

	<b>start</b>	<b>stop</b>	<b>KCDB number &amp; link</b>	<b>Status</b>	<b>Publication reference</b>
1	1991	1992	<a href="#">EUROMET.L-K1.Prev</a>		(Metrologia, 1995, 32, 79-86)
2	1993	1994	CCDM gauge block comparison		(Metrologia, 1998 35, 97)
3	1998	1999	<a href="#">SIM.L-K1.Prev.</a>		(Metrologia, 1999, 36, 421-432)
4	1998	2000	<a href="#">CCL-K1</a>		(Metrologia, 2002, 39, 165-177)
5	2002	2003	<a href="#">EUROMET.L-K1</a>		(KCDB, EUROMET project #471 Final report)
6	2001	2002	<a href="#">SIM.L-K1</a>		(Metrologia, 2007, 44, Tech. Suppl. 04001)
7	2005	2006	<a href="#">APMP.L-K1</a>		(Metrologia, 2006, 43, Tech. Suppl. 04004)
8	1994	1996	<a href="#">EUROMET.L-K1.1</a>		(KCDB, EUROMET project #471 Final report)
9	1998	2000	<a href="#">APMP.L-K1.1</a>		(Metrologia, 2009, 46, Tech. Suppl. 04005)
10	2008	2010	<a href="#">SIM.L-K1.2007</a>		(Metrologia, 2012, 49, Tech. Suppl. 04010)
11	2010	2010	<a href="#">EURAMET.L-K1.2</a>		(Metrologia, 2012, 49, Tech. Suppl. 04005)
12	2011	2013	<a href="#">CCL.K1-2011</a>	Draft A.3, 09/2021	
13	2012	2014	<a href="#">EURAMET.L-K1.2011</a>		(Metrologia, 2016, 53, Tech. Suppl. 04003)
14	2011	2012	<a href="#">APMP.L-K1.1.2011</a>		(Metrologia, 2013, 50, Tech. Suppl. 04002)
15	2020	2021	<a href="#">AFRIMETS.L-K1.2020</a>		
16	2020	2021	<a href="#">APMP.L-K1.2018</a>	Running	
17	2018	2019	<a href="#">SIM.L-K1.2007.1</a>	Running	
18	2020	2020	<a href="#">EURAMET.L-K1.2019</a>	Draft B, in review, awaiting edits	(Metrologia 2021 58 Tech. Suppl. 04002)
19	2022		CCL-K1.n01	About to plan	
20	2022		EURAMET.L-K1.n01	About to plan	

	CMC X/since	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
<b>APMP</b>																			
AU (NMIA)	x												2	4					
CN (NIM)	x												2	4					
JP (NMIJ)	x													4					
KR (KRISS)	x													4					
SG (A*STAR)	x													4					
<b>COOMET</b>																			
VNIIM	x												2						
<b>EURAMET</b>																			
AT (BEV)	x							1					2						
CH (METAS)	x							1								3	3		
CZ (CMI)	x															3	3		
DE (PTB)	x							1					2			3	3		
ES (CEM)	x							1								3	3		
FI (MIKES)	x							1								3	3		
FR (LNE)	x															3	3		
IT (INRIM)	x							1					2			3	3		
NL (NMi VSL)	x							1								3	3		
SK (SMU)	x															3	3		
TR (UME)	x															3			
UK (NPL)	x							1					2			3	3		
<b>AFRIMETS</b>																			
SA (NMISA)	x												2						
<b>SIM</b>																			
BR (INMETRO)	x																		
CA (NRC)	x												2						
MX (CENAM)	x																		
USA (NIST)	x												2						

CCL-K2 long gauges joined with CCL-K1 for future comparisons, limited to L <= 500 mm

	start	stop	KCDB number & link	Status	Publication reference
1	1993	1995	<a href="#">EUROMET.L-K2.Prev</a>		(Metrologia, 1996, 33, 485-491)
2	1999	2001	<a href="#">CCL-K2</a>		(Metrologia, 2003, 40, Tech. Suppl. 04004)
3	2002	2005	<a href="#">EUROMET.L-K2</a>		(Metrologia, 2006, 43, Tech. Suppl. 04003)
4	2000	2002	<a href="#">APMP.L-K2</a>		(Metrologia, 2006, 43, Tech. Suppl. 04005)

