



**WMO SECRETARIAT**  
**WMO SDS-WAS Region for Asia**  
**First Meeting of the Regional Steering Group (RSG)**  
**CMA, Beijing China, 4-6 November 2008**

**Introduction**

In accordance with the actions approved by the WMO Joint Scientific Committee (JSC) for the World Weather Research Programme (WWRP) to develop the WMO Sand and Dust Storm Warning Advisory and Assessment System (SDS-WAS): Implementation Plan (2009-2013), the first meeting of the Regional Steering Group of the WMO SDS-WAS Asia/Central-Pacific Node was held at China Meteorological Administration (CMA), Beijing, China, 4-6 November 2008. It was convened with the following objectives:

- a) Review the draft implementation plan for SDS-WAS prepared by the writing team of the SDS-WAS Scientific Steering Committee and the Research Department of the WMO Secretariat in Geneva.
- b) Develop a plan of action for 2009 to 2010, and prepare for constituent body meetings of WMO (e.g. the 14<sup>th</sup> Session of WMO Regional Association II (Asia), Tashkent, Uzbekistan, 5 to 11 December 2008; CBS meeting Croatia, 25 March to 2 April 2009; CAS 18-24 November 2008 Seoul Korea).
- c) Finalize the Regional Steering Group(RSG) membership and appoint a chair and vice-chairs,

This summary report outlines the progress and conclusions of this meeting.

The meeting was attended by the participants listed in Annex I

**Opening of the session**

The meeting was opened in Salle 10, Keji Building, CMA, Beijing at 09:30 on 4 November 2008. The ceremony was moderated by Dr Zhang Xiaoye, Co-Chair of the

Sand and Dust Storm Project of the WMO World Weather Research Programme (WWRP) and Vice-President of the Chinese Academy of Meteorological Science CMA. In his opening remark, Mr. Shen Xiaonong, Deputy Administrator of CMA extended a warm welcome to the international participants, noting that it was a small but very important meeting. To demonstrate the importance of sand and dust research and forecasting, Mr Shen recalled three severe sand and dust storm events that he had personally experienced, emphasizing the necessity to launch a high profile program supported with appropriate institutional arrangements. Considering its trans-boundary and cross-cutting nature, international partnership is essential, in particular, at the regional level. He indicated CMA's support and commitment to the initiative, looked forward to the development of a regional strategy within the framework of the WMO SDS-WAS implementation plan so that an contribution could be made in Asia to the global effort. Finally, he wished the meeting a good success.

Mr Barrie, Co-Chair of the Sand and Dust Storm Project and Director of the WMO Research Department, briefed the group on the latest developments and forthcoming events relevant to the SDS-WAS. He indicated WMO's interest and attention was due to the wide-ranging and multi-faceted impacts of sand and dust storms and the long range transport of dust affecting climate and weather. He outlined WMO's vision for the Sand and Dust Storm Warning Advisory and Assessment System: the combination of research and operations through partnership at regional level. He appreciated the exemplary leadership by CMA, JMA and KMA in this process that would be a catalyst in bringing together the countries in the Asian region to implement SDS-WAS. Taking into account the progress already made and the relevant events ahead, he declared this Beijing meeting a significant milestone. Finally, he pointed out that in the week of 24 November 2008 in Tunisia the first meeting of the North Africa, Middle East and Europe node of SDS-WAS would take place and provide input to the draft implementation plan.

Participants introduced themselves, the group adopted the provisional agenda (see Annex II) and then appointed Mr. Leonard Barrie of WMO and Mr. Ning Jia as chair and rapporteur of this meeting, respectively.

Four scientific background presentations were delivered respectively by Dr Barrie, Dr X. Zhang, Dr. M. Mikami and Prof. S. Park. These informative and illustrative updates were convincing and encouraging, giving a clearer picture of current situation and future plans.

