IEEE Information Theory Society Board of Governors meeting minutes
ISIT, St. Petersburg, Russia, 07.30.2011, 12-6pm
Natasha Devroye

Present: Giuseppe Caire, Muriel Médard, Bruce Hajek, Gerhard Kramer, Natasha Devroye, Frank Kschischang, Alex Vardy, Emanuele Viterbo, Prakash Narayan, Paul Siegel, Emina Soljanin, Michelle Effros, Rolf Johannesson, Li Ping, Nick Laneman, Adriaan Van Wijngaarden, Ezio Biglieri, Helmut Bölcskei, Anthony Ephremides, Martin Bossert, David Tse, Sriram Vishwanath, Andrea Goldsmith, Abbas El Gamal, Hans-Andrea Loeliger, Matthieu Bloch, Sergio Verdu

The meeting was called to order at 1:10pm by the society President, Giuseppe Caire, who welcomed the Board of Governors.

1. The minutes of the BoG Meeting on 02/06/2010 at ITA were approved.

2. The agenda was approved.

3. Giuseppe Caire presented the President's report:

- outlined the meeting agenda

- Nihar Jindal is terminating his role as treasurer at the end of 2011. Giuseppe thanked him for the excellent job he has done in the last years.

- Motion: to appoint Aylin Yener as treasurer. This was unanimously approved.

4. The treasurer's report was given by Giuseppe Caire on behalf of Nihar Jindal:

- final numbers for 2010 were reported: net surplus +$492,000 , total reserves $3,430,000

- because of the backlog in IT Transactions, this year $\sim$ 2000 pages were budgeted for 2011 to attempt to clear out the queue, costing $150,000.

-Andrea Goldsmith asked whether the net reserves increased or decreased; this needs to be checked and was not included in the slides. (**ACTION**)

- it was suggested that the BoG discuss further increases to the cost for print copies at a future BoG meeting, for example at the BoG meeting at ITW in Paraty, October 2011

- net income from the IT Transactions is stable at about $350,000 a year, conference publications are stable at about $250,000 a year

- the total number of pages is increasing every year

- the IT Transactions expenses are dominated by editing expenses (fixed charge times number of pages) at around $1100/article. It was noted that while the society can afford the extra expenses to clear out the queue for a year, but if the increasing page number trend continues, we may need to reconsider some of the publication policies.

- in summary, the IT society continues to be in excellent financial shape, but given the possibility for change in publication models (e.g. open access) it may be prudent to remain fiscally conservative. The large reserve may call for the creation of an endowment, but this is not possible through the IEEE Foundation, as was

made clear during a TAB meeting. Future presidents may want to investigate other avenues at IEEE. (**ACTION**)

- there was a discussion regarding possibilities for tapping into the IT society reserves. Muriel Médard asked whether the former mechanism of tapping into the reserves for special initiatives is still open; Giuseppe Caire stated that as he understood it, this ability is limited to one-time, truly special, initiatives. Alex Vardy expressed concern that the IT Society reserves are in large part controlled by the IEEE, and could be taken away at any point. The society may want to do something to protect the reserves. David Tse suggested we be more aggressive in spending the reserves; Frank Kschischang stated that the IT Society is able to withdrawn about 3%/year. Alex Vardy suggested that the society find a more formal way of suggesting special initiatives to access the reserves. Frank Kschischang suggested the IT Society be less fiscally conservative and try to squeeze more out of the actual budget.

5. Andrea Goldsmith presented the report from the Nominations and Appointments committee:

- outlined the committee members: Andrea Goldsmith, Frank Kschischang, Dan Costello, Jim Massey, Dave Neuhoff

- put forward a BoG slate of candidates at this meeting; this was not voted on at this meeting

- Andrea Goldsmith outlined how BoG members are selected: 12 society members were suggested 2 weeks prior to BoG meeting; additional nominations may be made at this meeting as long as the person is willing, The BoG members are then formally elected in fall, along with one from each under-represented region. There were no under-represented regions this year. The slate of BoG candidates was composed after soliciting suggestions from the BoG and N&A committee, after taking numerous other factors into account.

- the BoG candidates are available at http://www.itsoc.org/people/bog/bog-meeting-isit-2011-st.-petersburg-russia/BoGSlate2011.pdf

- Andrea Goldsmith opened the floor to additional BoG nominations. None were made.

