IEEE Information Theory Society Board of Governors Meeting

Location: Marine Room, La Jolla California

Date: 31 Jan 2016; meeting convened at 1:10pm PST; meeting adjourned 5:30pm PST

Meeting Chair: Alon Orlitsky

Minutes taken by: Stark Draper

Meeting Attendees: Krishna Narayan, Pierre Moulin, Alex Vardy, Emanuele Viterbo, Rüdiger Urbanke, Elza Erkip, Aylin Yener, Anand Sarwate, Alon Orlitsky, Michelle Effros, Wei Yu, Jeff Andrews, Abbas El Gamal, Vincent Poor, Suhas Diggavi, Stephen Hanly, Daniela Tuninetti.

Remote Attendees (via Skype): Andrew Barron, Ubli Mitra.

The meeting of the Information Theory Society (ITSoc) Board of Governors (BoG) was called to order at 1:10pm, Pacific Standard Time, by ITSoc President Alon Orlitsky.

Motion: To approve the minutes from the 3 October 2015 BoG meeting in Chicago, Illinois. The motion was tabled to give BoG members more time to review the minutes. The motion was revisited at the end of the meeting.

1) President's Report: President Alon Orlitsky first presented the President's report. Alon welcomed new BoG members: Matthieu Bloch, Suhas Diggavi, Pierre Moulin, Krishna Narayan, and continuing board members Emina Soljanin and Jeff Andrews. He welcomed new officers: Emanuele Viterbo (Conference Committee Chair), Elza Erkip (Second Vice President), and Stark Draper (Secretary). The President extended thanks to retiring board members, committee chairs and officers: Mike Honig, Vijay Kumar, Ram Zamir, Elza Erkip (Conference Committee Chair) and Edmund Yeh (Secretary). Finally, Alon thanked Michelle Effros for her service as ITSoc President in 2015 and Gerhard Kramer for his as Senior Past President.

Alon offered congratulations to a number of Society awardees. Two IEEE Field Awards were awarded: Leandros Tassiulas received the Koji Kobayashi Award and Robert Li, Raymond Young, and Ning Cai received the Eric E. Sumner Award. Three IEEE Medals were awarded to Society members: Roberto Padovani (Bell Medal), Abbas El Gamal (Hamming Medal), David Forney (Medal of Honor). Sergio Verdú received the National Academy of Science Scientific Reviewing Award. Fifteen ITSoc members were elevated to IEEE fellow status: Ozgur Akan, Faramarz Fekri, Christina Fragouli, Erik Larsson, Petar Popovski, Sundeep Rangan, Osvaldo Simeone, John Thompson, Sennur Ulukus, Zhengdao Wang, Kaikit Wong, Liang-Liang Xie, Lie Liang Yang, Jinhing Yuan, and Lizhong Zheng.

Alon provided an update on the position of ITSoc administrator. Matt Lafleur was hired in May 2015. Matt is working 50% for ITSoc and 50% for the RFID council. Matt has been playing important roles in the ITSoc website revision, efforts at creating a movie about Claude Shannon, budgetary work, and generally facilitating interaction with the IEEE.

Alon reported on the State of the Society. The finances are sound. The Transactions are in excellent shape with a record number submissions in 2015. Conference planning is on track and five school for information theory were held in 2015. A major website revision is in the works.

In terms of Society priorities, Alon raised two. The first is to keep the society vital and important by continually considering how to "branch out" to identify areas in which information theoretic ideas and perspectives can provide insight and impact. Possible initiatives include: (i) organizing a "Bit of information channel" on youTube or Vimeo, (ii) putting together short videos about information concepts, (iii) a journal of information with a scope broader than that of the Transactions. The second set of priorities surround the Shannon Centennial. Initiatives here include: (i) Shannon Days, and (ii) the Shannon movie. More discussion of the Centennial was to follow later in the meeting.

2) Treasurer's Report: Treasurer Daniela Tuninetti next presented her report on the state of the Society's finances. She first provided the BoG an update on the 2015 budget for which the actual numbers would be finalized by April 2016. She then discussed the 2016 budget. Regarding the 2015 budget, Daniela first reviewed the three main budget items in terms of percentage revenue/expenses: Publications (60% of revenue / 59% of expenses), conference (38%/35%), and membership (2%/5%). As of the October 2015 BoG meeting a surplus for 2015 was anticipated, which the BoG approved to donate to the IEEE Foundation Shannon Fund. However, the transfer did not take place as it was too late in the year to get the IEEE Board of Directors' approval to make the transfer. The IEEE Technical Activities Board (TAB) proposed that ITSoc spend the money that would have been donated on the initiatives on which they would have been spent, even through this would mean ITSoc would be in the red for 2016. The projected budget surplus has decreased since the October meeting and the actuals should firm up by early April 2016 by which time all 2015 conference should have closed.