## **A. Review of the Draft Implementation Plan (2009-2013)**

The October 30, 2008 version of the SDS-WAS draft Implementation Plan (2009-2013) prepared by the WMO Secretariat was reviewed in detail and suggested changes noted by Dr. Barrie. The implementation plan is a general roadmap describing the core aspects of the initiative including mission, structure, roles, milestones and even an ambitious list of proposed projects or priorities. The meeting recognized the principle of federation that defines the SDS-WAS. The revised IP is attached in Annex I. The group entrusted Dr. Barrie with the task of incorporating their comments into the next version of the implementation plan to be finalized using inputs from this meeting and the meeting of the North Africa, Europe, Middle East node of SDS-WAS to be held later in the month in Tunisia. It requested that a revised version is prepared and circulated before the 14<sup>th</sup> Session of WMO Regional Association II (Asia), Tashkent, Uzbekistan, 5 to 11 December 2008.

## **B. Activities in 2009-2010**

### **1. Integrated Observations**

- 1.1 Promote exchange of aerosol observations (PM10 and LIDAR) in near real time (1-3 hrs).
  - Action: Design a regional pilot project and host a technical workshop including major network representatives, models (research and operations) and WMO Information System (WIS) experts from each country {Lead and host Korea}

### **2. SDS Forecasting and Analysis**

- 2.1 Multi-model qualitative comparison through display on the SDS-WAS Regional Node website hosted by RC (include research and operational products).
  - Action: propose a plan for consideration{ Lead Japan and Mikami }
- 2.2 SDS model comparison using case studies of past SDS events
  - Action: Prepare and circulate for review an experiment design proposal (Lead RC)
- 2.3 Links to home site of each model on the website
  - Action; implement {Lead RC}
- 2.4 Standardize verification methodology (e.g. like Threat Score)
  - Action: Suggest a threat score methodology in a draft paper for PM10 and comparison between modeled and monitored PM10 concentration at standardized monitoring sites. Link this to observation technical workshop (lead: RC and Zhang, XY)

### **3. SDS User Interface (Products and Outreach)**

- 3.1 Develop a common methodology for issuing a seasonal dust forecast for Asia.

- Action: Link to WMO regional climate outlook forum(RCOF) and its regional representatives (WMO Secretariat and CMA, KMA , JMA)
- 3.2 Prepare a list of SDS forecasts and analysis products and a guide for users and place on the website
  - Action; implement draft webpage for comment {Lead RC }
- 3.3 Fill gaps in SDS product awareness and delivery in parts of Asia-central Pacific Region
  - Action: Hold WMO SDS-WAS User Workshop for Asia Central Pacific Region associated with technical observations workshop {Lead: Lead and host Korea }

### **C. Membership of the Regional Steering Group**

The group reviewed the membership of the RSG for SDS-WAS A-CP and suggested the following structure for 2009-2010:

Members of the SDS-WAS Scientific Steering Committee

*Prof S. Park Chair*  
*Dr M. MIKAMI Vice-Chair*  
*Dr X. ZHANG Vice-Chair*

Dr. Maki (JMA)  
 Dr. Sugimoto(NIES, Japan)  
 Dr. Seung-Bum KIM (research)  
 Dr. Deuk-Gyun RHA (operation)  
 Dr. DUAN Yihong (CMA)  
 Dr. HU Xiuqing (CMA)  
 Dr. Farida Muratova (Kazakhstan)  
 Dr. Mongolia (TBD) Dulam Jugder  
 India (TBD)  
 A Representative for Aerosol Optical Dept Measurements (TBD)

It thanked and welcomed Professor Soon-Ung Park of Korea for taking the lead as first chair of the SDS-WAS A-CP node and pledged to work hard with him to implement the activities outlined in section B above. It thanked Dr. X. Zhang and CMA for hosting the Regional Centre in support of the Regional Node.

### **Closure of the session**

All the international participants expressed their gratitude to CMA for its warm hospitality and thoughtful arrangements accorded during the session. Dr. X. Zhang expressed his appreciation to all the participants and to WMO for their support and cooperation.

