1 Transitions between EiCs

July 1st, 2013 Ioannis Kontoyiannis

Nov. 1st, 2013 Helmut Bölcskei

Dec. 16th, 2013 Frank Kschischang

Ioannis Kontoyiannis stepped down from the EiC position at the end of October, 2013. The previous EiC, Helmut Bölcskei, very kindly stepped in as interim EiC to keep things running. (Thank you Helmut!) My term started on December 16th, 2013. I am grateful to be working with a fantastic and supportive Executive Editorial Board (EEB) comprising Dave Forney, Prakash Narayan, Vince Poor, and Shlomo Shamai. This EEB has agreed to continue until mid-2014.

2 Associate Editor Transitions

No new associate editors had been appointed since February, 2013. The Board approved a large slate of new associate editors that started in January 2014, namely:

<table>
<thead>
<tr>
<th>Name</th>
<th>Area</th>
</tr>
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<tbody>
<tr>
<td>Avestimehr, Salman</td>
<td>Communications</td>
</tr>
<tr>
<td>ten Brink, Stephan</td>
<td>Communications</td>
</tr>
<tr>
<td>Chen, Jun</td>
<td>Shannon Theory</td>
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<tr>
<td>Chung, Sae-Young</td>
<td>Shannon Theory</td>
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<tr>
<td>Liu, Tie</td>
<td>Shannon Theory</td>
</tr>
<tr>
<td>Nair, Chandra</td>
<td>Shannon Theory</td>
</tr>
<tr>
<td>Permuter, Haim</td>
<td>Shannon Theory</td>
</tr>
<tr>
<td>Pradhan, S. Sandeep</td>
<td>Shannon Theory</td>
</tr>
<tr>
<td>Simeone, Osvaldo</td>
<td>Communications</td>
</tr>
</tbody>
</table>
The term of Michael Elad (AE for Signal Processing) ended in October, 2013, and the term of Venkatesan Guruswami (AE for Complexity and Cryptography) ended in December, 2013. The terms of Alexei Ashikhmin, David Burshtein, Nicolò Cesa-Bianchi, George Moustakides, and Yasutada Oohama will expire at the end of February, 2014. Thus I will soon present the BoG with a new slate of AEs to replace these outgoing ones.

The Editorial Board currently includes 40 AEs. Papers arrive at a rate of roughly 1200/year, giving an average load of 30 papers per year (unfortunately, not uniformly distributed at the moment).

3 Transition from Pareja to ScholarOne

By mid-December, 2013, all papers formerly hosted on Pareja had been transferred to ScholarOne. This was accomplished by much hard work from Helmut, Lisa Jess at IEEE, but most particularly, Michael Lerjen at ETH Zürich. The society owes a big debt of gratitude to Michael, and I would like to suggest that the President send him a letter and an official IEEE Certificate of Appreciation in recognition of his valiant efforts.

4 Transition to Moderate Editing

In December 2013, the Transactions moved from being a “fully edited” journal to “moderately edited” one. Under “moderate editing,” IEEE includes editing of abstracts, authors’ biographies, art captions; IEEE performs an automated spell check, validates references, and checks accuracy of article metadata; and IEEE allows for author proofs and alterations. Excluded is editing text for grammar, punctuation, spelling or style.

As Gerhard Kramer reported in his President’s Column in the December 2013 Newsletter, this change reduces IEEE page charges from $57/page to $37/page (and reduces publication costs from $100/page to $80/page). As Gerhard reported, a side effect of this change is that authors may be required to pay for further editing of their paper when the Associate Editor handling the paper deems it necessary. This policy has not yet been implemented — the current status is that all published papers are produced from the final electronic typescripts supplied by the authors.

\[1\text{Can be ordered through IEEE.}\]
5 Transition to Page Charges?

Our Treasurer will be able to comment more fully with actual numbers, but it seems that in 2014 our Transactions is expected to bring a subscription/IEEEnote gross revenue to the Society on the order of $920K, at an expense of about $680K to produce and deliver (8500 pages at $80/page), resulting in a net revenue of around $240K. Had we remained at $100/page with fully editing, this income would have been reduced (by $170K) to just $70K.

On the other hand, historically (since 2008), the Transactions has produced a net revenue between $300K to $400K, so this year’s $240K is low by comparison. We could bring the net revenue to $340K, say, by reducing the number of pages from 8500 to 7250. This could be done by reducing the average page-count from 14 pages/paper to 12 pages/paper.

