



文件编号: 02685/2022/1/ONM/MQC/UAI-2022-Call-for-Operators 2022年2月22日

附件: 2个(仅以英文提供)

主题: 为WMO 2022年高空仪器互比活动(UAI-2022, 德国林登堡)征集无线电探空仪系统独立操作员/技师师提名

要求采取的行动: (1) 向贵国的无线电探空仪系统操作员/技师分发本独立操作员提名征集。
(2) 于**2022年3月20日前**提名无线电探空仪系统独立操作员/技师, 以出席WMO UAI-2022。

尊敬的先生/女士,

“WMO 2022年高空仪器互比活动”将于2022年8月8日至9月17日在德国林登堡举行, 主要目的是评估各种高空业务观测系统的性能。本次互比活动不仅包括无线电探空仪系统, 还包括各种地基遥感系统和机载观测。有关互比活动的进一步详情, 如详细的互比项目计划, 可在 [WMO 网站](#) 上查阅。

本次活动承接先前的WMO高空互比系列活动, 上次于2010年在中国阳江举办。本次互比活动将对来自不同制造商、约10-12个无线电探空仪系统进行测试。为了能够对参与的无线电探空仪系统进行独立比对(包括测试用户友好性), 这些系统将由独立操作员/技师而非制造商操作。这些操作员/技师将在活动开始时接受无线电探空仪制造商的培训。

本次互比活动为进一步培训来自会员的技术人员操作无线电探空仪系统、为探空活动和能力的国际协调提供了一个独特机会。技术人员将: (i)全程参与互比团队, (ii)接受特定无线电探空仪系统的必要培训, (iii)在活动期间操作这些系统。这些人员将向同事们学习, 并就探空系统的可用性提供反馈。

在整个活动期间, 操作员将住在林登堡(预计不会进行人员轮换)。他们将接受制造商的培训, 并将为最多三种不同的无线电探空仪系统提供支持。他们将是操作团队的一员, 并按要求操作分配给他们的系统, 进行相关白天和夜晚的探测。他们还将参与评价各种无线电探空仪系统的可用性。[附件 1](#) 提供了关于这一能力发展机会的更多细节。

致: WMO 会员常任代表

抄送: 水文顾问

在此，我们邀请您提名贵国一名或多名愿意并能够作为独立操作员参加互比活动的无线电探空仪操作员。操作员必须经过气象技师培训(参见《气象与水文教育培训标准实施指南，第一卷 - 气象》(WMO-No.1083)中 BIP-M 和 BIP-MT 的基础教学课程)或其国家气象水文部门(NMHS)同等标准的培训。他们必须有无线电探空仪系统的最新经验，并有足够的英语口语表达和书面能力。

来自发展中国家的人员将被优先考虑。WMO 致力于社会性别主流化，因此大力鼓励妇女提出申请。活动将根据可用资金情况，提供有限的差旅补助。

鉴于正在持续的 COVID-19 疫情，主办方正采取一切措施，确保参与者、操作员和工作人员的安全。鼓励操作员及早安排签证和疫苗接种事宜，以确保他们能够进入德国。操作员必须遵守德国政府的规定和限制。请注意，这些规定或可在短期内发生变化。有关规章和例外情况的详细信息，请参阅[这里](#)。

请有意以独立操作员身份参与互比活动的技术人员于 **2022 年 3 月 20 日前**尽快填写[在线问卷](#)。为便于准备所需信息，调查表所依据的问题清单载于[附件 2](#)。

提名无线电探空仪操作员参加 UAII-2022 的简短信函必须由被提名操作员的相关常任代表于 **2022 年 3 月 20 日前**提交给 WMO 秘书处，请发送至测量、质量和合规股负责人 Isabelle Rüedi 女士(iruedi@wmo.int)。该信函还须说明是否要求以一笔总付形式而非每日津贴和/或差旅补助方式提供资助。

我愿借此机会再次感谢您对“仪器和观测方法计划”活动的关注和贡献。

您诚挚的



张文建博士
代秘书长

Excerpt from the Project Plan for the WMO Upper-Air Instrument Intercomparison Campaign

Ref.: 02685/2022-1.6 I/ONM

Capacity-Building of Operational Personnel

Expectations:

The operation of the radiosondes and the receiving systems during the radiosounding field campaign will be performed by independent personnel. The rationale for doing so is:

- To evaluate the user-friendliness (see Annex 7) and ease of operability of the radiosonde systems, which is a relevant factor in the procurement process for WMO Members,
- To enable an independent comparison of the radiosonde systems,
- To train staff from WMO Members in the operation of radiosonde systems with preference to staff from developing countries.

The operators of the radiosonde systems will be recruited from WMO Members as a form of capacity-building. If operators cannot be recruited from WMO Members, [Deutscher Wetterdienst \(DWD\)](#) will provide the operators.

