

**URSI Commission F:
Wave Propagation and Remote Sensing**

**Report on the Business meetings held
at URSI GA 2008 during 7-16 August 2008 in Chicago**

**Madhu Chandra
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**Current Commission Chair (Incoming Chair during the
Business Meetings)**

**Days of the Business Meetings: Monday 11th, Wednesday
13th and Friday 15th, at 5:20pm**

Venue: Commission Conference Room

URSI Commission F Minutes of the Meetings

URSI GA 7-16 August 2008, Chicago, IL, USA.

Meeting A: 17:30 Monday, Aug. 11, 2008

Meeting B: 17:30 Wednesday, Aug 13, 2008

Meeting C: 17:30 Friday, August 15, 2008

Topic 1: Agenda (A)

Action: The agenda was tacitly agreed. No additional points were raised

Topic 2: Verification of credentials

Action: The credentials of the voting members were verified.

Topic 3: Election of Vice Chair for 2008-2011

Action: Prof. R. Lang (USA) was elected as the new incoming vice-chair. At the following council meeting this result of the election was confirmed.

Topic 4: Scrutiny of the 2008 GA programme

Action: The rule that paper contributions of up to four pages were required was not clearly understood by the authors. The commission members suggested a better and clearer wording of author instructions for the next GA. All members however agreed that the maximum length of four pages per paper was appropriate and acceptable.

Topic 5: Consider the request from Coordinating Committee and Council to propose ideas towards white papers and the inclusion of scientific activities in the area of navigation and global positioning systems (GPS/GNSS).

Action:

1. The incoming chair (Prof. M. Chandra) detailed to the members the suggestion, initiated by the URSI president Francois Lefeuvre and other French members (Jean Isnard and Joel Hamelin), namely, that Commission-F took lead in creating a white paper on the subject of remote sensing and disaster management. All members agreed to support the idea. It was suggested that Prof. M. Chandra, in consultation with Jean Isnard and Francois Lefeuvre, should embark on this project. It was also suggested that during the first half of 2009 the three named persons should meet and identify a work plan in achieving this goal. The three named persons agreed to meet regularly (opportunity permitting) either in France or in Germany or on the sidelines of URSI conferences. M. Chandra suggested that for logistic ease, the region of Strasbourg lends itself as a suitable venue for meetings directed towards this action.
2. The members of the commission agreed to promote the inclusion of GPS/GNSS topics in the scientific activities at national level and at international level (particularly Commission-F conferences and Commission-F sponsored conferences).

Topic 6: Discussion about the Radio Science Bulletin.

Action: The new incoming vice-chair, Roger Lang, in keeping with URSI tradition, was named the next editor and facilitator for Commission-F contributions to the Radio Science Bulletin. The presenters of the Commission-F review talks were reminded that they are expected to make submissions to the RSB. M. Chandra and Roger Lang agreed to follow this action.

Topic 7: Request for proposals of web-course in Commission-F competence directed toward developing countries.

Action: The members agreed to come up with suggestions for improving the visibility of Commission-F activities on the official website. The members suggested that paper contributions of major Commission-F conferences should be posted on the commission's official website. The possibility of offering web courses on Commission-F topics was also briefly discussed. There were no immediate offers. M. Chandra suggested that short web courses could be offered as a prelude to major URSI-F conferences.

Topic 8: Discussion of terms of reference (B).

Commission F comprises two closely related fields, wave propagation and remote sensing and, based on the Terms of Reference updated at the 2005 General Assembly, encourages research in these fields at all frequencies, in particular, the Commission encourages :

- (a) The study of all frequencies in a non-ionised environment :
 - (i) wave propagation through planetary, neutral atmospheres and surfaces;
 - (ii) wave interaction with the planetary atmospheres, surfaces (including land, ocean and ice), and subsurfaces;
 - (iii) characterisation of the environment as it affects wave phenomena;
- (b) The application of the results of these studies, particularly in the areas of remote sensing and communications;
- (c) The appropriate co-operation with other URSI Commissions and other relevant organisations.

Action: No change was deemed necessary.

Topic 9: Anticipated inter-assembly meetings

Action:

Type A meetings

- **MicroRAD2009**
- **COSPAR**
- **IGARSS2009**
- **IGARSS2010**
- **AP-RASC2009**
- **ISMOT-2009**
- **ISAP'2009**
- **MicroRAD2010**
- **EUSAR 2010**

Type B meetings

- **Commission F Open Symposium Nov 2010**

- **Commission F specialist Meeting on remote sensing (?)**
- **AP-RASC09 (in addition for sponsorship “A”)**
- **Climm’Diff 2009**

Topic 10: Proposed meetings for next triennium

Action:

1. Commission F Triennium Open Symposium (type B)
 - Madhu Chandra proposed to organize it. The proposal was unanimously accepted.
 - venue: Garmisch-Partenkirchen, Germany
 - period: Nov 2010

2. Specialist meeting on remote sensing (type B)
 - Proposal: No firm decision was reached. Bertram Arbesser-Rastburg and Roger Lang agreed to consider the possibility of hosting this meeting in tandem with other URSI-sponsored meetings organized by them.
 - Venue: pending
 - Period: pending
 - Members sited that conference may face stiff competition from IGARSS. This action continues!

Topic 11: Comm-F proposals for sessions at the next URSI GA in 2011

Action: Suggested (tentative) list of topics:

- Channel characterization
- Channel models (see COST??)
- GPR and UWB applications
- Terahertz propagation
- Propagation effects in GPS/GNSS
- UWB indoor propagation,
- Active and passive remote sensing systems
- SMOS Aquarius related topics
- Global observation of the earth surface
- Cryosphere and Arctic sphere
- Multiparameter radar applications
- Education in the area of remote sensing (e-learning)
- Propagation and RS of vegetation, moisture RS,
- Rain and the atmosphere
- Ocean surface RS
- Irregular terrains
- Open sessions 1 and 2
- Theoretical developments common to radiocomm and RS

Topic 12: Inter-commission working groups (C)

Action: The WGs automatically end at the GA and must be renewed by resolution

Working Groups suggested:

- The Group on Mitigation of Ionospheric and Tropospheric Effects on GNSS (Bertram Arbesser-Rastburg continues)
- Education and training in RS and related aspects on propagation (M. Chandra and Jean Isnard) to be linked to the activity on the proposed white paper (disaster management and remote sensing)

Topic 13: Representatives to other organizations

Action:

- SCOR: Scientific Committee on Ocean research (Delaware)
 - The incoming vice-chair /D. Weissman
- IUCAF (SCIENTIFIC COMMITTEE ON FREQUENCY ALLOCATIONS FOR RADIO ASTRONOMY AND SPACE SCIENCE)
 - Steven Reising, Colorado State University, USA
- COSPAR: COMMITTEE ON SPACE RESEARCH (Paris)
 - Bertram Arbesser

Madhu requested to be kept informed

Topic 14: Publications and Publicity

Action:

a. Radio Science Bulletin

Roger Lang, Madhu Chandra and Ian Glover agreed to serve as referees and facilitators

b. Information dissemination

All commission members were requested to regularly visit the URSI webpage of Commission-F and to pass on their suggestions to Madhu Chandra.

Topic 15: Any other business

Action: All commission members were requested by Piotr Sobieski and Madhu Chandra to support commission activities even more strongly than in the past and to maintain close contact with the commission chair.