

Member State
Associate of the CGPM
International organization

State as on 21 June 2019

Acronyms are listed in the last page of this document.

Country	AUV				Mass and Related Quantities									Length			PR	T	TF	EM			
	A	W	V	Total	Mass 1	Dens 2	Pres 3	F 4	Torq 5	Visc 6	H 7	Grav 8	FF 9	Total	Laser	Dim Met	Total	Total	Total	Total	Total	Matrices	
Albania					7									7									
Argentina	5		4	9	29	16	13	11					4	73	1	11	12	4	17	9	78	21	
Australia	13		10	23	7	2	4	5						18		27	27	17	26	21	80	27	
Austria	17		6	23	9	2	7	4		7	4	1	25	59	5	24	29	4	23	17	44	10	
Azerbaijan										1				1									
Bangladesh																							
Belarus	31			31	6		1			2	1			10	2	14	16	11	37	31	42	6	
Belgium					10		0							10	3	12	15		20	4	7	3	
Bolivia					17									17									
Bosnia and Herzegovina					8		2							10					15	15	26	23	
Botswana																			3				
Brazil	57		31	88	27	15	11	5	1	22			4	85	8	19	27	11	11	13	66	29	
Bulgaria	12		18	30	8		15			1				24	3	15	18	7	44	16	58	33	
Canada	20	3	9	32	32	8	9						3	52	10	9	19	76	64	7	73	22	
CARICOM																							
Chile					24			9						33		1	1		10		26	13	
China	22	3	31	56	12	4	8	3	1	15	14		12	69	2	77	79	27	50	34	180	81	
Chinese Taipei	21		18	39	9		12	4			3		24	52	3	55	58	45	42	9	49	20	
Colombia						1		2						3		1	1		37	12			
Costa Rica					24								8	32					8	11	16	14	
Croatia							10							10	3	19	22		32		21	12	
Cuba													12	12					8		17		
Czechia	4		4	8	10		11	4	1				21	47	15	66	81	40	73	17	87	58	
Denmark	29		12	41	7		14	4					37	62		14	14	8	27		51	8	
Ecuador					20									20									
Egypt					7		6	4	1	5				23	2		2			4	6	5	
ESA																							
Estonia					8									8		4	4		4		18	16	
Ethiopia																							
Finland	17		13	30	9	2	14	3	3			1	4	36	11	49	60	53	42	11	100	39	
France	57		6	63	10	12	19	8	5	31			19	104	5	22	27	30	102	11	135	65	
Georgia					5									5					9		16	2	
Germany	8	3	41	52	10	22	23	11	4	67	14		43	194	4	93	97	85	117	25	156	60	
Ghana																							
Greece					9								15	24	2	2	4		54		41	13	
Hong Kong, China	15			15	9	6	6	4	3		6			34	2	13	15		30	29	66	43	

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	A	W	V	Total	Mass 1	Dens 2	Pres 3	F 4	Torq 5	Visc 6	H 7	Grav 8	FF 9	Total	Laser	Dim Met	Total	Total	Total	Total	Matrices	
Hungary	6			6	8	14	16	8			5		8	59	3	15	18	57	46	5	85	5
IAEA																						
India	23		11	34	16	2	17	6	1	6	3		3	54	2	42	44	14	4	11	74	32
Indonesia	15		12	27	24		3							27		5	5		45		20	10
Iran																						
Iraq																						
Ireland	4			4	7									7		13	13		35	7	30	22
Israel																						
Italy	23	2	17	42	9	7	7	7		0	15	1	16	62	7	36	43	20	100	12	115	53
Jamaica					22									22								
Japan	4		4	8	12	7	11	3	3	28	3		28	95	7	27	34	49	44	29	55	41
JRC																						
Kazakhstan					6					3	8			17	3	3	6		9	25	5	3
Kenya	3		12	15																		
Korea	33	4	19	56	9	8	11	5	2		8		7	50	6	34	40	41	71	29	90	36
Kuwait																						
Latvia					7									7		6	6				16	2
Lithuania					7		0						8	15		9	9		17	16	16	6
Luxembourg																						
North Macedonia					7								8	15					8			
Malaysia	8		13	21	7		8							15	4	3	7	8	15	4	33	10
Malta																						
Mauritius																						
Mexico	23	1	16	40	28	20	18	15	4	11			15	111	2	32	34		15	9	150	54
Moldova																1	1		40			
Mongolia																						
Montenegro													4	4		1	1		18			
Namibia					7									7								
Netherlands, The					7	2	5	0		40			31	85	9	63	72	29	70	26	206	48
New-Zealand					9	3	8							20	3	19	22	30	14	11	80	16
Norway					9								13	22	4	9	13	3	46		28	16
Oman																						
Pakistan																						
Panama					20									20						10	7	5
Paraguay					23		1							24								
Peru					19	1	2	1					7	30		1	1		43	5	12	5
Philippines					21									21					10			
Poland	15		33	48	8	5	8	4		31	4		11	71	7	43	50	15	69	30	48	30
Portugal		2	2		6	1	7	2		7			11	34	4	11	15	2	47		12	6
Qatar																						
Romania	8			8	9		7	3		7	4		2	32	1	20	21	17	44	9	39	20

