Length, Serbia, DMDM (Directorate of Measures and Precious Metals)

Calibration or Measurement Service			Measurand Level or Range			Measurement Conditions/Independent Variable		Expanded Uncertainty						
Class	**Instrument or Artifact: Measurand**	**Instrument Type or Method**	**Minimum value**	**Maximum value**	**Units**	**Parameter**	**Specifications**	**Value**	**Units**	**Coverage Factor**	**Level of Confidence**	**Is the expanded uncertainty a relative one?**	**NMI Internal Service Identifier**	**Comments**
Laser radiation	Frequency stabilized laser: vacuum wavelength	Optical beat frequency	633	633	nm			0.04	fm	2	95%	No	1	Approved on 22 March 2005
Laser radiation	Frequency stabilized laser: absolute frequency	Optical beat frequency	474	474	THz			24	kHz	2	95%	No	2	Approved on 22 March 2005
Laser radiation	Frequency stabilized laser: vacuum wavelength	Optical beat frequency	633	633	nm			1E-09		2	95%	Yes	3	Approved on 22 March 2005
End standards	Gauge block: central length *L*	Interferometry, exact fraction	0.5	100	mm			Q[20, 0.2*L*], *L* in mm	nm	2	95%	No	4	Approved on 22 March 2005
End standards	Gauge block: central length *L*	Mechanical comparison to gauge block	0.5	100	mm			Q[50, 0.5*L*], *L* in mm	nm	2	95%	No	5	Approved on 22 March 2005
Angle by circle dividers	Optical polygon: face angle	Goniometer	0	360	°			0.2	"	2	95%	No	7	Approved on 22 March 2005
Angle by circular dividers	Rotary table, heads and goniometers: angle	Standard polygon and autocollimator	15	360	°			0.2	"	2	95%	No	8	Approved on 22 March 2005
Angle instruments	Autocollimator: error of indicated angle	Goniometer	0	according to the autocollimator	'			0.2	"	2	95%	No	9	Approved on 22 March 2005
Angle artefacts	Angle block: included angle	Goniometer	0	360	°			0.2	"	2	95%	No	10	Approved on 22 March 2005
Surface texture	Depth standard: (ISO 5436-1 type A), depth *d*	Stylus instrument	0.01	50	µm	Depth	*d*	Q[15, 15*d*], *d* in µm	nm	2	95%	No	11	Approved on 12 September 2016
Surface texture	Spacing standard (ISO 5436-1 type C): amplitude parameters	Stylus instrument	0.01	15	µm	Average parameters	*Ra, Rq*	Q[10, 30*Ra*], *Ra* in µm	nm	2	95%	No	12	Approved on 12 September 2016

Length, Serbia, DMDM (Directorate of Measures and Precious Metals)

Calibration or Measurement Service			Measurand Level or Range			Measurement Conditions/Independent Variable		Expanded Uncertainty						
Class	**Instrument or Artifact: Measurand**	**Instrument Type or Method**	**Minimum value**	**Maximum value**	**Units**	**Parameter**	**Specifications**	**Value**	**Units**	**Coverage Factor**	**Level of Confidence**	**Is the expanded uncertainty a relative one?**	**NMI Internal Service Identifier**	**Comments**
Surface texture	Spacing standard (ISO 5436-1 type C): amplitude parameters	Stylus instrument	0.04	30	µm	Peak parameters	*Rz, Rt, Rp, Rv*	Q[20, 40Rz], Rz in µm	nm	2	95%	No	12	Approved on 12 September 2016
Surface texture	Spacing standard (ISO 5436-1 type C): wavelength parameters	Stylus instrument	10	500	µm	Parameter	*RSm*	0.5	µm	2	95%	No	12	Approved on 12 September 2016
Surface texture	Roughness standard (ISO 5436-1 type D): ISO roughness parameters	Stylus instrument	0.01	10	µm	Average parameters	*Ra, Rq*	Q[10, 40*Ra*], *Ra* in µm	nm	2	95%	No	13	Approved on 12 September 2016
Surface texture	Roughness standard (ISO 5436-1 type D): ISO roughness parameters	Stylus instrument	0.04	30	µm	Peak parameters	*Rz, Rt, Rp, Rv*	Q[20, 50*Rz*], *Rz* in µm	nm	2	95%	No	13	Approved on 12 September 2016