

**WMO OMM**

World Meteorological Organization
Organisation météorologique mondiale
Organización Meteorológica Mundial
Всемирная метеорологическая организация
المنظمة العالمية للأرصاد الجوية
世界气象组织

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Ref.: 21864/2023-1.8 I/ONM

文件编号: 21864/2023/I/ONM/RA II/WIGOS

2023 年 10 月 19 日

附件: 1 份 (仅提供英文版本)

主题: 面向 WMO 第二区域协会 (RAII) 会员的 WMO 全球综合观测系统 (WIGOS) 实施研习会

需要采取的行动: 关注本研习会, 尽早提名贵国的与会者, 最好不迟于 **2023 年 10 月 25 日**

尊敬的先生/女士,

谨此高兴地通知您, 应中国气象局 (CMA) 的盛情邀请, 面向 WMO 第二区域协会 (RA II) 会员的 WMO 全球综合观测系统 (WIGOS) 实施研习会将于 2023 年 11 月 27 日至 30 日在中国北京举行。研讨会将以英语进行。鼓励您亲自参加会议, 但也可在线参加。

此次研习会的目的是满足二区协会会员的需求并为其提供必要的支持, 以确保 WIGOS 的全面实施, 并更好地响应联合国预警倡议 (EW4All) 的要求。研讨会将讨论以下主题: 全球基本观测网络 (GBON)、区域基本观测网络 (RBON)、WMO 滚动需求评审 (RRR)、业务天气雷达网络和相关数据交换、飞机气象数据中继 (AMDAR) 以及支持 WIGOS 的区域中心。研习会的议程草案作为附件附于本信函之后, 详细的日程安排和研习班的其他信息将适时在 WMO 的网站上 ([本链接](#)) 公布。

预计研习班的第一天将面向高层管理人员, 随后三天将面向中层管理人员和有关专家。

为此, 谨请您提名贵国参加研习班的代表, 并说明是亲自参加还是在线参加。

希望贵组织能够承担与会者的费用。但是, 如果做不到这一点, WMO 根据请求, 考虑为贵国最多一 (1) 名与会者提供资助。

关于非工作人员的保险问题, 请注意以下几点:

“获准由本组织出资旅行和/或从 WMO 领取 DSA 的非 WMO 工作人员须确保其对代表本组织公务旅行和出席会议期间因死亡、疾病或伤害发生的费用完全负责。因此, 他们须全权负责为这些会议和活动期间安排人寿、健康、意外和任何其他形式的足额保险。”

WMO 的责任仅限于代表本组织从事服务或出席会议, 由伤害和疾病福利保险覆盖, 该保险有限覆盖医疗、急诊和补充公务差旅费”。

谨请尽早 (最好不迟于 **2023 年 10 月 25 日**) 将贵国参加研习会的专家/代表的姓名和详细联系信息通过电子邮件通知秘书处 Bing Liu 女士 (bliu@wmo.int), 并说明是亲自参加还是在线参加。

与会者有责任办理中国入境签证。不过, 如有必要, WMO 可根据要求协助与 CMA 协调, 提供支持签证申请的正式邀请函。

致: 第二区域协会会员 WMO 常任代表

抄送: WMO 第二区域协会会员水文顾问

谨此感谢您对 WMO 活动的一贯支持。

谨上，

A handwritten signature in blue ink, appearing to read 'Zhang'.

