

KEY PERFORMANCE INDICATORS (updated December 2016)

(*) For indicators marked with an asterisk, the data comes from the Survey on Impacts of Achieved Results on Members. The numbers and percentages indicated reflect the number/percentage of respondents, not the whole body of WMO Members.

Key Performance Indicator	Disaggregation	Unit of analysis	Baseline year	Baseline value		2017 Target	2017 Actual		2019 Target	2019 Actual	
				%	#		%	#		%	#
Expected Result 1: Enhanced capabilities of Members to deliver and improve access to high-quality weather, climate, water and related environmental predictions, information, warnings and services in response to users' needs, and to enable their use in decision-making by relevant societal sectors											
KO 1.1 Improved access to seamless weather, climate, water, and related environmental products and services (e.g. warnings, forecasts and supporting information)											
1.1.1*	Number of Members demonstrating quantitative measurements of the socio-economic benefits of their products and services	General public Emergency management Aviation industry Marine industry Agriculture	Percentage / Number (out of those for whom applicable)	2015	91% 92% 77% 53% 81%	71 72 60 41 63					
1.1.2*	Number of NMHSs with regular access to products provided by global and regional centres		Percentage / Number of Members that have given a rating of "mostly reliable" and "highly reliable" access	2015	96%	92					
KO 1.2 Delivery of weather, climate, water and related environmental products and services to users' communities is improved											
1.2.1*	Number of NMHSs expressing user satisfaction with the:	(a) availability (b) reliability and (c) range of products (d) timeliness (e) contribution to decision making	Percentage / Number of Members who have given a rating of 4-5	2015	81% 76% 69% 82% 76%	84 79 72 85 78					
Expected Result 2: Enhanced capabilities of Members to reduce risks and potential impacts of hazards caused by weather, climate, water and related environmental elements											
KO 2.1 Multi-hazard early warning systems are implemented											
2.1.1*	Number of NMHSs contributing to the implementation of multi-hazard early warning systems		Percentage / Number	2015	93%	96					
KO 2.2 National integrated flood management plans are developed											
2.2.1*	Number of Members establishing flood management plans		Percentage / Number	2015	90%	92					
2.2.2*	Number of NMHSs participating in regional hydrological forecasting systems for transboundary river basins		Percentage / Number (out of those for whom applicable)	2015	51%	52					
KO 2.3 Drought early warning systems are improved											
2.3.1	NMHSs and Regional Centres that issue drought early warnings		Number	2015	--	44					
Expected Result 3: Enhanced capabilities of Members to produce better weather, climate, water and related environmental information, predictions and warnings to support in particular disaster risk reduction and climate impact and adaptation strategies											
KO 3.1 Improved climate monitoring, long range forecasts and long-term projections											
3.1.1*	Number of Members issuing:	(a) monthly predictions (b) seasonal predictions (c) climate watch bulletins (d) long-term projections	Percentage / Number	2015	71% 85% 73% 53%	70 84 72 52					
3.1.2*	Perceived quality of the issued:	(a) Monthly predictions	Percentage / Number of Members that have given a rating 4-5	2015	51%	38					

