

IEEE Information Theory Society Board of Governors meeting minutes

Boston Marriott Cambridge, Cambridge, 07.01.2012, 1-6pm

Natasha Devroye

Present: Muriel Medard, Gerhard Kramer, Natasha Devroye, Frank Kschischang, Helmut Boelcskei, Emanuele Viterbo, Amin Shokrollahi, Michelle Effros, Alon Orlitsky, Max Costa, Jayne Cerone (IEEE), Alex Vardy, Giuseppe Caire, Urbashi Mitra, Paul Siegel, Abbas El Gamal, Bruce Hajek, Matthieu Bloch, Nicholas Laneman, Edmund Yeh, Rolf Johannesson, Alex Dimakis Prakash Narayan, Sriram Vishwanath, Aylin Yener, David Tse, Hans-Andrea Loeliger, Dave Forney, Sergio Verdu

The meeting was called to order at 12:54pm by the Information Theory Society (ITSoc) President, Muriel Medard, who welcomed the Board of Governors (BoG). Everyone introduced themselves, including Jayne Cerone (guest) from IEEE. Jayne explained that she attends / observes BoG meetings and conferences of various societies.

1. Motion: The minutes of the BoG Meeting at ITA 2012 held at Catamaran Resort, La Jolla, were approved.
2. Motion: The agenda was approved.
3. Muriel presented the President's report. Committee activity updates were presented: Natasha Devroye stepping down as secretary, and Edmund Yeh is taking over. Negar Kiyavash will be taking over as WithITS coordinator from Christina Fragouli. The mentoring committee led by Joerg Klierer and joined by Bobak Nazer and Elza Erkip is alive and well. The external nomination committee members are: Max Costa, Muriel Medard (ex officio), Prakash Narayan (chair), Alon Orlitsky, Han Vinck. Various ad hoc committee memberships were outlined, including the active ad-hoc committees on the Transactions.

We are currently undergoing a Society review (occurs every 5 years). This February, Transactions were reviewed at the TAB meeting in Arizona; the rest of the Society review will take place in the November TAB meeting. A draft was sent out to the BoG about the society review; **TO DO:** Muriel will provide everyone with a draft in the ITW BoG meeting in Lausanne in September in time for the November presentation.

Highlights of the Transactions review: 2 days ago it was approved by TAB and our quality is deemed "superb". We are the most cited journal in all of IEEE. Organizationally, the heroic efforts of Helmut Boelcskei, as Editor in Chief (EiC) were noted by TAB, but it was also noted that this may not be tenable. IEEE did point out that there must be within the Society a mechanism for appeals above the EiC before progressing to the IEEE; the publications board cannot serve in this role as it is appointed by the EiC (need independence from EiC). As we only have a single publication, appointing a VP of Publications may not make sense (as is done in some larger societies). As a stop-gap measure, Muriel proposed that the President serve in that role – we need to provide a mechanism to satisfy governance requirements.

TAB issues of interest to our society: new revenue streams include new conferences, new publications and an open-access mega-journal. These may not be very relevant to our society. Our only option appears to be to reduce our society costs. The issue of quantifying the value of membership was mentioned: we may provide differentiated costs (of events etc.) to our Society members and other societies do so. Other ways of quantifying the value of membership to our society must be thought about. Finally, some IEEE members expressed concern about having agencies co-sponsor conferences; something to be aware of in organizing future conferences. Finally, there will be a cost for technical co-sponsorship of non-financially sponsored

conferences: going forward there will be a cost of around \$1,000 per technically co-sponsored conferences plus a few dollars per paper. There will be an associated quality assurance from IEEE – this will affect us. Muriel has requested that there be an allowance for a few special cases per year (for conferences that have been technically co-sponsored for a long time). Muriel has also suggested using volunteers to verify the quality and guarantee presence (rather than sending IEEE staff) at the conference.

Motion: Bruce Hajek moved to have the Appeals for the IEEE Transactions on Information Theory be taken care of by the 2nd Past President. Michelle Effros suggested this be a past Editor in Chief. Muriel expressed concerns. Apparently no appeals above the EiC (to the level of the IEEE) have been coming up in past years. Frank Kschischang moved to table the motion until the next BoG, as he feels this is moving quite hastily, as it will go into the Bylaws.

