



Survey on Metrological Control for the Medical Measurement Instruments

The Working Group on Medical Measurements
The 21st Forum Meeting
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Jin-Hai Yang





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 - Introduction
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- 2015 Working Plan



Introduction



- Drafted: Working Group on Medical Measurements
- Issued: September 2, 2014
- Responded:
 - 6 Member Economies, including Australia, Japan,
 Mongolia, the Philippines, Viet Nam, and Chinese
 Taipei (by October 12, 2014)





	Jap	an	Mongolia		The Philippines		Viet Nam		Chinese Taipei	
	M	Н	M	Н	M	Н	M	Н	M	Н
Clinical Thermometers, Mercury- in-Glass with Maximum Device (OIML R 7)	X	X	X	X	X*	-	X	X	X	X
Mechanical Non-Invasive Sphygmomanometers (OIML R 16-1)	X	X	X	X	X*	1	X	X	X	X
Non-Invasive Automated Sphygmomanometer (OIML R 16-2)	X	X	X	X	X*	ı	1	-	1	X
Medical Syringes (OIML R 26)	-	N/A	-	-	X*	-	-	-	-	ı
Standard Graduated Pipettes for Verification Officers (OIML R 40)	-	N/A	X	X	X*	-	-	-	-	-

M: Metrology Authority H: Health Authority

*: DOH





	Jar	Japan		Mongolia		The Philippines		Nam	Chinese Taipei	
	М	Н	М	н	М	Н	М	Н	M	Н
Westergren Tubes for Measurement of Erythrocyte Sedimentation rate (OIML R 78)	-	N/A	-	-	X*	-	-	-	-	-
Electroencephalographs - Metrological Characteristics (OIML R 89)	1	N/A	1	-	X*	-	X	X	ı	-
Electrocardiographs - Metrological Characteristics - Methods and Equipment for Verification (OIML R 90)	-	N/A	-	-	X*	-	X	X	-	-
Measuring Instrumentation for Human Response to Vibration(OIML R103)	-	N/A	-	-	X*	-	-	-	-	-
Pure-Tone Audiometers (OIML R104)	-	N/A	-	-	X*	_	-	-	-	-





	Jap	Japan		Mongolia		The Philippines		Viet Nam		Chinese Taipei	
	М	Н	М	Н	М	Н	М	I	М	Н	
Clinical Electrical Thermometers for Continuous Measurement (OIML R 114)	1	-	X	X	X*	-	-	-	X	X	
Clinical Electrical Thermometers with Maximum Device (OIML R 115)	X	X	-	-	X*	-	X	X	X	X	
Equipment for Speech Audiometry (OIML R 122)	-	-	-	-	X*	-	-	-	-	-	
Ergometers for Foot Crank Work (OIML R128)	-	-	-	-	X*	-	-	-	-	-	
Spectrophotometers for Medical Laboratories (OIML R 135)	-	-	X	X	X*	-	-	-	-	-	





	Jar	Japan Mongolia		The Philippines		Viet Nam		Chinese Taipei		
	М	Н	М	Н	М	Н	М	Η	М	М
Thermographic Instruments (OIML R 141)	-	N/A	-	-	X*	-	-	-	-	-
Automated Refractometers (OIML R 142)	-	N/A	X	X	X*	-	-	1	-	-



Clinical Thermometers, Mercury-in-Glass with Maximum Device (OIML R 7) -1



	Responsible	e Authority	Relative Regulations	
	M	Н	M	Н
Japan	METI	MHLW	Measurement Act	Measurement Act (and others)
Mongolia	MASM	MASM	The Mongolian Law of Guarantee on Measurement Uniformity	The Mongolian Law of Guarantee on Measurement Uniformity
The Philippines	DOH	-	-	-
Viet Nam	STAMEQ	STAMEQ	Circular 23/2013/TT-BKHCN; ĐLVN 21:1998; ĐLVN 232:2010	Circular 23/2013/TT-BKHCN; ĐLVN 21:1998; ĐLVN 232:2010
Chinese Taipei	BSMI	FDA	Regulations Governing Verification and Inspection of Measuring Instruments Technical Specification for Verification and Inspection of Thermometers	Regulations for Governing The Management of Medical Device



Clinical Thermometers, Mercury-in-Glass with Maximum Device (OIML R 7) -2



	Type Approval or Evaluation Pre- market		Type Approval or Evaluation Post- market		Verific Pre-ma		Verification Post-market		
	M	Н	M	Н	M	Н	M	Н	
Japan	NMIJ	X	-	-	Local Government	-	-	-	
Mongolia	-	-	-	-	-	Central/ National	Central/ National Every Year	Central/ National Every Year	
The Philippines	-	-	-	-	-	-	-	-	
Viet Nam	-	-	-	-	Central/ National, State/ Regional, Local/ Municipal	Central/ National, State/ Regional, Local/ Municipal	-	Central/ National, State/ Regional, Local/ Municipal	
Chinese Taipei	-	X	-	-	Central/ National	-	-	- 9	