Fig. 1 shows the histogram of pages printed per article over the last three years and tabulates some statistics.

![Histogram of Transactions pages per item for 2011, 2012, and 2013 (the latter up to November only).](image)

<table>
<thead>
<tr>
<th>year</th>
<th>50th</th>
<th>66th</th>
<th>80th</th>
<th>90th</th>
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</thead>
<tbody>
<tr>
<td>2011</td>
<td>13</td>
<td>16</td>
<td>19</td>
<td>23</td>
</tr>
<tr>
<td>2012</td>
<td>14</td>
<td>16</td>
<td>19</td>
<td>23</td>
</tr>
<tr>
<td>2013</td>
<td>14</td>
<td>16</td>
<td>20</td>
<td>24</td>
</tr>
</tbody>
</table>

Figure 1: Histogram of Transactions pages per item for 2011, 2012, and 2013 (the latter up to November only).

Should page charges be imposed for papers having a length exceeding some threshold, say \( N \)? This might cause authors to modify their behavior so that they simply don’t write papers longer than \( N \) pages. For the 2013 distribution of paper lengths, replacing a paper of length \( L \) with one of length \( \min(N, L) \) results in the following table of expected values and revenue gains (assuming 600 papers published):

<table>
<thead>
<tr>
<th>( N )</th>
<th>( \infty )</th>
<th>24</th>
<th>20</th>
<th>18</th>
<th>16</th>
<th>15</th>
<th>14</th>
</tr>
</thead>
<tbody>
<tr>
<td>( E[\min(N, L)] )</td>
<td>14.2</td>
<td>14.0</td>
<td>13.6</td>
<td>13.2</td>
<td>12.6</td>
<td>12.2</td>
<td>11.8</td>
</tr>
<tr>
<td>( \Delta ) (K$)</td>
<td>0</td>
<td>7.6</td>
<td>29.3</td>
<td>48.4</td>
<td>75.6</td>
<td>93.5</td>
<td>115</td>
</tr>
</tbody>
</table>
Thus, for example, setting $N = 16$ might reduce production costs by about $75K. These savings do not include additional revenue that overlength page-charges may generate.

It is possible to publish items electronically (i.e., on IEEE Xplore) that do not appear in print. This suggests an interesting possibility: namely to create an electronic-only Supplements to IEEE Transactions on Information Theory, in which additional material associated with a paper (e.g., proofs, tables, graphs) might be published. Production of such material would not be “free,” but could be produced at, say, $65 per page (assuming the same creation costs as regular Transactions pages, excluding printing and distribution). If the trial TEX-to-XML project reaches fruition, these costs might be pushed down quite substantially, though not to zero. This merits further study.

I seek the advice of the Board on the issue of page charges. Is the financial stability of the Transactions sufficiently at risk to justify imposition of such a significant change to our existing very liberal policy?

6 Transition to a New Editorial Board Structure?

The operational structure of the Transactions currently has a single point of failure: the EiC. Should the EiC become incapacitated, the handling of papers, and the production of issues, etc., would halt until a replacement could be found. This precarious situation is clearly not desirable.

To address this situation, two models have been (and are being) discussed among the members of the EEB and the Officers of the Society. I will refer to these models as the “Area Editors Model” and the “Shift-register Model.”

6.1 Area Editors Model

This model, adopted by many journals, e.g., IEEE Transactions on Communications and IEEE Transactions on Automatic Control, imposes a tree-structured hierarchy on the editorial board, in which a number of “area editors” or “senior editors” play the role of mini-EiC for their area, distributing submitted papers to a number of Associate Editors for handling. This model was suggested by the Transactions review committee chaired by Alexander Vardy in 2006, and by the Transactions review committee chaired by Abbas El Gamal in 2011.

For example, I spoke with Panos Antsaklis, EiC of the IEEE Transactions on Automatic Control (TAC). TAC also receives around 1200 new submissions per year (or a bit more, if re-submissions are counted). The editorial board includes six “senior editors,” with areas are not explicitly named. Each senior editor handles around 200 papers per year, distributing these to one of 6 or 7 AEs under their purview. The AE handles the review process as usual and eventually writes a decision letter. However, before sending this to the authors, the
decision letters need to receive approval from the corresponding senior editor. The senior editors are also supposed to keep tabs on the AEs to make sure that nothing falls through the cracks. The EiC is not involved in day-to-day paper-handling, but instead is called upon when issues arise (appeals, load-balancing, etc.). The senior editors together with the EiC form the executive editorial board.