	CMC X/since	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	Years from start of last comparison
<b>APMP</b>																																							
AU (NMIA)	x																		3					7											0				
CN (NIM)	x																		2			3		7										0					
JP (NMIJ)	x																		2			3		7										0					
KR (KRISS)	x																		3																0				
SG (A*STAR)	x																		3			6		8										0					
<b>COOMET</b>																																							
VNIIM	x																		2					10		8								7					
<b>EURAMET</b>																																							
AT (BEV)																			2																				
CH (METAS)	x																		1		2														4				
CZ (CMI, VÚGTK)	x																		1																0				
DE (PTB)	x																		1		2														4				
ES (CEM)	x																		1																0				
FI (MIKES, FGI)	x																		1																0				
FR (LNE, LNE-INM)	x																		1																0				
IT (INRIM)	x																		1		2														0				
NL (NMi VSL)	x																		1																0				
SK (SMU)	x																		1		2														7				
TR (UME)	x																		1																0				
UK (NPL)	x																		1																0				
<b>AFRIMETS</b>																																							
SA (NMISA)																			2			3													0				
<b>SIM</b>																																							
BR (INMETRO)	x																		2					4											0				
CA (NRC)																			2					4											0				
MX (CENAM)	x																		2					4											0				
USA (NIST)	x																		2																2				

	start	stop	KCDB number & link	Status	Publication reference
1	1996	1999	<a href="#">EUROMET.L-K3.Prev</a>		(EUROMET Project 371, PTB-report F-43, 2001)
2	2000	2002	<a href="#">CCL-K3</a>		(Metrologia, 2009, 46, Tech. Suppl. 04004)
3	2005	2007	<a href="#">APMP.L-K3</a>		(Metrologia, 2016, 53, Tech. Suppl. 04006)
4	2008	2010	<a href="#">SIM.L-K3.2008</a>		(Metrologia, 2015, 52, Tech. Suppl. 04008)
5	Loop 1	2010			
6	Loop 2	2011	<a href="#">EURAMET.L-K3.2009</a>		(Metrologia, 2018, 55, Tech. Suppl. 04001) Note: this comparison ran in 4 loops over long timescale
7	Loop 3	2013			
8	Loop 4	2014			
9	2008	2008	<a href="#">EURAMET.L-K3.1</a>		(Metrologia, 2010, 47, Tech. Suppl. 04005)
10	2011	2012	<a href="#">COOMET.L-K3</a>		
11	2014	2014	<a href="#">EURAMET.L-K3.2009.1</a>		(Metrologia, 2015, 52, Tech. Suppl. 04011)
12	2017	2017	<a href="#">EURAMET.L-K3.2009.2</a>		(Metrologia, 2018, 55, Tech. Suppl., 04005)
13	2021	2022	<a href="#">EURAMET.L-K3.01</a>		
14	2019	2021	<a href="#">SIM.L-K3.2019</a>		
15	2021	2021	<a href="#">CCL-K3.2020</a>		

Draft B under review  
Running  
Draft A in preparation  
Protocol ready

Needs renumbering as EURAMET.L-K3.n01

? Join 15 ?

	CMC X/since	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	Years from start of last comparison
<b>APMP</b>																			2		4																		
AU (NMIA)	x																		2																			0	
CN (NIM)	x																		2																		6		
JP (NMIJ)																				4																			
KR (KRISS)	x																		2																		0		
SG (A*STAR)	x																			4																	0		
<b>COOMET</b>																																							
VNIIM	x																		2																		1		
<b>EURAMET</b>																																							
AT (BEV)	x																				3																	5	
CH (METAS)	x																		1																		5		
CZ (CMI, VÚGTK)	x																		1																		5		
DE (PTB)	x																		2																		5		
ES (CEM)	x																			3																	5		
FI (MIKES, FGI)	x																		1																		5		
FR (LNE, LNE-INM)	x																		1																		5		
IT (INRIM)	x																		2																		5		
NL (NMI VSL)	x																		1																		5		
SK (SMU)																				3																			
TR (UME)	x																		1																		5		
UK (NPL)	x																		2																		8		
<b>AFRIMETS</b>																			2																				
SA (NMISA)	x																		2																		6		
<b>SIM</b>																				3	6																	6	
BR (INMETRO)	x																		2																				
CA (NRC)																			2																			6	
MX (CENAM)	x																		2																			6	
USA (NIST)	x																		2																			6	

