

Commission A: Electromagnetic Metrology

Chair: Dr Q Balzano

Vice Chair: Dr S Pollitt

Commission A Business Meeting 1, Monday 24 October 2005

Dr Balzano called the meeting to order at 18:00. Those present introduced themselves giving their name and affiliation, and added their details to the list of participants. 6 voting members were present.

Approval of agenda

Dr Balzano proposed an agenda for the meeting that was accepted unanimously.

Election of new Vice Chair

The Chairman had received 9 ballot papers by mail prior to the meeting. Messrs Van Lil and Davis were asked to confirm their ballots, which they did. The other voting members voted by paper ballot at the meeting. The ballots were counted and recounted by the Chairman and Vice Chairman. The result was:-

Dr P Banerjee 20

Prof C Davis 19

Report on Commission A activities and 1st Council Meeting of the XXVIII GA

The Chairman reported on the activity of the previous three years, specifically on the support given to meetings and conventions, to the Solar Power Satellite (SPS) project, to the Scientific Committee on Telecommunications (STC) and to Commission K. (More detail can be found at www.ursi.org/India05/ComTriReports/ComAtrirep.)

The Chairman also reported on the 1st Council Meeting held on 23 October 2005, including the following items: paper handling for future General Assemblies, the financial report, a position paper on SPS, the report of the STC and the venues for the 2008 General Assembly.

Activity Report of members

The members present reported no activities of relevance or requiring discussion.

First discussion of future activities of Commission A

There was substantial discussion about the future of Commission A. The sense of those present was that activities of other Commissions are intruding upon the domain of Commission A.

Those present agreed that the Terms of Reference of Commission A needed to have a sharper focus. It was noted that measurement papers were being presented in other Commissions' programmes. It was proposed that Commission A should propose to Council that the Terms of Reference should be amended from 'Measurement' to 'Measurement Methodology and Calibration'. In future any paper dealing with methods of measurement and calibrations should be presented in Commission A only.

Commission A Terms of Reference

Dr Pollitt undertook to draft a 'straw man' revised Terms of Reference which took the previous discussion into account, and to table it for discussion at the 2nd Business Meeting.

AOB

No other business was tabled. The Chairman adjourned the meeting at 19:20.

Commission A Business Meeting 2, Wednesday 26 October 2005

Dr Pollitt deputised for Dr Balzano and chaired the Business Meeting. Dr Pollitt called the meeting to order at 18:00. Those present introduced themselves giving their name and affiliation, and added their details to the list of participants. 9 voting members were present.

Approval of agenda

Dr Pollitt proposed an agenda for the meeting that was accepted unanimously.

Topics of discussion

Those present identified the need for a Web-site to share and communicate the activities of Commission A. Dr Davis kindly offered to host a Web-site for Commission A. All members of the Commission are expected to contribute to the site.

Dr Mishra kindly offered to host a list-server for Commission A.

Commission H had asked Commission A to discuss:-

- 1) The continuation of the SPS ICWG
- 2) Intercommission session on SPS

Those present unanimously agreed to support Commission H's proposal. Dr Marvin was asked and agreed to continue as Commission A's representative.

The Dr Tobar drew members' attention to the AP-RAC'07 to be held in 2007 in Australia.

Terms of Reference

Dr Pollitt presented a 'straw man' Terms of Reference:-

- 1) Primary standards, including those based on quantum phenomena, for electromagnetic measurements
- 2) Time and frequency realisation and measurements
- 3) Calibration and measurement methodology to support the development and exploitation of electromagnetic technologies, including telecommunications.
- 4) Characterisation of electromagnetic properties of materials.
- 5) Electromagnetic dosimetry.

There was discussion on the frequency band covered by Commission A; there was consensus in retaining the present range from DC to optical frequencies. There was agreement that the Commission should emphasize the development and refinement of new measurement techniques. It was also proposed and accepted that there should be reference to measurement intercomparisons and standardisation.

Dr Pollitt agreed to capture the discussion and modify the 'straw-man' Terms of Reference accordingly and to present a summary at the 3rd Commission A Business Meeting

AOB

No other business was tabled. The Vice Chairman adjourned the meeting at 19:00.

Commission A Business Meeting 3, Friday 28 October 2005

Dr Balzano called the meeting to order at 18:00. Those present introduced themselves giving their name and affiliation, and added their details to the list of participants. 6 voting members were present.

Approval of Agenda

Dr Balzano proposed an agenda for the meeting that was accepted unanimously.

Review of notes of the 1st Business Meeting

Dr Balzano presented the notes of the 1st Business Meeting which were accepted without amendment by those present.

Report of the 2nd Business Meeting

Dr Pollitt summarised the discussions that took place at the 2nd Business Meeting.

Report of Council Meetings II and III

Dr Balzano reported that Council had approved the appointment of Vice Chairs at Council Meeting II, and confirmed that Dr Banerjee is the new Vice Chair of Commission A.

Dr Balzano also reported the results of election for URSI President, Secretary General and Vice Presidents and the venue for the 2008 General Assembly (Chicago, USA) which had been determined at Council Meeting III. He also reported on the publication of RSR and RSB and noted that there had not been a contribution from Commission A.

Discussion of proposed new Terms of Reference

Dr Pollitt presented the revised 'straw man' Terms of Reference' and the discussion which followed led to the final draft detailed in the next section.

Final draft of the new Terms of Reference for Commission A

Those members present agreed that the following final draft should be presented to Council and Council's approval sought for the changes.

Commission A: Electromagnetic Metrology (Electromagnetic Measurements and Standards)

The Commission promotes research and development in the field of measurement standards, in calibration and measurement methodologies, and the intercomparison of such.

Areas of emphasis are:

- 1) The development and refinement of new measurement techniques.
- 2) Primary standards, including those based on quantum phenomena.
- 3) Realization and dissemination of time and frequency standards.
- 4) Characterization of the electromagnetic properties of materials.
- 5) Electromagnetic dosimetry.

The commission fosters accurate and consistent measurements needed to support research, development and exploitation of electromagnetic technologies across the spectrum.

AOB

Dr Pollitt on behalf of members of Commission A thanked Dr Balzano for his excellent chairmanship of Commission A over the three-year period up to and including the XXVIII General Assembly.

No other business was tabled. The Chairman adjourned the meeting at 19:00.

January 2006