Panos seems quite pleased with the setup. He does not carry a very heavy load. The senior editors handle about 200 papers per year, though this varies by area. AEs handle about 30 papers per year, i.e., each senior editor corresponds with about 6 or 7 AEs. I asked if there was a perception that being an AE was somehow “less prestigious” – Panos didn’t think so. The senior editors, though not easy to recruit, are all very senior internationally known people.

The Association for Computing Machinery (ACM) allows for (but does not impose) this type of hierarchical structure in their journals; I have reproduced the ACM description of the position descriptions in the Appendix to the report.

The Area Editors model likely reduces the EiC’s workload by at least a factor of 5.

### 6.2 Shift-Register Model

This model was also called the “EiC pipeline model” by Gerhard Kramer, and corresponds also to a suggestion of Prakash Narayan. Here the idea is to create overlapping EiC terms. In the proposed implementation, there would be two people in the pipeline: an EiC and a past-EiC.

The EiC would be responsible for:

- the day-to-day handling of papers as they arrive, deciding on fast-rejections, and dealing papers out to the AEs.
- oversight of the AEs, sending reminders, etc.
- handling author queries
- reporting to the BoG
- interaction with IEEE and ScholarOne people on the paper-intake review side of things

The past-EiC would be responsible for:

- making up the table of contents for the issues
- approving the first pages of the formatted papers as they are created
• handling appeals
• consulting with the EiC on daily issues that arise
• official thank-yous for outgoing AEs
• interaction with IEEE Publications people on the production side of things

Both people (together with the EEB) would be responsible for:

• appointing new AEs
• special initiatives (e.g., invited papers)
• writing reports and presentations

The natural evolution would be to serve as EiC for 18 months and as past-EiC for 18 months. The technical areas of the EiC could be chosen to complement that of the past EiC (e.g., one in coding theory, one in Shannon theory).

The pipeline model reduces the EiC workload by about a factor of 2.

6.3 Discussion

Clearly there is much to discuss about these two models.

The Area Editors model is well established and has been adopted by many journals in different areas. The EiC’s workload is reduced very substantially, allowing the EiC to focus on strategic initiatives. The risk of a single point of failure is almost completely removed. Indeed, most large organizations eventually organize themselves into such hierarchies.

On the other hand, recruitment of senior editors may become problematic (it is difficult already to get one EiC, let alone six). The standards between different areas may “drift,” and there is a risk that Transactions “devolves” into a number of mini-journals published under a common banner. The apparent “prestige” of AEs may be reduced, also increasing recruitment difficulties. The EiC will definitely be far less “hands-on” (more of a manager) and so may lose insight into emerging trends, and also lose touch with problems that arise in different areas.

The shift-register model already serves the Society very well in the context of succession of Society Officers. It has the advantage of helping to preserve institutional memory. The proposed division of tasks (EiC handles the review process, past-EiC handles the production process) is quite natural. The current structure of the editorial board remains essentially untouched. The level of “prestige” of the AEs and of the EiC remains at present levels.
On the other hand, the shift-register model is untested; I am not presently aware of other journals that have adopted this type of structure. One can foresee that unforeseen issues will arise if this model is implemented.

I seek the advice of the Board on the issue of a transition to a new editorial board structure.

Respectfully submitted,

Frank Kschischang

Frank Kschischang
Editor-in-Chief
A Position Descriptions — Volunteer Editors of ACM Journals

Source: Association for Computing Machinery [http://www.acm.org/publications/policies/position_descriptions](http://www.acm.org/publications/policies/position_descriptions)

A.1 Editor-in-Chief

Appointed by the ACM Publications Board, Editors-in-Chief (EiCs) of ACM journals are delegated full responsibility for the editorial management of the journal consistent with the journal’s charter and general ACM policies. The Board relies on EiCs to ensure that the content of the journal is of high quality and that the editorial review process is both timely and fair. To carry out these duties EiCs have the following authorities:

- To appoint (and to excuse as necessary) Associate Editors (AEs), Information Directors, and Editorial Assistants to carry out the editorial operations of the journal.
- To make final decisions on editorial content.
- To make minor adjustments to the scope of the journal in response to changes in the research community served by the journal.
- To propose significant changes to the scope of the journal to the Publications Board in response to changes in the research community served by the journal.