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		(b) Seasonal predictions	Percentage / Number of Members that have given a rating of 4-5		51%	45						
		(c) Climate watch bulletins	Percentage / Number of Members that have given a rating of 4-5		68%	51						
		(d) Long-term projections	Percentage / Number of Members that have given a rating of 4-5		43%	25						
3.1.3*	Perceived timeliness of the issued:	(a) Monthly predictions	Percentage / Number of Members that have given a rating of 4-5	2015	74%	54						
		(b) Seasonal predictions	Percentage / Number of Members that have given a rating of 4-5		72%	63						
		(c) Climate watch bulletins	Percentage / Number of Members that have given a rating of 4-5		68%	52						
		(d) Long-term projections	Percentage / Number of Members that have given a rating of 4-5		61%	37						
KO 3.2 Climate information and prediction products for climate adaptation and risk management are improved												
3.2.1*	Perceived quality of the products of WMO Regional Climate Centres used at the national level	(a) Long range forecasts	Percentage / Number of Members that have given a rating of 4-5	2015	58%	44						
		(b) Regional climate monitoring products	Percentage / Number of Members that have given a rating of 4-5		66%	55						
		(c) Regional data	Percentage / Number of Members that have given a rating of 4-5		54%	44						
		(d) Guidance material on regional products	Percentage / Number of Members that have given a rating of 4-5		47%	35						
3.2.2*	Number of Members operationally developing and disseminating climate products and information for national needs	(i) Basic climate products derived from national climate data	Percentage / Number	2015	92%	96						
		(ii) Climate diagnostics and climate analysis (to describe climate variability and change)	Percentage / Number		89%	90						
		(iii) Hazards and extreme value analysis	Percentage / Number		84%	85						
		(iv) Contribution to national and local climate assessments	Percentage / Number		94%	97						
		(v) Monthly and longer climate predictions (empirical/dynamical), incl. seasonal climate outlooks, both statistical and model-based	Percentage / Number		78%	79						
		(vi) National climate watch advisories and bulletins	Percentage / Number		80%	81						

Key Performance Indicator	Disaggregation	Unit of analysis	Baseline year	Baseline value		2017 Target	2017 Actual		2019 Target	2019 Actual	
				%	#		%	#	%	#	
	(vii) Specialized climate products to meet the needs of major climate-sensitive sectors	Percentage / Number		83%	82						
	(viii) Downscaled long-term climate projections	Percentage / Number		65%	64						
	(ix) Risk identification/risk assessment products	Percentage / Number		58%	56						
	(x) Adaptation-oriented climate information and products	Percentage / Number		67%	61						
	(xi) Policy-oriented climate information and products	Percentage / Number		68%	67						
	(xii) Regional-scale climate model products	Percentage / Number		60%	58						
	(xiii) Global-scale climate model products	Percentage / Number		39%	37						
	(xiv) Products based on interdisciplinary (climate/sector) models	Percentage / Number		42%	39						
	(xv) New models and/or analytical tools	Percentage / Number		49%	46						
3.2.3* Perceived quality of the national climate information and products available in Member countries	(i) Basic climate products derived from national climate data	Percentage / Number of Members that have given a rating of 4-5	2015	81%	84						
	(ii) Climate diagnostics and climate analysis (to describe climate variability and change)	Percentage / Number of Members that have given a rating of 4-5		66%	69						
	(iii) Hazards and extreme value analysis	Percentage / Number of Members that have given a rating of 4-5		55%	57						
	(iv) Contribution to national and local climate assessments	Percentage / Number of Members that have given a rating of 4-5		72%	73						
	(v) Monthly and longer climate predictions (empirical/dynamical), incl. seasonal climate outlooks, both	Percentage / Number of Members that have given a rating of 4-5		52%	53						
	(vi) National climate watch advisories and bulletins	Percentage / Number of Members that have given a rating of 4-5		53%	54						
	(vii) Specialized climate products to meet the needs of major climate-sensitive sectors	Percentage / Number of Members that have given a rating of 4-5		56%	55						
	(viii) Downscaled long-term climate projections	Percentage / Number of Members that have given a rating of 4-5		45%	45						
	(ix) Risk identification/risk assessment products	Percentage / Number of Members that have given a rating of 4-5		39%	39						
	(x) Adaptation-oriented climate information and products	Percentage / Number of Members that have given a rating of 4-5		42%	42						
	(xi) Policy-oriented climate information and products	Percentage / Number of Members that have given a rating of 4-5		47%	47						

