IEEE Information Theory Society Board of Governors meeting minutes
Starling Hotel, Lausanne, Switzerland, 09.02.2012, 1-6pm
Edmund Yeh

Present: Matthieu Bloch, Helmut Boelcskei, Martin Bossert, Mike Casey, Michelle Effros, Abbas El Gamal, Elza Erkip, Gerhard Kramer, Frank Kschischang, Nicholas Laneman, Ping Li, Hans-Andrea Loeliger, Muriel Medard, Urbashi Mitra, Alon Orlitsky, Amin Shokrollahi, Paul Siegel, David Tse, Edmund Yeh, Aylin Yener.

The meeting was called to order at 1:45pm by the Information Theory Society (ITsoc) President, Muriel Medard, who welcomed the Board of Governors (BoG). Everyone introduced themselves, including Mike Casey from NOW Publishers. Mike was at the meeting to present a proposal regarding the production of XML documents. Quorum was verified.

1. Motion: The minutes of the BoG Meeting at ISIT 2012 held at Cambridge, MA, were approved.

2. Motion: The agenda was approved.

3. Aylin presented the Treasurer's report. An update on the budget was presented. In June, the BoG approved an increase in the 2012 page budget to 7800, leaving a $12K projected surplus. By July, this projected surplus was down to $700. In August, the EiC adjusted the page budget estimate back to 7500. As a result, currently the projected surplus is $25.2K for 2012.

Aylin reiterated that budget estimates are updated every quarter based on forecasts. The society is being conservative in operations in order to end up with a balanced budget. Committee expenses have been modest and deserving. Due to increasing disk space needs, we now have a new contract of web hosting. Our Distinguished Lectures (DL) program has seen healthy growth. Raymond Yeung, Young Han Kim, and Emre Telatar have been/are being scheduled for visits. Aylin showed the detailed breakdown of the budget leading to the projected surplus. She is hopeful for a balanced budget for 2012. In general, Aylin proposes that the society should aim for a healthy surplus, so that the funds can be used for initiatives.

Continuing on to the 2013 budget, the first pass on the budget was done in May 2012. An increase of the page budget to 8000 was requested and incorporated into the budgeting. No modification in the membership fees, subscription fees, etc, has been requested. Currently in the process of evaluating the second pass of the budget. Aylin will be working with Denise Hurley on the budget (as the previous analyst Carissa Burkhart is taking a leave).

For reimbursements of committee and other relevant expenses (e.g. DL), please submit all receipts with the completed Expense Form to Alyson Rupp (A.Rupp@ieee.org) with a cc to Aylin.

Conference closing is a process that involves IEEE conference services (we have a dedicated conference analyst). Organizers need to work with the analyst. Closings should be done 3 months after the conference, with a maximum of one year after the conference, beyond which there will be fines.

Aylin will give the next report at ITA 2013.

Frank Kschischang asked about the cost of print subscriptions to the Transactions. Frank asked if there has been an annual increment in the print subscription fee. It's observed that the society currently effectively subsidizes print subscriptions out of the budget. Muriel agreed that this is an important point. Michelle asked whether the issue concerns individual or library subscriptions. Muriel indicated that subsidizing

print subscriptions effectively began about 7 years ago. Aylin indicated that the costs may continue to climb. Nick asked for further details on this. Elza asked whether other societies also subsidize print subscriptions. The answer is yes. Nick indicated that the break-even cost of print subscriptions will climb as fewer people subscribe. Michelle indicated that these costs may not climb linearly. Muriel suggests that print subscription costs are high (including paper, mailing) and differ according to where you live. Elza raised the issue of whether people will continue to be society members if print copies become too expensive to obtain. **To Do**: Aylin will propose an increase in price for print subscriptions.

Aylin mentioned that for DL program, the upper limit on reimbursement had been set at $2000 per trip. She mentioned that there are now requests for more than $2000 per trip. Gerhard pointed out that the annual budget for the DL program is $25K, which can be allocate among talks. Currently, we have had only 2 DL trips so far for 2012, and 1 scheduled for 2013. So there does not seem to be a problem. Aylin mentioned that a $100K budget is split among committee expenses, the student committee, and reimbursement for the DL program. Frank mentioned that the DL program was never designed to cover all trip expenses. Chapters are expected to share the cost. $2000 per trip is guidance to the chapters for budgeting. Nick asked how the surplus from the $25K DL budget is being spent. Aylin replied that the unspent part of the $100K budget yields the surplus. However, she said that there are always unexpected budget items which arise.