The training of the operators on each radiosonde system will be performed by the manufacturer. The manufacturer will take responsibility for appropriate training and capacity-building with their systems.

The timeline of the radiosounding field campaign provides for a two-week period in order to set up and test the radiosonde system, and for the manufacturer to train the operator. During this preparatory phase, three soundings will be performed to verify the proper operation of the systems. After this setting-up period the manufacturers will leave the campaign site and hand over control to the operators. A hotline, or another means of 24/7 support will be provided by the manufacturers to assist in the event of possible problems with the radiosonde system.

Technical staff may be trained in the use of multiple systems (up to three) to be able to support more than one manufacturer.

The training and capacity-building will be conducted in English.

The operators are expected to stay on site for the duration of the training and the field campaign (approximately 5 weeks).

Process to recruit technical staff:

WMO will issue a call for interest requesting assistance from its Members and will specify the expectations. The Project Team will review the nominations and make the best efforts to match the skills of the nominees with the needs of its Members and the manufacturers.

The Project Team will try to assign technical staff from countries other than the manufacturer's country of origin to operate the radiosonde system.

Qualification profile of technical staff:

- Expected level: "Basic Instruction Package for Meteorological Technicians" (see [Guide to the Implementation of Education and Training Standards in Meteorology and Hydrology, volume I – Meteorology](#) (WMO-No. 1083))

Because of the significant initial training requirements during the set-up phase, it may be advantageous to arrange a staggered set-up of the different manufacturers. The initial set-up period may take 2–3 days at the beginning of the set-up and testing periods.

The training sessions need to be spread out over the course of the two-week set-up and pre-campaign testing period. Each training session should take between 2–3 days including a launch of the respective radiosonde (as part of the larger rig).

During the intercomparison campaign, regular review meetings of the technical staff may be required to evaluate the operations and provide a process to eliminate operational errors and troubleshoot problems that may arise.

Operators are also expected to participate in pre-flight coordination meetings.

Review of the data by the manufacturers will be essential to assure that potential operator errors are identified and corrected early.

The Project Team should identify one or two training managers, with the following responsibilities:

- To coordinate the training activities of the manufacturers
- To support the operators in completing their tasks and to be a point of contact for issues that may arise
- To assure that operator performance does not negatively influence the performance of the radiosonde intercomparison
- To define the evaluation and feedback processes (regular sounding meetings and feedback documents)

At the end of the campaign, the training manager will coordinate the documentation of the capacity-building process and solicit input from all external operating staff to provide a final document.

APPLICATION FORM

for

**Independent Radiosonde System Operator/Technician for the
WMO Upper-Air Instrument Intercomparison Campaign, 2022
Lindenberg, Germany**

Ref.: 02685/2022-1.6 I/ONM

PLEASE NOTE: This questionnaire must be filled in electronically (available [online](#))

1.	Member country	
2.	Operator/Technician proposed for participation	
	Family name	Preferred Title: Dr <input type="checkbox"/> Mr <input type="checkbox"/> Ms <input type="checkbox"/>
	First name	
	Organization	
	Address	
	Telephone	
	Email	
	Position presently held	
3.	Work experience of proposed Operator/Technician ¹	
	Brief description of your current duties/work:	
	Which educational degree/training did you obtain?	

¹ Please provide a short CV of the proposed operator/technician

	Were you trained as meteorological technician (BIP-MT, WMO-No. 1083 ²)? Yes <input type="checkbox"/> No <input type="checkbox"/>
	Did you undergo a training equivalent to BIPM-MT provided by your NMHS? Yes <input type="checkbox"/> No <input type="checkbox"/>
	Which radiosonde system are you currently operating?
	Which other radiosonde system(s) have you operated in the past, if any:

4.	Observing station at which you have been performing radiosonde launches most recently
	Station name/location:
	From (month/year):
	To (month/year):
	Were the soundings from this station reported on the GTS? Yes <input type="checkbox"/> No <input type="checkbox"/>
	WIGOS Station Identifier (if appropriate):

5.	Expected benefit
	Which benefit do you expect to gain from participating in the WMO Upper-Air Instrument Intercomparison 2022 as independent operator/technician?

6.	Knowledge of English			
		Excellent	Good	Fair
	Reading	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Writing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Speaking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Oral understanding	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

² See Basic Instruction Packages for BIP-M and BIP-MT in the [Guide to the Implementation of Education and Training Standards in Meteorology and Hydrology, volume I – Meteorology](#) (BIP-MT, WMO-No. 1083)

7.	Additional comments/information
	Feel free to provide any additional comments that you deem useful

8.	Endorsement by the Permanent Representative
	<p>I certify that the Permanent Representative of my country with WMO supports my application to take part in the UAII-2022 as an independent radiosonde system operator/technician and that he/she agrees to send a letter to WMO, nominating me for this activity and indicating whether financial support is requested in the form of a lump sum in lieu of per diem and/or travel.</p> <p>Name of person filling this form:</p>