- Motions: the election of the Officers. Paul Siegel nominated Michelle Effros as Second Vice-President; this was approved. Giuseppe Caire nominated Abbas El Gamal as Second Vice-President; this was approved. Frank Kschischang nominated Gerhard Kramer as First Vice-President; this was approved. Andrea Goldsmith nominated Muriel Médard as President; this was approved.

- bylaws changes will be completed in fall BoG meeting. Andrea Goldsmith will draft the text for making Online and Student Committees standing committees. Muriel Médard moved to harmonize the joint IT Society/Communications Society best paper award so this deadline does not change from year to year depending on who is in charge. (**ACTION**)

6. Helmut Bölcskei presented the Editor in Chief's report:

- thanked executive editorial board: G.D. Forney Jr., S. Shamai, A. Vardy, S. Verdu.

- introduced the new Senior IEEE editor Megan Vorel Hernandez

- currently, the papers submitted under the online Pareja system will be completed by the Pareja system, while all new papers are already, and will continue to be handled by the recently introduced online

ScholarOne system.

- Administrative Assistant for ScholarOne is Alison Larkin

- new AE appointments were listed and voted on. Jean-Claude Belfiore for coding theory: approved. Olgica Milenkovic for coding theory: approved. Robert Fischer for Communications: approved. Bertrand Hochwald for Communications: approved. Angel Lozano for Communications: approved. Francois Baccelli for Communication Networks: approved. Ronald Cramer for Complexity and Cryptography: approved. Ueli Maurer for Complexity and Cryptography: approved. Adam Smith for Complexity and Cryptography: approved. Alexander Holevo for Quantum Information Theory: approved. Michael Elad for Signal Processing: approved. Giuseppe Durisi for Publications Editor: approved. Alex Vardy asked whether the AE could be approved in one go rather than each individually? A few years ago, the BoG wanted to discuss each nominated AE individually, and it has remained like this since then.

- the area of cryptography, in relation to the Transactions on IT was discussed. It was asked why there are so many new editors in this area if it is not the central focus of the Transactions. It was responded that there are an overwhelming number of papers submitted in this area. This topic was explicitly discussed at the editorial board meeting, and it was decided that only papers that have a clear connection with IT, or are truly exceptional will be accepted. The editorial policy concerning cryptography and complexity reads: "Submissions in the editorial area of cryptography will be accepted for review only if they relate to information and/or coding theory or are clearly outstanding contributions to cryptography." Leading cryptographers were consulted by the editorial board and it was agreed that the Transactions on IT is not perceived as the top journal to which to submit papers in cryptography. To address this perception, leading researchers in cryptography were elected as AE in cryptography. Muriel Médard stated that while we certainly want to keep papers that have a strong connection to IT, if we have so many editors in cryptography, it is like soliciting in this area. Helmut Bölcskei stated that the IT Transactions does not want to discourage submissions, and wants to maintain its reputation as an intellectually strong and open society. Helmut hesitates to remove the area of cryptography altogether – this is too strong of a message. Andy Loeliger agrees that that too drastic, and historically there is a strong connection between IT and cryptography. The IT Transactions is hoping to bring quality back up using the new AE which should attract excellent papers.

- the general submission / publication statistics were discussed. The initially alarming 1500 suspected submissions this year was a hiccup in Scholar One; the actual submissions is slightly down. The publication queue is still quite significant but is being reduced by publishing additional pages this year. To further decrease the queue, there will be no special issues in 2012. The average time from submission to first decision stands at 4 months, down from 8 months. The projected page count for 2011 is 8000 pages, up from the 3000 pages in 2000. The accept to print delay was increasing, but is coming down now, so the queue is indeed emptying. Giuseppe Caire warned about emptying out the queue completely. IEEE takes about 10 weeks to process a paper, so the minimal delay is around 3 months.

- 30% of the papers were fast rejects, significantly more than in the past. A small percentage of these rejects came from Helmut directly, the rest in collaboration with the appropriate AE, which gave the authors concrete reasons for the fast reject. It was noted that some authors were quite grateful for the fast turnaround and suggestions (usually out of scope or language issues).