4. Muriel presented the President's Report. The major items concern publications. The items consist of the report of the ad hoc committee on the growth of the Transactions, the report of the ad hoc committee on the production cost of the Transactions, scope of publications, and new proposed position of vice president of publications. This is followed by the review process update and updates on other activities.

With respect to the review process, input is being gathered and activities coordinated among officers committee members for the review at the TAB meeting in November, which will be very thorough. We should expect much feedback from that meeting. A document will be sent around to BoG members for comments. Covered areas are purpose of society, strategy and operations, conferences, publications, and education, membership, finance, governance.

In other activities, the ad hoc committee on outreach and education will present its report. A committee on the Tom Cover Dissertation Award has been formed, with Sergio and Giuseppe co-chairing. The award will be formalized and put into the bylaws.

Question from Abbas about the ad hoc committee on chapters and membership. Muriel answered that it has been established. **To Do**: Muriel will check on the level of activity for this committee and report at the next meeting.

5. Bylaw changes

Muriel moved next to present proposed changes in the Bylaws for 2012, prepared by Giuseppe Caire.

First item. Proposed change to Article V: Standing Committees. Article 7 (Publication Committee). Add: "The Senior Past President of the Society shall serve as Vice President of Publications."

Muriel recapped the discussion from last BoG on this issue. There is a need for someone independent from the Publications Board to handle appeals above the EiC. Although these appeals occur very seldomly, there is a need to address this issue from a governance point of view. The proposed position of VP of Publications shall handle such appeals. Assigning this to the Senior past president should not constitute a burden, since the incidences of appeals are very few.

Andi Loeliger indicated that this is fine if it works as intended. However, could the role of the VP of Publications be interpreted differently in the future? Frank responded that the executive task list will indicate the role to be played by the VP of Publications, and so the limited scope of the role should be clear. The position is not intended to be the boss of the EiC.

Motion: approve change to Article V, Article 7. Motion was passed.

Second item. Proposed change to Article VII: Awards. Section 3 (The Information Theory Society Paper Award). Add: "No paper previously selected for an ITSoc paper award or a Joint ITSoc/ComSoc award shall be eligible for the ITSoc paper award. Normally in a given year one paper will be selected, but in exceptional circumstances up to two may be chosen. The committee may also decline to make any award, if they decide that no suitable paper has been nominated."

There is much discussion on the first sentence. Elza noted that the first sentence is vague. Alon asked why we would disallow a paper which has won the student paper award from winning the ITSoc paper award. Muriel indicated that this is currently possible. David said that as a general rule in the IEEE, winning a lower grade award should not preclude a paper from winning a higher grade award. Gerhard suggested that the first sentence be changed to "No paper previously selected for THE ITSoc paper award or a Joint ITSoc/ComSoc award shall be eligible for the ITSoc paper award." This would remove all ambiguity. Abbas, however, suggested that this would be redundant.

Michelle suggested that the first sentence be changed to "No paper previously selected for THE Joint ITSoc/ComSoc award shall be eligible for the ITSoc paper award." David then raised the issue of what happens if the Joint ITSoc/ComSoc award is being decided at the same time as the ITSoc paper award. In that case, under the proposed change by Michelle, the outcome would be somewhat random. Gerhard suggested that if this happens, then the ITSoc paper award can be decided at an earlier date. Muriel pointed out that since the First VP is ex officio on both award committees, there is actually little room for randomness. She also pointed out that the timing of the ITSoc paper award is well defined in the Bylaws. However, the deadlines for the Joint ITSoc/ComSoc award can be changed. ComSoc does not have the timing in the Bylaws. David suggested that "previously" is vague and should be changed to "in previous years." Muriel suggested that the First VP should be able manage both awards so that one paper does not get both awards. Abbas suggests that the text should read "No paper shall win both the ITSoc paper award and the Joint ITSoc/ComSoc award." Aylin asked whether one paper can win both the student paper award and the ITSoc paper award. Ubli asked whether a paper can win a pure ComSoc paper award and win the ITSoc paper award. Gerhard responded that no previous winner of a purely ComSoc award (at the same level) can win the Joint ITSoc/ComSoc award. However, winning a lower level ComSoc award does not preclude winning the joint award.

Motion: Paul suggested that due to the potential complexities involved, we should table the issue of whether to change Article VII: Awards. Section 3 (The Information Theory Society Paper Award), and let the awards committee chair further the discussion. The award committee chair is asked to return a carefully worded change to the BoG. Motion was passed.

Third item. Proposed change to Article VII. Awards. Section 3 (The Information Theory Society Paper Award). Add: "An open call for nominations for this award shall be published in the Newsletter, with a deadline of March 15."