Key Performance Indicator		Disaggregation	Unit of analysis	Baseline year	Baseline value		2017 Target	2017 Actual		2019 Target	2019 Actual		
					%	#		%	#		%	#	
		(xii) Regional-scale climate model products	Percentage / Number of Members that have given a rating of 4-5		47%	47							
		(xiii) Global-scale climate model products	Percentage / Number of Members that have given a rating of 4-5		31%	30							
		(xiv) Products based on interdisciplinary (climate/sector) models	Percentage / Number of Members that have given a rating of 4-5		18%	18							
		(xv) New models and/or analytical tools	Percentage / Number of Members that have given a rating of 4-5		29%	28							
3.2.4*	Number of Members providing targeted/tailored climate information, products and services, through formal mechanisms including National Climate Outlook Forums, to support user requirements in their countries for adaptation and climate risk management in key socio-economic sectors	Agriculture/food security, incl. fisheries and livestock	Percentage / Number	2015	90%	93							
		Water resource management	Percentage / Number		88%	91							
		Public health	Percentage / Number		75%	77							
		Energy	Percentage / Number		84%	87							
		Tourism and recreation	Percentage / Number		62%	64							
		Urban design/management	Percentage / Number		63%	65							
		Industry (i.e. construction, manufacturing, etc)	Percentage / Number		71%	73							
		General public	Percentage / Number		94%	97							
		Emergency management	Percentage / Number		89%	92							
		Government, policy, agencies, NGOs, etc.	Percentage / Number		85%	88							
		Transportation (land, air, marine)	Percentage / Number		83%	85							
KO 3.3 Hydrological information and products, including water resources, are improved													
3.3.1*	Number of Members using a Quality Management Framework for Hydrology based on current guidance materials		Percentage / Number	2015	39%	38							
3.3.2*	Number of regional hydrological databases developed in transboundary river basins		Percentage / Number	2015	40%	38							
KO 3.4 Drought information and prediction for risk management is improved													
3.4.1	Number of NMHSs and Regional Centres issuing drought information and prediction		Number	2015	--	44							
Expected Result 4: Enhanced capabilities of Members to access, develop, implement and use integrated and interoperable Earth- and space-based observation systems for weather, climate and hydrological observations, as well as related environmental and space weather observations, based on world standards set by WMO													
KO 4.1 WMO Integrated Global Observing System implementation phase is completed													
4.1.1	Percentage of progress in achieving the key implementation tasks, milestones and deliverables specified by the WIGOS Implementation Plan (WIP)		Percentage	2015									
4.1.2	Increased availability of observations for users	Synop	Percentage: Ratio of the [number of SYNOP reports (FM 12-XIV), TEMP reports (FM 35-XI Ext.), CLIMAT reports (FM 71-XII) and their binary successors (FM 94 BUFR) as measured in the annual WWW IM] and [average of 2007-11 FP]	2015	113%	--							
		Upper Air			107%	--							
		Climate			93%	--							

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					%	#		%	#		%	#
		AMDAR	Percentage: Ratio of the [number of AMDAR reports (FM 42-XI Ext.) and its binary successors (FM 94 BUFR) as measured in the annual WWW IM] and [average of 2007-11 FP]	2015	308%	--						
		Operational drifters reporting on GTS according to JCOMMOPS	Number	2015	--	1549						
		GEO sat	Percentage: Ratio of the [Number of operational geostationary satellites and imaging channels on 1 June] and [number for 1 June 2011]	2015	100%	--						
		Imaging channels			114%	--						
		MW	Percentage: Ratio of the [Number of operational polar-orbiting satellite sounders (Microwave or IR) on 1 June] and [number for 1 June 2011]	2015	140%	--						
		Infra-red hyps			300%	--						
			Number of satellite instruments routinely inter-calibrated to references (GSICS)	2015	--	4						
	Percentage: Ratio of the [Number of satellite observations and sources available for global NWP as measured by the lead centre for satellite data] and [the Number for 2011]	2015	N/A (see note)	--								
KO 4.2 WMO Information System is developed and implemented												
4.2.1*	Progress in the implementation of WIS by NMHSs as measured by	(a) percentage of registered WIS centres that have been endorsed as WIS compliant	Percentage	2015	83%	--						
		(b) Number of NMHSs with improved <u>observational data</u> as a result of implementation of WIS functions	Percentage / Number	2015	68%	45						
		(c) Number of NMHSs with improved <u>products</u> as a result of implementation of WIS functions	Percentage / Number	2015	58%	38						
4.2.2*	Number of NMHSs whose data processing and management capabilities have enhanced as a result of implementation of WIS functions		Percentage / Number (out of those to whom applicable)	2015	75%	48						

