WMO OMM

World Meteorological Organization
Organisation météorologique mondiale
Organización Meteorológica Mundial
Всемирная метеорологическая организация
المنظمة العالمية للأرصاد الجوية
世界气象组织

WEATHER CLIMATE WATER
TEMPS CLIMAT EAU

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Annex: 1

Subject: Formalization of the Asia-Oceania Meteorological Satellite Users Conference (AOMSUC) mechanism

Action required: To provide comments on the draft Agreement and Terms of Reference of the AOMSUC, by **24 May 2016**

Dear Sir/Madam,

In a side event at the Seventeenth World Meteorological Congress in 2015, the Permanent Representatives of Australia, China, India, Indonesia, Japan, the Russian Federation and the Republic of Korea with WMO expressed their interest to further the success of the Asia-Oceania Meteorological Satellite Users Conference (AOMSUC), and to strengthen its mechanisms.

I am writing with the intent to formalize the AOMSUC as a permanent mechanism in RAs II and V, for the benefit of Members in utilizing satellite data for improved weather, climate and disaster mitigation services.

The AOMSUC has been established since 2010 as a successful mechanism for building a community of satellite data users across the Asia-Oceania region. The annual Conference, with rotating hosts and guided by an International Conference Steering Committee, is increasingly recognized by Members, satellite operators, and the scientific community in RAs II and V for the exchange of information and best practices. The Conference also offers an excellent opportunity for organizing training events for young scientists, and for collocating formal meetings of the WMO satellite data user groups in RA II and RA V.

Six AOMSUCs were held since 2010, and at the Shanghai 2014 and Tokyo 2015 Conferences, participants agreed on joint statements confirming their support to the AOMSUC:

http://www.wmo.int/pages/prog/sat/meetings/documents/CG-17-SideEvent-AOMSUC_ShanghaiStatement.pdf ("Shanghai Statement")

http://www.jma-net.go.jp/msc/en/aomsuc6/Tokyo_Statement_AOMSUC-6.pdf ("Tokyo Statement")

http://www.jma-net.go.jp/msc/en/aomsuc6/summary.html (AOMSUC-6 Conference Summary)

The 7th AOMSUC is planned for 24-29 October 2016 in Songdo, Republic of Korea, hosted by KMA.

To: Permanent Representatives of Australia, China, India, Indonesia, Japan, the Russian Federation and the Republic of Korea

To strengthen the engagement of Members and to put the successful AOMSUC on a permanent footing, I invite your comments on the draft Agreement and Terms of Reference for the AOMSUC (Annex), by **24 May 2016**.

I propose to use the final version of the document for signature by all interested parties, at an AOMSUC ceremony during EC-68 this coming June in Geneva.

I look forward to your response, and count on your commitment to strengthen the successful AOMSUC mechanism for the benefit of Region II and Region V.

Yours faithfully,

(P. Taalas)
Secretary-General

Agreement on the Asia-Oceania Meteorological Satellite Users Conference (AOMSUC)

"To maximize the use of meteorological satellites for sustainable socioeconomic development"

We, the present and future hosts of the Asia-Oceania Meteorological Satellite Users Conferences (AOMSUCs) assembled at the sixty-eighth session of the Executive Council of WMO in Geneva,

Recalling the five AOMSUCs held so far in Beijing, China in November 2010, Tokyo, Japan (2011), Jeju Island, Republic of Korea (2012), Melbourne, Australia (2013), Shanghai, China (2014), and Tokyo, Japan (2015), all with overwhelming success,

Recalling further that the AOMSUCs provide an excellent forum for the meteorological community in Asia and Oceania to meet and enhance their joint efforts in the utilization of satellite data and products for better weather, climate, and disaster mitigation services. The Conferences feature the use of satellite data in Climate and Environment Monitoring, Numerical Weather Prediction, and Disaster Risk Reduction. The Conferences are an excellent platform for Asia-Oceania scientists and practitioners in: (1) promoting satellite observations and highlighting their utility, with a focus on regional issues; (2) advancing satellite remote sensing science; (3) fostering the dialogue between satellite operators and the user community on current and future satellites; and (4) engaging young scientists,

Recognizing that Asia-Oceania is a region prone to weather and other natural disasters such as tropical cyclones and volcanic activity. Super typhoon *Haiyan* in 2013, one of the strongest tropical cyclones ever recorded caused significant casualties and disrupted socioeconomic activities in South-East Asia. Most observations of the typhoon were taken from space, with satellite data playing an important role in determining the Typhoon's position and strength, and in forecasting its evolution,