- the IT Transactions is the most cited of all IEEE journals

- a discussion was had concerning where the IT Society sees the IT Transactions going. At the panel of

editors meeting, it became clear that the publication model for the IT Transactions will change dramatically in the next 5 years. As such, Helmut Bölcskei proposed forming an Ad Hoc Committee to investigate options for the IT Transactions. Abbas El Gamal stated that some societies have several journals, might this be considered? Michelle Effros stated that it is unclear how making more journals would impact the society since all journals appear to be going online, and there is relatively little distinction between online journals. Moving to electronic only will not change the finances drastically, as it is the editing cost that is costly, not the printing cost. If length of papers is a problem, and # of pages is the main issue, one possibility would be to consider papers that relegate technical details to online. The appendices would be reviewed but not necessarily edited to cut costs. Concerning the editing costs, it was noted that most authors carefully write, edit and submit their papers in latex, and that the IEEE editors then re-write everything in XML, which requires the authors to again carefully proofread the IEEE proof. A general feeling that this step is wasteful. Some suggestions were made: Michelle Effros suggested that we submit the papers in latex. It was noted that it would be extremely difficult to get the IEEE to accept and use latex (rather than XML). Andy Loeliger suggested using ITSOC funds to fund a technical attempt to overcome latex to xml conversion, or something to simplify publication / editing process. Alex Vardy stated that if we had software to convert latex to XML then we could persuade the IEEE to bring down the cost per page and cut processing time. Helmut Bölcskei suggested forming a small committee headed by Stephan Moser to overcome technical issues. IEEE is exceedingly reluctant to change. Frank Kschischang stated that an out of IEEE publishing model may be more appropriate; some other societies do this. Open access papers would cost about $3,000 per paper.

- Motion: to form an ad-hoc committee to address the growth of Transactions of IT. Andrea Goldsmith asked whether there are specific questions this committee would address and how it would use the work of the prior committee led by Alex Vardy? (**ACTION**)

- Motion: to stop sending authors of Transactions of IT papers courtesy copies of the issues they are published in, which would save $10k/year. It would still be possible for an author to request a copy. Muriel furthermore suggests sending an automatic email to authors about when their paper will appear. The motion was unanimously approved. (**ACTION**)

- many statistics concerning the impact factor, where publications come from, statistics of other comparable journals were presented. Overall, the Transactions on IT ranks well, though the Transactions on IT is a far outlier in terms of sub-to-pub time, averaging around 90 weeks, far longer other Transactions. The time from submission to first decision takes on average 114 days. Alex Vardy suggested that it may be useful to make and publish statistics regarding the sub-to-pub time of shorter papers. If this turns out to be shorter than longer papers, it may encourage authors to reduce paper length.

- various items discussed at the editorial board meeting were brought up. The editorial policies were skipped due to time constraints and will be discussed at the next BoG meeting. Authors will be asked to submit their papers in two-column format. Forwarding ISIT reviews to the Transactions on IT, and the reviewer credit system were heavily debated at the editorial board meeting but not discussed at this BoG. One issue with ScholarOne was brought up: that we cannot attach papers automatically to review invitations. Alex Vardy suggested asking ScholarOne to tailor this to our needs.

-Andrea Goldsmith and the BoG gave Helmut a round of applause for all the work he has done for the Transactions on IT.

7. Muriel Médard presented the Award Committee report:

- outlined committee members

- outlined the procedure for the IT paper award, where it was noted that more participation and paper recommendations are needed from the publications committee. Muriel Médard suggests including the following "best practice" in the Officers' notes: putting all papers on a website, making one report per paper by committee members, which are again put online.

- non BoG and nominated authors were asked to leave the room.

- Motion: to accept the Awards Committee's report for the Best Paper award for 2011 was made. It was unanimously approved.

- Motions: several were made concerning the best paper award. It was finally decided that the 2011 IT Transactions Best Paper Award would be made jointly to two papers:

- the joint IT/Comsoc paper award had 6 papers under consideration, mostly nominated by the IT Society. Comsoc should be generating more, higher quality nominations; this should be taken up with the Award Committee (or equivalent) chair of the Comsoc. Muriel Médard again recommended the "best practice" of creating a website for all papers, and assigning these papers to committee members to write a report. Muriel Médard further suggested harmonizing the nomination dates (March 1 in our by-laws, February 15 in Comsoc years) in the fall revision of the bylaws (**ACTION**). Other proposals on how to increase the number of nominations included encouraging nominations from the IT editorial board, which could be enabled by adding a box in ScholarOne to ask whether the paper is award-worthy (**ACTION**).

