observing System (WIGOS) in Region VI** |
| **KPI 4.1.1** | **Number of Members with WIGOS in operation**  |
| **KPI 4.1.2** | **Completion of redesign of the RAVI RBON network as a WIGOS Demonstration Project** |
| **KPI 4.1.3** | **Increased availability of observations for users** |
| **KPI 4.1.4** | **Increased collaboration between RICs and NMHSs** |
| **KPI 4.1.5** | **A network of calibration centres are established** |
| ***Deliverables*** | ***Activities*** | ***WG*** | ***TT*** | ***2016*** | ***2017*** | ***2018*** | ***2019*** | ***WMO Progr.*** | ***WMOComm.*** |
| 4.1.1 | Develop, update and finalize the WIGOS Implementation Plan (WIP) for RA VI:1.Revise and analyse the existing WIP and discover areas of further enhancement2. Establish a QM process in which the RA VI members can participate in the further development of the RA VI WIP3. Coordination with WIGOS PO in WMO, EUMETNET and other key players4. Continous updating the WIP5. Redesign of the Regional Observation Network | **WG TDI** | RAVI WIGOS |  |  |  |  | WWW | CBS |
| 4.1.2 | Assist RA VI Members to develop their national WIPs1. Establish communication and collaboration processes with the national focal points2. Further assist member countries to fill gaps in their observation system3. Capacity building / Workshops /Documents Create a regional capacity building plan | **WG TDI** | RAVI WIGOS | **x** | **x** |  |  | WWW | CBS |
| Realizing WIGOS via regional observation networks (RBON) | **WG TDI** | RAVI WIGOS | **x** | **x** |  |  | WWW | CBS |
| 4.1.3 | Radar systems integration and windprofiler integration | **WG TDI** | RAVI WIGOS | **x** | **x** |  |  | WWW | CBS |
| Monitoring an Integrated QM-Construction of a comprehensive QM process - Develop real-time monitoring and reporting capabilities; incorporating existing EUMETNET & EUCOS monitoring portal- Implement real-time (quality) monitoring in coordination with EUMETNET & EUCOS QM portal | **WG TDI** | RAVI WIGOS | **x** | **x** |  |  | WWW | CBS |
| 4.1.4 | Foster efficient collaboration between RICs and NMHSs in RAVI* Establish a communication process between RICs and NMHSs
* Exchange of experience, review regional and national practices
* Support members fo RAVi with instrument issues
 | **WG TDI** | RICs |  |  |  |  |  |  |
| 4.1.5 | Establish a network of calibration centres in RAVI | **WG TDI** | RICs |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| **Key Outcome 4.2** | **WMO Information System (WIS) is developed and implemented within Region VI** |
| **KPI 4.2.1** | **Number of NMHSs that have successfully implemented the WIS in compliance with the regional WIS Implementation Plan** |
| **KPI 4.2.2** | **Number of Members exchanging data in Table Driven Code Format** |
| ***Deliverables*** | ***Activities*** | ***WG*** | ***TT*** | ***2016*** | ***2017*** | ***2018*** | ***2019*** | ***WMO Progr.*** | ***WMOComm.*** |
| 4.2.1 | Status report on the implementation of the current WIS requirements | **WG TDI** | WIS | **x** | **x** |  |  | WWW | CBS |
| Assessment of WIS operation in RA VI | **WG TDI** | WIS | **x** | **x** |  |  | WWW | CBS |
| Evaluation of future WIS requirements for RA VI | **WG TDI** | WIS | **x** | **x** |  |  | WWW | CBS |
| Monitor status of the RMTN and support members to be connected to RMDCN in RA VI  | **WG TDI** | WIS | **x** | **x** |  |  | WWW | CBS |
| Support the implementation of recommendations of OPAG-ISS in RA VI  | **WG TDI** | WIS | **x** | **x** |  |  | WWW | CBS |
| Monitor developments in data processing and forecasting systems, particularly with regard to EPS and severe weather events forecasting. | **WG TDI** | WIS | **x** | **x** |  |  | WWW | CBS |
| Make recommendations to strengthen collaboration and represent the Region in the CBS Inter-Commission Team on Global Data-Processing and Forecasting System (ICT-GDPFS). | **WG TDI** | WIS | **x** | **x** |  |  | WWW | CBS |