Clinical Thermometers, Mercury-in-Glass with Maximum Device (OIML R 7) -3



	Conformity Assessment Procedure	Conformity	Post-mar	ket Control	The Level of
	Review of Technical Documentation	Assessment Bodies	Responsible Authorities	Relative Regulations	Implementation for Post-market Control
Japan	-	-	-	-	-
Mongolia	-	-	MASM/ Professional Inspection Agency (PIA)	The Mongolian Law on Guarantee on Measurement Uniformity and Law on Inspection	Sampling Check
The Philippines	-	-	-	-	-
Viet Nam	ÐLVN 232:2010	STAMEQ, Sub- directorates for Standards, Metrology and Quality	STAMEQ, Sub- directorates for Standards, Metrology and Quality	Circular 23/2013/TT- BKHCN; Circular 28/2013/TT- BKHCN; ÐLVN 09:2011	-
Chinese Taipei	Registration	FDA		-	_ 10





- METI: Ministry of Economy, Trade and Industry
- MHLW: Ministry of Health, Labour and Welfare
- NMIJ: National Metrology Institute of Japan
- DOH: Department of Health, Philippines
- MASM: Mongolian Agency for Standardization and Metrology
- Directorate for Standards, Metrology and Quality
- BSMI: Bureau of Standards, Metrology and Inspection, Chinese Taipei
- FDA: Food and Drug Administration, Chinese Taipei



Mechanical Non-Invasive Sphygmomanometers (OIML R 16-1) -1



	Responsible	Authority	Relative Regulations	
	M	Н	M	Н
Japan	METI	MHLW	Measurement Act	Measurement Act (and others)
Mongolia	MASM	MASM	The Mongolian Law of Guarantee on Measurement Uniformity	The Mongolian Law of Guarantee on Measurement Uniformity
The Philippines	DOH	-	-	-
Viet Nam	STAMEQ	STAMEQ	Circular 23/2013/TT-BKHCN; ĐLVN 21:1998; ĐLVN 232:2010	Circular 23/2013/TT-BKHCN; ĐLVN 21:1998; ĐLVN 232:2010
Chinese Taipei	BSMI	FDA	Regulations Governing Verification and Inspection of Measuring Instruments, Technical Specification for Verification and Inspection of Thermometers	Regulations for Governing the Management of Medical Device



Mechanical Non-Invasive Sphygmomanometers (OIML R 16-1) -2



	or Eva	approval aluation narket	or Eva	ype Approval or Evaluation Post-market Verification Pre-market				fication -market
	M	Н	M	Н	M	Н	M	Н
Japan	NMIJ	X	-	-	Local Government	-	-	-
Mongolia	-	-	-	-	-	Central/ National, State/ Regional, Local/ Municipal	Central/ National, State/ Regional, Every Year	Central/ National, State/ Regional, Local/ Municipal, Every Year
The Philippines	-	-	-	-	-	-	-	-
Viet Nam	-	-	-	-	Central/ National, State/ Regional, Local/ Municipal	Central/ National, State/ Regional, Local/ Municipal	Central/ National, State/ Regional, Local/ Municipal	Central/ National, State/ Regional, Local/ Municipal
Chinese Taipei	-	X	-	-	Central/ National	-	-	_ 13



Mechanical Non-Invasive Sphygmomanometers (OIML R 16-1) -3



	Conformity Assessment Procedure	Conformity	Post-mar	ket Control	The Level of
	Review of Technical Documentation	Assessment Bodies	Responsible Authorities	Relative Regulations	Implementation for Post-market Control
Japan	-	-	-	-	-
Mongolia	-	-	MASM, Professional Inspection Agency (PIA)	The Mongolian Law on Guarantee on Measurement Uniformity and Law on Inspection	100% Periodically Check
The Philippines	-	-	-	-	-
Viet Nam	ĐLVN 232:2010	STAMEQ, Sub- directorates for Standards, Metrology and Quality	STAMEQ, Sub- directorates for Standards, Metrology and Quality	Circular 23/2013/TT- BKHCN; Circular 28/2013/TT- BKHCN; ÐLVN 09:2011	100% Periodically Check
Chinese Taipei	Registration	FDA	-	-	- 14



Non-Invasive Automated Sphygmomanometer (OIML R 16-2) -1



	Responsible Authority		Relative Regulations	
	M	Н	M	Н
Japan	METI	MHLW	Measurement Act	Measurement Act (and others)
Mongolia	MASM	MASM	The Mongolian Law of Guarantee on Measurement Uniformity	The Mongolian Law of Guarantee on Measurement Uniformity
The Philippines	DOH	-	-	
Viet Nam	-	-	-	-
Chinese Taipei	-	FDA	-	Regulations for Governing the Management of Medical Device