- the Baker award was discussed next. Four papers which had previously won awards and several other papers with significant impact were considered. Reports on all papers were made, and the awards committee finally made a recommendation to IEEE, who ultimately has the final say. The paper Viveck R. Cadambe, Syed A. Jafar, Interference Alignment and the Degrees of Freedom of the K user Interference Channel, IEEE Transactions on Information Theory, Aug. 2008, Vol. 54, No. 8,pages 3425 – 3441. The committee recommends keeping the paper E. Arikan , "Channel Polarization: A Method for Constructing CapacityYAchieving Codes for Symmetric Binary–Input Memoryless Channels", IEEE Transactions on Information Theory, Jul. 2009 in mind for future years. It was also noted that the Baker award took considerable time and effort and should not be considered to be a minor part of the awards committee work.

- ISIT student paper award nominations were made. Some of the nominated students could not make it to ISIT, which led to the discussion of whether or not a paper will be eligible if the student does not make a serious effort to attend to ISIT, and presents via a video instead. Comparing a video presentation and a live one seemed unfair, and it was concluded that since video presentations appear to be happening more and more (rather than be the exception, once every few years), that this needs to be put on the agenda of a future meeting, possibly leading to a bylaw change (**ACTION**). A best-practice learned was to put the list of finalists online.

- this year the Kyoto Prize in Advanced Technology is focussing on the field of "information science" (this is the case every 3 years). The nomination deadline is September 16; nominations are welcome.

- Andrea Goldsmith suggested also considering our society members for BBVA awards. This would constitute an enormous amount of work, so Giuseppe Caire suggested soliciting institutes to create nomination packages that the ITSOC could endorse. It was suggested that Shannon award winners could be considered for the BBVA awards.

8. Gerhard Kramer presented the Membership and chapter committee report:

- the chapter of the year award was given to the Spain Section chapter this year.

- Ezio Biglieri spoke about European School of Information Theory: there was a record attendance of 70 (received over 100 requests), and the organizers received very positive feedback from participants (4.35/5.0). Exio Biglieri outlined the committee members, instructors, sponsors, cost, and technical program.

- Sriram Vishwanath spoke about the North American School of Information Theory, held in Austin in May 2011, over memorial day weekend. He outlined the organizing committee and schedule, noting that unlike past schools, one full day was devoted to working on the new Information Theory Wiki page started by Rudiger Urbanke and Alon Orlitsky. The school had 122 attendees, lower than previous years (178 in 2010). The disadvantage was that there were fewer students, but Sriram saw this as an advantage, as this resulted in a lower budget and higher teacher-to-student ratios. Sriram suggested that late June - August would be a better time than May to host future schools. The total budget was $55,000 USD. It was noted that this year students were asked to provide a credit card for reserving their dorm rooms, which was much easier than dealing with checks, and resulted in fewer cancellations.

- Gerhard Kramer spoke about the Oulu Wireless Information Theory Summer School: there were 75 participants, a registration of 120 Euros which covered the lectures and meals.

- Deniz Gunduz proposed to hold the European School of IT in 2012 in Turkey. Due to the great demand, positive feedback, loads of interest from countries in the Middle East and North Africa, an annual (rather than biennial) school might be warranted. The chairs would be Deniz Gunduz and Gerhard Kramer; local arrangements would be Alkan Soysal; the school would take place at the end March / beginning of April. Deniz would like to use the ITSOC website as platform. Antalya and Kusadasi are possible locations; a list of potential hotels and prices were also mentioned. Deniz intends to continue the tradition of having lectures for 4 mornings, and student talks / posters in the afternoon. Wednesday afternoon would be reserved for sightseeing. The estimated total cost, assuming 80 (possibly go up to 100) students, is 41,000 euros. The organizers plan to charge students 250-300 Euros per person (includes all food).