Key Performance Indicator	Disaggregation	Unit of analysis	Baseline year	Baseline value		2017 Target	2017 Actual		2019 Target	2019 Actual	
				%	#		%	#		%	#
KO 4.3 Progress in implementing the Global Climate Observing System											
4.3.1	Percentage of progress in achieving the tasks of the GCOS implementation plan (see Note)	(a) atmospheric domain (2012-13); very good (2015)	Percentage	2012	11%	--					
		(b) oceanic domain (2012-13); good (2015)			32%	--					
		(c) terrestrial domain (2012-2013); Moderate (2015)			35%	--					
		(d) cross-cutting actions (2012-2013); limited (2015)			15%	--					
		(e) limited or none (2015)			7%	--					
KO 4.4 Data rescue and data management systems improved											
4.4.1*	Number of NMHSs undertaking data rescue or being involved in regional collaborative data rescue initiatives such as MEDARE		Percentage / Number	2015	33%	33					
4.4.2*	Number of Members implementing modern climate data management systems and/or climate monitoring systems		Percentage / Number	2015	82%	84					
Expected Result 5: Enhanced capabilities of Members to contribute to and raw benefits from the global research capacity for weather, climate, water and the related environmental science and technology development											
KO 5.1 Research in climate prediction/projection to improve the skills of seasonal, decadal and longer timescales is enhanced											
5.1.1	Number of new activities advancing climate research capacity at the global and regional level, especially for early career scientists and scientists from developing and LDC countries		Number	2015	--	6					
5.1.2	Number of early career scientists and scientists from developing and least developed countries that WCRP funded to participate in activities to advance climate research	Early career scientists	Number	2015	--	102					
		Scientists from developing and LDC countries	Number		--	39					
5.1.3*	Degree of satisfaction among NMHSs with the skill of climate predictions		Percentage / Number of Members that have given a rating of 4-5	2015	38%	36%					
KO 5.2 Research in the prediction of high-impact weather on time scales of hours to seasons is enhanced											
5.2.1	Number of total research projects on operational products and services	New	Number	2015	--	6					
		Ongoing			--	5					
		Completed			--	2					
5.2.2*	Number of Members whose operational products and services have improved as a result of WMO research projects	Operational nowcasting service	Percentage / Number	2015	76%	56					
		Design and operational use of mesoscale prediction systems	Percentage / Number		53%	39					
		Access and use of outputs of operational ensemble modeling systems	Percentage / Number		72%	53					
5.2.3*	Number of NMHSs in developing and least developed countries participating in regional and international research initiatives on high impact weather or severe weather forecasting demonstration projects		Percentage / Number	2015	49%	33					
KO 5.3 Atmospheric chemistry observations and assessment meet needs of environmental conventions and policy assessments											
5.3.1*	Degree of Member satisfaction with the:	(a) usefulness of Global Atmospheric Chemistry Bulletins	Percentage / Number of Members that have given a rating of 4-5	2015	50%	40					