张文建博士
代秘书长

RA II - WIGOS Regional Implementation Workshop (Hybrid)

Concept Note

27–30 November 2023
Beijing, China (hosted by CMA)

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1. Purpose

The purpose of the Workshop is to discuss and make progress on the key activities of the WIGOS implementation in Regional Association II (RA II):

- Implementation of Global Basic Observing Network (GBON)
- Development of the Regional Basic Observing Network (RBON)
- Strengthening collaboration with Regional WIGOS Centres (RWC), and with other WIGOS-related regional centres (Regional Instrument Centres (RIC), Regional Marine Instrument Centres (RMIC), Regional Radiation Centres (RRC), Regional Climate Centres (RCC) including third pole, Regional Training Centres (RTC)), GSRN Lead Centre
- Development of the WMO-IATA Collaborative AMDAR Programme (WICAP)
- Enhancement of Radar observation network capabilities
- Emerging technologies
- Environmental sustainability
- Contribution of Members to the Early Warnings for All (EW4All) initiative
- Capacity development

2. Background

Several successful workshops on WIGOS implementation in Regional Association II have already been organized, for example:

- [Regional Association II \(RA II\) Training Workshop on Regional WIGOS Centre \(RWC\) Functions and Tools \(online\)](#), 5–12 July 2021
- [OSCAR/Surface training in RA II](#), 13–15 November 2019, Tokyo, Japan
- [WMO RA II Workshop on Regional WIGOS Centres for West Asia](#), 30 April–2 May 2019, Jeddah, Saudi Arabia
- [OSCAR/Surface training in RA II](#), 16–18 April 2019, Muscat, Oman
- [WMO RA II WIGOS Workshop - Regional WIGOS Centres and its services for Members](#), 6–9 March 2019, Tokyo, Japan
- [RA II WIGOS Workshop](#), 6–9 November 2018, Beijing, China
- [RA II/RA-VI Workshop on WIGOS](#), 12–14 September 2017, Minsk, Belarus

Through the interaction with experts and Members' representatives from WMO Regional Association II (RA II) during recent events held in Geneva, consultation with the WMO Regional Office for Asia and the South-west Pacific and following the visit of the WMO Secretary-General and Assistant Secretary-General earlier this year in China, a clear need to further support the full implementation of WIGOS in RA II has been identified.

To address the need and provide necessary support, the Commission for Observation, Infrastructure and Information Systems (INFCOM) is organizing the WMO Regional Association II (RA II) WIGOS Implementation Workshop for RA II Members, from 27 November to 30 November 2023, in Beijing, China.

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3. Expected outcomes

In relation to recent Congress decisions and the RA II priorities, the Workshop is expected to:

- Provide a regional perspective on the contribution of GBON high-density networks per GBON technical regulations
- Provide guidance on how to achieve appropriate GBON standard density by taking into account cross-border areas
- Provide awareness and guidance on GBON Compliance monitoring and on the role of RWC
- Raise awareness of Members on their expected contributions to RBON to facilitate the design of RBON in RA II
- Provide information on the required RBON compliance, and explore what mechanisms and tools could be introduced for RBON compliance monitoring, in particular in relation to the role of the RWCs
- Provide guidance on how to address the identified regional challenges, and contribute to observational requirements of EW4All
- Identify regional requirements for the AMDAR data
- Explore a regional operational mechanism for the AMDAR programme implementation, including WICAP
- Explore the possibility of expanding radar mosaic, exchange of data, to be one component of RBON in the region in response to the EW4All initiative
- Discuss and identify regional challenges regarding environmental sustainability of observations

4. Target Audience

The main/target audiences of the Workshop are as follows:

Day 1

- high-level management, decision makers

Day 2–4

- Middle-level (technical) management
- Experts dealing with networks, radars, ABO matters
- Chairs/co-Chairs of relevant Regional (RA II) teams (WG-INF; ET-WIGOS; ET-RIC, ET-WICAP)
- Chairs/co-Chairs of relevant Global (INFCOM) teams (TT-GBON-Next; ET-WTR; JET-EOSDE; ET-QTC)
- National Focal Points for WIGOS, WICAP