Non-Invasive Automated Sphygmomanometer (OIML R 16-2) -2



	Type App Evaluati mar	on Pre-	Type App Evaluatio marl	on Post-		ication narket	Verification Post-market	
	M	Н	M	Н	M	Н	M	Н
Japan	X	X	-	-	-	-	-	-
Mongolia	-	-	-	-	-	Central/ National	Central/ National, Every Year	Central/ National, Every Year
The Philippines	-	-	-	-	-	-	-	-
Viet Nam	-	-	-	-	-	-	-	-
Chinese Taipei	-	X	-	-	Central/ National	-	-	-



Non-Invasive Automated Sphygmomanometer (OIML R 16-2) -3



	Conformity Assessment Procedure	Conformity	Post-ma	rket Control	The Level of			
	Review of Technical Documentation	Assessment Bodies	Responsible Authorities	Relative Regulations	Implementation for Post-market Control ongolian w on Intee on Irement mity and w on			
Japan	-	-	-	-	-			
Mongolia	-	-	MASM, Professional Inspection Agency (PIA)	The Mongolian Law on Guarantee on Measurement Uniformity and Law on Inspection	Sampling Check			
The Philippines	-	-	-	-	-			
Viet Nam	-	-	-	-	-			
Chinese Taipei	Registration	FDA	-		-			



Medical Syringes (OIML R 26) -1



	Responsible Authority	e	Relative Regulations			
	M	Н	M	Н		
Japan	-	N/A	-	N/A		
Mongolia	-	-	_	_		
The Philippines	DOH	-	-			
Viet Nam	-	-	-	-		
Chinese Taipei	-	FDA	-	Regulations for Governing The Management of Medical Device		







	Type Approval or Evaluation Pre-market		Type Approval or Evaluation Post-market			Verification Verification Pre-market Post-market		
	M	Н	M	Н	M	Н	M	Н
Japan	-	N/A	-	N/A	-	N/A	-	N/A
Mongolia	-	-	-	-	-	-	-	-
The Philippines	-	-	-	-	-	-	-	-
Viet Nam	-	-	-	-	-	-	-	-
Chinese Taipei	-	X	-	-	X	-	-	-



Medical Syringes (OIML R 26) -3



	Conformity Assessment	Conformity	Post-mar	ket Control	The Level of
	Procedure Review of Technical Documentation	Assessment Bodies	Responsible Authorities	Implementation for Post-market Control	
Japan	N/A	N/A	N/A	N/A	N/A
Mongolia	-	Recognized Third Parties- MASM (Mongolian national accreditation system, MNAS)	Professional Inspection Agency	Mongolian Law on Inspection	Sampling Check
The Philippines	-	-	-	-	-
Viet Nam	-	-	-	-	-
Chinese Taipei	Registration	FDA	-	-	-



Standard Graduated Pipettes for Verification Officers(OIML R 40) -1



	Responsible Authority		Relative Regulations			
	M	Н	M	Н		
Japan	-	N/A	-	N/A		
Mongolia	MASM	MASM	The Mongolian Law of Guarantee on Measurement Uniformity	The Mongolian Law of Guarantee on Measurement Uniformity		
The Philippines	DOH	-	-			
Viet Nam	-	-	-	-		
Chinese Taipei	-	FDA	-	Regulations for Governing the Management of Medical Device		



Standard Graduated Pipettes for Verification Officers(OIML R 40) -2



	Evaluat	proval or ion Pre- rket	Type App Evaluatio mar	on Post-		ication narket	Verification Post-market	
	M	Н	M	Н	M	Н	M	Н
Japan	-	N/A	-	N/A	-	N/A	-	N/A
Mongolia	-	-	-	-	-	Central/ National	Every Two Year	Central/ National, Every Two Year
The Philippines	-	-	-	-	-	-	-	-
Viet Nam	-	-	-	-	-	-	-	-
Chinese Taipei	-	-	-	-	-	-	-	-



Standard Graduated Pipettes for Verification Officers (OIML R 40) -3



	Conformity Assessment	Conformity	Post-ma	rket Control	The Level of	
	Procedure Review of Technical Documentation	Assessment Bodies Responsible Authorities Responsible		Relative Regulations	Implementation for Post-market Control	
Japan	N/A	N/A	N/A	N/A	N/A	
Mongolia	-	MASM (Mongolian national accreditation system, MNAS)	MASM and PIA	The Mongolian Law on Guarantee on Measurement Uniformity and The Law on Inspection	Sampling Check	
The Philippines	-	-	-	-	-	
Viet Nam	-	-	-	-	-	
Chinese Taipei	-	-	-	-	-	



Westergren Tubes for Measurement of Erythrocyte Sedimentation Rate (OIML R 78) -1

	Responsible Authority		Relative	Regulations
	M	Н	M	Н
Japan	-	N/A	-	N/A
Mongolia	-	-	-	-
The Philippines	DOH	-	_	
Viet Nam	-	-	-	-
Chinese Taipei	-	-	-	-