Key Performance Indicator		Disaggregation	Unit of analysis	Baseline year	Baseline value		2017 Target	2017 Actual		2019 Target	2019 Actual	
					%	#		%	#		%	#
		(b) timeliness of Global Atmospheric Chemistry Bulletins	Percentage / Number of Members that have given a rating of 4-5	2015	49%	38						
5.3.2*	Degree of Member satisfaction with the usefulness of:	(a) GAW measurement guidelines and reports	Percentage / Number of Members that have given a rating of 4-5 out of those for whom applicable	2015	78%	51						
		(b) Sand-and-Dust storm products	Percentage / Number of Members that have given a rating of 4-5 out of those for whom applicable	2015	61%	28						
		(c) the chemical weather activities of GURME	Percentage / Number of Members that have given a rating of 4-5 out of those for whom applicable	2015	50%	24						
ER 6: Enhanced capabilities of NMHSs, in particular in developing and least developed countries, to fulfil their mandates												
KO 6.1 Visibility and relevance of NMHSs in national and regional development agendas is improved, particularly in developing and least developed countries												
6.1.1*	Number of NMHSs with:	(a) increased contribution to national policy setting	Percentage / Number of Members that have given a rating of 4-5 out of those to whom applicable	2015	65%	62						
		(b) improved awareness by users on types of services NMHSs can deliver	Percentage / Number of Members that have given a rating of 4-5 out of those to whom applicable		82%	83						
		(c) improved user accessibility to forecasts and warnings	Percentage / Number of Members that have given a rating of 4-5 out of those to whom applicable		86%	87						
		(d) improved timeliness of forecasts and warnings	Percentage / Number of Members that have given a rating of 4-5 out of those to whom applicable		77%	77						
		(e) increased accuracy of forecasts and warnings	Percentage / Number of Members that have given a rating of 4-5 out of those to whom applicable		81%	81						
6.1.2*	Number of NMHSs with:	(a) increased contribution to regional policy setting	Percentage / Number of Members that have given a rating of 4-5 out of those to whom applicable	2015	48%	39						
		(b) improved awareness by regional users on types of services that can be provided	Percentage / Number of Members that have given a rating of 4-5 out of those to whom applicable		57%	47						
		(c) improved regional user accessibility to forecasts and warnings	Percentage / Number of Members that have given a rating of 4-5 out of those to whom applicable		70%	58						
		(d) improved timeliness of forecasts and warnings delivered from the Regional Centre	Percentage / Number of Members that have given a rating of 4-5 out of those to whom applicable		70%	57						

Key Performance Indicator		Disaggregation	Unit of analysis	Baseline year	Baseline value		2017 Target	2017 Actual		2019 Target	2019 Actual	
					%	#		%	#		%	#
		(e) increased accuracy of forecasts and warnings delivered from the Regional Centre	Percentage / Number of Members that have given a rating of 4-5 out of those to whom applicable		66%	54						
KO 6.2 Infrastructure and operational facilities of NMHSs and Regional Centres are improved, particularly in developing and least developed countries												
6.2.1*	Number of NMHSs with improved infrastructure and operational facilities in:	Surface observing network	Percentage / Number of Members to whom applicable	2015	87%	86						
		Upper-air observing network	Percentage / Number of Members to whom applicable		41%	37						
		Equipment for meteorological / environmental satellite data	Percentage / Number of Members to whom applicable		67%	64						
		Data-processing / forecasting sector (2012-13); Numerical weather prediction and data processing (2015)	Percentage / Number of Members to whom applicable		77%	71						
		In early warning and hazard risk assessments	Percentage / Number of Members to whom applicable	2015	--	--						
		In forecasting	Percentage / Number of Members to whom applicable		--	--						
KO 6.3 Education and training development facilities at national and regional levels are improved, especially in developing and least developed countries												
6.3.1	Number of RTCs providing education and training support for GFCS related activities		Number	2015	--	11						
6.3.2*	Degree to which Members are getting value for money from the WMO Fellowship Programme		Percentage / Number of Members that have given a rating of 4-5 out of those for whom applicable	2015	75%	39						
6.3.3*	Degree of Member satisfaction with the Regional Training Centres (RTCs) in use		Percentage / Number of Members that have given a rating of 4-5	2015	75%	101						
KO 6.4 Capacities of NMHSs are enhanced through cooperation and partnerships with other national and regional organizations												
6.4.1	Development projects and activities funded through voluntary and extra-budgetary resources			2015								
Expected Result 7: 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 strategic issues												
KO 7.1 WMO leadership and contribution in relevant UN system and other international partners' initiatives and programmes is improved												
7.1.1	Number of reports of WMO and its co-sponsored programmes submitted to UN and other international conventions, particularly the UNFCCC, UNCCD and UNCBD	FCCC	Number	2015	--	9						
		CCD	Number		--	1						
		CBD	Number		--	0						
7.1.2	Number of contracts/cooperation agreements within which WMO is engaged with partners	Agreements	Number	2015	--	56						
		Working arrangements	Number		--	49						
		Consultative status	Number		--	20						
		Memonrandum of Understanding	Number		--	106						
7.1.3*	Number of NMHSs implementing projects with the UN and other international and/or regional organizations		Percentage / Number	2015	73%	74						