Motion: approve change to Article VII, Section 3. Motion was passed.

Fourth item. Proposed change to Article VII. Awards. Section 3 (The Information Theory Society Paper

Award). Amend: "By March 1, the Publications Committee Chair or designee shall forward to the Awards Committee Chair a list of at least five articles, published in the previous two calendar years, for the consideration of the Awards Committee. Each nomination shall be accompanied by a statement outlining the contribution of the paper."

Motion: approve change to Article VII, Section 3. Motion was passed.

Fifth item. Proposed change to Article VII. Awards. Section 7 (ISIT Student Paper Award). Add: "This author must be a registered student of an educational institution at the time of paper submission to be eligible for this award."

Gerhard pointed out that the change is necessary since it is not enough to be a student of life.

Motion: approve change to Article VII, Section 7. Motion was passed.

Sixth item. Proposed change to Article VII. Awards. Section 7 (ISIT Student Paper Award). Replace: "The ISIT TPC shall select between 8 and 12 eligible papers as finalists and notify the authors accordingly." to "The ISIT TPC, or a committee formed by the ISIT TPC, shall recommend between 8 and 12 eligible papers as finalists to the Awards Committee Chair. The Awards Committee Chair shall select up to 6 of these papers as finalists and notify the authors accordingly."

Gerhard pointed out that currently the award committee reduces the list of candidates from 8-12 to 6. 3 can win in the end. Abbas asked whether we can leave it to the committee to decide how many are awarded. Gerhard pointed out that in the two previous years, the committee wanted to award more than 3. Paul suggests that this discussion is beside the point right now. We can revisit the number awarded at a later time.

Motion: Gerhard moves to put this proposal back to committee, and then after further deliberation, it will be presented to the BoG. Ubli suggests that the issue of how many to award is separate. Motion is seconded. The motion did not pass.

Motion: approve change to Article VII. Section 7. Motion was passed.

Seventh item: Proposed change to Article VIII. Confidentiality and Conflict of Interest. This is a new article, introduced after the discussion on confidentiality and conflict of interest (CoI) started at the BoG meeting at ITA February 2012. Muriel read the text of the new article to the BoG. The text is provided in the draft Bylaws-2012 document, available on the BoG website.

Summary of the text: it was decided to define confidentiality and CoI general guidelines and definitions, while leaving the various committees and TPCs some latitude in how to manage specific cases. This approach is motivated by the fact that a strict and detailed set of rules may be too restrictive for a relatively small and collegial scientific community like ours.

David asked whether we should give specific examples of relationships which could be construed as CoI. Muriel said that it would be difficult to give examples which covered all cases. Certainly, examples would include same institution, teacher-student relationship, and others. There is a deliberate decision not to make things too precise. Abbas pointed out that each committee member should be aware of his/her potential CoI. Michelle suggested that declaring potential CoI is at first a committee member's responsibility. This gives others a chance to evaluate potential problems and whether there is apprehension of bias. Muriel pointed out that at the end of the day, these are normative expectations. In general, it is hard to

codify everything. This proposed change represents the first step toward codification. It's a substantive step. Our sister societies in the IEEE are undergoing the same process right now.

Paul asked who drafted the CoI statement. Muriel said it was the junior past president. Gerhard recounted the history: at the Paraty meeting, Frank put together the text. Paul noted that the text is very well written. He asked whether we should seek further validation from the IEEE CoI office. Abbas asked Frank about the process of gathering information. Frank said that a main source is the IEEE Code of Conduct. Frank believes that even minor CoI should be declared. Others can dismiss the concern if they think it's okay. David was still concerned about the lack of specific examples of CoI. These would be useful as guidance to individuals. Muriel indicated that the IEEE Code of Ethics exists and can serve as a guideline for individuals. We can include an explicit pointer to the IEEE Code of Ethics from our website. Gerhard said that it is very hard to spell out all possible CoI examples. Abbas added that spelling everything can actually go in the wrong direction in the sense that if a potential issue does not appear on the list of examples, then the person concerned may not feel obliged to mention it, even though it may be a problem. Martin pointed out that CoI is a very important issue. David checked the IEEE Code of Ethics and found no specific examples. Frank mentioned that we could include the NSF guidelines on coI. But these should be included in the officers' task list rather than in the Bylaws.

Motion: approve change to Article VIII. Confidentiality and Conflict of Interest. Motion was passed.