Chinese Taipei

Westergren Tubes for Measurement of Erythrocyte Sedimentation Rate (OIML R 78) -2

	Type Approval or Evaluation Pre- market		Type App Evaluatio mar	on Post-		ication narket		ification t-market
	M	Н	M	Н	M	Н	M	Н
Japan	-	N/A	-	N/A	-	N/A	-	N/A
Mongolia	-	-	-	-	-	-	-	-
The Philippines	-	-	-	-	-	-	-	-
Viet Nam	-	-	-	_	-	-	-	-



Westergren Tubes for Measurement of Erythrocyte Sedimentation Rate (OIML R 78) -3

	Conformity Assessment	rost-market Comuon		ket Control	The Level of	
	Procedure Review of Technical Documentation	Assessment Bodies	Responsible Authorities	Relative Regulations	Implementation for Post-market Control	
Japan	N/A	N/A	N/A	N/A	N/A	
Mongolia	-	-	-	-	-	
The Philippines	-	-	-	-	-	
Viet Nam	-	-	-	-	-	
Chinese Taipei	-	-	-	-	-	



Electroencephalographs - Metrological Characteristics (OIML R 89) -1



	Responsible	e Authority	Relative Regulations				
	M	Н	M	Н			
Japan	-	N/A	-	N/A			
Mongolia	-	-	_	_			
The Philippines	DOH	-	-				
Viet Nam	STAMEQ	STAMEQ	Circular 23/2013/TT-BKHCN; ĐLVN 44:2009; ĐLVN 219:2010-	Circular 23/2013/TT-BKHCN; ĐLVN 21:1998; ĐLVN 232:2010 -			
Chinese Taipei	-	-		-			



Electroencephalographs - Metrological Characteristics (OIML R 89) -2



	Evalua	proval or tion Pre- irket	or Eva	pproval luation narket	Verific Pre-m		Verification Post-market	
	M	Н	M	Н	M	Н	M	Н
Japan	-	N/A	-	N/A	-	N/A	-	N/A
Mongolia	-	-	-	-	-	-	-	-
The Philippines	-	-	-	-	-	-	-	-
Viet Nam	-	-	-	-	Central/ National, State/ Regional, Local/ Municipal	Central/ National, State/ Regional, Local/ Municipal	Central/ National, State/ Regional, Local/ Municipal	Central/ National, State/ Regional, Local/ Municipal
Chinese Taipei	-	-	-	-	-	-	-	-



Electroencephalographs - Metrological Characteristics (OIML R 89) -3



	Conformity Assessment	Conformity	Post-mar	ket Control	The Level of
	Procedure Review of Technical Documentation	Assessment Bodies	Responsible Authorities	Relative Regulations	Implementation for Post-market Control
Japan	N/A	N/A	N/A	N/A	N/A
Mongolia	-	-	-	-	-
The Philippines	-	-	-	-	-
Viet Nam	ÐLVN 232:2010	STAMEQ, Sub-directorates for Standards, Metrology and Quality	STAMEQ, Sub- directorates for Standards, Metrology and Quality	Circular 23/2013/TT- BKHCN; Circular 28/2013/TT- BKHCN; ÐLVN 09:2011	100% Periodically Check
Chinese Taipei	-	-	-	-	-



Electrocardiographs - Metrological Characteristics - Methods and Equipment for Verification (OIML R 90) -1



	Responsible Authority		Relative Regulations			
	M	Н	M	Н		
Japan	-	N/A	-	N/A		
Mongolia	-	-	-	-		
The Philippines	DOH	-	-			
Viet Nam	STAMEQ	STAMEQ	Circular 23/2013/TT-BKHCN; ĐLVN 21:1998; ĐLVN 232:2010	Circular 23/2013/TT-BKHCN; ĐLVN 21:1998; ĐLVN 232:2010		
Chinese Taipei	-	-	-	-		



Electrocardiographs - Metrological Characteristics - Methods and Equipment for Verification (OIML R 90) -2



	Evaluat	proval or ion Pre- rket	Type App Evaluatio marl	on Post-	Verification Pre-market		Verification Post-market	
	M	Н	M	Н	M	Н	M	Н
Japan	-	N/A	-	N/A	-	N/A	-	N/A
Mongolia	-	-	-	-	-	-	-	-
The Philippines	-	-	-	-	-	-	-	-
Viet Nam	-	-	-	-	Central/ National, State/ Regional, Local/ Municipal	Central/ National, State/ Regional, Local/ Municipal	Central/ National, State/ Regional, Local/ Municipal	Central/ National, State/ Regional, Local/ Municipal
Chinese Taipei	-	-	-	-	-	-	-	-



Electrocardiographs - Metrological Characteristics - Methods and Equipment for Verification (OIML R 90) -3



