



REPORT OF IEEE/AESS “SPACE SYSTEMS” PANEL – Attachment 1.C

March 2004

The following activities have been carried out in the period October 2003–March2004:

- Activities related to the co-Chairing of Track 2 *Space Missions, Systems and Architecture* of the 2004 IEEE Aerospace Conference, held in Big Sky (March 2004), and starting steps for preparing the 2005 edition. In particular, the number of European experts involved in the Conference (as session organisers and co-chairs), covering the areas of RF and optical technology, payload optimisation, International Space Station, space missions envisaged for the 21^o century, are increasing. Furthermore, conference has been promoted in the European space community, yielding to the submission of various abstracts from Europe in 2004 . The involvement of those European experts brings benefit also to the Panel.
- Intense activities related to the role of Editor of *Space Systems* of the AES Transactions, where the number of manuscripts submitted in the area has increased quite significantly. A network of reviewers, that are expert in the various space systems topics and, in some cases, are related to the Aerospace Conference team, has been created thanks to the activity as Editor. Furthermore, the manuscript handling with the new electronic procedure has been started.
- Activities as Mentor of the Student Branch at the University of Roma Tor Vergata, Italy, particularly for space-related activities.
- Organisation of training and thesis activities of students at the University of Roma Tor Vergata in the field of space systems.

- Deployment of the Master Course in “Advanced Satellite and Communications Systems” at the University of Roma Tor Vergata, since last January. Twenty highly qualified students with degrees in Engineering and Physics have been selected. Two teaching cycles with two modules per cycle have been undertaken until now, gathering experts from space industries and institutions, including obviously the space experts of the University Roma Tor Vergata. Visits to the major space enterprises and technological poles devoted to space have been organised for the M.Sc students. Some of them have been then included in working teams for active space projects and integrated in the research group that I manage. Some European Universities have asked to deploy the same Master in their premises.
- Development of successful proposal for research projects in the field of EHF satellite system architectures (W-band and V-band), of heterogeneous network with satellite and HAP components.

Among the envisaged activities:

- Activities related to the role of Editor of *Space Systems* of the AES Transactions.
- Activities related to the various mentioned Conferences, that will be held this year and in 2005.

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