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	A	W	V	Total	Mass 1	Dens 2	Pres 3	F 4	Torq 5	Visc 6	H 7	Grav 8	FF 9	Total	Laser	Dim Met	Total	Total	Total	Total	Total	Matrices	
Russia	35	7	30	72	8	2	15	18	1	11	9		6	70	1	22	23	115	143	36	326	10	
Saudi Arabia																							
Serbia	12			12	10								9	19	3	12	15	11	37	12	40	20	
Seychelles																							
Singapore					6		8	4			3		4	25	2	44	46	40	95	16	47	33	
Slovakia					7		5			25			10	47	3	15	18	11	82	16	41	13	
Slovenia					7		9						5	21	3	21	24		61	11	91	31	
South Africa	56		29	85	24		9	10					5	48	1	30	31	60	34	8	112		
Spain	18		22	40	10	7	25	4	3				3	52	3	40	43	59	69	19	78	28	
Sri Lanka																							
Sudan																							
Sweden	20		13	33	11	8	14	4					23	60	3	38	41	29	56	19	149	27	
Switzerland	21		3	24	10	16	9	4	2			1	12	54	3	79	82	63	23	12	107	46	
Syrian Arab Republic																							
Tanzania																							
Thailand	18	9		27	8		11				3			22	2	33	35	5	72	8	21	16	
Tunisia																				10	4	4	
Turkey	16	3	8	27	8	3	12	6		47			10	86	5	71	76	9	53	20	122	61	
Ukraine	30			30	5			2		2	1	1	3	14	2	25	27	6	63	30	57	11	
United Arab Emirates																							
United Kingdom	0	11		11	9	9	11	6					14	49	10	45	55	136	62	12	168	55	
United States	15	1	16	32	38	7	22	15			17		9	108	1	48	49	114	89	11	321	13	
Uruguay					35	11							5	51		1	1		27			132	
Uzbekistan																							
Viet Nam					6		3						4	13	2	7	9		4	5			
WMO																							
Zambia																				11			
Zimbabwe																				13			
	734	47	463	1244	842	223	467	208	35	369	125	5	525	2799	187	1471	1658	1361	2709	779	4396		
14946	1244			2799										1658			1361	2709	779	4396			
Total General Physics	Total AUV			Total M										Total L			Total PR	Total T	Total TF	Total EM			