The session was closed in Beijing at 5:00 PM on 5 November 2008. The international participants toured the Beijing 2008 Olympic Games facilities as well.

Drafted in English in Beijing, this summary report including minutes has been previewed by and found acceptable to all the participants.

Annex I      Table of Participants and emails  
Annex II     Agenda of Meeting

## Annex I List of Participants

### WMO SDS-WAS Asia/Central-Pacific Regional Centre Steering Group Meeting (4-6 November 2008, Beijing, China)

No.	Full Name	Country	Affiliation	Tel	Fax	Email
1	SHEN Xiaonong	China	Deputy Administrator, China Meteorological Administration			
2	ZHANG Xiaoye	China	Vice President, Chinese Academy of Meteorological Sciences	86-10-68408943	86-10-62175931	xiaoye@cma.gov.cn
3	DUAN Yihong	China	Director General, National Meteorological Center, CMA	86-10-68408985	86-10-62172962	duanyh@cma.gov.cn
4	YU Jixin	China	Director General, Department of International Cooperation, CMA	86-10-68406462	86-10-62174797	yujx@cma.gov.cn
5	Leonard A. Barrie	WMO	Director, Atmospheric Research Department, WMO	41 (0) 22 7308240	41 (0) 22 7308049	Lbarrie@wmo.int
6	Masao MIKAMI	Japan	Meteorological Research Institute, JMA	81-29-853-8704	81-29-855-6936	mmikami@mri-jma.go.jp
7	Soon-Ung PARK	Korea	Souel National University	82-2-885-6715	82-2-885-6715	supark@snu.ac.kr
8	Seung-Bum KIM	Korea	Korea Meteorological Administration (KMA)	82-2-6712-403	82-2-2018-0689	skim@kma.go.kr
9	SUN Rui	China	Chinese Academy of Meteorological Sciences	86-10-68406928	86-10-68406928	sunrui@cams.cma.gov.cn
10	LU Yan	China	Chinese Academy of Meteorological Sciences	86-10-58995277	86-10-62175931	luyan@cams.cma.gov.cn
11	JIA Ning	China	Training Center of CMA	86-10-68407952	86-10-68406242	jianing@cma.gov.cn
12	ZHAO Yan	China	Chinese Academy of Meteorological Sciences	86-10-68407226	86-10-62175931	yanzhao@cams.cma.gov.cn

**Annex II**  
**Agenda of the Meeting**

WORLD METEOROLOGICAL ORGANIZATION  
CHINA METEOROLOGICAL ADMINISTRATION

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MEETING OF THE  
WMO SDS-WAS Regional Steering Committee  
(SDS-WAS RSC) meeting of Asian/Central  
Pacific Regional Centre (A/C RC)  
(Beijing, 4-6 November 2008)

**Tuesday 04 November 2008**

09:30 Meeting Start

1. Opening Remarks and Welcome on behalf of the host, CMA, Deputy Administrator of CMA
2. Approval of the Agenda; denoting the Chair and Rapporteur

10:00- 11:00

3. Introduction of WMO SDS WAS and A/C RC (X.Y. Zhang)
4. Introduction of Implementation Plan (IP) of WMO SDS WAS (LB)

11:00- 14:00

5. Reviewing the IP

14:00- 18:00

6. Elaborating the issues from IP

18:00 End of the Meeting session

**Wednesday 5 November 2008**

09:30 – 10:00

7. Discussion on mechanisms of delivering products

10:00 – 10:30

8. Discussion on providing neutral ground for operations, research and capacity building in the region and to build partnerships

10:30 – 11:00

9. Discussion on assembling forecasts, and gradual unification of the observation system for SDS
10. Discussion on mid- to long- range forecasts

11:00 – 12:00

11. Future plans and Final Issues

12:00 Meeting Closure