



Our ref.: OBS/CBS/TECO-2016

GENEVA, 13 May 2016

Annex: 1 (available in English only)

Subject: Announcement and Call for Papers for the 2016 WMO Commission for Basic Systems Technical Conference on "Emerging Trends in Information and its Use" (CBS-TECO-2016)

Action required: To distribute the announcement to interested parties, and to submit abstracts of papers via the WMO/CBS website as soon as possible, but **not later than 20 June 2016**

Dear Sir/Madam,

The World Meteorological Organization (WMO), under the auspices of the Commission for Basic Systems (CBS), is organizing the CBS Technical Conference (CBS-TECO-2016) with the theme: Emerging Trends in Information and its Use.

CBS-TECO-2016 will be held in Guangzhou, China, at the kind invitation of the China Meteorological Administration (CMA), from 21 to 22 November 2016.

The Conference will take place before the sixteenth session of the Commission for Basic Systems (CBS-16) of WMO, at the same venue, from 23 to 29 November 2016.

CBS-TECO-2016 is for experts in basic operational meteorological systems from National Meteorological and Hydrological Services (NMHSs), international operational and research institutes and the private sector. Its aim is to explore emerging trends in information, including Big Data, and to explore how NMHSs might manage, use and extract value from this explosion of data to address emerging user needs; it will consider how the basic systems and services of NMHSs might evolve in the changing context. It provides an invaluable opportunity for training and capacity development, particularly for participants from developing countries, who are strongly encouraged to present their work at the Conference.

An International Programme Committee (IPC), chaired by Dr Susan Barrell, the vice-president of CBS, will oversee the Conference and will be responsible for the selection of papers for oral presentations.

To: Permanent Representatives (or Directors of Meteorological or Hydrometeorological Services) of Members of WMO (PR-6901)

cc: Hydrological Advisers to Permanent Representatives)
Presidents and vice-presidents of technical commissions)
Presidents of regional associations)
Members of CBS) (for information)
Director General, ECMWF, EUMETSAT, ASECNA)
Executive Secretary, HMEI)

The purpose of this letter is to announce the Conference and to invite submission of abstracts. Those wishing to present an oral or poster presentation at CBS-TECO-2016 are kindly requested to complete the electronic version of the Abstract Submission Form, which is available on-line, at:

<http://public.wmo.int/en/events/constituent-bodies/cbs-teco-16>

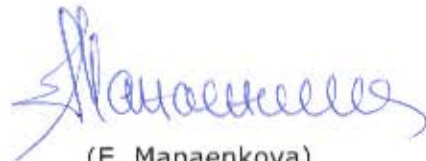
For technical reasons, consideration can only be given to abstracts, in English, of less than **300** words, which are submitted on-line before **20 June 2016**.

Lead authors of papers selected by IPC will be advised in August 2016 with further instructions concerning the format and submission deadline for papers.

The Conference Announcement is provided in the Annex and additional information will also be available at the above-mentioned web link.

I should be grateful if you would make this announcement widely known within your respective Service and beyond.

Yours faithfully,



(E. Manaenkova)
for the Secretary-General



WORLD METEOROLOGICAL ORGANIZATION
Weather • Climate • Water

The World Meteorological Organization is pleased to announce

The WMO 2016 Commission for Basic Systems Technical Conference (CBS-TECO-2016)

Guangzhou, China, 21-22 November 2016

Theme: Emerging Trends in Information and its Use

Background

Change, as they say, is the only constant – and changes in technology and how we use it provide both opportunities and challenges to NMHSs, in terms of their basic infrastructure and systems, and how they process and deliver the information and services that their users require. Big Data and associated disruptive technologies, such as the Internet of Things (IoT), are turning up the pressure and adding increasing complexity to the choices NMHSs must make regarding the data they source and how they use it, the systems they invest in, the services they offer and how they deliver them, and how they engage with their users to deliver the highest value outcomes.

The WMO Commission for Basic Systems (CBS) will hold a two-day Technical Conference on 21-22 November 2016 in conjunction with its sixteenth session in Guangzhou, China.

The aim of the TECO is, firstly, to explore emerging trends in information. This will include Big Scientific and Opportunity Data and all that it means for NMHSs, from new generation satellites to crowdsourcing to social media and commercial data providers, and to the Internet of Things. It will cover cloud computing and lifecycle data management, data assimilation into high resolution NWP and decision support and visualization tools to help our professionals assimilate, integrate, interpret and apply Big Data. Secondly, the TECO will explore how NMHSs might manage, use and extract value from this explosion of data to address emerging user needs, especially in the area of impact-based forecasting. It will look at how NMHSs can use social media and new delivery channels, not just to deliver services to our users, but to get their feedback and data analytics in return; it will look at the changing demands from users for timely, detailed information and services, and track how they respond to our services. It will reflect on what all this means, not just for the services NMHSs provide but for the changing roles of meteorologists, hydrologists and other professionals.

The WMO Integrated Global Observing Systems (WIGOS), the WMO Information System (WIS), the Global Data-processing and Forecasting Systems (GDPFS), and Public Weather Services Programme provide the foundational infrastructure for NMHSs. The CBS-TECO will consider how those basic systems and services themselves might evolve, how CBS needs to evolve, and consider what practical advice and concrete actions CBS can provide to Members.

Topics

Technical experts from National Meteorological and Hydrological Services, international operational and research meteorological institutes, and the private sector will address the following main topics:

- Emerging trends in data and associated information technologies, and their implication to NMHSs:
 - ICT opportunities for NMHSs

- Big data
 - Cloud computing
 - Social media
 - Internet of Things
 - Mobile networks
- Challenges and opportunities for NMHSs
 - Technological challenges for NMHSs and users
 - Special challenges for developing country Members
 - Lifecycle data management
 - Working with third parties, including commercial providers
- Using data and information:
 - Big data analytics – helping deliver the right services to the right people
 - Extracting real value from crowd-sourced data
 - Making choices - which data, which source, where to invest?
 - Success stories in using data from diverse sources
 - Human challenges of using and interpreting 'big' data
 - Big data in support of impact-based forecasting
 - Capturing and applying data on hazards, user response and impacts
 - Evolving role of people – forecasters, observers
 - New approaches to service design and service delivery

CBS-TECO-2016 will be conducted in English only. All information concerning CBS-TECO-2016, including the Form for Submission of Abstracts and Papers, is available on the WMO/CBS website under:

<http://public.wmo.int/en/events/constituent-bodies/cbs-teco-16>

The International Programme Committee will give preference to papers on the above-mentioned subjects.

The deadline for submission of full papers and posters in their required format will be provided in the acceptance letter to be sent to authors of selected abstracts, before the end of August 2016. Papers accepted for presentation will be published in their original form (without editing) in the WMO CBS website.

Abstracts of proposed papers, not exceeding half a page, in **English only**, should be submitted, using the electronic version of the Submission Form, via the above-mentioned web link, not later than **20 June 2016**.

**The International Programme
Committee**

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