DISSEMINATION OF SPACE WEATHER ADVISORIES

1. Space Weather Advisory

1.1 The space weather service and the obligations of a space weather centre (SWXC) are defined in ICAO Annex 3 – *Meteorological Service for International Air Navigation*, Chapter 3, Section 3.8. Information relating to the space weather advisory (SWX Advisory) and its format is given in Annex 3, Appendix 2, Section 6 with the message template in Table A2-3- Template for advisory message for space weather information..

1.2 The space weather information service provision will become operational on 7 November 2019 with three global space weather information service providers:

- ACFJ consortium (comprising Australia, Canada, France and Japan) ;
- PECASUS consortium (comprising Austria, Belgium, Cyprus, Finland, Germany, Italy, Netherlands, Poland and the United Kingdom)m ; and
- United States (USA).

These providers will operate on a rotational basis of two (2) weeks each.

2. Communication Networks

2.1 Routing of SWX Advisories in text form will be similar to the current routing of OPMET messages, via the aeronautical fixed service (AFS), including the aeronautical fixed telecommunications network (AFTN) and the aeronautical (or ATS) message handling s ystem (AMHS).

2.2 Routing of SWX Advisories in the ICAO meteorological information exchange model (IWXXM) form will be made via the AMHS as an attachment utilising the file transfer body part (FTBP) feature. Note that the exchange in IWXXM form will initially be a recommended practice but will become a standard practice as of 5 November 2020.

2.3 The key players in the routing of SWX Advisories are the SWXCs, the national OPMET centres (NOCs), the regional OPMET centres (ROCs) and the inter-regional OPMET gateways (IROGs).

2.4 The users will be able to obtain the SWX Advisory through their NOC or the secure internet services: the secure aviation data information service (SADIS); and the world area forecast system (WAFS) Internet File Service (WIFS).

3. Message Headers

3.1 The World Meteorological Organization (WMO) message headers (TTAAii CCCC) for the text and IWXXM Advisories are given in the table below, noting that the ACJF Consortium will issue advisories from two locations.

	WMO headers	
	Text Advisory	IWXXM Advisory
ACFJ - Australia	FNXX01 YMMC	LNXX01 YMMC
ACFJ- France	FNXX01 LFPW	LNXX01 LFPW
PECASUS	FNXX01 EFKL	LNXX01 EFKL
USA	FNXX01 KWNP	LNXX01 KWNP

4. Message Routing – Originating Region

4.1 Space weather advisory centre (SWXC)

4.1.1 The SWXCs are the data originator. They will produce the SWX Advisories in text form and, from no later than 5 November 2020, in IWXXM form. They will send the SWX Advisories to their associated NOC.

4.2 National OPMET centre (NOC)

4.2.1 The role of the NOC is to gather OPMET messages, compile national data into bulletins, validate the bulletin structure and to distribute them according to the regional distribution schema. As necessary, the NOC associated with the SWXC (the Originating NOC) will add the bulletin (WMO) header and send it to all other SWXCs. The Originating NOC will also send the SWX Advisories to its associated ROC via the AFS and will distribute, or make available via agreed State briefing services, the SWX Advisories to users within its national area of responsibility.

4.3 Regional OPMET centre (ROC)

4.3.1 An originating ROC is responsible for the collection of the SWX Advisories from the originating NOC and for validation of the message format. The originating ROC will then disseminate the SWX Advisories, via AFS, to the IROGs within its region, to the RODBs within its region, to all other ROCs within its Region and to SADIS/WIFS.

4.4 Inter-regional OPMET gateway (IROG)

4.4.1 The IROGs in the originating regions are responsible for collection and dissemination of the SWX Advisories to their partner IROGs in other regions.

5. Message Routing – Receiving Region

5.1 Inter-regional OPMET gateway (IROG)

5.1.1 The receiving IROG is responsible for the collection of the SWX Advisories and for the dissemination to its associated ROCs and RODBs in its region.

5.2 Regional OPMET centre (ROC)

5.2.1 A ROC will receive SWX Advisories from other regions via their IROG. In turn, the ROC will distribute the SWX Advisories to all its associated NOCs.