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				%	#		%	#		%	#
KO 7.2 Public, decision-makers and other stakeholders are increasingly aware of key WMO and NMHSs issues, activities and priorities through enhanced communication											
7.2.1	Uptake of WMO public information outputs as measured by:	(a) number of unique visitors on the WMO website	Number	2015	--	5 175 000					
		(b) number of times WMO was mentioned in press articles	Number		--	36 420					
		(c) number of Facebook fans	Number		--	49 000					
		(d) number of Twitter followers	Number		--	22 500					
7.2.2*	Degree to which NMHSs make use of WMO public information outputs	Using "regularly," "frequently" and "always"	Percentage / Number	2015	75%	76					
7.2.3*	Number of NMHSs that have provided training to senior managers and/or communication officers in media relations, social media or other aspects of communication		Percentage / Number	2015	60%	61					
Expected Result 8: An effective and efficient Organization											
KO 8.1 Effective and efficient WMO Congress and EC											
8.1.1	Degree of Member satisfaction (rating of 3-5) with documentation for Cg, EC and its working groups	(a) technical content	Percentage of meeting participants who have given a rating of 3-5	2015	66%	--					
		(b) language quality			82%	--					
8.1.2	Degree of Member satisfaction (rating of 3-5) with supporting services for Cg and EC (interpretation, conference activities and facilities)	(a) interpretation	Percentage of meeting participants who have given a rating of 3-5	2015	79%	--					
		(b) paperless sessions			94%	--					
		(c) efficiency of badge delivery			92%	--					
8.1.3	Decrease in the total cost of sessions held under similar conditions (in CHF)		CHF	2015							
KO 8.2 An effective and efficient WMO Secretariat											
8.2.1	Percentage of implemented accepted oversight recommendations for improved business effectiveness on the agreed deadline	(a) IOO	Percentage	2015	79%	--					
		(b) JIU	Percentage	2015	TBD	--					
8.2.2	Unqualified opinion of the external auditor in the financial period		Number	2015	--	4					
8.2.3	Increase in the efficiency of fulfilling requirements for linguistic and publishing services	(a) direct cost (in CHF) per 1 000 words translated per language (temporary and outsourced translation - A,C,F,R,S) for EC	CHF	2015	--	See note					
		(b) number of publications/CB reports distributed online exclusively	Number	2015	increase of 17%	70					
8.2.4	Issuance of statements of internal control in the financial period		Number	2015	--	4					
KO 8.3 Effective and efficient constituent bodies (RAs and TCs)											
8.3.1	Degree of Member satisfaction with constituent body documentation	(a) technical content	Percentage of meeting participants who have given a rating of 3-5	2015	See note	--					
		(b) language quality			See note	--					

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					%	#		%	#		%	#
8.3.2	Degree of Member satisfaction with constituent body supporting services	(a) interpretation	Percentage of meeting participants who have given a rating of 3-5	2015	See note	--						
		(b) paperless sessions			See note	--						
		(c) efficiency of badge delivery			See note	--						
8.3.3	Decrease in the total cost of constituent body sessions held under similar conditions (in CHF)		CHF	2015								

NOTES:

4.2.1: Number could not be established; revisiting role of global lead centre on satellite data monitoring.

4.3.1: the GCOS Status Report 2015 does not distinguish anymore between the categories (a) - (d) as measured in 2012 and 2013. In 2015, progress was measured as (a) very good, (b) good, (c) moderate, (d) limited and (e) limited or none.

8.3.1 and 8.3.2: In 2015, RA I-16 was the only constituent body meeting held. Data is unavailable due to the lack of response to the WMO satisfaction survey distributed to Members following the meeting.