start	stop	KCDB number & link	Status	Publication reference
1	1996	1998 <a href="#">EUROMET.L-K4.Prev</a>		(Metrologia, 2000, 37, 253-260)
2	2000	2002 <a href="#">CCL-K4a</a>	CCL-K4b	(KCDB)
3	2005	2007 <a href="#">EUROMET.L-K4.2005</a>		(Metrologia, 2010, 47, Tech. Suppl. 04001), (Metrologia, 2014, 51, Tech. Suppl. 04004)
4	2008	2010 <a href="#">APMP.L-K4</a>		Abandoned (Metrologia, 2015, 52, Tech. Suppl. 04004)
5	2006	2008 <a href="#">COOMET.L-K4.b</a>		(Metrologia, 2020, 57, Tech. Suppl. 04003)
6	2009	2010 <a href="#">SIM.L-K4.2009</a>		(Metrologia 2021 58 Tech. Suppl. 04004)
7	2013	2014 <a href="#">EURAMET.L-K4.2005.1</a>	Draft B	
8	2015	2017 <a href="#">CCL.K4.2015</a>	Re-measure needed before Draft A	
9	2016	2018 <a href="#">EURAMET.L-K4.2015</a>	Registered	
10	2020	2021 <a href="#">COOMET.L-K4.2021</a>		
11	2021	<a href="#">APMP.L-K4.n01</a>		

CMC X/since	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	Years from start of last comparison
APMP																																						
AU (NMIA)	x																2			3	4												8			0		
CN (NIM)	x																2			4													8		0			
JP (NMIJ)	x																2			4												5		-1				
KR (KRISS)	x																2			4												8		0				
SG (A*STAR)																																6		8				
COOMET																																						
VNIIM																			3																			
EURAMET																																						
AT (BEV)	x																1			2			3									6		5				
CH (METAS)	x																	2			4										6		6		5			
CZ (CMI, VÚGTK)	x																	3																				
DE (PTB)																	1		2																			
ES (CEM)	x																1		2		3										6		6		-1			
FI (MIKES, FGI)	x																	3																				
FR (LNE, LNE-INM)	x																1			3											6		8	9	-1			
IT (INRIM)	x																	3																				
NL (NMIVSL)	x																1			3											6		8	9	-1			
SK (SMU)																																						
TR (UME)																																						
UK (NPL)	x																1			3											6		8		5			
AFRIMETS																																						
SA (NMISA)	x																	3													6				5			
SIM																																						
BR (INMETRO)	x																			3	4																-1	
CA (NRC)	x																	2		3											6		6		5			
MX (CENAM)	x																	2		3											6		6		5			
USA (NIST)	x																			4																	5	

start	stop	KCDB number & link	Status	Publication reference
1	1996	1998 <a href="#">EUROMET.L-K5.Prev</a>		(PTB Report F-37, September 1999)
2	1999	2002 <a href="#">CCL-K5</a>		(Metrologia, 2006, 43, Tech. Suppl. 04006)
3	2004	2007 <a href="#">EUROMET.L-K5.2004</a>		(Metrologia, 2012, 49, Tech. Suppl. 04008)
4	2006	2007 <a href="#">APMP.L-K5.2006</a>		(Metrologia, 2012, 49, Tech. Suppl. 04007)
5	2012	2012 <a href="#">APMP.L-K5.2006.1</a>		(Metrologia, 2017, 54, Tech. Suppl. 05006)
6	2016	2017 <a href="#">EUROMET.L-K5.2016</a>		(Metrologia 2020, 57, Tech. Suppl. 04002)
7	2014	2015 <a href="#">APMP.L-K5.2014</a>	Abandoned	
8	2021	2022 <a href="#">APMP.L-K5.2021</a>	Running	
9	2022	EUROMET.L-K5.n01	Planning	

	CMC X/since	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
<b>APMP</b>									1						2					4	
AU (NMIA)	x															2				4	
CN (NIM)	x															2				4	
JP (NMIJ)	x															2				4	
KR (KRISS)	x																			4	
SG (A*STAR)																					
<b>COOMET</b>																2					
VNJIM																					
<b>EURAMET</b>																					
AT (BEV)	x																				
CH (METAS)	x																				
CZ (CMI)	x								1							2		3			
DE (PTB)									1							2		3			
ES (CEM)	x																				
FI (MIKES)	x																3		4		
FR (LNE)	x															2					
IT (INRIM)	x																2		3		
NL (NMi VSL)	x																2		3		
SK (SMU)																					
TR (UME)																					
UK (NPL)	x															2		3			
<b>AFRIMETS</b>																					
SA (NMISA)	x								1									4			
<b>SIM</b>																					
BR (INMETRO)	x															1			4		
CA (NRC)																	2		4		
MX (CENAM)	x																2		4		
USA (NIST)	x																2		4		

