



## Form for Regular Reporting of Regional Instrument Centres

(please expand the cells as required to properly reflect your activities)

Terms of Reference for Regional Instrument Centres (RICs) are available under:  
<https://www.wmo.int/pages/prog/www/IMOP/instrument-reg-centres.html>

Regional instrument Centre - General Information	
Name of RIC	Calibration laboratory
RIC's website	<a href="http://www.shmu.sk/en/?page=1541">http://www.shmu.sk/en/?page=1541</a>
Institute hosting RIC	Slovak hydrometeorological institute
City	Bratislava
Country	Slovakia
Regional Association	RA VI
Contact Person for the Regional Instrument Centre	
Courtesy Title	
First name	Lenka
Family name	Leštinská
Street and number	Jeséniova 17
Postal code	833 15
City	Bratislava
State/Province	Slovakia
Country	Slovakia
Tel. number(s)	00421 2 59 415 124
Fax number(s)	
Email(s)	lenka.lestinska@shmu.sk
Has contact person changed since your last report?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If yes, provide the previous contact person?	

## RIC's staff

(Please specify the number of your managerial and technical staff)

- Managerial: 3
- Technical: 3

## Interlaboratory Comparisons

### **Have you organized any interlaboratory comparison in the last calendar year?**

(If yes, please specify the event(s) and final reports, including their web links, if available):

- Calibration of Brewer spectrophotometers for central Europe region (Hungary, Poland, Slovakia) in our meteorological station Gánovce

### **Have you participated in any interlaboratory comparison in the last calendar year?** (If yes, please specify the event(s) and the report(s), including their web links, if available):

- 2016/17: Intercomparison in the field of temperature, humidity and pressure MM-ILC-2015-THP (final report obtained in 9/2017)

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## Applied International Standards/Norms

### **Is your RIC accredited according to ISO/IEC 17025?**

**Yes** (please, specify the following):

**Accreditation/certification body:** SNAS (Slovak national accreditation service)

**Date of the last audit:** 2016

**Link to the Certificate of Accreditation:**

<https://ais.snas.sk/ais/#!WebReports/1/list.accredited.subject.search.byfield/AccreditedSubjectsByFields>

**No** (please, indicate if you have already applied any quality management system, and provide a reason for a lack of accreditation, if possible)

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## Assessment by a recognized authority other than accreditation body

### **Was your RIC assessed by a recognized authority other than an accreditation body?** (e.g. certification body, NMI, another RIC)

**Yes** (please, specify the following):

**Name of a recognized authority:**

**Date of the last assessment:**

**Standard against which the assessment was carried out:**

**No** (please, explain why, if possible)

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**WMO/CIMO [Evaluation Scheme \(excel file\)](#)**

**Have you filled out the WMO/CIMO Evaluation Scheme (excel) and submitted it to the WMO Secretariat?**

- Yes** (please, specify when you submitted the most recent one): 2017  
 **No** (please, explain why, if possible)

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**Calibrations of the Members' Instruments**

**Which calibration services, were provided by your RIC for other Members/countries in the last calendar year?** (Please specify)

Year	Type of instruments	Number of calibrated instruments	WMO Member/Country

**Capacity Development and Training Activities**

**Which capacity development/training activities have been carried out by your RIC within the Region in the last calendar year?** (please specify events, WMO Members that participated and the number of participants)

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**Has your RIC provided services on capacity development and training outside the Region in the last calendar year?** (If yes, please specify to whom and when)

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**Which guidance documents, standard procedures or other publications were developed and published by your RIC in the last calendar year?** (Please, include full reference and web-link if available)

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**Utilization of Resources and Capabilities of the Region**

(Have you collaborated with other RICs, RRCs, RTCs, NMHSs or NMIs on standardization of meteorological and other related environmental measurements in the last calendar year? If yes, please specify when and how)

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### Recent Changes in Circumstance

**Have there been any changes in your RIC's capabilities in the last calendar year?** (If so, please specify)

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**Have there been any significant changes in your RIC's infrastructure in the last calendar year?** (If so, please specify)

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**Have there been any changes in your staffing in the last calendar year?** (If so, please specify)

- New head of the Calibration laboratory in march 2017
- Previous head of the laboratory retired and is currently on part-time contract
- New technical employee in October 2017

### Future Plans and any other relevant information

(Please provide plans/projects of your RIC for this calendar year, and add any other information you find relevant about your RIC)

- Participation in interlaboratory comparisons
- Re-accreditation according to ISO/IEC 17025

**Are you in agreement with publishing this reporting form on WMO/CIMO website?**

Yes

No

\_\_\_\_\_  
Date

\_\_\_\_\_  
Name and Signature of Person in Charge of RIC

## ANNEX

(Following information will be a part of your RIC's website as published on the [WMO/CIMO website](#))

