Report on the Business Meetings of

Commission F

during the

XXXth URSI General Assembly and Scientific Symposium

Istanbul, Turkey, August 13-20, 2011

Roger Lang
(lang@gwu.edu)

Current Commission Chair (Incoming Chair during the Business Meetings)

Days of the Business Meetings
Monday, Wednesday and Friday
All starting at 5:20pm

Venue: Commission Conference Room
URSI Commission F Minutes of the Meetings

URSI GA 13-20 August 2011, Istanbul, Turkey

Meeting A: 17:20 Monday, Aug. 15, 2011
Meeting B: 17:20 Wednesday, Aug 17, 2011
Meeting C: 17:20 Friday, August 19, 2011

Topic 1: Acceptance of Agenda and Report by the Commission Chair.
Action: The agenda was accepted. Commission chair summarized the highlights of commission-F activities during the reporting period.

Topic 2: Verification of credentials
Action: The credentials of the voting members were verified.

Topic 3: Election of Vice Chair for the Triennium 2011-2014
Action: Commission-F elected its new incoming vice-chair. The vice-chair elect was Dr. Simonetta Paloscia, Italy. The results of the balloting were:

Total number of ballots cast: 16

<table>
<thead>
<tr>
<th>Candidates</th>
<th>Totals points scored</th>
</tr>
</thead>
<tbody>
<tr>
<td>Animesh Maitra (India)</td>
<td>8</td>
</tr>
<tr>
<td>Cesar Amaya (Canada)</td>
<td>14</td>
</tr>
<tr>
<td>Simonetta Paloscia (Italy)</td>
<td>24</td>
</tr>
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</table>

- Simonetta Paloscia (Italy) was thus elected as the in-coming vice-chair for the next triennium.
- Cesar Amaya (Canada) is the runner-up

Bertram Arbesser-Rastburg (Commission-F, Benelux) kindly counted, tallied and verified the votes.
Andreas Danklmayer (observer participant, Germany) served as a witness and assisted with the election procedure.

Topic 4: Postmortem of the 2011 GASS Program
Action: Should invited papers be labeled as ‘invited’ papers in the conference program.
Action taken: The issue was put to discussion. The consensus of opinion may be summarized as follows: Invited papers should be marked ‘invited’. Room should, however, be left for regularly contributed papers
Topic 5: Consider the request from Coordinating Committee and Council to form working groups with the possibility (i.e. option) of writing white papers or working documents:

Action taken:

**Internal commission-F working groups:**

- Next-generation radar remote sensing [A council-Action from the last triennial to be continued into the next triennium (2011-2014)]
  - Conveners: Jean Isnard, Wolfgang Keydel, Emile Schweicher, and Madhu Chandra

New suggestions under discussion (the named ‘working-group conveners’ are, in the first instance, commission experts who will advise and assist the commission chairs in planning, or carrying-out, scientific activities in the indicated areas):

- Next generation passive microwave remote sensing
  - Conveners: Paolo Pampaloni

- Millimeter-wave to THz propagation
  - Conveners: Thomas Kürner

- Radio propagation, channel modeling and measurements associated with portable and mobile communications
  - Conveners: Robert Bultitude

Intended or Possible Audiences: Policy makers, Funding agencies in various countries/ unions, and ITU

**Inter-Commission Working groups**

- Working group for coordinating or liaising joint activities between commissions F and C
  - Convener: Robert Bultitude

- Working group for coordinating or liaising joint activities between commissions F and G
  - Convener: Francois Lefeuvre


Action:

(1) The new incoming vice-chair, Simonetta Paloscia, in keeping with URSI tradition, was named the next editor and facilitator for Commission-F contributions to the Radio Science Bulletin.

(2) In the next triennium, the vice-chair elect together with Prof. Lang (the in-coming chair) will seek contributions from: (i) Dr. Stefan Bueckreuss (DLR, Germany), who will give the commission-F tutorial lecture on Tandem-X; (ii) Prof. P. Pampaloni (commission-F, Italy) on the topic of passive remote sensing; (iii) Dr. Robert Bultitude (Canada), in cooperation with the joint working group, will consider submitting a tutorial paper on mobile and portable radio propagation research, channel modeling, and radio propagation measurements.
Topic 7: Interlinking of Commission-F with ITU, ISPRS, IEICE and IEEE Societies

Action taken: The commission discussed the issue and the results are summarized below:

<table>
<thead>
<tr>
<th>Organization</th>
<th>Persons identified for liaising or promoting links to URSI Commission-F</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITU</td>
<td>Dr. Bertram Arbesser-Rastburg, Prof. Carlo Capsoni</td>
</tr>
<tr>
<td>ISPRS</td>
<td>Prof. Francois Lefeuvre, Prof. Tullio Tanzi</td>
</tr>
<tr>
<td>IEEE GRSS</td>
<td>Prof. Steven Reising, Dr. David LeVine, Prof. Animesh Maitra</td>
</tr>
<tr>
<td>IEEE AP-S, VT-S</td>
<td>Prof. Thomas Kürner</td>
</tr>
<tr>
<td>IEICE (Japan)</td>
<td>Prof. Takada</td>
</tr>
</tbody>
</table>

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-ionized 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) characterization 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 organizations.

