

**IEEE SPS SPCOM TC Chair's Report 2015**  
**Erik G. Larsson**  
**April 18, 2015**

This report aims at summarizing the state of SPCOM TC and is provided to all members at the annual meeting at ICASSP.

1. Membership

At the end of 2014, the following members stepped down from the TC as their terms ended: Shuguang (Robert) Cui, Gesualdo Scutari and Dirk Stock. On behalf of the whole TC, I thank them for their service.

Starting January 2015, the following newly elected members joined the TC: Yindi Jing, Wing-Kin (Ken) Ma, and Alejandro Ribeiro.

The following members were re-elected for a second term, starting in 2015: Urbashi Mitra and Rui Zhang.

Tim Davidson stepped down as chair and serves as past chair throughout 2015. Tim was succeeded by undersigned, serving as chair for 2015-2016. On behalf of the whole TC I warmly thank Tim for his mentorship and chairmanship of the committee. A new vice-chair shall be elected before the end of 2015.

Some data on the diversity of the membership and how it has evolved over the last two years can be found in the following table:

2. Subcommittees

**Geographic Distribution by Region:**

	<b>TC - 2014</b>		<b>TC-2015</b>		<b>Society – Sept 2014</b>	
Region 1:	5	16.67%	4	13.33%	1,288	7.67%
Region 2:	0	0.00%	2	6.67%	1,210	7.21%
Region 3:	0	0.00%	0	0.00%	654	3.90%
Region 4:	2	6.67%	1	3.33%	618	3.68%
Region 5:	1	3.33%	0	0.00%	786	4.68%
Region 6:	4	13.33%	4	13.33%	1,965	11.71%
Region 7:	3	10.00%	4	13.33%	564	3.36%
Region 8:	8	26.67%	7	23.33%	5,004	29.82%
Region 9:	0	0.00%	0	0.00%	548	3.27%
Region 10:	7	23.33%	8	26.67%	4,141	24.68%
<b>TOTAL:</b>	<b>30</b>		<b>30</b>		<b>16,778</b>	

- 30 TC members, including Chair
- 2014 TC Roster: 5 Members, 18 Senior Members, 7 Fellows; 28 Academia, 2 Industry; 5 Female, 25 Male
- 2015 TC Roster: 10 Members, 14 Senior Members, 6 Fellows; 28 Academia, 2 Industry; 6 Female, 24 Male

During 2015, together with past-chair Tim Davidson, I have tried to establish a more effective subcommittee structure, which currently is organized as follows:

1. Nominations and elections subcommittee: David Love (chair), Wolfgang Utschick and Milica Stojanovic
2. Awards subcommittee: Erik G. Larsson (chair), Tim Davidson and Matthew McKay
3. Marconi award subcommittee: Matthew McKay (chair), Kaibin Huang, Rui Zhang, Cihan Tepedelenlioglu and Tim Davidson
4. Industry/government subcommittee: Pengfei Xia (chair), Amir Leshem and Ahmed Sadek
5. Newsletter subcommittee: Chandra Murthy
6. Education subcommittee: Shengli Zhou and Feifei Gao

The Marconi subcommittee already operates autonomously and has conducted the Marconi award nomination process for 2015, resulting in the nomination of the paper "MIMO Broadcasting for Simultaneous Wireless Information and Power Transfer" by Rui Zhang and Chin Keong Ho. There were 6 high-quality papers on the slate and voting was conducted according to the normal BPA nomination process in the TC. Many thanks to Matt McKay for chairing the Marconi subcommittee, to David Love for drafting the nomination statement, and to Tim Davidson for a lot of useful input in the process.

3. TC representation

The following TC members act as representatives on other IEEE boards:

1. SPS Technical Directions board (E.G. Larsson)
2. Steering committee of the IEEE Trans. Wireless Comm. (U. Mitra)
3. Steering committee of the IEEE Wireless Comm. Letters (E.G. Larsson)

4. Outcome of the TC's nominations for Society's Major Awards made in Fall 2014

The TC nominated 5 papers in total:

S. Sardellitti, M. Giona and S. Barbarossa, "Fast Distributed Average Consensus Algorithms Based on Advection-Diffusion Process", for BPA: **successful**

T. Gou, C. Wang and S. Jafar, "Aiming Perfectly in the Dark-Blind Interference Alignment Through Staggered Antenna Switching" for YABPA: **successful**

A. B. Gershman, N. D. Sidiropoulos, S. Shahbazpanahi, M. Bengtsson, and B. Ottersten, "Convex Optimization-based Beamforming", for MBPA: not successful.

B. Wang and K. J. Ray Liu, "Advances in Cognitive Radio Networks: A survey" for OBPA: not successful.

S. Talwar, Y. Jing and S. Shahbazpanahi, "Joint Relay Selection and Power Allocation for Two-Way Relay Networks" for LBPA: not successful.

5. The nomination of Zhi-Quan (Tom) Luo for the Technical Achievement Award was not successful.

6. Congratulations to TC members elevated to IEEE fellow:

Biao Chen  
David Love

7. Summary of recent years ICASSP papers submissions to SPCOM:

ICASSP 2012: 115 accepted out of 218 submitted  
ICASSP 2013: 205 accepted out of 387 submitted + 5 SPL papers  
ICASSP 2014: 187 accepted out of 391 submitted + 12 SPL papers  
ICASSP 2015: 75 accepted out of 153 submitted + 14 SPL papers

8. SPAWC statistics from recent years:

SPAWC 2012: 119 accepted out of 171 submitted; 124 attendees  
SPAWC 2013: 158 accepted out of 237 submitted; 184 attendees  
SPAWC 2014: 102 accepted out of 121 submitted; 132 attendees  
SPAWC 2015: 207 submissions

9. Statistics of GlobalSIP symposia in SPCOM areas:

GlobalSIP 2013: 5 SPCOM of 18 in total  
GlobalSIP 2014: 6 SPCOM of 13 in total

10. Upcoming TC review

A TC review is to take place during ICASSP 2015, on April 24.

## 11. Summary of tasks ahead and known hard deadlines

February 15, 2015: Nominations for the Marconi award (passed)  
May 31, 2015: Nominations for distinguished lecturers  
September 1, 2015: Nominations for BPA, YABPA, MBPA, LBPA, OBPA and TA  
November 15, 2015: Membership election completed