Regarding the 2016 budget. Daniela first discussed the cost of preparation of the Transactions. The switch in 2014 of the Transactions from full-edit to moderate-edit reduced production costs by about 50%. Furthermore, the Transactions page count in 2015 ran about 1000 pages below the estimated page count. Daniela then detailed the income vs. expenses to produce and distribute the Transactions. She presented exact numbers for 2014, but the 2015 numbers are not yet final, pending details on income generated by IEEEXplore. A discussion ensued about the subsidization the society provides to subscribers of the print edition. This category is decreasing by about 15% per year. It was agreed that the BoG should get a clearer sense of what type of subscribers are receiving the print edition before implementing any changes in pricing. Daniela will work with Matt Lafleur to get such numbers. Finally, Daniela will reach out to the Transactions EiC to get the page count estimated needed to put together the 2017 budget.

Daniela then reviewed the membership situation and fees. There has been a slow decline in overall membership over the past few years, with the exception of 2014 at which time differential pricing was introduced at conferences (for ITSoc vs. non-ITSoc IEEE members). Daniela the reviewed the various product offerings of Society publications to which IEEE members and non-IEEE members can subscribe. Daniela sought guidance from the BoG whether she should formulate a proposal on how to change product pricing and/or product bundling.

Motion: To request the Treasurer to propose a bundling of the Transaction-electronic and Conference-digital-library in a single "Electronic Library" package to sell to IEEE (non-ITSoc) members. After some discussion the motion was tabled.

Daniela reported that in 2015 \$25k was allocated to produce and distribute the Newsletter while actuals were close to \$30k. If a plan is put into motion to grow the Newsletter into a magazine, the additional budget required would need to be planned for.

Regarding conferences, Daniela noted that many schools have occurred sufficiently frequently that they are no longer in the "new initiatives" category (funded through the IEEE "50% rule"), but must be factored into recurrent annual expenses. The 2015 budget aimed for \$268k in net income from conference, through Dec 2015 \$228k had been accrued with some conferences yet to close their books. The 2016 budget is designed to net \$241k in income. The BoG then discussed the possibility of designing budgets to be balanced, to net \$0 in income. Daniela noted that if the BoG decides to aim for a budget, it will be critical for all conference to meet their target surpluses.

Daniela then discussed with the BoG administrative fees charged by IEEE, the budgets allocated to the various committee, the salary for the new ITSoc administrator, and the support for the Distinguished Lecturer (DL) series, as well as the budget for new initiatives.

In conclusion Daniela noted two things. First, the draft budget for 2017 is due to the IEEE in July, so if any committee will request an increase in their budget they need to do so before the BoG meeting at ISIT. Second, Daniela provided some guidance regarding reimbursements: (a) submit expenses within one month, (b) email all receipts with the latest expenses form (which Daniela can provide) to her and Matt LaFleur, (c) include a full list of attendees at meals, (d) Distinguished Lecturers should follow same procedure.

3) Nominations and Appointments (N&A) Committee: N&A Committee Chair Abbas El Gamal next presented his report. He reviewed the composition of the various committees and noted that all are fully staffed except for the External Nominations Committee, which is still missing a committee chair.

Abbas then reviewed two changes in the bylaws that require BoG discussion and votes. The first change was a revision of the current bylaws. It concerned the selection of the James L. Massey Research and Teaching Award. Abbas read the proposed revised bylaw to the board: "A subcommittee of the Awards Committee shall be responsible for selecting the recipient of the IEEE Information Theory Society Thomas M. Cover Dissertation Award, according to Article VII, Section 8. Another subcommittee of the Awards Committee shall be responsible for selecting the recipient of the IEEE Information Theory Society James L. Massey Research & Teaching Award for Young Scholars, according to Article VII, Section 9....The Cover Dissertation Award and Massey Research & Teaching Award Subcommittees shall be appointed by the Nominations and Appointments Committee by December 31 of the previous year."

Motion: To pass the revision to the bylaws. The motion was passed unanimously.