The EiC is responsible for the content of the journal, normally making all final decisions (i.e., accept, revise, or reject) regarding the disposition of manuscripts. In addition, EiCs have the following responsibilities:

- To ensure that all volunteers are properly trained to perform their duties.
- To perform initial evaluation of submitted manuscripts to ensure that they are properly within the scope of the journal and meet minimum requirements for a research paper.
- To assign manuscripts to AEs to obtain expert reviews.
- To monitor the progress of manuscripts to ensure timely processing.
- To ensure that the review process is carried out with fairness and integrity. In particular, to ensure that procedures for exposing and managing conflicts-of-interest are in place and adhered to.
- To ensure that the editorial management system contains a complete and accurate record of the status and disposition of each submitted manuscript.
- To coordinate with ACM Publications staff to ensure the smooth handoff of accepted manuscripts for publication.
• To manage the annual page budget allocated by the Publications Board, and to work with Publications staff and the Board to address persistent shortages/overages.
• To coordinate with the EiCs of other ACM publications with which there is technical overlap.
• To promote the journal among the community of authors, such as by working closely with the organizers of relevant conferences to develop and maintain a pipeline of quality submissions.
• To cooperate with ACM Headquarters staff in the development of plans and materials suitable for marketing the journal.

A.2 Senior Associate Editor

Senior Associate Editors (SAEs) are Associate Editors (AEs) that have been assigned additional responsibilities and duties by the Editor-in-Chief (EiC) that are substantially above and beyond the typical AE responsibilities and duties. The SAE designation serves to provide recognition of this exceptional level of service and dedication to the publication. This position is optional and created at the discretion of the EiC. Consistent with the intent of the SAE designation, it would be expected that an Editorial Board contain a small number of SAEs in relation to the number of AEs. SAE appointments are made by the EiC, and the duties of an SAE are specified by the EiC. Some example duties might include:

• Taking responsibility for soliciting manuscripts in a particular subarea.
• Assigning papers to appropriate Associate Editors.
• Assisting the EiC in selecting Associate Editors to serve on the Editorial Board.
• Working directly with AEs to ensure a high-quality and timely review process.
• Working closely with organizers of relevant conferences to develop and maintain pipelines of quality submissions.
• Assisting the EiC in creating pools of reviewers dedicated to rapid turnaround of reviews.
• Maintaining and monitoring various statistics on the health and vitality of the journal (e.g., acceptance rates, time to decision, etc.)

The appointment of a Senior Associate Editor must specify the additional duties/responsibilities of the Editor. When appropriate, this information should also be included in listings of the Editorial Board members on the journal’s website.

A.3 Associate Editor

Associate Editors (AE) manage the review process for submitted manuscripts. To carry out these responsibilities, AEs typically perform the following duties:
• Identify appropriate referees, secure their agreement to perform reviews, and ensure that the reviews are submitted in a timely manner, and are appropriate for use.

• Ensure that all potential conflicts-of-interest are identified and properly managed.

• Prepare reports summarizing the main findings of the review process for authors and the EiC.

• Recommend the appropriate disposition of the manuscript to the EiC.

• Ensure that the editorial management system contains a complete and accurate record of the status of each manuscript under their control.

A.4 Information Director

An Information Director appointed by the EiC is responsible for creating, maintaining and updating all information on the journal home page. This position is an unpaid volunteer position. The Information Director is listed on the masthead of the journal. The person suitable for this position might be a junior faculty member, a graduate assistant, or anyone with the necessary web skills. The Information Director must keep the website up-to-date, including making any editorial board member changes in a timely manner.

The Journal home page is located on an ACM server and must contain basic information:

• Editorial Charter

• Editorial Board (including institutions, contact information and areas of expertise)

• Current Issue and Archive (links to the Digital Library)

• Author Information (with link to Manuscript Central submission site)

• Subscription Information

• Calls-for-Papers

Optionally, the Information Director may be assigned other tasks by the EiC related to the journal’s communications portfolio, such as posting Tables-of-Contents and calls for papers to mailing lists, and social media.