	Conformity Assessment	Conformity	Post-mark	et Control	The Level of
	Procedure Review of Technical Documentation	Assessment Bodies	Responsible Authorities	Relative Regulations	Implementation for Post-market Control
Japan	N/A	N/A	N/A	N/A	N/A
Mongolia	-	-	-	-	-
The Philippines	-	-	-	-	-
Viet Nam	ĐLVN 232:2010	STAMEQ, Sub-directorates for Standards, Metrology and Quality	STAMEQ, Sub- directorates for Standards, Metrology and Quality	Circular 23/2013/TT- BKHCN; Circular 28/2013/TT- BKHCN; ÐLVN 09:2011	100% Periodically Check
Chinese Taipei	-	-	-	-	-



Measuring Instrumentation for Human Response to Vibration (OIML R 103) -1



	Responsible Authority		Relative Regulations		
	M	Н	М	Н	
Japan	-	N/A	-	N/A	
Mongolia	-	-	_	-	
The Philippines	DOH	-	-		
Viet Nam	-	-	-	-	
Chinese Taipei	-	-	-	-	



Measuring Instrumentation for Human Response to Vibration (OIML R 103) -2



	Evaluat	proval or ion Pre- ket	Type App Evaluatio mar	on Post-	Verification Pre-market		Verification Post-market	
	M	Н	M	Н	M	Н	M	Н
Japan	-	N/A	-	N/A	-	N/A	-	N/A
Mongolia	-	-	-	-	-	-	-	-
The Philippines	-	-	-	-	-	-	-	-
Viet Nam	-	-	-	-	-	-	-	-
Chinese Taipei		-	-	-	-	-	-	-



Measuring Instrumentation for Human Response to Vibration (OIML R 103) -3



	Conformity Assessment	Conformity	Post-mar	ket Control	The Level of
	Procedure Review of Technical Documentation	Assessment Bodies	Responsible Authorities	Relative Regulations	Implementation for Post-market Control
Japan	N/A	N/A	N/A	N/A	N/A
Mongolia	-	-	-	-	-
The Philippines	-	-	-	-	-
Viet Nam	-	-	-	-	-
Chinese Taipei	-	-	-	-	-



Pure-Tone Audiometers (OIML R 104) -1



	Responsible Authority		Relative Regulations		
	M	Н	М	Н	
Japan	-	N/A	-	N/A	
Mongolia	-	-	_	-	
The Philippines	DOH	-	-		
Viet Nam	-	-	-	-	
Chinese Taipei	-	-	-	-	



Pure-Tone Audiometers (OIML R 104) -2



	Evaluat	proval or ion Pre- ket	Type App Evaluatio mar	on Post-	Verification Pre-market			Verification Post-market	
	M	Н	M	Н	M	Н	M	Н	
Japan	-	N/A	-	N/A	-	N/A	-	N/A	
Mongolia	-	-	-	-	-	-	-	-	
The Philippines	-	-	-	-	-	-	-	-	
Viet Nam	-	-	-	-	-	-	-	-	
Chinese Taipei	-	-	-	-	-	-	-	-	



Pure-Tone Audiometers (OIML R 104) -3



	Conformity Assessment	Conformity	Post-mar	ket Control	The Level of
	Procedure Review of Technical Documentation	Assessment Bodies	Responsible Authorities	Relative Regulations	Implementation for Post-market Control
Japan	N/A	N/A	N/A	N/A	N/A
Mongolia	-	-	-	-	-
The Philippines	-	-	-	-	-
Viet Nam	-	-	-	-	-
Chinese Taipei	-	-	-	-	-



Clinical Electrical Thermometers for Continuous Measurement (OIML R 114) -1



	Responsible	Authority	Relative Regulations	
	M	Н	M	Н
Japan	METI	MHLW	Measurement Act	Measurement Act (and others)
Mongolia	MASM	MASM	The Mongolian Law of Guarantee on Measurement Uniformity	The Mongolian Law of Guarantee on Measurement Uniformity
The Philippines	DOH	-	-	-
Viet Nam	-	-	-	-
Chinese Taipei	BSMI	FDA	Regulations Governing Verification and Inspection of Measuring Instruments, Technical Specification for Verification and Inspection of Thermometers	Regulations for Governing The Management of Medical Device



Clinical Electrical Thermometers for Continuous Measurement (OIML R 114) -2



	or Eva	pproval luation narket	or Eva	pproval luation narket	Verification Pre-market		Verification Post-market	
	M	Н	M	Н	M	Н	M	Н
Japan	NMIJ	X	-	-	Local Government	-	-	-
Mongolia	-	-	-	-	-	Central/ National	Central/ National, Every Year	Central/ National, Every Year
The Philippines	-	-	-	-	-	-	-	-
Viet Nam	-	-	-	-	-	-	-	-
Chinese Taipei	-	X	-	-	-	Central/ National	-	-