CCL-K6 comparison series halted. DC6 discussing new artefacts and comparisons

	start	stop	KCDB number & link	Status	Publication reference
2	2000	2003	<a href="#">CCL-K6</a>		(Metrologia, 2009, 46, Tech. Suppl. 04003)
3	2004	2005	<a href="#">EUROMET.L-K6</a>		(Metrologia, 2013, 50, Tech. Suppl. 04001)
1	1996	1996	<a href="#">SIM.L-K6.Prev.</a>		(Proc. International Dimensional Workshop on "Metrology of the 21st Century", May 1999)
4	2008	2008	<a href="#">APMP.L-K6</a>		(Metrologia, 2014, 51, Tech. Suppl. 04003)
5	2022	2024	APMP.L-S10	Being planned as supplementary comparison	

	CMC X/since	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	Years from start of last comparison
<b>APMP</b>																																							
AU (NMI)	x														2												5								6				
CN (NIM)	x															3	3		4															0					
JP (NMIJ)	x																										5							6					
KR (KRISS)	x																		4									5							6				
SG (A*STAR)	x																											5							6				
<b>COOMET</b>																																							
VNIIM	x															3		4											8						0				
<b>EURAMET</b>																																							
AT (BEV)	x															2		3	4															0					
CH (METAS)	x															1																			0				
CZ (CMI, VÚGTK)	x																2	3	4															0					
DE (PTB)	x															1																			0				
ES (CEM)	x																2	3	4															0					
FI (MIKES, FGI)	x															1																			0				
FR (LNE, LNE-INM)	x															1																			0				
IT (INRIM)	x															1																			5				
NL (NMIVSL)	x																1																		0				
SK (SMU)	x																1																		0				
TR (UME)	x																	4																	0				
UK (NPL)	x															1																			0				
<b>AFRIMETS</b>																																							
SA (NMISA)	x																											5							6				
<b>SIM</b>																																							
BR (INMETRO)	x																																						
CA (NRC)	x																																						
MX (CENAM)	x																																			0			
USA (NIST)	x																																			0			

	start	stop	KCDB number & link	Status
1	1992	1993	<a href="#">EUROMET.L-S1</a>	
2	2003	2004	<a href="#">EUROMET.L-S14</a>	
3	2000	2002	<a href="#">CCL-S3</a>	
4	2006	2008	<a href="#">EUROMET.L-K7.2006</a>	
5	2015	2016	<a href="#">APML.L-K7</a>	
6	2014	2014	<a href="#">EURAMET.L-K7.2014</a>	
7	2016	2017	<a href="#">SIM.L-K7.2016</a>	Draft B
8	2021		EURAMET.L-K7.n01	Draft Protocol (PTB pilot)

**Publication reference**  
 (EUROMET Project 252, Final report, BNM-LNE Report, September 1995)  
[\(Metrologia, 2003, 40, Tech. Suppl. 04002\)](#)  
[\(EUROMET.L-S14 Final Report, 2004, 38 pages\)](#)  
[\(Metrologia, 2012, 49, Tech. Suppl. 04006\)](#)  
**Met Tech. Supp MISSING**  
[\(Metrologia, 2015, 52, Tech. Suppl. 04007\)](#)

	CMC X/since	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	Years from start of last comparison
<b>APMP</b>																																							
AU (NMI)	x																		3										6	7				0					
CN (NIM)	x																			3									6	7				0					
JP (NMIJ)	x																			3									7					0					
KR (KRISS)	x																			3									7					0					
SG (A*STAR)	x																			3										5					0				
<b>COOMET</b>																																							
VNIIM	x																			2									3					6	7		1		
EURAMET	x																				3								4		5	5		6	7		0		
AT (BEV)	x																					5							6								1		
CH (METAS)	x																			2								2					6			1			
CZ (CMI, VÚGTK)	x																			2								4					6			1			
DE (PTB)	x																			2								3					6			1			
ES (CEM)	x																			2								5					6			1			
FI (MIKES, FG1)	x																			2								5					8						
FR (LNE, LNE-INM)	x																			2								4		5	5					8			
IT (INRIM)	x																			2								4		5					8				
NL (NMIVSL)																				2								2											
SK (SMU)																				2								2											
TR (UME)	x																			2								3		4	5					8			
UK (NPL)	x																			2								3		4			6	7		1			
<b>AFRIMETS</b>																																							
SA (NMISA)	x																				3							5								8			
<b>SIM</b>																																							
BR (INMETRO)	x																		1								4		5							8			
CA (NRC)																			1								4									0			
MX (CENAM)	x																		1								3	4				7	7	?	0				
USA (NIST)	x																		7								2021	2022	APMP.L-K8.2021										