Motion: Frank Kschischang would like to table the discussion about the original motion proposed by Bruce Hajek. There was no discussion. The motion to table the motion was passed unanimously. This will be further discussed at the BoG in Lausanne.

4. ITSOC treasurer Aylin Yener reported on the ITSOC's financial health.

Some housekeeping items: there is now a procedure in place for reimbursements for committee expenses. Please send receipts along with expense form within one month to Alyson Rupp (A.Rupp@ieee.org) with a CC to Aylin Yener. Closing the books of a conference is a process that involves the IEEE and should be done within 3 months of the conference ending, max within one year. Aylin Yener encourages everyone to be responsive to avoid fines.

The 2011 forecast was +\$90k; the BoG approved a “one-time” page budget increase to clear the publication queue. This brought the forecast for operational budget down to -\$15k. Final numbers turned out to be more optimistic, with 2011 ending at +\$28k (better income than forecasted from conferences). Additionally, we were hit with -\$350k reflecting IEEE investment losses. Thus, our bottom line in 2011 was -\$317k. Since this is not our fault we are not being penalized.

The 2012 budget projected a surplus of \$119k, along the way the BoG once again approved an increase in the page budget for 2012 from 6750 to 7800 (pages), which brings down the projected surplus to \$12k.

For 2013, the first pass of the projected budget was made in May 2012; the projected surplus was \$131k. Recently, the BoG again approved an increase on the page budget from 6750 to 8000 pages, changing the new forecast to \$2k.

These numbers are obtained from an IEEE analyst assigned to our society.

Up to 50% of our surplus can be designated for special initiatives of the society (if you are in good standing); currently we are unable to propose such initiatives for the next two years due to the low expected surpluses in 2012 and 2013. Societies are not supposed to have a yearly operational budget that is in the deficit: three consecutive years in deficit puts us on an IEEE financial watch list. ISIT 2011 is projecting a +\$83k surplus but it is not yet closed; this could affect things.

Some good news: Aylin believes we run the society extremely efficiently; volunteers use their own resources and donate their time generously, minimizing “committee” expenses. Conferences often exceed surplus expectations, and conference papers bring in significant revenue on IEEEExplore (\$242k in 2011). The IT Transactions IEEEExplore revenue is healthy and the largest source of income (\$742k in 2011).

Cost items: very modest committee expenses. The Transactions cost is overall the largest ticket item: e.g. in 2011 it was \$833k. The overall Transactions income in 2011 was \$986k; membership fees added up to only \$80k.

The treasurer recommends reducing the cost of the transactions (rather than relying on conference income) in order for the society to be able to run its activities and initiatives in the future.

5. The Nominations and Appointments committee report was given by Frank Kschischang. A slate of 12 candidates for the BoG next year was presented (available online), which was constructed with the aim of better representing the various regions our members. The current BoG membership is 65% from North America, whereas our membership numbers are quite different.

Motion: to approve the BoG members for next year.

Frank Kschischang opened the floor for nominations for President for 2013. Gerhard Kramer was nominated. There were no further nominations.

Frank Kschischang opened the floor for nominations for First Vice President for 2013. Abbas El Gamal was nominated. There were no further nominations.

Frank Kschischang opened the floor for nominations for Second Vice President for 2013. Alon Orlitsky and Michelle Effros were nominated. There were no further nominations.

6. The Publications committee report was given by the current EiC, Helmut Boelcskei. He thanked the Executive Editorial Board and the Editorial Board. He put forth four new Associate Editor (AE) nominations: in Signal Processing, Yi Ma and Venkatesh Saligrama were proposed. In Communication Networks, Devarat Shah was proposed. In Shannon Theory, Aaron B. Wagner was proposed.

Motion: to approve Yi Ma as AE. Motion approved.

Motion: to approve Venkatesh Saligrama as AE. Motion approved.

Motion: to approve Devarat Shah as AE. Motion approved.