Recognizing that the Global Framework for Climate Services (GFCS) is a UN-led initiative spearheaded by WMO with the goal of guiding the development of science-based climate information and services in support of decisionmaking in societal sectors such as agriculture and food security, disaster risk reduction, health, and water management. Satellite-based climate data records have a growing role in the provision of climate services; the architecture for climate monitoring from space provides the framework for collaboration among the Asia-Oceania space agencies and user communities to generate satellite-based climate data records in a coordinated and sustainable manner,

Noting the important roles played by the International Conference Steering Committee (ICSC) of the AOMSUCs, composed of scientists and satellite operators from Asia-Oceania and outside the region, and representatives from the sponsoring organizations WMO and GEO. The ICSC has played an essential and fundamental role in the genesis and evolution of the AOMSUC, in helping formulate the roles of the sponsors, in setting up the programmes of the Conferences, in helping to attract strong international science participation, and in setting the pathway for future conferences,

Noting further that the new generation of geostationary meteorological satellites, scheduled to enter operations from 2015 to 2020, present WMO Members with unprecedented opportunities and challenges. Through its effective user-provider dialogue, the AOMSUCs will be the key mechanism to prepare the Asia-Oceania region for taking full advantage of the new-generation satellites,

With this is mind, have reached consensus on the following. We:

1. **Note with satisfaction** the AOMSUCs as a forum for facilitating the dialogue and improved collaboration among the space agencies and user communities of the Asia-Oceania region, enhancing the use of satellites for weather and climate services;

2. **Agree** to organize the AOMSUCs on an annual basis, with focus areas similar to those at EUMETSAT and NOAA satellite user conferences. The Conference host is a satellite operator or a major user country in the Asia-Oceania region. It is a goal of the Conference to encourage participation from all countries in Asia-Oceania, particularly with regard to utilization of the new generation of meteorological satellites;

3. **Agree further** to use the AOMSUC mechanism to foster cooperation among satellite operators and users in Asia-Oceania by introducing a satellite application facility structure, conceptually similar to the EUMETSAT Satellite Application Facility (SAF), with the goal to improve regional capacity in exploiting satellite data in a cost-effective, collaborative manner, building upon and concentrating existing skills and infrastructure;

4. **Agree further** to add to the current mandate of the International Conference Steering Committee (ICSC) of AOMSUC the coordination responsibility for: (i) a user-focused training event; and (ii) as appropriate, a meeting of the WMO Satellite User Requirements coordination groups in Regions II and V, held jointly with the AOMSUCs and based on voluntary contributions from the host country and other AOMSUC sponsors;

5. **Agree further** to proceed with an ICSC that is composed of a chair who is chosen by the ICSC and serves for three years; of two co-chairs, one from the host country of the AOMSUC, the other from the host country of the previous AOMSUC, preferably the Permanent Representatives to WMO or his/her high-level representatives; of members who are high-level representatives from satellite operators and major user countries of the region, sponsor representatives, as well as internationally renowned scientists recommended by the sponsors;

6. **Agree further** to establish a secretariat function to: (i) sustain the AOMSUC mechanism by facilitating the organization of AOMSUCs, supporting ICSC meetings, liaising with EUMETSAT and NOAA conference secretariats as appropriate, and coordinating with the WMO Space Programme office; and to (ii) provide support to AOMSUC sponsors and others in Asia-Oceania by strengthening existing and fostering future collaboration on the utilization and exploitation of satellite data, and by helping coordinate related activities including in developing and least-developed countries;

7. **Extend** deep appreciation to China, Japan, the Republic of Korea and Australia for graciously hosting the first six AOMSUCs, and to India, Indonesia and the Russian Federation for the decision to join the ICSC and thereby to commit to host a future AOMSUC;

8. **Acknowledge** the valuable contributions of WMO and GEO as sponsors, and express special gratitude to the ICSC chair and members, as well as the local organizing committee members for dedicating their time, efforts and resources to the success of the AOMSUCs.

Geneva, XX June 2016

PR of Australia

PR of China

PR of India

PR of Indonesia

PR of Japan

PR of Republic of Korea

PR of Russian Federation

Secretary-General of WMO (sponsor)

Annex:
Terms of Reference of AOMSUC Host, Sponsors, ICSC and Secretariat

Meteorological and Earth observation satellites provide frequent and extensive observational information for use in weather forecasting, disaster prevention and climate monitoring/diagnostics, and are indispensable in today's world. Today, satellites have evolved into a powerful space-based observing system with China, EUMETSAT, India, Japan, the Republic of Korea, the Russian Federation and the United States providing high quality observations over the Asia-Oceania region. Those satellites are a part of the WMO Integrated Global Observing System (WIGOS) promoted by the World Meteorological Organization (WMO), and contribute to the Global Earth Observing System of Systems.