The second change was an addition to the bylaws requested by the IEEE. The addition deals with possible conflict-of-interest situations wherein a member of the N&A Committee would like to be nominated to a committee for which the N&A Committee handles nominations. In brief, said member would both need to resign prior to the start of the year and cannot be nominated by a (former) fellow member of the N&A Committee. Abbas read the proposed addition: "A member of the N&A Committee may be nominated and run for a position for which the N&A Committee makes nominations only if: (i) the member resigns from the N&A Committee prior to its first meeting of the year in which the nomination shall be

made and (ii) the nomination is made by a member of the N&A Committee whose term did not overlap with that of the nominee."

Motion: To pass the addition to the bylaws. The motion was passed unanimously.

4) **Online Committee:** Online Committee Chair Anand Sarwate presented his report. Anand reviewed the current Committee membership and thanked Stefan Moser for his efforts on behalf to the Committee.

Anand reported that ITSoc Administrator Matt Lafleur is taking on the job of updating website content. He gave a tour of the mockup of the revised site. He would like to get a volunteer to manage an ITSoc Twitter feed, as well as other social media links (LinkedIn/Facebook/other). The BoG asked about a YouTube channel. The decision was made to go with Vimeo because there are no ads and because there may be ownership questions once you post content to YouTube. Anand will look into legal issues about ownership on YouTube with the idea that we can perhaps post both to YouTube and to Vimeo, and will report back to the board.

5) **Conference Committee:** Conference Committee Chair Emanuele Viterbo first reviewed the current membership of the Committee and made a motion to add two members to the Committee.

Motion: To add Elza Erkip and Brian Kurkoski to the Conference Committee. The motion was passed unanimously.

Emanuele then reviewed the upcoming ISITs. All are on track. Emanuele reviewed the ISIT 2018 (Paris) budget, registration costs, and discussed pessimistic and optimistic revenue scenarios. The target is an 8% surplus. The BoG had a short discussion about how much surplus to target. The ISIT 2018 organizers are requesting a \$60k loan to use for a down-payment for the venue.

Motion: To approve the ISIT 2018 budget and loan. The motion was passed unanimously.

Emanuele then reviewed the ITWs from 2015 (past) through 2017. He also introduced two motions for technical co-sponsorship. A short discussion of the benefits that accrue to ITSoc from technical co-sponsorship ensued. The two conferences requesting technical co-sponsorship are the 9th International Symposium on Turbo Codes (2016) and the 15th International Symposium on Problems of Redundancy in Information and Control Systems (2016). The Committee recommended both symposia be co-sponsored.

Motion: To co-sponsor the 9th International Symposium on Turbo Codes. The motion was passed unanimously.

Motion: To co-sponsor the 15th International Symposium on Problems of Redundancy in Information and Control Systems. The motion was passed unanimously.

6) Schools Committee: Aylin Yener, Chair of the Schools Committee, then presented the report of the Committee. In 2015 there were five schools in various parts of the world. The five school were the North American School held at UCSD, the European School held in the Netherlands, the Indian School, the East Asian School in Hong Kong (funded by the Croucher Foundation), and the African School held in South Africa. The four schools planned for 2016 and previously approved by the BoG are all on track. The Australian

School was held already at Monash University in Melbourne in January 2016. The other 2016 schools will be the North American School to be held at Duke University, the European School to be held at Chalmers University of Technology in Sweden, and the Indian School.

As for future schools, Aylin reported that it is likely that the next Croucher Foundation funded East Asian School will be held in Hong Kong again in 2017. At the moment a biannual event appears more feasible in Asia than an annual event. In 2017 there will be schools in North American and in Europe, these are annual events.

A proposal to hold the 2017 European School in Madrid was presented by Albert Guillén i Fàbregas on behalf of the organizers.

Motion: To support the 2017 European School for Information Theory in the amount of \$20k. The motion passed unanimously.

7) Report on the Transactions: President Alon Orlitsky presented the report on the Transactions on behalf of EiC Frank Kschischang who could not attend the BoG meeting. A number Associate Editors (AEs) are retiring and were thanked for their service: Michael Langberg, Yingbin Liang, Gerald Matz, B. Sundar Rajan, Rajesh Sundaresan. The number of submissions is up and the page count is down.

Prakash Narayan will become Executive Editor at the beginning of March. The addition of the Executive Editor position was approved by the BoG at the last meeting. The Executive Editor will be responsible for day-to-day paper handling/assignment, dealing with authors and AEs, and interacting with ScholarOne. The EiC retains overall responsibility, and is responsible for producing issues, handling appeals, interacting with IEEE Production Portal, recruiting new AEs (in consultation with EE and EEB), writing reports, chasing delinquent reviewers, making presentations.