Provisional programme

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<i>Day 1, Monday, 27 November 2023</i>			
<i>Time (UTC)</i>	<i>Item</i>	<i>Topic</i>	<i>Speaker/Lead (TBC)</i>
	1	Opening and introduction	
	1.1	Welcome PR of China	
	1.2	Welcome from P-RA II	
	1.3	Representative of WMO SG	
	1.4	Local arrangements (10 minutes)	
	2	SESSION 1: WIGOS PRIORITIES	
	2.1	Outcome of Cg-19: WMO Strategic Plan	
	2.2	EW4All, RA II services, including INFCOM aspects	
	2.3	WIGOS framework	
	2.4	WMO technical regulations and guidance material	
	2.5	RA II WIGOS Operating plan and challenges	
	3	SESSION 2: GBON in RA II	
	3.1	The Global Basic Observing Network (technical regulations)	
	3.2	GBON compliance monitoring	
	3.3	WIGOS Tools for GBON	
	3.5	National presentations on GBON	
	4.1	Discussion on the GBON implementation in RA II	

<i>Day 2, Tuesday, 28 November 2023</i>			
<i>Time. (UTC)</i>	<i>Item</i>	<i>Topic</i>	<i>Speaker/Lead (TBC)</i>
	3.5	National presentations on GBON (cont'd)	
	3.6	Discussion on the GBON implementation in RA II (cont'd)	
	4	SESSION 3: RBON Implementation in RA II	
	4.1	Introduction to the WMO Rolling Review of Requirements (RRR) process	
	4.2	Regulatory framework and guidance material supporting RBON implementation	
	4.3	Report on the progress with RBON design in RA II	
	4.4	Plan for full RBON Implementation in RA II	
	4.5	Discussion of the report and plan	
	5	SESSION 4: CMA observing capabilities	
	5.1	Presentations on CMA observing capabilities including emerging technologies	

Day 3, Wednesday, 29 November 2023			
Time. (UTC)	Item	Topic	Speaker/Lead (TBC)
		SESSION 4: Regional Centres supporting WIGOS	
	6.	Regional WIGOS Centres	
	6.1	RWC Beijing - operations	
	6.2	RWC Tokyo - operations	
	6.3	Audit of the centres – report	
	6.4	Members' experience with the RWCs – national presentations	
	6.5	Discussion	
	7	Other regional Centres in support of WIGOS	
	7.1	Regional Instrument Centres in RA II – report (2, RIC-Beijing, RIC Tsukuba)	
	7.2	Regional Marine Instrument Centre China – report	
	7.3	Regional Radiation Centres in RA II – report (3, Pune, Tokyo, Saint Petersburg)	
	7.4	Regional Climate Centres in RA II – report (4, Beijing, Tokyo, Moscow, Pune)	
	7.5	Regional Training Centres in RA II – report (8, Nanjing (Beijing), New Delhi (Pune-IMD, Pune-NWA, Roorkee), Tehran, Baghdad, Seoul, Doha, Tashkent, Moscow)	
	7.6	Outcomes of seventh RMIC/AP Marine Instrumentation Workshop	
	7.7	Discussion	
	8	Visit to Regional Centres in Beijing (2-hour tour at CMA)	

Day 4, Thursday, 30 November 2023			
Time. (UTC)	Item	Topic	Speaker/Lead (TBC)
	9	<i>SESSION 5: Aircraft-based Observations (ABO) and Radar Observations capabilities and opportunities</i>	
	9.1	WIGOS implementation concerning aircraft observations (WSI, metadata repository, data exchange, compliance monitoring)	
	9.2	Introduction to WICAP regulatory framework	
	9.3	Report on WICAP implementation in RA II	
	9.4	New and developing systems (MODE-S, UAS, ADD)	
	9.5	Introduction to Radar guidance and standardization material	
	9.6	Radar databases and data exchange formats	
	9.7	Radar networks in RA II (South-Asia network, Gulf network)	
	9.8	National experience and practices with Radar observations	
	9.9	Discussion	
	10	<i>SESSION 6: SUMMARY AND CLOSING</i>	
		Final discussion and summary of the Workshop recommendations	
		Closure of the Workshop	