#### **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 relusers	ated enviro	nmental in	formation	and proc	ducts in	accorda	nce with t	he needs o
KPI 1.1.1	Number of Members able to demonstrate socio-economic benefits of their services through the use of WMO endorsed methodology  Number of NMHSs providing products for decision-making by users following the WMO Strategy for Service Delivery								
KPI 1.1.2									
Deliverables	Activities	RA6 WG	тт	2016	2017	2018	2019	WMO Progr.	WMO Comm.
1.1.1	Support possible pilot SEB studies with a view to optimize monitoring of the contents and results	WG SDP	SEB	х	х			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	х				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 relate aviation	ed environm	ental prod	lucts and	services	to users	s' comm	unities, e	specially fo
KPI 1.2.1	Number of Members compliant with the requirements for QMS for aviation meteorological	gical services							
KPI 1.2.2	Number of Members compliant with the competency requirements for the aeronautical	al MET personn	el						
Deliverables	Activities	WG	TT	2016	2017	2018	2019	WMO Progr.	WMO Comm.
1.2.1	Organise an European Conference on meteorological service provision to civil aviation	WG SDP		х					
1.2.2	Monitor regional activities and developments related to civil aviation meteorology	WG SDP	Ad hoc	х	х			AeMP	CAeM in close cooperation with TT QM

#### 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

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.	WMO Comm.		
2.1.1	Develop and establish a mentoring pilot project in the field of weather warnings	WG SDP	WARN	х	х			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	х	х			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 b	asins									
Deliverables	Activities	WG	TT	2016	2017	2018	2019	WMO Progr.	WMO Comm.		
2.2.1	Mapping and comparison of the use of hydrological models in RAVI	WG CH	HMFW	х	х			HWRP	СНу		
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	х	х			HWRP	СНу		
2.2.3	Exchange best practices and training materials for warning systems	WG CH	HMFW		х			HWRP	СНу		
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	al and regional	centres								
Deliverables	Activities	WG	TT	2016	2017	2018	2019	WMO Progr.	WMO Comm.		
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	х	х			WCP/HW RP	СНу		
2.3.2	Identify the scope for, and implementation of, Integrated drought management w.r.t. water resources and agriculture	WG CH	WSD	х	x			WCP/HWRP	СНу		

## 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 for	orecasts an	d long-term	n projectio	ns				
KPI 3.1.1	Number of Members providing standardized products (e.g. monthly and seasonal pre	dictions, clima	ite watches)						
KPI 3.1.2	Increased awerness of improvements in forecast model development								
Deliverables	Activities	WG	TT	2016	2017	2018	2019	WMO Progr.	WMO Comm.
3.1.1	Include downscaled LRF products in RCOFs practice and provide training on downscaling technologies to NMHSs	WG CH	RCOF	x	х	х		WCP/RP	CCI
3.1.2	Monitor developments in data processing and forecasting systems, particularly with regard to EPS and severe weather events forecasting.	WG TDI	Rapporte ur 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 regional and national level	for climate	adaptation	and risk	manage	ment -	impleme	entation of	GFCS at
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	l and providing	input to RCC	s					
KPI 3.2.3	Number of products of NCCs								
Deliverables	Activities	WG	TT	2016	2017	2018	2019	WMO Progr.	WMO Comm.
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	х			WCP/RP	CCI
	Identify new services, including hydrological and agrometeorological, for WMO RAVI RCC	WG CH	RCC	X	х			WCP/RP	CCI
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	CCI
Key Outcome 3.3	Hydrological information and products including water resource ass	sessments a	are improve	d					
KPI 3.3.1	Volume of data available to users from regional hydrological data bases developed in	transboundar	y river basins						
	Number of Members developing and disseminating drought management products ar	nd services							
KPI 3.3.2								14/8/10	14/8/6
KPI 3.3.2 Deliverables	Activities	WG	TT	2016	2017	2018	2019	WMO Progr. WCP/HW	WMO Comm.