<b>Specific information on Instrument Calibration Capabilities</b>					
<b>Temperature:</b>					
Instrument Undergoing Calibration	Calibration Range	Reference standard, Equipment	Calibration and Measurement Capability (CMC)*	Traceability of Reference equipment	
				Last standard calibration date	Calibration body
In-Glass thermometers	-30 °C to +40 °C	In-glass thermometer	0.2 °C	2018	SMU
Platinum resistance thermometers	-30 °C to +40 °C	SPRT + resistance bridge	0.05 °C	2018	SMU
Mechanical thermometers	-30 °C to +40 °C	PRT + data collector	1 °C	2018	SHMU
Electronic thermometers	-30 °C to +40 °C	PRT + data collector	0.3 °C	2018	SHMU
Status of accreditation (date of the latest accreditation): 2013 Link to the accreditation certificate: <a href="http://www.snas.sk">www.snas.sk</a> Accreditation body: SNAS					
<b>Relative Humidity:</b>					
Instrument Undergoing Calibration	Calibration Range	Reference standard, Equipment	Calibration and Measurement Capability (CMC)*	Traceability of Reference equipment	
				Last standard calibration date	Calibration body
RH sensors	10 to 97 %	Dew point standard	2.5 %	2018	ČMI
Hygrographs	20 to 95 %	Capacitance RH sensor in climatic chamber	3 %	2018	SHMU
Mechanical hygrometers	20 to 95 %	Capacitance RH sensor in climatic chamber	5 %	2018	SHMU

Status of accreditation (date of the latest accreditation): 2013  
 Link to the accreditation certificate: [www.snas.sk](http://www.snas.sk)  
 Accreditation body: SNAS

### **Atmospheric pressure:**

Instrument Undergoing Calibration	Calibration Range	Reference standard, Equipment	Calibration and Measurement Capability (CMC)*	Traceability of Reference equipment	
				Last standard calibration date	Calibration body
Absolute pressure	650 to 1050 hPa	Calibrator DHI PPC2+	0.1 hPa	2018	SMU

Status of accreditation (date of the latest accreditation): 2013  
 Link to the accreditation certificate: [www.snas.sk](http://www.snas.sk)  
 Accreditation body: SNAS

### **Wind:**

Instrument Undergoing Calibration	Calibration Range	Reference standard, Equipment	Calibration and Measurement Capability (CMC)*	Traceability of Reference equipment	
				Last standard calibration date	Calibration body
anemometer	0.2 to 40 m/s	Thermal and rotating anemometer, Pitot tube	0.1 m/s (BMC)	2018	ČMI

Status of accreditation (date of the latest accreditation): 2013  
 Link to the accreditation certificate: [www.snas.sk](http://www.snas.sk)  
 Accreditation body: SNAS

**Precipitation:**

Instrument Undergoing Calibration	Calibration Range	Reference standard, Equipment	Calibration and Measurement Capability (CMC)*	Traceability of Reference equipment	
				Last standard calibration date	Calibration body
Tipping bucket		Volumetric flask	10 ml at 500 ml	2005	SMU
Weight rain gauge	1g to 7 kg	Set of weights	1 g	2017	SLM

Status of accreditation (date of the latest accreditation): 2013  
 Link to the accreditation certificate: [www.snas.sk](http://www.snas.sk)  
 Accreditation body: SNAS

**Other (please specify if applicable):**

Instrument Undergoing Calibration	Calibration Range	Reference standard, Equipment	Calibration and Measurement Capability (CMC)*	Traceability of Reference equipment	
				Last standard calibration date	Calibration body
NOx analyzers	(0.5 to 1000) nmol/mol	Standard analyzer	(0.04 hm + 1.3) nmol/mol	2017	CHMI
SO2 analyzers	(0.5 to 1000) nmol/mol	Standard analyzer	(0.05 hm + 1.3) nmol/mol	2017	CHMI
O3 analyzers	(0.5 to 500) nmol/mol	Standard analyzer	(0.03 hm + 1.2) nmol/mol	2017	CHMI
CO analyzers	(0.04 to 50) $\mu$ mol/mol	Standard analyzer	(0.02 hm + 0.4) $\mu$ mol/mol	2017	CHMI

Status of accreditation (date of the latest accreditation): 2013  
 Link to the accreditation certificate: [www.snas.sk](http://www.snas.sk)  
 Accreditation body: SNAS

\* A **CMC (calibration and measurement capability)** is the smallest uncertainty (k=2) of measurement that can be expected to be achieved by the RIC during a calibration under normal conditions. This CMC is evaluated by the RIC itself and described in the scope of accreditation of the RIC, if available.