Action: No change was deemed necessary.

Topic 9: Anticipated inter-assembly meetings
Action: Type A meetings

- MicroRad 2012 in Frascati, Italy
- MicroRad 2014 (TBD)
- COSPAR 2012 in Mysore, India
- IGARSS 2012 in Munich, Germany
- IGARSS 2013 in Melbourne, Australia
- IGARSS 2014 in Quebec City, Canada
- ISAP 2012 (also 2013 and 2014)
- EuSAR 2012 in Nuremberg, Germany, April 24-26, 2012
- International Radar Conference 2012 on October 22-25, 2012 in Glasgow, UK
- International Radar Conference 2014 in France
- ANTEM 2012 in Toulouse, France
- APS/USNC URSI Symposium in Chicago USA July 7-13, 2012
National Conference on Radiocommunication on May 14-16, 2012 at Gdansk University of Technology, Poland
EuCAP 2012 in Prague, Czech Republic, on 26-30 March 2012.

Type B meetings

Triennial Commission F Open Symposium in Ottawa, Canada, Spring 2013
Commission F Specialist Meeting on Remote Sensing / Microwave Signatures in Helsinki, Finland, Fall 2013
AP-RASC 2013 in Taipei, China (SRS) (in addition for sponsorship “A”)

Climm’Diff

Topic 10: Proposed meetings for next triennium
Action:
° Triennial Commission F Open Symposium
  Dr. Robert Bultitude and Dr. Cesar Amaya will host this meeting in Ottawa, Canada in Spring, 2013

° Commission F Specialist Meeting on Remote Sensing / Microwave Signatures
  Prof. M. Hallikainen will host this meeting in Helsinki, Finland in Fall, 201

Topic 11: Comm-F proposals for sessions at the next URSI GA in 2011
Action: Suggested (tentative) list of topics:

- Radio channel characterization
- Mobile channel measurements and modeling (see COST 1004) – Dr. Bultitude (Canada)
- GPR and UWB applications
- Terahertz propagation – Dr. Thomas Kuerner (Germany)
- Propagation effects in GPS/GNSS
- Propagation effects in tropical regions – Prof. Animesh Maitra (India), Prof. Ajewole (Nigeria)
- Short-range and indoor microwave propagation – Prof. Takada (Japan)
- Outdoor and indoor optical propagation – Dr. Sizun (France)
- Terrestrial and Earth-space microwave propagation – Dr. Cesar Amaya (Canada)
- Passive microwave remote sensing systems and techniques – Prof. Steven Reising (USA)
- Soil moisture, vegetation and ocean salinity RS from space
- Global observation of the Earth’s surface
- Cryosphere
- RS of snowpack: Experiments and modeling – Prof. Paolo Pampaloni (Italy)
- Radio Frequency Interference (RFI): effects on RS – Prof. Martti Hallikainen (Finland)
  o NOTE: Potentially joint with Comm. J
- Multiparameter radar applications – Prof. Madhu Chandra (Germany)
- Education in the area of remote sensing (e-learning)
- Propagation through vegetation – Dr. Saul Torrico (USA)
- Precipitation and atmospheric remote sensing
- RS for disaster management – Prof. Tullio Tanzi (France)
- Ocean surface RS
- Irregular terrains
- Open sessions 1 and 2
- Theoretical developments common to radiocomm and RS

NOTES:
1. ALL proposals must be submitted via e-mail to both Prof. Roger Lang and Dr. Simonetta Paloscia before March 2013. They will both be invited to attend a meeting in Gent, Belgium to finalize the list of sessions for URSI GASS 2014.
2. During URSI GASS 2011, we have 9 F-only sessions, 1 FCA, 2 DAF and 1 FG sessions.
3. For URSI GASS 2014, we will need a Commission F Tutorial as well.

**Topic 12: Inter-commission working groups (C)**
**Action:** The WGs automatically end at the GA and must be renewed by resolution. Already dealt with above.

**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:**
- **Radio Science Bulletin (RSB) publication** (Facilitators: Commission Chair and Vice Chair)
- **Radio Science:** Collation and review of full papers submitted following the 12th Commission-F triennial symposium, held during March 2011, in Garmisch-Partenkirchen, Germany. Madhu Chandra will carry out this work as a Guest Editor in consultation with Dr. Paul Canon, Editor-in-Chief of the Radio Science journal
Topic 15: Any other business
Action:

General Comments regarding GASS 2011

- Business Meeting were well attended and productive
- Poland, perhaps for the first time, took active part in the business meetings
- The important GASS2011 activities sometimes occurred in parallel (e.g. Tutorial talks, sessions with award presentation and other actions occurred in parallel)