SPCOM-TC Meeting at ICASSP-2013 Report from the Chair

This report is designed to provide a concise summary of the state of the SPCOM Technical Committee. Much of this information has been previously communicated to members of the TC. The goal here is to ensure that this information is appropriately archived.

1. Membership:

At the end of 2012, the following members retired from the TC. On your behalf, it is my pleasure to thank them for their service: Mats Bengtsson, Huaiyu Dai, Daniel Palomar, Hamid Sadjadpour, Akbar Sayeed and Zhengdao Wang

In our elections in the Fall of 2012 the following people were newly elected to the TC: Min Dong, Kaibin Huang, Syed Jafar, Joakim Jalden, Michael Rabbat, Shengli Zhou. On behalf of the TC, I would like to welcome you. We look forward to the perspectives that you will bring to our discussions.

In those elections, the following TC members were re-elected to a second term: Amir Leshem and Zhi (Gerry) Tian. We thank you for your service over the last three years, and we look forward to your contributions in the next three.

Some measures of the diversity of the membership:

- The geographical distribution of the membership for 2013 is: USA 12; Europe 8; Canada 5; Asia 4; Middle East 1
- The TC has 4 female members
- The TC does not have any industrial members.

2. TC Subcommittees

As of the beginning of 2013, the subcommittee structure of the TC was as follows.

- Awards subcommittee: Erik Larsson, Gerald Matz, Tim Davidson, Tom Luo (Chair)
- Nominations and Elections Subcommittee: C.-Y. Chi, Geoffrey Li, Gerald Matz, Milica Stojanovic, Tim Davidson (Chair)
- Industry/Government Subcommittee: Dirk Slock, Erik Larsson, Robert Cui (Chair)
- Newsletter Subcommittee: Paolo Banneli, Roberto Lopez–Valcarce (Chair)
- Education representative: C.-Y. Chi
- Maintenance of SPCOM homepage (Vacant, Tim Davidson standing in)

3. TC Representation

In 2013, the following people are external representatives of the TC:

- Technical Directions Board (Tim Davidson)
- Steering Committee of the IEEE Transactions on Wireless Communications (Robert Heath, U. Texas, Austin)
- IEEE WCL Steering committee (Erik Larsson)
- **4. Outcome of the TC's nominations for Society's Major Awards made in Fall 2012** These nominations are for the 2012 awards, which will be awarded in 2013.

Society Award: no nominee

Technical Achievement Award: Ye (Geoffrey) Li, unsuccessful

Best Paper Award: R. W. Heath, Jr., Tao Wu, Young Hoon Kwon and A. C. K. Soong, for their paper "Multiuser MIMO in Distributed Antenna Systems with Out-of-Cell Interference", IEEE Transactions on Signal Processing, October 2011. *Unsuccessful*

Young Author Best Paper Award: Chao-Cheng Su and Tsung-Hui Chang for their paper, coauthored with Wing-Kin Ma, Chao-Cheng Su, Joakim Jaldén, Tsung-Hui Chang, and Chong-Yung Chi, "The Equivalence of Semidefinite Relaxation MIMO Detectors for Higher-Order QAM", IEEE Journal of Selected Topics in Signal Processing, December 2009. *Unsuccessful*

Magazine Best Paper Award: Walid Saad, Zhu Han, Mérouane Debbah, Are Hjørungnes (dec.), and Tamer Basar for their paper "Coalitional Game Theory for Communication Networks", IEEE Signal Processing Magazine, December 2009. *Unsuccessful*.

Distinguished Lecturer: Sergio Barbarossa and Robert Heath. Both successful

5. Notable Awards

IEEE Fellows: Retiring member Daniel Palomar and continuing member Zhi (Gerry) Tian were elevated to IEEE Fellow on 1 January 2013.

Best Paper Award: Shuguang (Robert) Cui, received a 2012 Signal Processing Society Best Paper Award for his paper with Zhi Quan and Ali Sayed, "Optimal linear cooperation for spectrum sensing in cognitive radio networks", IEEE Journal of Special Topics in Signal Processing, 2008.

Magazine Best Column Award: Erik Larsson received the 2012 Best Column Award for his column "MIMO Detection Methods: How they work", IEEE Signal Processing Magazine, 2009.

Magazine Best Paper Award: A paper that the SPCOM TC had previously nominated in 2010 and 2011 for the Magazine Best Paper Award received the 2012 version of that award: David Gesbert, Marios Kountouris, Robert W. Heath Jr., Chan-Byoung Chae, and Thomas Salzer, "From Single User to Multiuser Communications: Shifting the MIMO Paradigm," IEEE Signal Processing Magazine, September 2007.

6. ICASSP Paper submissions

```
# papers submitted to SPCOM TC
ICASSP 2003
                       320
                       360
ICASSP 2004
                       408
ICASSP 2005
ICASSP 2006
                       420
                       380 (174 accepted, or \sim 46\%)
ICASSP 2007
ICASSP 2008
                       283 (150 accepted, or \sim 53\%)
                       293 (133 accepted, or \sim 45\%)
ICASSP 2009
                       297 (142 accepted, or \sim 48\%)
ICASSP 2010
                       355 (168 accepted, or \sim 47\%)
ICASSP 2011
ICASSP 2012
                       219 (115 accepted, or \sim 53\%)
                       382 (200 accepted, or \sim 52%) plus 5 presentations of SPL papers
ICASSP 2013
```

There were no joint sessions other TCs in 2013.

7. SPAWC Paper Submissions and Attendance

SPAWC 2011	213 (116 accepted, or ~54%); 137 attendees
SPAWC 2012	171 (119 accepted, or ~70%); 130 attendees
SPAWC 2013	241 (158 accepted, or ~ 65%)

8. Tasks for 2013/2014

May 2013 Call for nomination of candidates for Distinguished Lecturer

31 May Submit TC's nominee(s) for Distinguished Lecturer

June Revise policies and procedures according to ICASSP discussion, and approve

Call for nominations of candidates for best paper, young author, SPL, magazine

and column awards

Scan review process for paper awards

Call for nominations and voting on candidates for IEEE Baker Award and IEEE

Fink Award

1 July Submit TC's nominees for Baker and Fink Awards due

July Paper award review process

1 August Submit responses to Technical Directions Board regarding issues raised at

ICASSP meeting

August Paper award review process, and initial voting

Call for nominations of candidates for Society, Technical Achievement,

Meritorious Service, and Education awards

September Voting for paper and career awards

Call for nomination of candidates for election to the TC

1 October Submit TC's nominees for the Society's major awards.

October Membership election

November Assignment of ICASSP reviews

December Call for nominations of candidates for IEEE Fourier Award

Call for nominations of candidates for Marconi Paper Award

Mid. Jan. 2014 ICASSP reviews due

31 Jan. 2014 Submit TC's nominee for IEEE Fourier Award

15 Feb 2014 Submit TC's nominee for Marconi Paper Award

March 2014 SPAWC reviews

10. Upcoming TC Meetings:

SPAWC 2013 (16-19 June 2013, Darmstadt, Germany) ICASSP 2014 (4-9 May 2014, Florence, Italy)