6. Proposal: Naming and Endowment of the ISIT Student Paper Award

Paul Siegel gave a presentation on the proposal to rename the ISIT Student Paper Award in honor of Jack and Toby Wolf. The renaming is to be accompanied by a funding campaign to endow the award (with the idea of possibly increasing the amount of the award). The Bylaws would be amended accordingly. Paul noted that Jack Wolf's profound contributions to information theory and the IT Society have been recognized with some of our most distinguished awards (IT Paper Award, Claude E. Shannon Award, Aaron D. Wyner Distinguished Service Award). He also noted that Jack was passionate about teaching and mentoring of students. This has been recognized by the UCSD Distinguished Teacher Award and the IT Society Padovani Lectureship. Toby Wolf has also been an important member of the community.

Paul noted that Jack was very proactive in creating mechanisms for recognizing and honoring student achievement. Examples of this include endowment of Shannon Graduate Fellowship (UCSD), contribution to Schultz Prize for Excellence in Graduate Student Research at UCSD, establishment of a number of scholarships and fellowships at UPenn, and service on the original board of the Marconi Society Young Scholar Award. Jack and Toby were enthusiastic proponents and supporters of the establishment of the IT Societys ISIT Student Paper Award. Renaming the ISIT Student Paper Award in honor of Jack and Toby would be a nice way to recognize the counsel, encouragement, and support they provided to generations of information theorists and electrical engineers. Endowment of the award would ensure its funding in perpetuity. A target of 100K would support 3 lucrative awards or 4-5 awards at current level.

Paul noted that Jack strongly supported the establishment of the student paper prize. There is a good chance of near-term success in fund-raising. For instance, over $1M was raised in 5 months to support the establishment of the Jack Keil Wolf Endowed Chair in Electrical Engineering at UCSD last year. The fund can be managed by the IEEE Foundation ($20K minimum). In terms of next steps, the BoG is asked to vote to approve the renaming of the award and the endowment campaign for funding it. It is proposed that an ad hoc committee be formed to address the following issues: the method of informing Toby and others, the timing and venue to publicly announce the naming, the identification of the fund-raising coordinator, and the Bylaw revision.

Following Paul's presentation, there was discussion. Abbas asked whether the student paper award has the prestige to warrant a name such as Jack Wolf. He would like to see the society add to the number of awards, rather than merely renaming. It is noted that Alex Vardy emailed in support of the proposal. Michelle Effros voiced her enthusiastic support. David Tse suggested that efforts should be made to make the student paper award more prestigious. The question is how. Ubli Mitra suggested that Jack would have been very enthusiastic about endowing the award. Ubli also mentioned that there won't be a dearth of names for other awards. Gerhard indicated that the BoG should give a charge to the ad hoc committee addressing this issue. Aylin mentioned that the IEEE Foundation is the right venue for managing the fund. They are eager to work with the IT Society on such matters. Alon suggested that the prestige of the student paper award will increase over time, with increased selectivity and monetary award value. Muriel asked how large the ad hoc committee should be. Paul said perhaps three. Abbas agreed that the formation of an ad hoc committee is a good idea.

Frank suggested that the ad hoc committee should be formed first, and then after deliberations, a motion can be made to rename the paper award. Michelle and Andi Loeliger agree. The conclusion is that Muriel will form the ad hoc committee with Paul being the chair. The committee will then consider the proposal presented by Paul. There is therefore no need to vote at present.

7. Martin Bossert presented the conference committee on behalf of Bruce Hajek. The only item for discussion is whether IT Society will support NetCod 2014. Muriel mentioned that Daniel Lucani has sent a message indicating that he will make the proposal for supporting NetCod 2014 at a later BoG meeting. Martin indicated that there are no other issues for discussion at present.

8. Report of the Ad Hoc Committee on the Future of IT Transactions

Frank presented the report. The ad hoc committee consisted of the following members: Helmut Bolcskei, Emmanuel Candes, Abbas El Gamal (Chair), David Forney, Bruce Hajek, Frank Kschischang, Madhu Sudan, Alexander Vardy.

The committee charge mentions that "The IT Transactions is the premier publication in the field of information theory and ranks among the top IEEE publications in terms of the number of citations and eigenfactor. However, the size of the Transactions has been steadily growing in recent years, which raises the questions of whether this growth can be managed, and whether it is hurting quality. Furthermore, the Transactions has not been attracting the best papers in closely related fields, such as cryptography, complexity, learning, quantum information, and network science."

Some specific questions that the committee was asked to address are (1) Has this growth indeed hurt quality compared to an absolute standard or top journals in cognate fields (e.g., computer science, statistics, operations research, mathematics, and physics)? (2) How have leading journals in these cognate fields managed size and growth? (3) Has this growth compromised the value of the Transactions to its readership (e.g., in timeliness or browsability)? (4) In general, how is the Transactions viewed by its readership broadly defined? (5) What actions, if any, need to be taken to ensure the future of the Transactions as a leading journal in the information sciences?