Clinical Electrical Thermometers for Continuous Measurement (OIML R 114) -3



	Conformity Assessment Procedure	Conformity	Post-ma	rket Control	The Level of
	Review of Technical Documentation	Assessment Bodies	Responsible Authorities	Relative Regulations	Implementation for Post-market Control
Japan	-	-	-	-	-
Mongolia	-	-	MASM, Professional Inspection Agency (PIA)	The Mongolian Law on Guarantee on Measurement Uniformity and Law on Inspection	Sampling Check
The Philippines	-	-	-	-	-
Viet Nam	-	-	-	-	-
Chinese Taipei	Registration	FDA	-	-	-



Clinical Electrical Thermometers with Maximum Device (OIML R 115) -1



	Responsible	Authority	Relative Regulations	
	M	Н	М	Н
Japan	METI	MHLW	Measurement Act	Measurement Act (and others)
Mongolia	-	-	The Mongolian Law of Guarantee on Measurement Uniformity	_
The Philippines	DOH	-	-	-
Viet Nam	STAMEQ	STAMEQ	Circular 23/2013/TT-BKHCN; ĐLVN 21:1998; ĐLVN 232:2010	Circular 23/2013/TT-BKHCN; ĐLVN 21:1998; ĐLVN 232:2010
Chinese Taipei	BSMI	FDA	Regulations Governing Verification and Inspection of Measuring Instruments, Technical Specification for Verification and Inspection of Thermometers	Regulations for Governing The Management of Medical Device



Clinical Electrical Thermometers with Maximum Device (OIML R 115) -2



	or Eva	pproval luation narket	or Eva	pproval luation narket	Verification Pre-market		Verification Post-market	
	M	Н	M	Н	M	Н	M	Н
Japan	NMIJ	X	-	-	Local Government	-	-	-
Mongolia	-	-	-	-	*	-	*	-
Philippines	-	-	-	-	-	-	-	-
Viet Nam	-	-	-	-	Central/ National, State/ Regional, Local/ Municipal	Central/ National, State/ Regional, Local/ Municipal	Central/ National, State/ Regional, Local/ Municipal	Central/ National, State/ Regional, Local/ Municipal
Chinese Taipei	-	X	-	-	-	Central/ National	-	-

^{*}No verification indicated during pre or post-mmarket. Verification implemented by central level authority.



Clinical Electrical Thermometers with Maximum Device (OIML R 115) -3



	Conformity Assessment Procedure	Conformity	Post-mar	ket Control	The Level of	
	Review of Technical Documentation	Assessment Bodies	Responsible Authorities	Relative Regulations	Implementation for Post-market Control	
Japan	-	-	-	-	-	
Mongolia	-	-	-	-	-	
The Philippines	-	-	-	-	-	
Viet Nam	ÐLVN 232:2010	STAMEQ, Sub- directorates for Standards, Metrology and Quality	STAMEQ, Sub- directorates for Standards, Metrology and Quality	Circular 23/2013/TT- BKHCN; Circular 28/2013/TT- BKHCN; ĐLVN 09:2011	100% Periodically Check	
Chinese Taipei	Registration	FDA	-	-	-	



Equipment for Speech Audiometry (OIML R 122) -1



	Responsible Authority		Relative Regulations		
	M	Н	M	Н	
Japan	-	N/A	-	N/A	
Mongolia	-	-	_	_	
The Philippines	DOH	-	-		
Viet Nam	-	-	-	-	
Chinese Taipei	-	-	-	-	



Equipment for Speech Audiometry (OIML R 122) -2



	Evaluat	proval or ion Pre- ket	Type App Evaluatio mar	on Post-	Verification Pre-market		Verification Post-market	
	M	Н	M	Н	M	Н	M	Н
Japan	-	N/A	-	N/A	-	N/A	-	N/A
Mongolia	-	-	-	-	-	-	-	-
The Philippines	-	-	-	-	-	-	-	-
Viet Nam	-	1	-	-	-	-	-	-
Chinese Taipei	-	-	-	-	-	-	-	-



Equipment for Speech Audiometry (OIML R 122)-3



	Conformity Assessment	FOST-INGINET CONTROL		The Level of	
	Procedure Review of Technical Documentation	Assessment Bodies	Responsible Authorities	Relative Regulations	Implementation for Post-market Control
Japan	N/A	N/A	N/A	N/A	N/A
Mongolia	-	-	-	-	-
The Philippines	-	-	-	-	-
Viet Nam	-	-	-	-	-
Chinese Taipei	-	-	-	-	-



Ergometers for Foot Crank Work (OIML R 128) -1



	Responsible Authority		Relative Regulations			
	M	Н	M	Н		
Japan	-	N/A	-	N/A		
Mongolia	-	-	_	-		
The Philippines	DOH	-	-			
Viet Nam	-	-	-	-		
Chinese Taipei	-	-	-	-		