| Migration to RMDCN-NG (= RMDCN - Next Generation) | **WG TDI** | WIS | **x** | **x** |  |  | WWW | CBS |
| Support RA VI members in the migration to RMDCN-NG | **WG TDI** | WIS | **x** | **x** |  |  | WWW | CBS |
| 4.2.2 | Coordination and supervision of the migration to TDCF in RA VI | **WG TDI** | MTDCF | **x** | **x** |  |  | WWW | CBS |
| Support RA VI members in the migration to TDCF | **WG TDI** | MTDCF | **x** | **x** |  |  | WWW | CBS |
| **Key Outcome 4.3** | **Accessible climate observations and high quality climate data archives at the NMHSs and global data centres are increased** |
| **KPI 4.3.1** | **Increased contribution from RAVI Members to the Global Climate Observing System** |
| **KPI 4.3.2** | **Increased availability of rescued and digitized climate data** |
| ***Deliverables*** | ***Activities*** | ***WG*** | ***TT*** | ***2016*** | ***2017*** | ***2018*** | ***2019*** | ***WMO Progr.*** | ***WMOComm.*** |
| 4.3.1 | Network design and optimization (with support from the Hydro Forum) | **WG CH** | DOM |  |  |  |  |  |  |
| Support to standards development | **WG CH** | DOM |  |  |  |  |  |  |
| Harmonization of methodologies, quality control and access to data | **WG CH** | DOM |  |  |  |  |  |  |
| Data exchange and sharing | **WG CH** | DOM | x |  |  |  | WWW | CIMO |
| 4.3.3 | Maintenance of monitoring systems | **WG CH** | DOM |  |  |  |  |  |  |
| 4.3.3 | Maintaining and improving the existing RA VI/CCl WebSite on Data Rescue, including information on available digitized data, data rescue projects, homogeneity methods, methodologies of data rescue, considering inclusion of info on hydrologicaldata | **WG CH** | DOM | x |  |  |  | WWW | CIMO |

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| **Expected Result 5****Advance Targeted Research** |
| Enhanced capabilities of Members to contribute to and draw benefits from the global research capacity for weather, climate, water and environmental science and technology development.  |
| **Key Outcome 5.1** | **Research in climate prediction/ projection to improve the skills of seasonal, decadal, and longer time scales is enhanced** |
| **KPI 5.1.1** | **Increased number of Members participating in regional climate research activities** |
| **KPI 5.1.2** | **Outcome of research activities is made available to Members to enable increase in the skill of products and services** |
| ***Deliverables*** | ***Activities*** | ***WG*** | ***TT*** | ***2016*** | ***2017*** | ***2018*** | ***2019*** | ***WMO Progr.*** | ***WMOComm.*** |
| 5.1.1 | Include downscaled LRF products in RCOFs practice and provide training on downscaling technologies to NMHSs | **WG CH** |  |  |  |  |  | WCRP | CCl |
| **Key Outcome 5.2** | **Research in the prediction of high-impact weather on time scales of hours to seasons is enhanced within Region VI** |
| **KPI 5.2.1** | **Increased number of Members participating in regional high impact weather research activities** |
| ***Deliverables*** | ***Activities*** | ***WG*** | ***TT*** | ***2016*** | ***2017*** | ***2018*** | ***2019*** | ***WMO Progr.*** | ***WMOComm.*** |
| 5.2.1 | Development of High Impact Weather projects in RAVI | WG CH |  |  |  |  |  | WWRP | CAS |
| **Expected Result 6****Strengthened Capacity Development** |
| Enhanced capabilities of NMHSs, in particular in developing and least developed countries, to fulfil their mandates- A crosscutting programme, already included in the programmes of every WG |

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| **Expected Result 7****Strengthened Partnerships** |
| New and strengthened partnerships and cooperation activities to improve NMHSs’ performance in delivering services and to increase the value of the contributions of WMO within the United Nations system, relevant international conventions and national strategies |
| **Key Outcome 7.1** | **Participation of NMHSs in relevant national and regional partnerships are enhanced** |