The committee conducted over 25 interviews with select group of researchers in IT and cognate fields, collected relevant statistics and policies about leading journals in cognate fields, and held six conference calls and one face-to-face meeting at ISIT 2012 to discuss results and make recommendations.

With respect to question (1), the committee found that T-IT still publishes the best papers in its field, but average quality has slipped, due to inclusion of more average papers in traditional core areas. For question

(2), it is found that measures include page limits, spin-off of new journals, more fast-rejects, use of on-line supplements, and all-electronic publication. For (3), it is found that browsability is not an issue because journals are nowadays searched, not browsed. Few comments were made about timeliness. For (4), it is found that T-IT is best journal in its field, more prestigious than any other IEEE journal. T-IT is the most mathematical of the IEEE journals (except possibly T-AC). It is more concerned with technical virtuosity than with impact. The quality of papers ranges widely, and therefore it does not give the quality stamp that other journals and conferences (e.g., FOCS, STOC) do. For (5), it is found that there is little or no sentiment for splitting the Transactions, spinning off new journals, or narrowing the scope. Some actions are under way: raise minimum acceptance threshold, reject incremental papers, avoid special issues. Some discussion items: IT does not have mechanism for pointing out the papers that everyone should read, either in T-IT or ISIT. Other fields have highly selective journals or conferences. Perhaps we should start a magazine along the lines of the Signal Processing Magazine.

Summarizing journal policy, it is noted that no other journal in our survey is contending with the growth that we are. Other IEEE journals have had success with instituting Senior Editors. *Physical Review Letters* (PRL) is an interesting model of a highly selective journal. It features short papers announcing major results from all branches of physics. It is widely read and one of most prestigious journals in any scientific discipline. The *Journal of Machine Learning Research* (JMLR) provides an interesting model for an online, open access journal. It was formed in 2000 by Kluwers Machine Learning Journal editorial board. It has a large staff of associate editors, and separate large editorial and advisory boards, with many top people. The journal makes commitment to rigorous yet rapid reviewing, with final versions of papers published electronically immediately upon receipt. JMLR also maintains an archive of open-source software for machine learning.

It was observed that growth up till 2011 followed 2006 ad hoc committee prediction of 11% per year (8000 pages in 2011). Growth beyond 2012 is difficult to predict, but exponential growth is expected to continue. The committee recommends that we (1) maintain current fast reject rate of about 30%, (2) reject incremental papers (EiC is already implementing this), (3) AEs should take more active role in ensuring that papers are not too long relative to their content, and (4) curb special issues.

Preliminary recommendations on improving operations include (1) move toward hierarchical editorial board with senior editors (similar to other IEEE Transactions); (2) blind AE fast reject should be left to the discretion of EiC; (3) implement some forms of reviewer rewards and penalties. The committee endorses publishing a list of good reviewers every year. Whether to implement or not is left to the EiC; (4) The current editing performed by IEEE Publishing is too costly and of marginal quality. We should explore alternatives. (5) T-IT evolution to all-electronic publication should follow IEEE lead; (6) The committee endorses the arXiv-based approach to open access and recommends continued monitoring of developments in this area; (7) EiC should submit his/her best estimate of page budget for the current and following year to the ITS officers every three months.

Preliminary recommendations on improving visibility include (1) monthly Table of Contents should be sent in a push email to all IT society members and anyone else who requests it (IEEE can do this, for $600/month!); (2) BoG should set up a committee to study conversion of IT Newsletter to on-line, and potentially its evolution to on-line magazine; (3) publication of review and discussion papers in the T-IT; (4) a more active T-IT website, perhaps including discussions of current papers.

On highlighting quality, some interviewees pointed out that IT has no highly selective venue (e.g., STOC/FOCS, Science/Nature/Physical Review Letters). The following ideas are proposed for the BoG to explore. (1) Highlighting EditorsChoice papers. (2) Comments on current papers. The idea would be to solicit paper

reviews, which would appear in some ephemeral but timely medium, e.g., IT Newsletter, IT website, or an IT blog. (3) Announce IT Prize Paper Finalists. This would be a formal responsibility of the Awards Committee. (4) Divide the T-IT into Part A (top) and Part B (archival) papers. No consensus on how to do this could be reached. (5) New, highly selective, interdisciplinary journal in the information sciences. The committee enthusiastically recommends IT Society support of the committee that has been created to explore the feasibility of such journal.