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Country	Ionizing Radiation				Chemistry (QM)															Total by country for all metrology areas	
	RI(I) 1	RI(II) 2	RI(III) 3	Total	QM / 1	QM / 2	QM / 3	QM / 4	QM / 5	QM / 6	QM / 7	QM / 8	QM / 9	QM / 10	QM / 11	QM / 12	QM / 13	QM / 14	QM / 15		Total
Albania																					7
Argentina		48		48		5	6		3			3	3		8		15				43
Australia	15	32	2	49	69		4	11	18					14	11		4				131
Austria	52	100		152				9													9
Azerbaijan																					
Bangladesh																					1
Belarus	21	30		51				16		2	1										19
Belgium																					
Bolivia									2												2
Bosnia and Herzegovina												1									1
Botswana																					
Brazil	8	115	15	138	7	3	22	36	19	5	4			9	6	0					111
Bulgaria	7	16		23						5											5
Canada	11	6	1	18	27	1			39					32	35		36		9		179
CARICOM																					
Chile																					
China	17	176	2	195	236	68	103	203	6	4	3	11	18	45	151	9	20	3	6		886
Chinese Taipei	7	78	4	89				7													7
Colombia										1	3										4
Costa Rica																					
Croatia	2			2																	
Cuba	13	63		76																	
Czechia	7	104	12	123				23		6	3			0							32
Denmark	7			7						4	5										9
Ecuador																					
Egypt	2			2			1											1			2
ESA																					
Estonia																					
Ethiopia																					
Finland	30			30				6	1												7
France	82	206	9	297	1	13	22	41	13	4	2		4	10	18		7				135
Georgia																					
Germany	88	155	20	263	25	34	17	82	27	7	6	159	43	38	20	3	41	22	7		531
Ghana																					
Greece	35			35	1				7					2	9						19
Hong Kong, China					5	3			7	1				1	14	22	2	13	2		70

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Country	Ionizing Radiation				Chemistry (QM)															Total by country for all metrology areas		
	RI(I) 1	RI(II) 2	RI(III) 3	Total	QM / 1	QM / 2	QM / 3	QM / 4	QM / 5	QM / 6	QM / 7	QM / 8	QM / 9	QM / 10	QM / 11	QM / 12	QM / 13	QM / 14	QM / 15		Total	
Hungary	26	78		104				19		3	4									26	406	
IAEA	26			26																	26	236
India								1												1	128	
Indonesia										1					3					4	0	
Iran																					0	
Iraq																					0	
Ireland																					96	
Israel																					0	
Italy	0	0	0	0				2			0	3	2	0	2						9	403
Jamaica																					22	
Japan	29	217	13	259	86	49	12	153	22	6	1	3	13	10	115	9	71				550	1123
JRC		0		0	0	0	0		0				0	0	0	0	0				0	0
Kazakhstan								6		1											7	69
Kenya															2						2	17
Korea	14	189	11	214	5	35	50	359					18	20	124		0	5	2		618	1209
Kuwait																						0
Latvia																						29
Lithuania																						73
Luxembourg																						0
North Macedonia																						23
Malaysia	15			15																		118
Malta																						0
Mauritius																						0
Mexico	10	45		55	62	37	66	26	12	6	2	15	5	4	16		78				329	743
Moldova	2			2																		43
Mongolia																						0
Montenegro																						23
Namibia																						7
Netherlands, The	21	0		21	17		4	223	2						1		0				247	756
New-Zealand																						177
Norway	22			22																		134
Oman																						0
Pakistan																						0
Panama																						37
Paraguay																						24
Peru						9			1	4	3				3		2				22	113
Philippines																						31
Poland	4	68		72	1			23		6	2										32	435
Portugal	43			43				21													21	176
Qatar																						0
Romania		37		37		7			7			4		3	2		4				27	234

