URSI General Assembly, New Delhi, India (Oct. 2005)

Report on the Open Commission Meetings (Business Meetings)

Commission E

Electromagnetic Noise and Interference

Chair: Flavio Canavero (Italy)

Vice – Chair: Christos Christopoulos (UK)

1) Terms of reference

After some discussion, Commission E voted the following amended version of ToR.

Commission E - ELECTROMAGNETIC NOISE AND INTERFERENCE.

The Commission promotes research and development in:

- (a) Terrestrial and planetary noise of natural origin, seismic associated electromagnetic fields:
- (b) Man-made noise;
- (c) The composite noise environment;
- (d) The effects of noise on system performance;
- (e) The lasting effects of natural and intentional emissions on equipment performance;
- (f) The scientific basis of noise and interference control, electromagnetic compatibility;
- (g) Spectrum management.

Also, during the discussion, the issue of changing the title of the commission was brought up. The Chair was charged to make a proposal for the next GA. During the business meetings in Chicago, this proposal will be discussed and voted, and finally ratified by the Board.

2) Working Groups

The Commission E activities are based on the work conducted by the working groups (WG). After some discussion, Commission E voted the following amended list of WG.

Working Groups 2005-2008

E.1. Terrestrial and Planetary Electromagnetic Noise Environment Co-Chairs: M. Hayakawa (Japan), A.P. Nickolaenko (Ukraine) and C. Price (Israel), K. Hattori (Japan);

E.2. Intentional Electromagnetic Interference

Co-Chairs: W. Radasky (USA) and M. Bäckström (Sweden);

E.3. High Power Electromagnetics

Co-Chairs: C.E. Baum (USA) and R.L. Gardner (USA);

E.4. Lightning Discharges and Related Phenomena

Chair: Z. Kawasaki (Japan);

E.5. Interaction with, and Protection of, Complex Electronic Systems

Co-Chairs: J. Nitsch (Germany) and J-P. Parmentier (France);

E.6. Spectrum Management

Chair: T. Tjelta (Norway);

E.7. Geo-Electromagnetic Disturbances and Their Effects on Technological Systems

Chair: A. Viljanen (Finland);

E.8. Electromagnetic Compatibility in Wire and Wireless Communication Systems

Co-Chairs: J. Gavan (Israel) and A. Zeddam (France);

Also, Commission E designated its representatives to WG jointly operated with other Commissions. A list follows:

Joint Working Groups

Inter-commission working group on Solar Power Satellites

Co-Chair for Commission E: Zen Kawasaki (Japan)

EGH. Seismo Electromagnetics (Lithosphere-Atmosphere-Ionosphere Coupling)

Co-Chair for Commission E : M. Hayakawa (Japan)

3) Sponsorship of Conferences

The following meetings have been supported in the past triennium either in mode A (without financing) or in mode B(with financing):

- EMF and Cardiac Pacemakers and Defibrillators, Paris, France, 25 October 2002, mode A
- EMC Zurich 2003, Zurich, Switzerland, 18-20 February 2003, mode B
- 2003 IEEE Int. Symp. On Electromagnetic Compatibility, Istanbul, Turkey, 11-16 May 2003, mode B
- Telecom 2003 & JFMMA, Marrakech, Morocco, 15-17 October 2003, mode A
- WARS04 (Workshop on Applications of Radio Science) conference 2004, Hobart, Tasmania, Australia, 18-20 February 2004, mode A
- EMC'04 Sendai 2004 International Symposium on Electromagnetic Compatibility, Sendai, Japan, 1-4 June 2004, mode A
- EMC Wroclaw 2004, Wroclaw, Poland, 29 June 1 July 2004, mode B
- AP-RASC 04: 2004 Asia-Pacific Radio Science Conference, Beijing, China, 20-23 August 2004, mode A
- Radar 2004, Toulouse, France, 19 21 October 2004, mode A
- EMC Zurich 2005, Zurich, Switzerland, 15-17 February 2005, mode B
- Telecom 2005 & JFMMA, Rabat Morocco, 23-25 March 2005, mode A

- VIth International Symposium on Electromagnetic Compatibility and Electromagnetic Ecology, St. Petersburg, Russia, 21-24 June 2005, mode B
- ICEAA'05, International Conference on Electromagnetics in Advanced Applications, Torino, Italy, 12-16 September 2005, mode A
- Microwave, Radar and Remote Sensing, Kiev, Ukraine, 19-21 September 2005, mode A

The chair is charged to collect as much as possible of the requests for support from National Representatives, in order to be able to plan a budget for future years.

5) Vice Chair Election

• Prof Christos Christopoulos (University of Nottingham, UK) was elected as Vice-Chair. He will also serve as the Commission E Editor of the Radio Science Bulletin.