A working group consisting of E. Candes, G. D. Forney, Jr., M. Sudan, and M. Vetterli was formed to further discuss the possible creation of new journal of information sciences. It is noted that other fields have journals (Science, Nature, PRL) where the very best work is highlighted. We don't. Within the information sciences, there is much interest in understanding developments in related fields. We lack good means of doing so. Preliminary suggestions include (1) core scope should include mathematically-grounded information sciences areas (theoretical CS, IT, statistics, signal processing, etc). (2) Title of the journal would probably include the word information. (3) The sponsor would preferably be new nonprofit organization. (4) Modest funding from government, industry, and universities. (5) Endorsement (probably without financial support) of societies, e.g., ACM, ITS, SPS, SIAM, IMS, AMS, INFORMS, with no dominant community. (6) Online, open-access model along the lines of JMLR is attractive. (7) If online journal were successful, it shouldn't be hard to find publisher for subscriber-supported print version (a la Nature/Science). (8) Journal includes both original research and survey articles. As a minimum, articles understandable by readers in related fields. (9) Science, Nature, and PRL require articles to be short (perhaps with supplementary on-line material). Is this the right policy for this journal? Do we expect authors of original research papers to publish full versions elsewhere?

Following Frank's presentation, there was much discussion. Gerhard asked whether junior faculty were interviewed for the committee study. Frank reiterated that the growth of special issues may have led to decreased quality. He mentioned that some associate editors (AEs) are only channeling papers, and are not reducing paper lengths when it's necessary. Helmut pointed out that the growth in page counts has exceeded the growth in number of submissions, meaning that paper lengths are indeed increasing. Paul suggested that carefully conceived special issues are of value. David mentioned that AEs are currently not anonymous, whereas reviewers are. Should AEs also be anonymous? Frank asked whether fast rejections should be done blindly. Abbas suggested that authors should be told to remove preliminary background in their papers, thereby reducing paper lengths. Helmut mentioned that he will be instituting a policy whereby derelict reviewers will have the printing of their publications delayed.

Abbas asked how we should move forward on the presented committee recommendations. He suggested that the pushing of the Table of Contents (ToC) could be a motion. Aylin asked whether the IT website can handle the table of contents. Abbas felt that this is not sufficient. Nick mentioned that IEEE publishes the contents of journals, and has a RSS feed if you subscribe. Muriel pointed out that whether we want to push the ToC, and how we want to push the ToC, are two separate issues. Gerhard suggested that we give the issue to the online editor for consideration. Frank suggested that we could post on the IT website instructions on how to subscribe to the IEEE RSS feed. Abbas reiterated that we need to push the ToC more actively. Muriel suggests that the online committee should work further on this issue. **To Do**: Matthieu will have the online committee look further into the issue.

The issue of whether to move to a hierarchical structure for the editorial board, with senior editors supervising AEs, was raised. Helmut indicated that he was not in favor of this. It is widely agreed that the newsletter is widely read. Abbas asked whether we should make the newsletter available online in html form. Aylin suggested that perhaps the newsletter should be entirely online, saving printing costs of 25K per year. Frank suggested that we should list the top downloads of articles in the Transactions on the

website.

Muriel raised the issue of whether we should have review and discussion papers in the Transactions. Sergio pointed out that there have been very few review papers over the years. Most of the review papers actually occurred in the special 50th anniversary issue in 1998. Since 2004, the FnT series has served the purpose of hosting review papers. The series promises 5 months from submission to publication. However, Sergio noted that papers are hard to get. It has also traditionally been difficult for IT Transactions to get review papers. Abbas mentioned that discussion papers are different from review papers. Sergio asked for an example of a discussion paper. Abbas mentioned that Annals of Statistics has discussion papers focusing on papers in the same or different issue. Elza asked for clarification. Helmut said that occasionally the Transactions publishes comments on other papers. Muriel asked whether we should put discussion papers in the Transactions. Abbas said not necessarily. Muriel mentioned that the computer science community has many discussion papers. She asked whether the online committee can host discussion papers online. Matthieu said that we can link the paper to comments online. One can build a Wiki around a paper. Nick suggested that this effort can be started off by posting online student review papers and summaries from reading seminars. Muriel suggested that the sentiment is to ask the online committee to look into the issue of discussion papers. **To Do**: Matthieu will look into this issue with the online committee and report back at the next BoG meeting.