5.3 National OPMET Centre (NOC)

5.3.1 The NOC will distribute, or make available via agreed State briefing services, the SWX Advisories to users within its national area of responsibility. The distribution may be via a "push" service (e.g. AFTN), a "pull" service (e.g. an internet-based briefing service) or by other methods agreed to within the State.

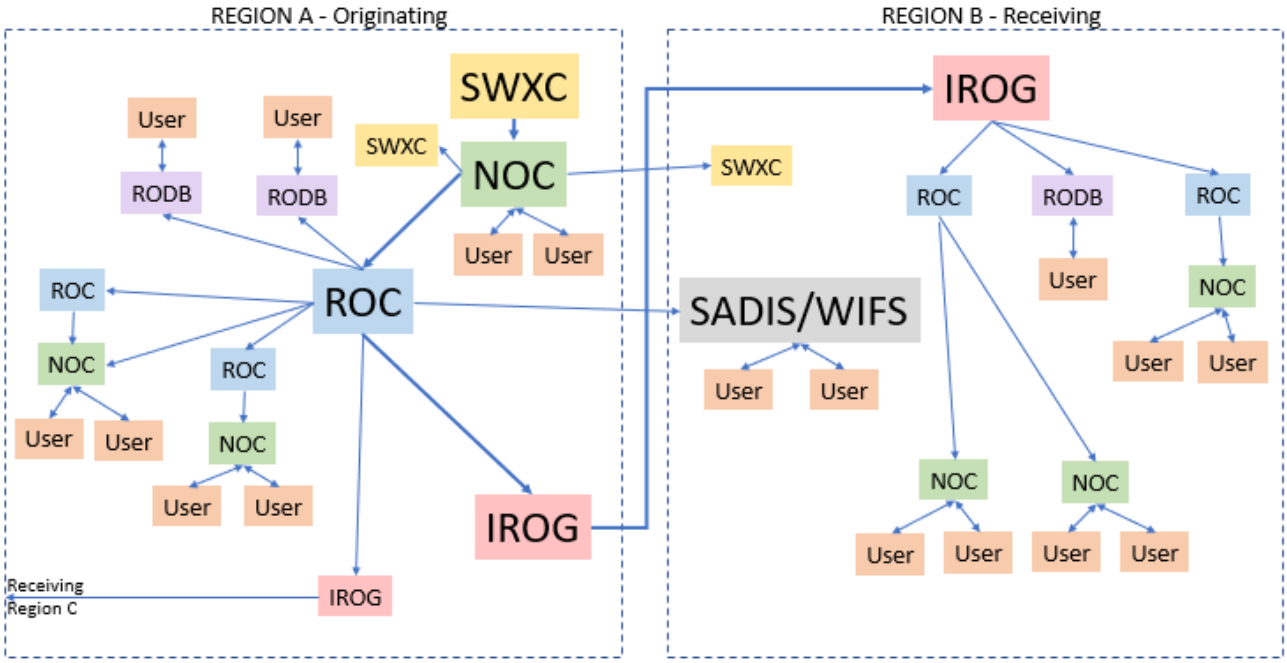
6. Data Access

6.1 User

6.1.1 It is the user's responsibility to ensure that they arrange for access to SWX Advisories through their NOC or through SADIS/WIFS.

6.2 Regional OPMET Date Bank (RODB)

6.2.1 RODBs should provide the capability for users to interrogate information, such as the SWX Advisories, through the AFS. Replies to these requests are described in the RODB Interface Control Documents. Reply reports of a request will be aggregated into one or more messages.



References:

Annex 3 - *Meteorological Service for International Air Navigation*
WMO-No.306 - *Manual on Codes*
Manual on Space Weather Information in Support of International Air Navigation, Doc 10100
Manual of Aeronautical Meteorological Practice, Doc 8896
EUR OPMET Handbook, Doc 018 –
Asia/Pacific Regional OPMET Exchange (ROBEX) Handbook
Guidelines for the Implementation of OPMET Data Exchange using IWXXM
Regional OPMET Data Bank (RODB) Interface Control Documents (ICD)