## 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					OII WOII	a Staria	aras sc	t by vvivic	<i></i>			
4.1	Progress in implementation of WMO Integrated Global Observing Sy	stem (WIGC	S) in Regi	on 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.	WMO Comm.			
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 enhancement 2. Establish a QM process in which the RA VI members can participate in the further development of the RA VI WIP 3. Coordination with WIGOS PO in WMO, EUMETNET and other key players 4. Continous updating the WIP 5. Redesign of the Regional Observation Network	WG TDI	RAVI WIGOS					www	CBS			
4.1.2	Assist RA VI Members to develop their national WIPs  1. Establish communication and collaboration processes with the national focal points 2. Further assist member countries to fill gaps in their observation system 3. Capacity building / Workshops /Documents Create a regional capacity building plan	WG TDI	RAVI WIGOS	х	x			www	CBS			
	Realizing WIGOS via regional observation networks (RBON)	WG TDI	RAVI WIGOS	x	x			www	CBS			
	Radar systems integration and windprofiler integration	WG TDI	RAVI WIGOS	x	х			www	CBS			
4.1.3	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	х	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 withi	n 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.	WMO Comm.	
	Status report on the implementation of the current WIS requirements	WG TDI	WIS	х	х			WWW	CBS	
	Assessment of WIS operation in RA VI	WG TDI	WIS	х	х			WWW	CBS	
	Evaluation of future WIS requirements for RA VI	WG TDI	WIS	х	х			WWW	CBS	
	Monitor status of the RMTN and support members to be connected to RMDCN in RA VI	WG TDI	WIS	х	х			WWW	CBS	
	Support the implementation of recommendations of OPAG-ISS in RA VI	WG TDI	WIS	х	х			WWW	CBS	
4.2.1	Monitor developments in data processing and forecasting systems, particularly with regard to EPS and severe weather events forecasting.	WG TDI	WIS	x	х			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	х	х			WWW	CBS	
	Migration to RMDCN-NG (= RMDCN - Next Generation)	WG TDI	WIS	х	х			WWW	CBS	
	Support RA VI members in the migration to RMDCN-NG	WG TDI	WIS	х	х			WWW	CBS	
100	Coordination and supervision of the migration to TDCF in RA VI	WG TDI	MTDCF	х	х			WWW	CBS	
4.2.2	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 archiv	es at the N	MHSs and	global data	a centres	are inc	reased			
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.	WMO Comm.	
	Network design and optimization (with support from the Hydro Forum)	WG CH	DOM							
	Support to standards development	WG CH	DOM							
4.3.1	Harmonization of methodologies, quality control and access to data	WG CH	DOM							
	Data exchange and sharing	WG CH	DOM	Х				WWW	CIMO	
4.3.3	Maintenance of monitoring systems	WG CH	DOM							
4.3.3	Maintaining and improving the existing RA VI/CCI WebSite on Data Rescue, including information on available digitized data, data rescue projects, homogeneity methods, methodologies of data rescue, considering inclusion of info on hydrological data	WG CH	DOM	х				www	CIMO	

#### **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.	WMO Comm.	
5.1.1	Include downscaled LRF products in RCOFs practice and provide training on downscaling technologies to NMHSs	WG CH						WCRP	CCI	
Key Outcome 5.2	Research in the prediction of high-impact weather on time scales of	hours to sea	ısons is eı	nhanced w	ithin Reg	gion 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.	WMO Comm.	
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

## 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 partnership					<u>J</u>					
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.	WMO Comm.		
7.1.1	Share best practices on building partnerships with the EU between different NMHSs.	WG SDP	EUP	Х	х			RP			
7.1.2	Monitor and advise on EU policy development and on EU calls when issuedAnnual 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 communication	are of key W	MO and N	MHSs issu	es, activ	ities and	l prioritie	s though	enhanced		
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.	WMO Comm.		
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	х	х						
7.2.1	Work with Members and partners to organize a communications workshop for Information and Public Affairs focal points	WG SDP	SDMC	х	х						

# 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.	WMO Comm.		
	Survey of Members' satisfactions	MG			X		х	RP			
8.1.1	Information about RA VI activities available on WMO web site	MG		х	х	х	х	RP			
	Organize regional events to support the implementation activities in main priority areas by the RA VI Members and enhance regional cooperation	MG		x	х	x	x	RP			
	MG meetings held as planned (at least one per year)	MG									
0.4.0	WG meetings held as planned (at least 2 per inter-session period)	All WGs		х	х			RP			
8.1.2	RA VI Operating Plan (2016 - 2019) adopted and published	MG		х				RP			
	Annual Progress Reports	MG, WGs		х	х	х	х	RP			
	Organize and conduct 17th Session of RA VI with innovative approaches	MG			х			All			
8.1.3	Organize and conduct RA VI TECO	MG, WGs			х			All			
	RA VI Working Structure established (after 17 <sup>th</sup> session)	MG			х	х		RP			