Ergometers for Foot Crank Work (OIML R 128) -2



	Type Approval or Evaluation Pre- market		Type Approval or Evaluation Post- market		Verification Pre-market		Verification Post-market	
	M	Н	M	Н	M	Н	M	Н
Japan	-	N/A	-	N/A	-	N/A	-	N/A
Mongolia	-	-	-	-	-	-	-	-
The Philippines	-	-	-	-	-	-	-	-
Viet Nam	-	-	-	-	-	-	-	-
Chinese Taipei		-	-	-	-	-	-	-



Ergometers for Foot Crank Work (OIML R 128) -3



	Conformity Assessment	Conformity	Post-mar	ket Control	The Level of	
	Procedure Review of Technical Documentation	Assessment Bodies	Responsible Authorities	Relative Regulations	Implementation for Post-market Control	
Japan	N/A	N/A	N/A	N/A	N/A	
Mongolia	-	-	-	-	-	
The Philippines	-	-	-	-	-	
Viet Nam	-	-	-	-	-	
Chinese Taipei	-	-	-	-	-	



Spectrophotometers for Medical Laboratories (OIML R 135) -1



	Responsible Authority		Relative Regulations				
	M	Н	М	Н			
Japan	-	-	_				
Mongolia	MASM	MASM	The Mongolian Law of Guarantee on Measurement Uniformity	The Mongolian Law of Guarantee on Measurement Uniformity			
The Philippines	DOH	-	-	-			
Viet Nam	-	-	-	-			
Chinese Taipei	-	-	-	-			



Spectrophotometers for Medical Laboratories (OIML R 135) -2



	or Eva	pproval luation narket	or Eva	pproval luation narket	Verification Pre-market		Verification Post-market	
	M	Н	M	Н	M	Н	M	Н
Japan	-	-	-	-	-	-	-	-
Mongolia	-	-	-	-	-	Calibration	Central/ National, Every Year	Central/ National, Every Year
The Philippines	-	-	-	-	-	-	-	-
Viet Nam	-	-	-	-	-	-	-	-
Chinese Taipei	-	-	-	-	-	-	-	-



Spectrophotometers for Medical Laboratories (OIML R 135) -3



	Conformity Assessment Procedure	Conformity	Post-ma	rket Control	The Level of Implementation for Post-market Control
	Review of Technical Documentation	Assessment Bodies	Responsible Authorities	Relative Regulations	
Japan	-	-	-	-	-
Mongolia	-	-	MASM and PIA	The Mongolian Law on Guarantee on Measurement Uniformity and The Law on Inspection	Sampling Check
The Philippines	-	-	-	-	-
Viet Nam	-	-	_	-	-
Chinese Taipei	-	-	-	-	-



Thermographic Instruments (OIML R 141) -1



	Responsible Authority		Relative Regulations	
	M	Н	М	Н
Japan	-	-	-	-
Mongolia	-	-	-	-
The Philippines	DOH	-	_	_
Viet Nam	-	-	-	-
Chinese Taipei	-	-	-	-



Thermographic Instruments (OIML R 141) -2



	or Eva	pproval luation narket	or Eva	pproval luation narket	Verification Pre-market		Verification Post-market	
	M	Н	M	Н	M	Н	M	Н
Japan	-	-	-	-	-	-	-	-
Mongolia	-	-	-	-	-	-	-	-
The Philippines	-	-	-	-	-	-	-	-
Viet Nam	-	-	-	-	-	-	-	-
Chinese Taipei	-	-	-	-	-	-	-	-



Thermographic Instruments (OIML R 141) -3



	Conformity Assessment Procedure	Conformity	Post-mar	ket Control	The Level of	
	Review of Technical Documentation	Assessment Bodies	Responsible Authorities	Relative Regulations	Implementation for Post-market Control	
Japan	-	-	-	-	-	
Mongolia	-	-	-	-	-	
The Philippines	-	-	-	-	-	
Viet Nam	-	-	-	-	-	
Chinese Taipei	-	-	-	-	-	



Automated Refractometers (OIML R 142) -1



	Responsible Authority		Relative Regulations				
	M	Н	M	Н			
Japan	-	-	-	-			
Mongolia	MASM	MASM	The Mongolian Law of Guarantee on Measurement Uniformity	The Mongolian Law of Guarantee on Measurement Uniformity			
The Philippines	DOH	-	-	-			
Viet Nam	-	-	-	-			
Chinese Taipei	-	-	-	_			



Automated Refractometers (OIML R 142) -2



	or Eva	pproval luation narket	or Eva	pproval luation narket	Verification Pre-market		Verification Post-market	
	M	Н	M	Н	M	Н	M	Н
Japan	-	-	-	-	-	-	-	-
Mongolia	-	-	-	-	-	Calibration	Central/ National, Every Year	Central/ National, Every Year
The Philippines	-	-	-	-	-	-	-	-
Viet Nam	-	-	-	-	-	-	-	-
Chinese Taipei	-	-	-	-	-	-	-	-