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Country	Ionizing Radiation				Chemistry (QM)															Total by country for all metrology areas	
	RI(I) 1	RI(II) 2	RI(III) 3	Total	QM / 1	QM / 2	QM / 3	QM / 4	QM / 5	QM / 6	QM / 7	QM / 8	QM / 9	QM / 10	QM / 11	QM / 12	QM / 13	QM / 14	QM / 15		Total
Russia	161	124	44	329	35	15	24	467	12	6	4	14	20	4	8		21	3		633	1747
Saudi Arabia																					0
Serbia								1													147
Seychelles																					0
Singapore					12				9					16	20			3			329
Slovakia	30	37	9	76	7	35		38		5	2									87	378
Slovenia	9	5		14					0			1		5	7		4	2		19	241
South Africa	1	36		37		1	2	82				4			20		8		1	118	533
Spain	52	105		157				31												31	548
Sri Lanka																					0
Sudan																					0
Sweden	23			23							2									2	412
Switzerland	3	21		24				14												14	403
Syrian Arab Republic																					0
Tanzania																					0
Thailand					2			4	8	4			7	7	30	2		3		67	257
Tunisia																					14
Turkey		3		3	25	2		9	16			7		27	32	6	6	3		133	529
Ukraine		15		15	1			22		6	4									33	275
United Arab Emirates																					0
United Kingdom	22	116	42	180	30	26	8	328	13			1	6	25	18	1	3			459	1132
United States	26	497	8	531	10	73	149	135	21	9	3		9	160	19	33	1	14		636	1891
Uruguay									11	2	2				2					17	228
Uzbekistan																					0
Viet Nam																					31
WMO								3												3	3
Zambia																					11
Zimbabwe																					13
	943	2722	192	3857	664	416	490	2401	274	100	56	226	149	436	707	71	334	61	25	6410	Grand total
14946	3857		6410																		25213
Total General Physics	Total RI		Total Chemistry																		

Acronyms used in this document

AUV	Acoustics, Ultrasound and Vibration
AUV A	Acoustics, Ultrasound and Vibration; Sound in air
AUV W	Acoustics, Ultrasound and Vibration; Sound in water
AUV V	Acoustics, Ultrasound and Vibration; Vibration
EM	Electricity and Magnetism
EM Matrices	Usage of the presentation in tables of uncertainty ranges

L	Length
L Laser	Length; Laser
L DimMet	Length; Dimensional Metrology

M	Mass and Related Quantities
M Mass 1	Mass and Related Quantities; Mass Standards (Service Category No 1)
M Dens 2	Mass and Related Quantities; Density (Service Category No 2)
M Pres 3	Mass and Related Quantities; Pressure (Service Category No 3)
M F 4	Mass and Related Quantities; Force (Service Category No 4)
M Torq 5	Mass and Related Quantities; Torque (Service Category No 5)
M Visc 6	Mass and Related Quantities; Viscosity (Service Category No 6)
M H 7	Mass and Related Quantities; Hardness (Service Category No 7)
M Grav 8	Mass and Related Quantities; Gravity (Service Category No 8)
M FF 9	Mass and Related Quantities; Fluid Flow (Service Category No 9)

PR	Photometry and Radiometry
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Czechia	Chemistry
QM / 1	Chemistry; High purity chemicals (Service Category No 1)
QM / 2	Chemistry; Inorganic solutions (Service Category No 2)
QM / 3	Chemistry; Organic solutions (Service Category No 3)
QM / 4	Chemistry; Gases (Service Category No 4)
QM / 5	Chemistry; Water (Service Category No 5)
QM / 6	Chemistry; pH (Service Category No 6)
QM / 7	Chemistry; Electrolytic conductivity (Service Category No 7)
QM / 8	Chemistry; Metal and metal alloys (Service Category No 8)
QM / 9	Chemistry; Advanced materials (Service Category No 9)
QM / 10	Chemistry; Biological fluids and materials (Service Category No 10)
QM / 11	Chemistry; Food (Service Category No 11)
QM / 12	Chemistry; Fuels (Service Category No 12)
QM / 13	Chemistry; Sediments, soils, ores, and particulates (Service Category No 13)
QM / 14	Chemistry; Other materials (Service Category No 14)
QM / 15	Chemistry; Surfaces, films, and engineered nanomaterials (Service Category No 15)

RI	Ionizing radiation
RI(I) 1	Ionizing radiation; Dosimetry (Service Category No 1)
RI(II) 2	Ionizing radiation; Radioactivity (Service Category No 2)
RI(III) 3	Ionizing radiation; Neutron measurements (Service Category No 3)

T	Thermometry
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TF	Time and Frequency
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Note that one CMC involving n analytes measured in one matrix (multi-component CMC) is counted as n CMCs in the Tables above. The reason for this is that n values of uncertainties are given for this n -component CMC.