| **KPI 7.1.1** | **Number of NMHSs having active partnerships at national and regional levels, in particular with EU** |
| **KPI 7.1.2** | **Financial support mobilized for development projects, e.g., from governments, donor partners and regional donors** |
| **Deliverables** | **Activities** | **WG** | **TT** | ***2016*** | ***2017*** | ***2018*** | ***2019*** | **WMO Progr.** | **WMOComm.** |
| 7.1.1 | Share best practices on building partnerships with the EU between different NMHSs. | **WG SDP** | EUP | **x** | **x** |  |  | RP |  |
| 7.1.2 | Monitor and advise on EU policy development and on EU calls when issued.-Annual Reporting to the community based on the annual Roadmaps released by the EU-Annual Reporting on large releases of H2020 Workprogrammes (Summer | **WG SDP** | EUP | **x** | **x** |  |  | RP |  |
| 7.1.2 | Consider proper mechanisms to inform members on EU opportunities with focus on H2020 (workshop?)-First step: mechanism through EU Focal Points network (ongoing on the EUMETNET Portal in Test Phase). Second step: extension into entire RAVI to be considered on a WMO Platform. | **WG SDP** | EUP | **x** | **x** |  |  |  |  |
| **Key Outcome 7.2** | **Public, decision-makers and other stakeholders are increasingly aware of key WMO and NMHSs issues, activities and priorities though enhanced communication** |
| **KPI 7.2.1** | **Number of NMHSs implementing a strategy for communication with key stakeholders in Region VI.** |
| ***Deliverables*** | ***Activities*** | ***WG*** | ***TT*** | ***2016*** | ***2017*** | ***2018*** | ***2019*** | ***WMO Progr.*** | ***WMOComm.*** |
| 7.2.1 | Provide an regional overview on best practices of communication / public affairs | **WG SDP** | SDMC | **x** | **x** |  |  | PWSP |  |
| 7.2.1 | Develop and establish a mentoring pilot project in the field of communication | **WG SDP** | SDMC | **x** | **x** |  |  |  |  |
| 7.2.1 | Work with Members and partners to organize a communications workshop for Information and Public Affairs focal points | **WG SDP** | SDMC | **x** | **x** |  |  |  |  |

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| **Expected Result 8****Improved Efficiency and Effectivness** |
| An effective and efficient Organization |
| **Key Outcome 8.1** | **An effective and efficient Regional Association** |
| **KPI 8.1.1** | **Members’ satisfaction with Regional Association and its subsidiary bodies activities and outputs** |
| **KPI 8.1.2** | **Completion of the activities of the subsidiary bodies in line with the Region Operating Plan** |
| **KPI 8.1.3** | **Enhance effectiveness and efficiency of Regional Association sessions and inter-sessional activities** |
| ***Deliverables*** | ***Activities*** | ***WG*** | ***TT*** | ***2016*** | ***2017*** | ***2018*** | ***2019*** | ***WMO Progr.*** | ***WMOComm.*** |
| 8.1.1 | Survey of Members’ satisfactions | **MG** |  |  | **x** |  | **x** | RP |  |
| Information about RA VI activities available on WMO web site | **MG** |  | **x** | **x** | **x** | **x** | RP |  |
| Organize regional events to support the implementation activities in main priority areas by the RA VI Members and enhance regional cooperation | **MG** |  | **x** | **x** | **x** | **x** | RP |  |
| 8.1.2 | MG meetings held as planned (at least one per year) | **MG** |  |  |  |  |  |  |  |
| WG meetings held as planned (at least 2 per inter-session period) | **All WGs** |  | **x** | **x** |  |  | RP |  |
| RA VI Operating Plan (2016 - 2019) adopted and published | **MG** |  | **x** |  |  |  | RP |  |
| Annual Progress Reports | **MG, WGs** |  | **x** | **x** | **x** | **x** | RP |  |
| 8.1.3 | Organize and conduct 17th Session of RA VI with innovative approaches | **MG** |  |  | **x** |  |  | All |  |
| Organize and conduct RA VI TECO | **MG, WGs** |  |  | **x** |  |  | All |  |
| RA VI Working Structure established (after 17th session) | **MG** |  |  | **x** | **x** |  | RP |  |