Automated Refractometers (OIML R 142) -3



	Conformity Assessment Procedure	Conformity	Post-mar	ket Control	The Level of
	Review of Technical Documentation	Assessment Bodies	Responsible Authorities	Relative Regulations	Implementation for Post-market Control
Japan	-	-	-	-	-
Mongolia	-	-	-	-	-
The Philippines	-	-	-	-	-
Viet Nam	-	-	-	-	-
Chinese Taipei	-	-	-	-	-



Future Works-1



	Medical measurement the WG should work	Activities needed	Number of people to participate	expert(s) contribute as trainers	Other comments
Japan	Clinical Thermometers, Sphygmomanometers-	Seminar, Survey	1	1	-
Mongolia	a	a	a	a	Need professional training and seminar/presentati on on all kind of measurements medical device
The Philippines	-	-	-	-	b
Viet Nam	Non-Invasive Automated Sphygmomanometers, Infrared Thermometers, Radiation Meters (Nuclear radiation, X- Ray Radiation, UV Radiation), SpO2 Meter, Erythrocyte Sedimentation Rate Meter	Training, Seminar, presentation, Workshop with hands-on experience	10 for training and 10 for seminar	-	-
Chinese Taipei	Blood-Glucose Meter	Seminar	2	-	-







Note: a

Medical measurement the WG should work	Ac	etivities need	Number of people to participate	expert(s) contribute as trainers	
Non-Invasive Automated Sphygmomanometer (R 16-2)	Training/ Workshop	Seminar	-	6	-
Medical Syringes (R 26)	Training/ Workshop	Seminar	Concultans	2	-
Electroencephalographs - Metrological Characteristics (R 89)	Training/ Workshop		Concultans	5	1
Electrocardiographs - Metrological Characteristics - Methods and Equipment for Verification (R 90)	Training/ Workshop		Concultans	5	1
Measuring instrumentation for Human Response to Vibration (R 103)	Training/ Workshop	Seminar	Concultans	5	1
Pure-tone Audiometers (R 104)	Training/ Workshop		Concultans	1	1
Equipment for Speech Audiometry (R 122)	Training/ Workshop		Concultans	5	2
Ergometers for Foot Crank Work (R 128)	Training/ Workshop		Concultans	5	1







Note: a

Medical measurement the WG should work	Act	tivities need	Number of people to participate	expert(s) contribute as trainers	
Spectrophotometers for Medical Laboratories (R 135)	Training/ Workshop	-	Concultans	5	1
Thermographic Instruments (R 141)	Training/ Workshop	Seminar	Concultans	2	1
Eye Tonometer	Training/ Workshop	Seminar	Concultans	5	1
Medical Software	Training/ Workshop	-	Presentation	-	-



Future Works-4



Note:b

- Our existing National Metrology Act (Law) requires Pattern Approval of all Test and Measuring Instruments (TMIs). However, there is no capability yet for performing Pattern Approval Testing on medical devices/instruments. Although, verification tests, which maybe part of Pattern Approval, is performed by the NML, ITDI on medical devices/instruments submitted by customers.
- These devices are:
 - 1. clinical thermometers, mercury-in-glass (R 7)
 - 2. non-invasive mechanical and automated sphygmomanometers (R 16-1, 16-2)
 - 3. standard graduated pippettes (R 40)
 - 4. refractometers (R 142)
 - 5. thermographic instruments (R 141)
 - 6. clinical electrical thermometers (R 114, 115)
- The Metrology Law recognizes Pattern Approval Certificates issued by Foreign Testing
 Laboratories/Authorities/Accredited/Recognized by International Bodies based on ISO 17025,
 OIML and other applicable International Standards. The survey form has been referred to
 Department of Health (DOH) which has authority on medical devices and related matters. In
 addition, the DOH is a member of the National Metrology Board (NMB). The NML, ITDI is
 interested in participating in trainings, seminars presentation covering legal metrology
 medical devices/instruments.



Conclusion



- 1. Few member economies show their concern on medical measurement instruments;
- 2. It seems that metrology authority needs the cooperation from health authority;
- 3. Training activities are needed in various field and this working group would like to organize training courses in the future under APLMF/APEC full support.



2015 Working Plan



Adverse report of medical instruments in Asia Pacific region

1. Methodology

- 1) Collect the data of adverse report of medical instruments in Asia Pacific region in past 5 years;
- 2) Analysis the data of adverse report of medical instruments in Asia Pacific region.

2. Objects

- 1) Address the threaten of malfunction/inaccuracy of medical measurement instruments;
- 2) Seek the opportunity to organize a workshop to build-up the cooperation between metrology authority and health authority in the future;
- 3) Bridge the dialogue between metrology authority and health authority.





Comments?

Question?





Thank you