Beginning in 2010, AuBOM, CMA, KMA, JMA, WMO and the Group on Earth Observations (GEO) joined forces as sponsors of the first Asia-Oceania Meteorological Satellite Users Conference (AOMSUC) in Beijing. Since that first conference, AOMSUCs have been held annually since in Japan (2011), Korea (2012), Australia (2013), China (2014) and Japan (2015). At the 2014 Conference, Roshydromet (Russian Federation) joined the AOMSUC as a sponsor, and at the Seventeenth World Meteorological Congress in 2015, India and Indonesia also joined. The purpose of these annual conferences is to further enhance the exchanges on application techniques among satellite data users in Asia-Oceania as well as to advance satellite observation technologies and to promote synergetic development related to meteorological satellites in this region. This Conference is the eminent scientific event in the Asia-Pacific for those working in satellite remote sensing with applications in weather forecasting, climatology, oceanography and related fields. Attendees have included world leaders in the field of satellite meteorology, satellite operators and leading scientists from around the world.

Topical areas that have been covered at these Conferences include:

- Current and future meteorological satellite programmes;
- Facilitation of data access and utilization;
- Atmospheric parameters derived from satellite observations;
- Application of satellite data to weather analysis and disaster monitoring;
- Application of satellite data to numerical weather prediction;
- Application of satellite data to climate and environmental monitoring;
- Land surface and ocean parameters derived from satellite observations;
- Capacity-building and training activities.

In order to place the Conference on a self-perpetuating basis, it is necessary to define the roles and responsibilities of the various parties engaged in formulating the annual AOMSUC. The sections below define the structure of the Conference and the roles of the host, sponsors, the International Conference Steering Committee (ICSC), and the Conference secretariat.

Terms of Reference

The AOMSUC will be supported by a host and other sponsors which include meteorological satellite operators from WMO RA II and RA V, a country or countries representing Oceania who are not satellite operators, possibly other user countries from Asia-Oceania, as well as other organizations with a vested interest such as WMO and GEO.

The sponsors include CMA, JMA, KMA, AuBOM, Roshydromet, India, Indonesia, WMO and GEO.

The following describes the responsibilities of the host, sponsors, the International Conference Steering Committee (ICSC), and the Conference secretariat that support the AOMSUC and associated activities.

I. Host

The host has primary responsibility for organizing the AOMSUC, for all local planning, and for co-chairing the ICSC. Selected responsibilities are below:

1. The host rotates on an annual basis among the AOMSUC sponsors, except for WMO and GEO. The incoming host at the final session of an AOMSUC announces the venue and timeframe for the next AOMSUC and initiates reconstitution of the ICSC by naming its new co-chairperson;

2. Within a month of the previous AOMSUC, to:
   i) Name one or two scientists from their country to participate on the ICSC;
   ii) Through the ICSC chairperson, update ICSC membership from the global science community as needed;
   iii) Develop a local support secretariat, with the task to:
      - Handle local arrangements such as venue, hotels, transportation, meals, events, visits, etc.;
      - Formulate the initial programme with the ICSC chairperson for review by the ICSC. The Conference programme should include strategic and programmatic priorities of the major sponsors;
      - Solicit abstracts for the sessions;
      - Collect and review abstracts and work with the ICSC chairperson to develop a final programme;
   iv) Post an announcement on a dedicated website that contains information such as venue, dates of the AOMSUC, call for abstracts, and other pertinent items: this website should be updated on a routine basis;
   v) Start interaction with the WMO Space Programme office toward the goal of developing a training event jointly with the AOMSUC;
   vi) Start interaction with the ICSC to help organize a meeting of the standing WMO regional groups for identifying requirements for satellite data (i.e., the Coordination Group for the WIGOS Project to Develop Support for NMHSs in Satellite Data, Products and Training (in RA II), and the Regional Task Team on Satellite Utilization (in RA V)), to be held in association with the AOMSUC;

3. Support the Conference secretariat and contribute to its activities, preferably through the WMO Space Programme office (see below for Secretariat terms of reference);

4. Work with the Conference secretariat to ensure timely and efficient coordination among sponsors and other interested parties to organize the activities mentioned above;