- Motion: that ITSOC support the 2012 European School of Information with a grant of $ 21,000 USD or 14,000 Euros on July 29. This motion was approved. However, it was noted that this was an increase from last year's $10,000 USD, and that it was not held in a university, but rather in a 5 star hotel, also breaking tradition. Frank Kschischang stated that locating it in a 5 star hotel would set a precedent. Gerhard Kramer noted that the level of support requested is similar to the level requested by the North American school of IT.

- Gerhard Kramer spoke about the 2012 North American School of Information Theory to be held on the Cornell campus from June 19-22, 2012. Aaron Wagner and Salman Avestimehr will be co-chairs; lodging will be in the dorms. The estimated cost is $57,000 USD. The School will raise additional funds by approaching funding agencies and local private schools.

- Motion: that ITSOC support the 2012 School of Information Theory with a grant of $20,000 USD. This motion was approved.

9. Bruce Hajek presented the Conference Committee report:

- the term of Dan Costello and Tony Ephremides is ending, and the BoG thanked them for their 4.5 years of service.

- Motion: to approve Elza Erkip and Lars Rasmussen as IEEE ITSOC Conference Committee chairs. This motion was approved.

-Tony Ephremides reported that the last registration figure for ISIT 2011 was 780 participants. Financially, ISIT 2011 appears to be a success.

- future ISITs to be held in Cambridge 2012, Istanbul 2013, and Hawaii 2014 are all on track.

- two proposals for ISIT 2015 were: Hong Kong by David Tse and Melbourne by Emanuele Viterbo. Both were very strong proposals. It was noted that since both are such strong proposals, that the proposal not chosen for 2015 would be considered for the following relevant ISIT year. Both options were discussed at length.

- Motion: to hold ISIT 2015 in Hong Kong. By show of hands, this motion was approved.

- Motion: to approve the budget of ITW 2012 in Lausanne. This motion was approved.

- Motion: for technical co-sponsorship (no monetary contribution, but IEEE Xplore access and advertising) of:

- International Symposium on Problems of REdundancy in Information and Control Syetms in September 2012. Approved.

- the IEEE Swedish Communication Technologies Workshop (Sweets) 2011. Approved.

- International Symposium on Turbo Codes & Iterative Information Processing. Approved

- there were no current proposals for ITW 2013; proposals are welcome.

10. Matthieu Bloch gave a report on the ITSOC website: the ITSOC website was hacked through Matthieu Bloch's account; the hackers caused the servers to crash. The ITSOC website server was fine, but the server responsible for the mailing-list and videos was brought down. No data was lost. In the past months there were additional hiccups and in general the IT people are responsive, but the ITSOC may need other options. Mattheiu Bloch welcomed suggestions on how to handle the ITSOC IT systems in the future. He suggested reading his report, which outlined 4 options and their tradeoffs for the mailing list. Frank Kschischang stated that the BoG vote mailing list is absolutely critical, and that while BoG announce is useful, it is not crucial like the BoG vote list. Within next month Matthieu will formulate more precise options **(ACTION)**.

11. Alon Orlitsky and Rudiger Urbanke spoke about the Platform for Online Science and Technology Education and Research. The goal is to create an integrated and interactive platform for research development and education in science and technology. This includes knowledge dissemination, creation, and education. This would be similar to Wikipedia, but for technical topics, and providing greater breadth, depth, and reliability. Much work remains to be done, and help needed. During the North American Summer School of IT, one day was allocated to jump-starting this tool. In addition, Tuesday after the sessions at ISIT 2011 is also allocated to this project. Alon and Rudiger requested suggestions on how to sustain this in the longer term. It would be useful if ITSOC members and/or students would contribute articles. One possible way to do this would be through class projects / surveys of an area.

12. Michelle Effros presented a report on "Supporting Community Research: A Case Study".
The Computing Research Association (CRA) and the Computing Community Consortium (CCC) have been highly successful in marketing computer science, in particular to the NSF, DARPA and various other governmental funding agencies. Whether and how the ITSOC could interact with these associations, or better market information theory (not confined to US organizations, though this was the case study examined and presented) was discussed. **ACTION:** Alex Vardy suggested that the ITSOC president for an ad hoc committee on this topic, that is not too US-centric.

13. The meeting was adjourned at 7:21pm.