



**Telecommunication  
Development Bureau (BDT)**

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Geneva, 25 July 2018

Administrations of ITU Member States,  
National Regulatory Authorities,  
ITU-D Sector Members and  
ITU-affiliated academic and research  
institutes in the Asia-Pacific region

**Subject: ITU/Rohde & Schwarz ITU Academy training workshop on "Implementation of radio monitoring systems according to ITU-R recommendations", Singapore, 15-19 October 2018**

Dear Sir/Madam,

On behalf of the International Telecommunication Union, I am pleased to invite your organisation to participate in a face-to-face training workshop on **"Implementation of radio monitoring systems according to ITU-R recommendations"** to be held **from 15 to 19 October 2018** at the Rohde & Schwarz Regional Learning Center in Singapore. The workshop is part of the ITU Academy training portfolio and will be conducted within the framework of a capacity-building partnership entered into between ITU and Rohde & Schwarz GmbH & Co.

The workshop will, among other topics, focus on the following:

- Introduction to spectrum monitoring
- ITU reports, recommendations and handbooks related to monitoring
- International cooperation in spectrum monitoring
- Monitoring antennas and receivers
- DF and radiolocation basics
- Signal analysis
- Computer-aided spectrum monitoring

The draft agenda of the workshop is attached as an Annex.

**Target group**

The workshop targets professional and technical staff from government, operators and regulatory agencies responsible for planning, implementation and operation of spectrum monitoring systems. Participants must have at least three years of professional experience in the area. The workshop is primarily targeting, but not limited to, participants from the Asia-Pacific region.

## Registration

Interested participants are kindly requested to register online on the ITU Academy portal at <https://academy.itu.int/> no later than **1 September 2018** according to the instructions indicated in the form. Although there is no training fee charged for participating in this workshop, please note that all expenses concerning travel, accommodation and meals are expected to be borne by the participants.

Due to space and organizational reasons, the **total number of participants is limited to 20**. Available slots will be allocated on a first-come, first-served basis.

## Fellowship

I am pleased to inform you that ITU will provide one partial fellowship (covering only daily subsistence allowance) per Administration of least developed countries (LDCs) and low income countries (LIC), subject to availability of funds. The final selection of candidates will be carried out by ITU. Eligible participants are requested to apply by completing the fellowship form available on the ITU Academy portal and returning it no later than **1 September 2018**. As ITU will provide a limited number of fellowships, these will be granted on a first-come, first-served basis.

## Additional information

Please note that the workshop will be conducted in English only and participants are therefore required to have a good working knowledge of this language.

Additional information on this workshop, including a list of recommended hotels, can be found on the ITU Academy website at <https://academy.itu.int/>. Confirmed participants are kindly requested to contact Ms Sharon Chan (telephone +65 6307 0032, email: [sharon.chan@rohde-schwarz.com](mailto:sharon.chan@rohde-schwarz.com)) from Rohde & Schwarz Singapore, for any questions concerning logistics, such as the venue and invitation letters if necessary for visa application. For any other questions concerning this workshop please contact Ms Susan Teltscher, Head, Human Capacity Building Division, ITU/BDT (telephone +41 22 730 6315, email: [hcbmail@itu.int](mailto:hcbmail@itu.int)).

I am looking forward to your positive response and active participation in this workshop. I would highly appreciate it if you could circulate this invitation among relevant stakeholders in your country that could benefit from this joint effort by ITU and Rohde & Schwarz.

Yours faithfully,

[Original signed]

Brahima Sanou  
Director

Annex: Draft programme

ITU/R&S Workshop on  
**"IMPLEMENTATION OF RADIO MONITORING SYSTEMS  
 ACCORDING TO ITU-R RECOMMENDATIONS"** in Singapore 2018



**Draft Time Table**

	Monday, 15 Oct	Tuesday, 16 Oct	Wednesday, 17 Oct	Thursday, 18 Oct	Friday, 19 Oct
<b>09:00 – 09:45</b>		Tasks of a Monitoring Service	Monitoring Receivers	Signal Analysis	Practical Exercises in Groups
<b>09:50 – 10:35</b>	<b>10:00 – 11:30</b> Registration of Participants	Spectrum Monitoring in the Netherlands	Monitoring Receivers	Signal Analysis	Practical Exercises in Groups
<b>10:35 – 11:05</b>	Coffee Break	Coffee Break	Coffee Break	Coffee Break	Coffee Break
<b>11:05 – 11:50</b>	11:05 – 11:30 Registration of Participants 11:30 – 11:55 Welcome, Introduction	Spectrum Monitoring in the Netherlands	Monitoring Receivers	Signal Analysis Practical Demonstrations	Practical Exercises in Groups
<b>11:55 – 12:40</b>	Introduction to Spectrum Monitoring	Monitoring at Major Events	DF and Radiolocation Basics	Computer aided spectrum monitoring	Practical Exercises in Groups <b>12:30 Final Discussion</b>
<b>12:40 – 14:00</b>	Lunch Break	Lunch Break	Lunch Break	Lunch Break	Lunch and Farewell
<b>14:00 – 14:45</b>	Introduction to Spectrum Monitoring	International Cooperation in Spectrum Monitoring	DF and Radiolocation Basics	Computer aided spectrum monitoring	
<b>14:50 – 15:35</b>	ITU Reports, Recommendations and Handbook related to monitoring	Monitoring Antennas Selection and Siting	ITU Compliant DF and DF Antennas	Spectrum Monitoring Systems, from Handheld to Nationwide	
<b>15:35 – 16:05</b>		Coffee Break	Coffee Break	Coffee Break	
<b>16:05 – 16:50</b>		Monitoring Receivers	DF Site Selection and Installation Aspects	TDOA Fundamentals	
<b>18:00 – 22:00</b>			Social Event		