On the issue of announcing the finalists of the IT paper prize, Muriel pointed out that the number of finalists differs from year to year. Nick mentioned that the finalists for the student paper award are announced on the IT website. Abbas said that we used to list the finalists of the IT paper prize. Muriel pointed out that we need to have a firm definition of a finalist. Abbas suggested that the award committee take action on this issue. Gerhard pointed out that according to the Bylaws, the award committee forwards the three top choices to the BoG. We could simply list these three top choices as the finalists. However, one issue is that papers can be considered multiple times for the award.

On the possible creation of new journal of information sciences, Abbas asked for endorsement or feedback from the BoG. Sergio asked whether the working group which discussed this issue was a subcommittee of the Ad Hoc Committee on the Future of IT Transactions. Abbas answered that this was an informal group. Sergio pointed out that starting new journals is a big deal. We don't want to start mediocre journals. Sergio mentioned a new journal *Information and Inference* edited by Rob Calderbank, David Donoho and others, which seems to have coverage similar to that proposed. Abbas indicated that he did not know about this new journal. Muriel suggested that there seems to be overlap, and that we should understand the situation better before proceeding further. Ubli mention that *Information and Inference* provides table of contents alerts, free for the first two years. Sergio suggested that one way to go is to start new journals in specific areas of information theory, for instance data compression. This approach was followed by the ComSoc society. But such a step should not be taken lightly. Ubli indicated that there has indeed been a dilution of importance for IEEE Transactions on Communications since the other ComSoc journals were founded. Gerhard indicated that interdisciplinary efforts are worthy of support, and warrants further investigation. Abbas pointed out that a new journal would not be an initiative from the IT Society alone, but must be supported by multiple communities.

9. Mike Casey from NOW publishers presented a proposal for a joint NOW/IT Society pilot program for LaTeX to XML conversion.

Mike was introduced by EiC Helmut Boelcskei. Mike expressed his thanks to the IT Society for its support of NOW. Mike explained that the NOW production process is designed to make the authors' life easy and costs down. Production is LaTeX-based and fully electronic. NOW currently does not produce

XML, but sticks to PDF. On the other hand, XML gives standardized way of handling journals across different disciplines, makes it easy to switch suppliers and use multiple suppliers, has very competitive typesetting rates. XML also enables output in multiple formats (future proof), makes it easy to publish content piecemeal. But it can be expensive, and cumbersome, particularly for mathematics. Perhaps most importantly, XML is being driven by the growth in hand-held devices.

Mike then explained XML in detail. XML is an extensible mark-up language and successor to SGML. In short, "HTML describes the way Web pages should appear in a browser. XML describes objects that are interchanged for Web services, electronic commerce, distributed computing, and other purposes." XML requires a Document Type Definition (DTD) which defines the entities and rules possible within any given XML file. An XML file can be parsed against a DTD for correctness. MathML has been developed for marking up equations.

Mike then presented a proposal for a joint NOW/IT Society pilot program for LaTeX to XML conversion. The goals are (1) determine how feasible (semi-)automatic conversion is; (2) understand and verify the costs; (3) develop an author-friendly environment; (4) develop a work-flow for typesetting-editing-proofing; (5) deliver Full-text XML files, including figures and print ready PDFs to IEEE. The methodology include (1) use standardised LaTeX; (2) use LaTeXML a LaTeX-to-XML conversion tool; (3) parallel process a number of articles; (4) include proofing process with authors. The phases of the pilot include (1) detailed scoping and budgeting; (2) prototype and conversion; (3) define stylefile for LaTeX (Can the IEEE style be used? Does it need adaptations?) (4) prototype workflow; (5) test run conversion and workflow on multiple articles in parallel production; (6) report on findings and proposal for future.

After the presentation, Muriel remarked that pursuing this project requires that authors undertake editing with IEEE in parallel with this project. Authors will therefore have to proofread twice, one for IEEE and one for this project.

10. Helmut Boelcskei presented the EiC report.

Helmut first presented the Aims and Scope statement for the IT Transactions: "The IEEE Transactions on Information Theory publishes papers concerned with the transmission, processing, and utilization of information. While the boundaries of acceptable subject matter are intentionally not sharply delimited, its scope currently includes Shannon theory, coding theory and techniques, data compression, sequences, signal processing, detection and estimation, pattern recognition, learning and inference, communications and communication networks, complexity and cryptography, and quantum information theory and coding. IEEE Transactions on Information Theory papers normally contain a strong conceptual and/or analytical contribution."

Next, Helmut presented further comments from the five-year review. These included (1) Do we want to formalize the appeals procedure and put it in writing? (2) Should authors be given a chance to appeal the EiCs final decision to the IT Society president? or to a VP Pubs? (3) Formalize Transactions reporting structure, how to assess needs of readership, guest editors, duties of EEB members, EiC training, AE training, AE reappointments.

