

**PROVISIONAL AGENDA (Draft 4)**

The meeting will start on Monday 25 November at 9:00 and is expected to close on Thursday 28 November at 16:00. It will be co-chaired by Dr Terrance Onsager and Dr Xiaoxin Zhang.

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| <i>DAY 1: Monday 25 November</i> |
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- 1. OPENING OF THE MEETING (9:00-9:15)**
  - Welcome and introduction
  - Adoption of the agenda
- 2. UPDATE ON WMO (9:15-9:30)**
- 3. ICTSW CO-CHAIRS' REPORT (9:30-10:00)**
  - ICTSW on-going activities, achievements and issues in the international context
  - Mapping of activities to the Terms of Reference
- 4. STATEMENT OF GUIDANCE ON SPACE WEATHER OBSERVATIONS (10:00 -10:30)**

Break (10:30 – 11:00)
- 5. SPACE WEATHER SERVICES TO AVIATION (11:00-12:30)**
  - 5.1 Review process of ICAO documents by ICTSW**
    - Concept of Operations for Space Weather Information
    - Space Weather Impacts on International Air Navigation
  - 5.2 ICAO requirements for space weather information**
  - 5.3 Organization of space weather services to aviation**

Lunch Break (12:30-14:00)
- 6. SPACE WEATHER PRODUCT PORTAL (14:00-15:30)**
  - 6.1 New WMO portal, concept and procedures**
  - 6.2 New candidate products**
  - 6.3 Candidate training material**

Break (15:30-16:00)
- 7. WARNING FOR EXTREME SPACE WEATHER EVENTS (16:00-17:00)**
  - Outcome of ICTSW-ISES panel on extreme space weather events and way forward

DAY 2: Tuesday 26 November

**8. DATA AND PRODUCT EXCHANGE ISSUES (9:00-10:30)**

**8.1 Overview and critical issues**

- Critical data availability and timeliness

**8.2 Formats and standards**

- Update on GRIB/BUFR coding proposal
- GNSS TEC data formats (GTEX/RINEX/IONEX)
- GNSS Radio-Occultation data (IROWG action)
- Other codes and format issues (ISES codes)

**8.3 Update on the WMO Information System (WIS)**

**8.4 WIS demonstration actions**

- Status and evaluation
- Way forward regarding ICTSW and WIS

Break (10:30-11:00)

**9. SPACE WEATHER OBSERVATION CAPABILITIES (11:00-12:30)**

**9.1 Surface-based observations**

**9.2 Outcome of the IROWG workshop**

**9.3 Introduction to OSCAR/Space capabilities**

- Categorization principles in OSCAR
- Instrument typology
- Instrument performance and measurement relevance

Lunch break (12:30 -14:00)

**9.4 Instrument categorization/evaluation review (14:00-15:30)**  
(using OSCAR development version)

Break (15:30-16:00)

**9.5 Impact on the Statement of Guidance (16:00-17:00)**

*Day 3: Wednesday 27 November 2013*

## **10. STRATEGIC PLAN FOR SPACE WEATHER**

### **10.1 National/regional strategic plans for space weather (9:00-10:30)**

- US space weather enterprise
- China's national plan for space weather
- ESA SSA Space Weather Element
- Canadian approach to space weather services to the government emergency operations centre
- NICT space weather centre activities
- Other.... national plan for space weather

Break (10:30-11:00)

### **10.2 Elements of a global strategic plan for space weather (11:00-12:30)**

- Improving observations and communications for space weather
- Developing products and services in space weather
- Training and education for space weather
- Space weather – meteorology interaction and possible synergy
- International initiatives and potential partnerships for space weather

Lunch Break (12:30-14:00)

### **10.3 Proposed WMO Strategy for Space Weather (14:00-15:30)**

- WMO assets to meet current/future international needs and expectations
- Resource mobilization for WMO space weather activities
- Space Weather breakthroughs for 2020-2025

Break (15:30-16:00)

## **11. WMO-ISES MEMORANDUM OF UNDERSTANDING (16:00-16:30)**

- ISES revision of the draft WMO-ISES MoU
- WMO response and next steps

## **12. TRAINING AND OUTREACH MATTERS (16:30-17:00)**

*Day 4: Thursday 28 November 2013*

**13. ICTSW WORK PLAN FOR 2014-2015**

**(9:00-10:30)**

- Tasks, targets and milestones
- Organization
- Resources

Break (10:30-11:00)

**14. REVIEW OUTCOME OF DISCUSSIONS ON PREVIOUS ITEMS (11:00-12:30)**

Lunch Break (12:30-14:00)

**15. ANY OTHER BUSINESS**

**(14:00-14:30)**

**16. CONCLUSIONS**

**(14.30-16:00)**

- Draft statement for the WMO Executive Council
- Draft statement for CGMS
- Draft statement to COPUOS
- Review of actions
- Date and place of next meetings

*CLOSURE OF THE MEETING (16:00)*

**ICTSW-4 at a glance**

| Monday 25 November                                                                  | Tuesday 26 November                                                                                                                      | Wednesday 27 November                                                     | Thursday 28 November                                |
|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------|-----------------------------------------------------|
| Opening<br>Update on WMO<br>ICTSW Co-Chairs' report<br>Statement of guidance update | Data and product exchange issues<br>- Overview, critical issues<br>- Formats and codes<br>- Update on WIS<br>- WIS demonstration actions | Strategic Plan for Space Weather<br>- National/regional strategic plans   | ICTSW work plan for 2014-2015                       |
| <i>Break</i>                                                                        | <i>Break</i>                                                                                                                             | <i>Break</i>                                                              | <i>Break</i>                                        |
| Space weather services to aviation                                                  | Space weather observation capabilities<br>- Surface-based<br>- Radio-occultation<br>- OSCAR/Space capabilities                           | Strategic Plan for Space Weather<br>- Elements of a global strategic plan | Review outcome of discussions on all previous items |
| Lunch break                                                                         | Lunch break                                                                                                                              | Lunch break                                                               | Lunch break                                         |
| New Space Weather Product Portal                                                    | Space-based instrument categorization and evaluation review                                                                              | Strategic Plan for Space Weather<br>- Proposed WMO plan for space weather | Review of actions<br>Any other Business Conclusions |
| <i>Break</i>                                                                        | <i>Break</i>                                                                                                                             | <i>Break</i>                                                              |                                                     |
| Warning for extreme space weather events                                            | Space-based instrument categorization and evaluation review (continued)<br>Impact on the Statement of Guidance                           | WMO-ISES MoU<br><br>Training and outreach issues                          | <i>Closure of the meeting</i>                       |