Motion: to approve Aaron B. Wagner as AE. Motion approved.

The State of the Transactions: they keep getting thicker and thicker. The number of papers submitted has been above 1000 since 2008. The page count for 2012 is projected to be around 7500 pages. Recently, there has been a trend toward longer papers being published (39% increase between 2009 and 2011), the number of papers accepted has remained fairly constant. The average # pages per paper is projected to be around 14 pages per paper for 2012. The acceptance rate peaked around 2010 around 56%, now we're down to around 38%. Historically we have averaged around 55%, putting us at a historic low at the moment. The submission of final material to print is about 3.5 months. There are no special issues in 2012 and 2013. The fast rejection rate is 25%. The AEs were asked to raise standard wrt significance of papers. Submission-to-first-decision averages 173 days (excluding fast rejects). We are the most cited, but also one of the biggest IEEE journals.

Areas where we are losing ground: Complexity and Cryptography – Ueli Maurer is now an AE in this area, and the hope is that the paper submission quality will improve.

Pareja is a big pain at the moment (we are still transitioning to ScholarOne) and we need to ramp down.

The production process remains expensive: about \$90 is spent per printed page. Alternatives are being explored outside IEEE to reduce the costs. Helmut Boelcskei is currently exploring another option within IEEE with the help of Stefan Moser: a full latex production and “light” editing which does not touch language. They tested it on “problem” papers and it worked well. Helmut Boelcskei cautions against making quick decisions on changing the Transactions.

The 5 year review: IEEE is concerned about the impact factor which peaked in 2008 at 3.75, but is now back down to 3. Historically though, there is still a steady increase. The also noted the rather lengthy review process, and suggested clearing out the publication queue. IEEE also suggested updating the Aims and Scope statement. **TO DO:** This will be discussed by email and voted on at ITW. Helmut Boelcskei encourages feedback over email. Should we formalize the appeals procedure and put it in writing (IEEE is in favor of formalizing)? How should we assess the needs of the readership? How should the EiC and AE be trained (formalized)? AE re-appointments: may this be done without a break?

Submission-to-publication time: the average time is 90.8 weeks. There are numerous paper submission horror stories in our Transactions which he recounted. How does this affect the reputation (on a non-technical level) of the journal and responsibility to the authors? How can we solve this problem? This has been thought about at length over Helmut Boelcskei’s time as EiC and all sorts of solutions were discussed and tried. They came up with a statement which should be interpreted wrt these special extremely problematic cases:

Proposed statement / policy which Helmut Boelcskei is asking the BoG to endorse: “In view of its concerns about excessive reviewing delays in the IT Transactions, the BoG authorizes the EiC in his sole judgement to delay publication of papers by authors who are derelict in their reviewing duties.”

A discussion about this statement was started. Sergio stated that coming up with such a policy was a long process with much careful thought put into it. Helmut Boelcskei notes that he has put in a place a system in ScholarOne where this is easy to monitor “bad” reviewers. Dave Forney states that he does not think this policy will be used more than a few times a years but that it sends the message that we are taking the author experience seriously. Frank Kschischang suggests that if the policy is used, that it be advertised broadly (i.e. in Newsletter). Nick Laneman suggests putting numbers on the expected number of papers an author should accept to review for every paper submitted; Helmut Boelcskei states that he wants to stay away from firm numbers.

Motion to endorse Helmut Boelcskei’s statement: approved (endorsed).

7. Gerhard Kramer presented the Awards Committee report. He first outlined the 2012 IEEE Awards and Medals.

This year the Awards Committee decisions were tricky as several papers written by those on the committee were nominated and received early support. As such, there was a lot of movement / changes in the committees to avoid conflict of interest. The joint ComSoc-ITSoc Joint Paper Award was awarded to two papers from the IT Transactions.

The ITSOC paper award was next discussed. Gerhard first outlined the Bylaws concerning this award. He asked non-voting members of the BoG and David Tse to leave the room. There were no questions of comments.

Motion: to accept the ITSOC paper award report. This was approved.

Three papers were proposed with one recommended paper.