	start	stop	KCDB number & link	Status	Publication reference
1	2000	2001	<a href="#">SIM.L-S2</a>		(Metrologia, 2006, 43, Tech. Suppl. 04002)
2	2001	2002	<a href="#">EUROMET.L-S11</a>		(Metrologia, 2004, 41, Tech. Suppl. 04001)
3	2008	2010	<a href="#">APMP.L-K8</a>		(Metrologia, 2013, 50, Tech. Suppl. 04003)
4	2009	2011	<a href="#">EURAMET.L-K8</a>		(Metrologia, 2017, 54, Tech. Suppl. 04005)
5	2013	2015	<a href="#">EURAMET.L-K8.2013</a>		(Metrologia, 2015, 53, Tech. Suppl. 04001)
6	2020	2020	<a href="#">EURAMET.L-K8.2020</a>		
7	2021	2022	<a href="#">APMP.L-K8.2021</a>	Running	

	CMC x/since YYYY	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	Years from last comparison
<b>APMP</b>																																							
AU (NMIA)																							R																
CN (NIM)	x																						R											0					
JP (NMIJ)	x																						R											Node					
KR (KRISS)	x																						R											0					
SG (A*STAR)	x																						R											0					
<b>COOMET</b>																																							
VNIIM	x																						R											>10					
<b>EURAMET</b>																																							
AT (BEV)	x																						4											Ref.					
CH (METAS)	x																						4											0					
CZ (CMI, VUGTK)	x																						1											0					
DE (PTB)	x																						1											Other					
ES (CEM)	x																						0											10					
FI (MIKES, FG1)	x																						0											Node					
FR (LNE, LNE-NM)	x																						0											15					
IT (INRIM)	x																						0											15					
NL (NMI VSL)	x																						0											6					
SK (SMU)	x																						0											11					
TR (UME)	x																						0											4					
UK (NPL)	x																						0											Node					
<b>AFRIMETS</b>																																							
SA (NMISA)	x																						6											3					
<b>SIM</b>																																							
BR (INMETRO)	x																																		10				
CA (NRC)	x																																		Node				
MX (CENAM)	x																																		10				
USA (NIST)	x																																		9				

	start	stop	KCDB number & link	Status	Publication reference					
0	1991		BIPML-K10		<a href="#">Phys. Rev. Lett., 2000, 85, 18, 3797-3800</a>	<a href="#">Appl. Phys. B, 2001, 72, 221-226</a>	<a href="#">Proc. SPIE, 2001, 4269, 122-133</a>			
1	2000	2003	Calibration at BIPM							
2	2004	2006	<a href="#">BIPML-K11</a>							
3	2007	2009	<a href="#">CCL-K11</a>	Report for 2007 - 2009	(Metrologia, 2005, 42, Tech. Suppl. 04002)(Metrologia, 2005, 42, Tech. Suppl. 04003)(Metrologia, 2005, 42, Tech. Suppl. 04004)					
4	2010	2010		Report for 2010	(Metrologia, 2010, 47, Tech. Suppl. 04009)					
5	2011	2011		Report for 2011	(Metrologia, 2011, 48, Tech. Suppl. 04001)					
6	2012	2012		Report for 2012	(Metrologia, 2012, 49, Tech. Suppl. 04009)					
7	2013	2013		Report for 2013	(Metrologia, 2013, 50, Tech. Suppl. 04005)					
8	2014	2014		Report for 2014	(Metrologia, 2014, 51, Tech. Suppl. 04006)					
9	2015	2015		Report for 2015	(Metrologia, 2015, 52, Tech. Suppl. 04007)					
10	2016	2016		Report for 2016	(Metrologia, 2016, 53, Tech. Suppl. 04001)					
11	2017	2017		Report for 2017	(Metrologia, 2017, 54, Tech. Suppl. 04001)					
12	2018	2018		Report for 2018	(Metrologia, 2018, 55, Tech. Suppl. 04003)					
13	2019	2019		Report for 2019	(Metrologia, 2019, 55, Tech. Suppl. 04004)					
14	2020	2020		Report for 2020						
15	2021	2021		Report for 2021						

R = requested but postponed due to COVID

APMP\_L-K11 ITRI, MSL, NIM, NIMT, NMJ, NMISA, SIRIM, SCL 2004

PTB offers CMCs but take a different approach to K11 equivalency (see WGMRA-19-5.9-3\_CCL-K11\_TechnicalProtocol\_v2.96.docx)