

**ITSC WORKING GROUP ON  
INTERNATIONAL ISSUES  
& FUTURE SYSTEMS**

*Co-chairs: John Eyre & Jérôme Lafeuille*

# ITSC-XV Actions and Recommendations (1/6)

## *RARS*

- **Recom II/FS-1 to WMO: Expand RARS network**  
The WMO Space Programme with CGMS assistance, should continue to promote the implementation of a globally coordinated system of RARS encouraging the development of the South-American and Asia-Pacific RARS and also ensuring coverage over Africa...(Gough and Marion Islands, Pretoria, Reunion, Honolulu and Tahiti).
- **Brazil, Argentina, Reunion, New Zealand now included  
Fiji & Honolulu expected in 2008  
Chile, Tahiti, Noumea expected in 2009**
- **Action II/FS-1: Enhance user information**  
WMO Space Programme to enhance user information about RARS through the WMO RARS Web site.
- **Initiated, further update planned in 2008**
- **Recom II/FS-2 to HRPT station operators: *Include IASI***  
RARS stations to upgrade HRPT stations in order to allow IASI data retransmission.
- **IASI: lower priority after Metop HRPT failure**
- **See David Griersmith's talk in Session 11 (Monday)**

# ITSC-XV Actions and Recommendations (2/6)

## *LEO WV channel, direct broadcast*

- **Recommendation II/FS-3 to space agencies (*LEO WV channel*)**  
Space agencies explore the possibility of flying an upgraded AVHRR–like sensor with a water vapour channel centred near 6.7 microns on future polar satellites in order to ensure the continuity of good quality polar atmospheric motion vectors beyond Terra and Aqua.
- **Not in currently planned operational LEO missions (-> 2020)**
- **Recommendation II/FS-4 to satellite agencies (*Direct Broadcast*)**  
Satellite agencies operating environmental polar satellites to provide or continue to provide a DB capability on their polar environmental satellite systems, and to make available in a timely manner the Direct Broadcast data processing (L0 to L1, and/or L1 to L2) software, documentation, and related training.
- **NOAA, Metop: AAPP, IAPP/ITPP**  
**Terra, Aqua: IMAPP**  
**NPP, NPOESS : IPOPP**
- **FY-3 (MPT 7.8 GHz/18.7 Mbps, AHRPT 1.7 GHz/4.2 Mbps)**  
**Meteor-M (HRPT 1700 MHz/665 kbps, LRPT 137 MHz/72 kbps)**  
See agencies' reports in Session 11 (Monday)

# ITSC-XV Actions and Recommendations (3/6)

## *Education and outreach*

- **Action II/FS-2 : ITWG Education web page**

ITWG Webmaster to expand the ITWG education Web page by linking to the international education program developer's sites and by encouraging these developers to use the ITWG education page as part of their resources and curriculum. Also to use the resources of the ITWG to help disseminate information to the international community about the education opportunities available.

➤ **Completed** (links to be updated soon)

- **Recom II/FS-5 to ITWG Co-Chairs: Executive Summary/support**

The ITSC-XV Working Group Report Executive Summary should encourage the satellite operators and product developers to financially support a strong education program, both within their region and internationally.

➤ **Completed (mentioned in Exec.Summary)**

- **Action II/FS-3: Education programmes certification**

ITWG members who are education material developers and providers (P. Antonelli, K. Strabala, EUMETSAT, etc.) to contact WMO Space Programme Department and the other international agencies to pursue the possibility of a certification for education programs.

➤ **WMO Pub.258 (Educational objectives) being updated for sat matters**

- **Recom II/FS-6 to ITWG Co-Chairs: Executive Summary / workshop**

The ITSC-XV Working Group Report Executive Summary should encourage the organization of a workshop to bring together the scientists who are involved in environmental remote sensing education and outreach programs to present their past and present activities and to co-ordinate future initiatives.

➤ **Completed (mentioned in Exec.Summary)**

# ITSC-XV Actions and Recommendations (4/6)

## *NPOESS payload*

- **Recommendation II/FS-7 to NOAA and DOD: sensor options**  
NOAA and DOD consider options to fund reinstatement of sensors removed from NPOESS based on assessment by US and International users.
  - **Was addressed, following Decadal Survey**
- **Action II/FS-4: Assess MW imager instead of CMIS**  
M. Goldberg to (contact) NPOESS Joint Agency Requirements Group (JARG) to request the assessment of a microwave imager only solution as replacement for the CMIS, and replace the loss of soundings with ATMS in the 0530 orbit plane.
  - ..
- **Action II/FS-5 : Assess cost saving of sounding on 05:30 ORBIT**  
M. Goldberg to (contact) IPO to assess cost savings of adding ATMS and/or CrIS in the 05:30 orbit in case of an early failure of either IASI/AMSU (10:00 orbit) or CrIS/ATMS (13:30 orbit). Cost assessment should include savings due to delaying a new launch for a single instrument failure as well as benefits .. of having three sounders in different orbits.
  - ..
- **Recom II/FS-8 to IPO and NASA : CERES on NPP**  
Consider including CERES on NPP instead of NPOESS-C1
  - **CERES will fly on NPP AND is proposed for NPOESS-C1**

# ITSC-XV Actions and Recommendations (5/6)

## *Direct Broadcast*

- **Action II/FS-6: Timetable for NPP/NPOESS HRD/LRD formats**  
Pete Wilczynski to provide a schedule (timetable) of availability of data format(s) for NPP/NPOESS real time Low Rate Data (LRD) & High Rate Data (HRD) as soon as practical.
- **Target date September 08, but still TBC**
- **Recom II/FS-9 to all space agencies: To provide L1b, L2 formats**  
Provide expected formats of level 1b and level 2 datasets at least one year prior to launch. Establish Web sites to provide detailed information on instruments, schedule, products and formats.
- **2008 launches: FY-3A, Meteor-M1, DMSP F-18, Jason-2, GOES-O, Elektro-L1, INSAT-3D, FY-2E**
- **See agencies' reports in Session 11 on Monday**

# ITSC-XV Actions and Recommendations (6/6)

## *Frequencies*

- **Recommendation II/FS-10 to NWP and Climate Modelling Centres**  
Studies should continue to be conducted to assess the impact of corrupt data (exceeding the corresponding radiometric resolution of the passive sensor) showing the level of degradation of the NWP or climate modelling.
- **Recommendation II/FS-11 to Space Agencies**  
Future passive sensors should be designed to detect potential anomalies, corrupt data or interference in order to report to national Administrations and international organisations in frequency management for further action. As a matter of urgency, the frequency bands which should be considered are the following:  
1400-1427 MHz    10.6-10.7 GHz    18.6-18.8 GHz    23.6-24 GHz  
31.3-31.5 GHz    36-37 GHz    50.2-50.4 GHz    52.6-54.25 GHz.

### **Action II/FS-7: J. Pla to provide references and documents**

Jean Pla to provide a list of existing documents addressing the use of microwave passive bands; and to produce additional documents if necessary on related topics and to contribute to the update or improvement of those existing documents with a view to disseminate corresponding information to administrations and international organizations dealing with frequency management.

➤ **Completed**

### **Action II/FS-8: J. Pla to update ITWG website**

Jean Pla to update the ITWG Web site dealing with frequency protection (see <http://cimss.ssec.wisc.edu/itwg/groups/frequency/>)

➤ **Completed, Updated in April 2008**