Motion: to accept the recommended paper. The motion passed and one paper was decided to be the 2012 paper award winner.

8. Prakash Narayanan reported on the External Nominations Committee. The main activity was putting forward nominations for the Baker Prize, which was quite difficult; he suspects it will take a few years to get this committee up and running smoothly – it is quite a large amount of work.

9. Abbas El Gamal presented the Membership and Chapters committee. He outlined the known tasks (it was not really clear to him what the purpose of this committee is) of this committee: 1) Chapters: Maintain list of chapters and their presidents; Select Chapter of the Year Award, 2) Schools: Approve locations; Approve selection of Padovani Lecturer, 3) Distinguished lecturers: Encourage them to speak at Chapters, Select 5 new lecturers at end of year.

They have added three new members to the committee, updated chapters information and sent email to all chapter presidents, sent email to Distinguished Lecturers encouraging them to participate in program (at least 3 will do/have done so), approved selection of Tom Richardson as 2012 Padovani Lecturer, approved European School IT, selected Finland for Chapter of the Year Award (see attached subcommittee report), organized Chapters lunch at ISIT (very lightly attended).

It was suggested by Michael Gastpar (who headed the Chapter of the Year Award), that this award be discontinued unless the ITSOC/BoG make it more clear what chapters are expected to do and how they should document their activities.

Abbas El Gamal stated that the Current M&C committee charge is vague and outdated and that activities do not warrant a separate committee. He proposed combining the M&C committee with Student and Outreach committees into Membership Committee and define charge to accurately reflect the activity of the combined committee. He welcomed discussion on the topic of merging the committees. Are other societies also seeing less chapter activity? It varies. Gerhard Kramer noted that the less-active chapters are those in North America; it has more value than we might expect outside of the US. Nicholas Laneman stated that the Chapters in the US tend to have regional-based IEEE chapters that are not particularly IT-focussed. Gerhard Kramer stated that it is not necessarily the responsibility of ITSOC to tell Chapters what to do; they receive instructions from the IEEE. Jayne Cerone stated that usually active societies are led by a really energetic person and clear-cut activities / what they are expected to do. Matthieu Bloch says in France, the IT Chapter is very inactive because there is a larger body in France that is very active and handles many IT-related activities.

Abbas El Gamal seeks input on 1) consolidating two committees, and 2) what to do with chapters.

Motion: Requests the formation of an ad-hoc committee to look into the charge of the M&C committee together with the other Outreach Committees. Motion is approved. **TO DO:** Muriel Medard shall appoint this committee to obtain feedback. She is not sure it can be done before the ITW BoG in September.

10. The Schools of IT were discussed.

Deniz Gunduz discussed the 2012 IT School in Antalya, Turkey. This went very well, highest ever participation for the European school: 74 attended from 25 institutions over 13 countries. He thought it was a good idea to have this annual school until demand decreases. There were excellent lecturers; 4 hour morning lectures and student presentations in the afternoon. There was good feedback from the students

(used online survey); for future organizations – poster presentations would be better if possible (rather than 15 minute talks).

Aaron B. Wagner discussed the 2012 North American IT School, in June 2012 at Cornell University. They had a “30-second madness” elevator pitch for their posters. They had 108 students, \$100 registration fee. They had a (preliminary) surplus of \$10k - what to do with this? Because it was registered as a conference, we must close the conference and ITSOC will get some of it back. If it comes back this year (within 3 months) then ITSOC may use it in this year’s budget.

Deniz Gunduz discussed the European School of IT (ESIT) in 2013 in Ohrid, Macedonia led by Petar Popovski. Ohrid is a world heritage city with a good climate and tourist facilities. They hope this will help attract Eastern European students (almost none in 2012). Program: 5 days, 4 hour morning lectures, afternoon posters.

Motion: that the ITSOC supports the 2013 ESIT with a grant of \$20k. The price per student for all costs, excluding flight, was 450 EUR. Motion was passed.

Sergio Verdu discussed the 2013 IT Summer School, proposed to be held at Purdue University.