Helmut then discussed the production process for IT Transactions papers. Currently, IEEE converts Latex (and Word) sources we submit first into XML and produces galleys based on the resulting XML. The final XML (after consultation with authors) is then used to produce .pdf and HTML. If we adopted a production process where the editing is not done by IEEE, then one can go directly from Latex to pdf, but it turns out that IEEE still produces XML in parallel and (since the editing would not be done by IEEE), authors

do not get to comment on the XML. Thus, the XML produced is not trustworthy. Currently ComSoc produces pdf only using editing outside of IEEE. IEEE currently funds conversion of ComSoc articles to XML, but authors do not get to comment on the XML. By the end of 2013, ComSoc will have to comply with the process currently applied to IT and most other IEEE societies.

Moving on, Helmut discussed the option for "moderate editing" of IT Transactions papers. Thus far, this was not an option for us because the quality of the math editing would not have been acceptable for Trans. IT. Now, however, IEEE is offering a Trans. IT-tailored light editing option that keeps the quality on the math editing. Compared to process so far, the difference is that the main body is not edited for grammar, punctuation, spelling, and style (abstracts and bios are). Going to light editing would save us $100-110K per year. In terms of editing for grammar, punctuation, spelling, and style, IEEE recommends an out-of-house service costing approximately $350 per paper. A cheaper option is available through NOW (Mike Casey). If light editing is adopted, AEs would have to decide whether a paper needs editing before it is approved for publication. As a result, the quality of typesetting may reduce, e.g., timid AEs maybe reluctant to force authors to have their papers edited. AEs may not pay attention to this, and authors may be recalcitrant. We have a need to balance our budget, but the surplus goes to IEEE anyway. Thus, the EiC would advise against switching to light editing.

On the issue of Latex to XML, Helmut mentioned that turning in XML instead of Latex would save us $2.5 per page. IEEE is working on a Latex to XML compiler. But we are not sure what the process is. Helmut believes that it makes sense for us to explore the development of a Latex-XML compiler. We are likely to come up with a better solution than the IEEE. We would have to clarify with the IEEE first if we could use the results of this project within IEEE. It is also possible that we can get a larger discount than the $2.5 per page, ITSoc president would have to negotiate this.

Following Helmut's presentation, there was much discussion. Helmut mentioned that IEEE Xplore downloads make us a lot of money. If we went away from IEEE editing, then IEEE may change Xplore download rates. Muriel pointed out that ComSoc, which is not using IEEE for editing, gets the same download rates as us. There is no negotiation on this. David wanted to verify this. Helmut suggested that in general, going away from IEEE editing is a complex process, a project not to be taken on lightly. Frank suggested that we can split the paper stream into two parts. Most papers don't need heavy editing. A small fraction does. However, it's not clear whether IEEE will allow us to split the paper stream. Andi suggested that we ask. Aylin suggested that light editing would still involve the IEEE, but the resulting savings can be used within the society (we don't have to give it back). For instance, signal processing society has moderate editing with the IEEE. Why not go with that? Helmut answered that we may have to put up with 10 percent of the papers with bad English. Muriel suggested that we hire English editors. Helmut pointed out that AEs would have to pay attention to which papers require English editing. Muriel suggested that $100K in savings would mean a large reduction in conference registrations. We should not let most of the nicety subsidize poor English. Helmut suggested that perhaps the EiC, and not the AEs, should decide which papers have bad English. Frank remarked that we should be careful about loading the EiC. Gerhard asked how we can curb growth in costs due to growth in pages. Helmut pointed out that the page explosion is due to a rise in acceptance rates. Muriel asked whether we can hire part-time professional editor. Gerhard said that the publications editor should do this. Muriel said that we should have the publications editor decide which papers need English editing, hire English editors, and adopt the light editing option.

Andi suggested that we approve the project proposed by Mike Casey. It's possible to sponsor such projects by tapping into reserves up to 3 percent. The project will have to be formally proposed. How will it impact our budget next year? Muriel suggested that the XML project is more long term. We can obtain lower costs with light editing now. **To Do**: Helmut agreed to further investigate possibilities for English editors

and the IEEE light editing process.

Muriel said that due to time constraints, the report by the outreach committee by Michelle Effros will be tabled until next meeting. Michelle has put up the presentation on the IT website. Perhaps the next meeting can take up this issue first.

Muriel thanked the outgoing BoG members, Martin, Frank, Andi, for their service. She said it has been a honor to serve as President of the IT Society this year.

The meeting was adjourned at 7 PM.