

9 – 12 September 2019

# WORKSHOP ON RANGING MODE (R-Mode)

IALA Headquarters, Saint-Germain-en-Laye, France







The International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA) is hosting a workshop on Ranging Mode (R-Mode) at IALA Headquarters, Saint-Germain-en-Laye from 9-12 September 2019. The working language will be English. The workshop is supported by the project R-Mode Baltic which is co-financed by the European Union through the European Regional Development Fund within the Interreg Baltic Sea Region Programme.

#### BACKGROUND

Ranging Mode (R-Mode) is a terrestrial positioning and timing system under development which supports vessel operations in coastal areas. It is foreseen as a backup system for GNSS. The R-Mode system itself consists of maritime radio transmitters, which were modified in a way that they broadcast synchronised ranging signals. Here, the transmissions of maritime radio beacons and base stations of Automatic Identification System (AIS) or, in the future, VHF Data Exchange System (VDES) are considered as signals of opportunity. The R-Mode system should be standardized to be used as a transnational navigation system.

#### **OBJECTIVE**

This IALA workshop aims to achieve the following:

- Give participants an overview about the recent status of world-wide R-Mode activities and latest results;
- Define R-Mode requirements for implementation with VDFS:
- Develop a roadmap for the standardisation and implementation of R-Mode on MF and VHF transmissions.

#### **TOPICS**

The workshop deals with general R-Mode aspects which have to be agreed upon in the early phase of system development. In particular the maritime user requirements on a backup system and the implementation approach of R-Mode as part of VDES. Furthermore, world-wide experts are invited to discuss and share their results of R-Mode research, and agree a way forward, including R-Mode standardisation. To support ongoing and upcoming R-Mode research, development, validation and implementation activities a concept for an information exchange platform will be further developed which should comprises world-wide available R-Mode testbeds and test facilities.

### **ATTENDEES**

The workshop will provide a forum for discussions between stakeholder groups. It is envisaged that the workshop will be attended by representatives of:

- IALA members
- IALA Sister Organisations
- Research institutions, which work on resilient PNT
- Key industry stakeholders such as manufacturers and users (shipowners, navigators, pilots, etc.)

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## **REGISTRATION FEE**

The registration fee for the workshop is EUR 150. It includes workshop material, coffee breaks and a workshop dinner. Registration should preferably be made online on www.iala-aism.org, news and events, calendar. Participants who are unable to pay online are invited to send the registration form at Page 3, duly filled in, by e-mail to <a href="mailto:contact@iala-aism.org">contact@iala-aism.org</a>.

### **VENUE**

The venue will be held at IALA headquarters, 9-12 September 2019.

### **HOTEL**

Delegates are responsible for booking their own hotels Please see Hotel Information flyer provided by the IALA secretariat via this link <a href="https://www.iala-aism.org/contact/">https://www.iala-aism.org/contact/</a>



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#### **PROGRAMME**

DAY 1 - Monday 9 September 2019				
12:00 - 13:00	Registration			
13:00 - 14:30	Session 1	Opening and keynote addresses		
14:30 - 15:10	Group photo and Tea / coffee break			
15:10 - 17:30	Session 2	Current status of developments		
09:00 - 10:20	10 September 2019 Session 3	Moulehon tonios and alricatives		
		Workshop topics and objectives		
10:20 - 10:50	Tea / coffee break	Common Manhing Curry, Descriptores of stallabelday on the D.Mada system		
10:50 - 12:30	Session 4 Lunch	Common Working Group: Requirements of stakeholder on the R-Mode system		
12:30 - 13:30	Session 5	Warking Croup 1: VDEC B Made implementation		
13:30 - 15:15	Session 5	Working Group 1: VDES R-Mode implementation Working Group 2: Guidelines on Implementation of R-Mode on MF and VHF		
15:15 - 15:45	Tea / coffee break	working Group 2. Guidelines on implementation of R-Mode on Mr and Mr		
15:45 - 17:30	Session 5 continued	Working Crouns 1 and 2		
		Working Groups 1 and 2		
19:30 - 21:30	Workshop dinner	La Piazza, 40 rue de Paris, Saint Germain en Laye		
DAY 3 - Wednesday 11 September 2019				
09:00 - 10:30	Session 6	Common Working Group: Platform for coordination of test facilities and testbeds		
10:30 - 11:00	Tea / coffee break			
11:00 - 12:30	Session 7	Working Group 1: VDES R-Mode implementation (continue Tuesday session)		
		Working Group 2: R-Mode development, standardisation and implementation		
		roadmap		
12:30 - 13:30	Lunch			
13:30 - 15:30	Session 7 continued	Working Groups 1 and 2		
15:30 - 16:00	Tea / coffee break			
16:00 - 17:00	Session 8	Panel Discussion: Shaping the future of R-Mode		
DAY 4 - Thursday 12 September 2019				
09:00 - 10:30	Session 9	Reports from Working Groups		
10:30 - 11:00	Tea / coffee break	vehous noun morking groups		
	•	Canalysians and clasing		
11:00 - 12:00	Session 10	Conclusions and closing		



## **REGISTRATION FORM**

Bookings should preferably done using the link <a href="https://www.iala-aism.org/product/workshop-on-ranging-mode/">https://www.iala-aism.org/product/workshop-on-ranging-mode/</a>

## **WORKSHOP ON RANGING MODE**

9 – 12 September 2019

**IALA Headquarters** 

Saint-Germain-en-Laye, France

Registration closes on the 26 August 2019

Participant's details		Holder's name:
Surname (family nar	ne):	Total to be charged:
First name (given na		Signature
	etc.):	☐ by bank transfer on receipt of an invoice
	pany:	Other requirements (please specify):
Address:		
Phone (incl. country	code):	
Mobile (incl. country	/ code):	
E-mail:		
Dietary requirement	s (please specify):	CANCELLATION POLICY All cancellations must be sent by e-mail to contact@iala-aism.org
I agree to my contac	t details being provided	A refund in full of the registration fee will only be provided
in the final report of	the workshop:	if notification is given at least one week prior to the event.  Otherwise, a cancellation charge of 50% will be applied.  Name changes will be accepted.  In case of a no-show, 100% of the registration fee will be charged.
Yes 🗆	No 🗆	
I need an invitation I	etter for visa purposes:	
Yes 🗆	No 🗆	
Payment details		
☐ by enclosed chequ	ue or bank draft in EUROS	
☐ by VISA or MASTE	RCARD	
No:		
Expiry date:		

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