Motion: request \$25k from the ITSOC to support the 2013 IT Summer School. Friendly amendment: request for \$20k now and approve extra \$5k when finances are more clear. The motion passed.

11. Matthieu Bloch presented the Online Committee report. Website has been running smoothly for the past few months. Regarding the mailing list (which was not working), they are transitioning to a new mailing list. Announcements are posted on the website, and emails are sent out at the end of the day. Regarding mailing lists for committees, can login online and there will be an option online for emailing the whole committee (as chair of committee). Regarding the sub-websites of the School of IT, Matthieu Bloch did not do much which is a very positive sign that people can do it themselves. Aylin Yener suggests migrating the old IT School lectures and videos to the new system, which is a great resource for students.

12. Sriram Vishwanath presented the Students Committee report (on behalf of himself and Elza Erkip). Planning two events at ISIT: a career panel during Monday’s lunch hosted by Lalitha Sankar, and a Gameshow during Thursday’s lunch. Events were held at CISS 2012 and planned for Allerton 2012.

Motion: request a budget of \$10k for 2013. Motion passed.

13. Muriel Medard reported on the ad-hoc committee on editing costs. Currently, the editing costs form a very large part of our budget. Other societies do not appear to be using the heavy editing from the IEEE that we use. Noone except us is using the heaving editing from IEEE. Comsoc runs its own shop; SP uses moderate editing (rather than heavy), others use vendors. It currently costs about \$75 per page published for the editing. The committee considered the Comsoc process at length, which Muriel described (available online); the overall cost runs at under \$20 per page. The Signal Processing Society is using the “moderate editing” option, which Muriel Medard also explained (available in report online). The moderate editing would run around \$60 per page (rather than the current \$75). We should be able to reduce our editing costs, should we choose to do so. There are various possibilities: Stay as we are; Go to moderate editing; Approach Comsoc to see whether we can piggyback; Run our own shop; Use a vendor – can query other societies about their vendors; Helmut Boelcskei’s proposal to change to a full Latex process without English text editing (over \$50 per page). Helmut Boelcskei cautions that if we stay with the IEEE we will eventually be forced to comply with their formatting (and some societies will be forced to do so in the future) and not to rush the decision before trying things out. Abbas El Gamal believes it is a no-brainer

to move away from IEEE editing. Muriel Medard states that we should make a decision on which options to explore in depth rather than the final decision on what to do. There are 3 issues: 1) conversion to XML (complies with IEEE), 2) editing level (English or not), 3) whether to stay with IEEE.

TO DO: The BoG (by vote) agreed to look at the following options: 1) approaching Comsoc to see if we can piggyback, 2) using a vendor (ask other societies who they use), 3) exploring Helmut Boelcskei's option (negotiate with IEEE on price and use direct from latex conversion to XML). Muriel Medard offers to pursue these items with the help of the Transactions committee.

14. Abbas El Gamal presented a proposal for a Tom Cover Dissertation Award. Tom was an original thinker. His PhD thesis and follow-on work represent key pioneering contributions to statistical learning. His broadcast channel paper pioneered network information theory. Tom was a gifted speaker and expositor. He was an exceptional advisor and mentor of graduate students. He graduated 63 PhDs in his 48 year career at Stanford. He instilled a culture of originality and excellence in research. He spent countless hours teaching students how to write and speak. The criteria for the Thomas M. Cover Dissertation Award is proposed to be:

“The Thomas M. Cover Dissertation Award is given to an original and innovative doctoral dissertation in any theoretical area in information sciences, including but not limited to Shannon information theory, coding theory, learning theory, quantum information and computing, complexity theory, and applications of information theory in probability and statistics. The award is given annually at the ISIT conference.”

The certificate would read: “For an outstanding dissertation in the mathematical foundations of the information sciences.”

TO DO: A nomination procedure was outlined (available online). Initial funding will come from Abbas El Gamal's Shannon award money. Subsequent funding may come from Tom Cover's students and colleagues and industrial sponsors. He proposed forming an ad hoc committee to resolve some of the details. Bruce Hajek asked whether there are other awards we want to consider (and looking at other societies); how would this fit into a desired constellation of awards? Around \$1,000 is envisioned. Jayne Cerone asks whether this is something we envision people can go online and donate to? These are all questions which should be looked at by the ad-hoc committee.