5. To the extent possible, enable the participation of experts and users from developing and least developed countries in the AOMSUC, through financial support;

6. Functionally carry out all needed arrangements for organizing an AOMSUC and its associated events;

7. Post the conference final summary report on the AOMSUC website and distribute it as further required.

II. Sponsors

At the end of an AOMSUC, the sponsors should proceed with the following activities:

1. Within one month, appoint a member from their organization to be their representative on the ICSC as well as one or two members from the scientific and stakeholder communities within their country to participate on the ICSC - in the case of international organizations, their representatives on the ICSC would be representative of their involvement in the AOMSUC;

2. Notify the ICSC chairperson of their appointments to the ICSC;

3. Constitute a presence on their website that reflects the information on the upcoming AOMSUC and mirror the host's main AOMSUC website;

4. Support experts within their agency and country to participate in the AOMSUC- in the case of international organizations this would be from within their realm of activities and not necessarily from within their organization;

5. As possible, enable the participation of people from developing and least developed countries in the AOMSUC through financial support;

6. As appropriate, participate in the training events and workshops associated with the AOMSUC;

7. Support the Conference secretariat and contribute to its activities through voluntary financial and in-kind contributions (see below the Secretariat terms of reference).

III. International Conference Steering Committee

The International Conference Steering Committee (ICSC) guides the direction of the Asia-Oceania Meteorological Satellite Users Conference. Members of the ICSC are expected to be renowned experts in their field and well recognized as such within their country as well as internationally. The ICSC will function under the guidance of a chairperson who is chosen by the ICSC and serves a three-year term, and two co-chairpersons: one co-chairperson will be from the host country of the AOMSUC, the other co-chairperson from the host country of the previous AOMSUC. The co-chairperson should preferably be a Permanent Representative to WMO, or their high-level representative. ICSC membership will be by invitation of the chairperson, in consultation with the major sponsors and the co-chairperson residing within the host country. The ICSC will be reconstituted at the end of an AOMSUC and is expected to be fully formed within two months after the end of an AOMSUC.

ICSC members are expected to take a leadership role in the Conference by helping formulate the Conference Agenda and its associated programme in conjunction with the appropriate host's local committee. ICSC members are expected to actively support the Conference in one or more of the following ways:

1. Co-chair one of the Conference sessions and provide a brief written summary of that session to the ICSC chairperson in a timely manner so that the summary can be included in the conference formal report;

2. Present a lecture during the Conference;

3. Serve as a chairperson, co-chairperson or member of a panel or round table discussion;

4. Provide closing thoughts in the final session;

5. Foster attendance by contacting colleagues and encouraging them to participate in the AOMSUC;

6. As needed, aid in the development of a user-focused training event and a meeting of the standing WMO regional groups for identifying requirements for satellite data that are attached to the AOMSUC;

7. Approve and deliver the Conference formal summary report to the conference host. This should be done within one month of the close of the Conference.

IV. Conference Secretariat

To sustain the AOMSUC mechanism and to facilitate the organization of AOMSUCs, a AOMSUC secretariat will be established as a contribution of the satellite operators and countries of the Asia-Oceania region. The secretariat will have a major support role in its interaction with the host, sponsors and the ICSC. A part of its function will be to liaise with EUMETSAT and NOAA conference secretariats, and other major organizations, as appropriate. The secretariat shall work in close coordination with the WMO Space Programme office, the ICSC through its chairperson, the host and sponsors to ease their work load and ensure requirements are met in a timely fashion. It should further:

1. Prepare for the AOMSUC and ensure the smooth transition between one AOMSUC to the next AOMSUC, and provide management support during the intersessional period;

2. Work with the incoming host to select a best possible date for the Conference through inspection of other relevant organizations' and working groups' upcoming events;

3. Aid the host (local support secretariat) in the timely development of the contents of a website for the upcoming AOMSUC;

4. Support the host and the AOMSUC local organizing committee on all other Conference-relevant matters;

5. Draft the formal report of the AOMSUC and, ensure approval by the ICSC chairperson, deliver the report to ICSC members, and distribute the report to AOMSUC sponsors and participants;

6. Have primary coordination responsibility with appropriate parties for the user-focused training event and the meeting of the standing WMO regional groups for identifying requirements for satellite data that are held in conjunction with the AOMSUC;

7. Provide support to AOMSUC sponsors and others in Asia-Oceania to strengthen existing, and foster the future, establishment of regional centres of excellence on utilization and exploitation of satellite data, and to help coordinate their activities based on the recommendations of the AOMSUC, including in developing and least developed countries.

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