

workshops and training programme, publishes reports and documents, develops frameworks and road maps and provides various policy advisory services to the Member States.

### **INDIAN NATIONAL CENTRE FOR OCEAN INFORMATION SERVICES**

The Indian National Centre for Ocean Information Services (INCOIS) has a mission to provide the best possible ocean information and advisory services to the society, industry, government and scientific community through sustained ocean observations and constant improvement through systematic and focused research. The INCOIS has developed a state-of-art system of early warning of tsunami and storm surges which would be useful for the countries of the region.

### **CLIMATE**

The climate of Hyderabad remains fairly warm through most parts of the year and does not receive much rainfall in the monsoon. During the summer months, the mercury goes as high as 42° C while in winters the minimum temperature may come down to as low as 12° C. June to November are the months of monsoons, when temperature goes down at times. As August is the rainy month, the participants are advised to bring an umbrella with them.

*For details contact:*



**Director,**  
SAARC Disaster Management Centre,  
NIDM Building, IIPA Campus,  
I.P. Estate, ITO Ring Road, New Delhi-110002.  
Phone: 0091-11-23702445  
Fax: 0091-11-23702446  
E-mail: [director.sdmc@gmail.com](mailto:director.sdmc@gmail.com),  
Webstie: [www.saarc-sdmc.nic.in](http://www.saarc-sdmc.nic.in)

**Director,**  
Indian National Centre for Ocean Information Services  
(INCOIS),  
'Ocean Valley', P. B. No. 21,  
IDA, Jeedimetla P. O.  
Hyderabad-500 055, Andhra Pradesh (India)  
Phone: 0091-40-23895000, 23886001  
Fax: 0091-40-23895001  
E-mail: [director@incois.gov.in](mailto:director@incois.gov.in)



## **SAARC Training Programme on EARLY WARNING FOR HYDRO-METEOROLOGICAL DISASTERS**

**August 16-20, 2010**

**Venue**

**Indian National Centre for Ocean Information Service (INCOIS),  
Hyderabad, Andhra Pradesh (India)**

**for**

**Professionals/Middle Level Executives/Staff involved in  
Disaster Management**

**Organized by**

**SAARC Disaster Management Centre,  
New Delhi (India)**

**In collaboration with**

**Indian National Centre for Ocean Information Service (INCOIS),  
Hyderabad, Andhra Pradesh (India)**

## **BACKGROUND**

Every year hydro-metrological disasters like flood, drought, cyclone, heat and cold wave etc. affect millions of people in South Asia, causing huge loss and fatalities. Much of these losses can be avoided with timely warning and evacuation of people likely to be affected by such disasters. In the recent years the South Asia region has developed good capacity for early warning of various hydro-meteorological disasters, particularly cyclone, storm surges, flood and tsunami. The sharing of information, knowledge and resources on such newly developing early warning systems in the region through training workshops would be mutually beneficial to all the countries.

## **COURSE OBJECTIVES**

Therefore with the objective of familiarizing the participants from the Member States of the SAARC with the latest developments in the field of early warning of hydro-meteorological disasters viz. tsunami, cyclone, flood, drought etc and the regional mechanism of sharing such warnings under various existing and forthcoming initiatives a training workshop has been designed by the SAARC Disaster Management Centre New Delhi.

## **WHO SHOULD ATTEND**

This training workshop has been designed for professionals in the fields of hydrology, meteorology, communication technology, disaster management etc and senior and middle Level functionaries of government concerned with disaster preparedness and response in the SAARC countries. 20-25 participants from the SAARC countries shall be admitted to the programme based on the nominations received from the Member States and the principle of geographical representation.

## **COLLABORATION**

This training workshop is being organised by the SAARC Disaster Management Centre (SDMC) New Delhi in collaboration with the Indian National Centre for Ocean Information Services (INCOIS) Hyderabad, India. Resource persons from a number of early warning agencies in the region shall attend the workshop as guest faculties.

## **VENUE**

The programme shall be organised at the INCOIS headquarters in Hyderabad.

## **DURATION OF COURSE**

Duration of course would be for a week, from 16 to 20 August, 2010.

## **COURSE CONTENTS**

The course contents are devised in such a way as to give the participants a comprehensive account of state-of-art development in the field of Early Warning of Hydro-metrological disasters in South Asia. The following topics will be covered in the training programme.

- Ø End to End Early Warning System for Hydro-meteorological disasters
- Ø Tsunami Early Warning System.
- Ø Demo of Indian Tsunami Early Warning System.
- Ø Data Sources for Tsunami Modelling.
- Ø Mathematical Concepts of Tsunami Modelling.
- Ø Tsunami Modelling Using TSUNAMI N2 Model-Model Set up, Execution and Analysis.
- Ø Early warning for Cyclone.
- Ø Early warning for Drought.
- Ø Early warning for Flood.
- Ø Early warning for Heat and Cold Wave.
- Ø Technological Options for Last Mile Connectivity.
- Ø Role of Mass Media during Early Warning.
- Ø Last Mile Connectivity: New Initiative.
- Ø Community based Early Warning System.
- Ø Early Warning and mass Evacuation.

## **LANGUAGE**

Teaching medium is English and all course materials will be provided in English only.

## **CERTIFICATE**

Participants completing the course successfully will be awarded with certificate.

## **ABOUT THE ORGANISERS**

### **SAARC DISASTER MANAGEMENT CENTRE**

SAARC Disaster management Centre was set up in 2007 at the premises of National Institute of Disaster Management in New Delhi. The Centre has the mandate to serve eight Member States of South Asian Association for Regional Cooperation (SAARC) namely, Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka, by providing policy advice and facilitating capacity building services including strategic learning, research, training, system development and exchange of information for effective disaster risk reduction and management in South Asia. It conducts studies and research, organizes