Motion: to approve the Thomas M. Cover Dissertation award and to form an ad-hoc committee that will resolve issues related only to this Dissertation Award”. The motion was passed.

15. Gerhard Kramer presented a proposal for an IEEE / ITSoc New Initiative: An Oral History of Information Theory. A proposal is available online. The goal is to generate new primary documents based on the way principal actors in the history of information theory recall their experience. The special contribution of this oral history will be enabling individuals who shaped the field to speak to the future, by the most direct means available to us today. Gerhard Kramer was looking for comments and support. Sergio Verdu suggested sending a 2 hour interview of Claude Shannon which is corrupted and un-intelligible to a lab to see if we can recover anything. Urbashi Mitra thinks this is a wonderful idea based on some feedback at ITA, where people like the interviews with senior people. Should we use people in the field or professionals? We have a unique opportunity to interact with Katalin Marton at ITW in Lausanne – should capture this opportunity before she disappears. Gerhard Kramer proposes to do a pilot project for \$40k first and then in the future go for a full-blown \$100k. If aimed at internal audience, perhaps IT researchers would be sufficient, in going to broader audience perhaps professional. It was suggested to try both side-by-side. Could serve both audiences. Frank Kschischang suggests keeping open option of using

reserves in the future. The BoG supported moving forward.

16. Bruce Hajek reported on the Conferences Committee. ISIT 2013 in Istanbul, 2014 in Hawaii, 2015 in Hong Kong (week of June 14 is now fixed). Future ISIT in 2016 and beyond: this year 5 expressed interest. Helmut Boelcskei said a few words about our unwritten tradition of having an ISIT in North America and non-North America in alternating years. The ITSOC community is quite international; ITWs are not subject to this “rule”, he believes the best proposal should win and that we could spread locations to promote interest in IT.

Motion to poll the sense of the BoG: it is the sense of the BoG that all ISIT proposals are welcome regardless of previous locations. Voted: yes; the sentiment of the BoG carries.

Two proposals for ISIT 2016 were presented: Albert Guillen i Fabregas presented a proposal for Barcelona (led by himself and Sergio Verdu). Urbashi Mitra presented a proposal for Los Angeles (led by herself, Michelle Effros, Alon Orlitsky).

Motion: to make decision about ISIT 2016 today. Motion passed.

Motion: to host ISIT 2016 in Barcelona (10 for Barcelona, 4 for LA). Motion passed.

Fernando Perez-Cruz presented a proposal for ITW in 2013 in Sevilla, Spain from 21-25 October, 2013. An emphasis on machine learning is envisioned.

Motion: to host ITW 2013 in Sevilla, Spain and that the ITSOC supports it. Motion approved.

Emanuele Viterbo presented a proposal for ITW 2014 in Hobart, Tasmania, right after ISITA in Melbourne. First week of November in 2014.

Motion: to host ITW 2014 in Hobart, Tasmania and that the ITSOC supports it. Motion approved.

Hong-Yeop Song presented a brochure on a proposed ITW 2015 on Jeju Island, Korea from October 5-8, 2015.

Motion: to technically co-sponsor Swe-CTW 2012, Lund University, Sweden, Oct. 24-26 2012 and 3th Canadian Workshop on IT, May 28-31 2013 in Toronto. Motion passes.

17. Michelle Effros presented the Outreach Committee report for Kliewer. A mentoring program was setup online; there were many more mentees than mentors, many of whom were not ITSOC members. They encourage people to be mentors, and were wondering whether they should restrict to ITSOC members. Muriel Medard suggests nagging people to be mentors, and that in the past we have always restricted it to ITSOC members.

18. Abbas El Gamal encouraged people to look at the report on the ad hoc committee on the future of the Transactions. He encourages feedback by the next BoG at ITW in Lausanne. **TO DO:** He will send an email to the BoG asking for comments.

The meeting was adjourned at 6:55pm.