Motion: To approve Holger Rauhut as AE for signal processing. The motion was passed unanimously.

- 8) Membership Committee: Membership Committee Chair Elza Erkip presented the Commitee's report. Elza introduced the new Committee and subcommittee members. Subcommittees include Student, Outreach, and School Committees (the last reported earlier in the meeting). Elza reviewed the major activities of the subcommittees. A point was raised that since the many schools are recurrent rather than new initiatives, the Schools Committee might be shifted to be under the auspices of the Conference Committee. It was recalled that this suggested had been made in the past, but that the School Committee had not been moved because the Conference Committee is already heavily loaded.
- 9) Shannon Centennial: Rüdiger Urbanke presented the Shannon Centennial Committee report on behalf of Committee Chair Christina Fragouli. Rüdi reviewed three infographics that the Committee had put together with volunteers and a designer of infographic. The three infographics discuss the impact of Shannon's ideas on information compression, storage, and security. The goal is to get 10 posters together. Rüdi then played a short video (three minutes) about Shannon's life, which could be played, e.g., at Shannon Day celebrations, perhaps in a rolling loop in poster sessions. Rüdi discussed how the target of Shannon Days is pre-university students. The Committee has also been in contact with IEEE Spectrum about the centennial, with Khan Academy about the possibility of producing

educational videos on information theory, and with Google about getting a Shannon-oriented design for Google's front page on the date of the centennial. There is a website for the centennial that will be updated shortly and a number of Centennial events have already been fixed. The Committee has spent \$10k of its budget for logo design, the short movie, and infographics design.

The BoG discussed various ideas that might prove helpful to publicize the Centennial. One idea was to have the graphics designer make a website banner that departments can use on their websites. Another was to have an array of content that could be shared with news organization that could push that content to local outlets, e.g., text for a newspaper, a one-minute video for TV organizations (we would need to get all rights), something for social media.

Motion: To allocate the Shannon Centennial Committee an additional \$10k budget to complete the infographics, to offer small commemorative gifts, and to create a children's book. The motion passed unanimously

Rüdi requested \$100k in ITSoc support to support Shannon Centennial events. A discussion ensued regarding the logistics of where the money would come from, the impact on the 2016 budget, the process that would be followed in awarding the money to recipients, and on how to communicate to awardees what sorts of expenses would be reimbursable. Regarding the first two financial items it was noted that the IEEE Technical Activities Board (TAB) has already suggested that ITSoc go into the red for 2016 to support Shannon Centennial events. The money, at least in part, corresponds to monies that in 2015 the BoG approved be transferred to the IEEE Shannon Fund. As noted earlier, this transfer was unable to be completed. Regarding the last point, on reimbursements, the Treasurer would help to determine what sorts of items would be reimbursable and the process for reimbursements. Regarding the process to award funds, the following motion was made:

Motion: To approve expenditure of a budget of up to \$100k to support Shannon Centennial Events. The procedure to allocate funds would be as follows: (i) The Centennial Committee will send out a call for proposals. (ii) The call would include guidelines on items that are likely to be reimbursable, e.g., speaker travel costs, poster printing costs, some small games. (iii) Proposals and accompanying budgets would be submitted to the Shannon Centennial Committee for approval (Chair: Fragouli, Members: Urbanke, Varshney). (iv) The anticipated amount of each award would be on the order of \$4-5k. The motion passed unanimously.

10) **Open discussion topics:** In the concluding topic of the meeting President Alon Orlitsky revisited some of the priority topics he had raised in his President's Report.

Alon raised the possibility of a "bit of information channel". This could consist of putting together educational items such as webinars or a YouTube channel. These activities could be in synchrony with the Centennial celebrations. It was thought that, if needed, the organizers of such content could apply to the Centennial Committee for funding under the auspices of the Shannon Centennial. That was generally thought to be a good idea for this year. The BoG will discuss at a later meeting whether a different funding mechanism is needed in future years.

Alon raised the idea about creating short videos about information theory concepts. Some examples of (successful) short educational videos on extremely technical topics were

mentioned by members of the Board. The Khan Academy was raised as a possible collaborator on such initiatives.

Minutes of the last meeting. The minutes from the previous meeting were briefly discussed.

Motion: To approve minutes from the October 2015 BoG Meeting. The motion was passed unanimously.

The meeting was adjourned at 5:30pm PST.