Peer Review Dialog Meeting 2011

Chaired by Martin Schaffernicht and Stefan Groesser

This year's meeting had been put into the context of a retrospective look at the past years' proposals and some data concerning submissions, reviewers and rejection. This revision yielded two guiding questions for the meeting:

- 1. How would we like the number of submissions, the number of reviewers and the acceptance rate to be in 2020?
- 2. What shall we achieve at the 2012 conference in St. Gallen, Switzerland?

Bob Eberlein, Peter Milling, Allyson Beall, and Jeff Trailer have attended this year's meeting. We want to thank the attendees for their time and contributions, and especially Bob Eberlein for his detailed explanations and willingness to invest the time required to implement the changes in the society's submission system.

Past and present: talking about reviewing

The dialog started from the observation that a significant number of reviews are informative neither for the thread chair nor for the authors. Despite the fact that reviewers receive guidelines about how to review and advise them to point out the contribution, the strengths and the weaknesses of the submitted paper (to the thread chair) as well as provide productive comments to the authors, many reviewers do not provide such reports.

The dialog then turned to an exchange between two positions; for some, being a reviewer is the task to make sure that poor papers and research are not presented at the conference. For others, the reviewer has in addition the duty to help the authors to improve their papers, which can be seen as one way to support the SD-community. In this context, it was also explained that the conference's policy is to organize an "inclusive" reviewing process which helps members to develop their skills. Even though this dialog did not lead to a consensus, it was important to recognize the variety of interpretations of the tasks of a reviewer.

Close future: concrete propositions

Then concrete measures to improve the reviewing format have been discussed with the perspective to implement them for the 2012 conference.

1. More guidance in the reviewer's form

To improve the guidance of the reviewer form, it will be changed as follows:

- introduce a specific text field in the review system about the **paper's contribution**;
- this field and the questions/suggestions to the authors will be defined as "required" fields, i.e., the review cannot be "submitted" without content in these fields.
- Anyone who submits unreasonable contents in these fields should be excluded from the review system in future or reduced in reviewer grading.

This would lead to more informative reviews (and we would not have to rely onny on the ranking that thread-chairs feed back about reviewers).

2. Authors classify their paper

Authors have to classify their paper as either "application paper" or "methodological paper" in their paper submission form. This would increase authors' awareness about the type of

contribution their paper has; it has also been discussed if there is a possibility to use this classification to assign reviewers to submission (assuming that some reviewers are more experienced in applications and others in the field of methodology).

As explained by Bob Eberlein, the reviewer assignment is currently carried out by an algorithm which would have to be modified. The time required for re-developing the algorithm seems to be too much, and therefore the reviewer assignment will not be changed this time. However, there are times when this automatic assignment has to be complemented and then, Bob could match a reviewer according to paper's classification.

3. Thread Chair meeting at the Conference

It has been argued that it would be productive to have an annual thread chair meeting. Since reviewers only make recommendations, but thread chairs make the decisions about acceptance or rejection, assembling thread chairs, articulate current practices and interact with the program chair and/or pertinent members of the PC was perceived to be productive. According to this argument, such a meeting could be included for the 2012 conference. However, this requires a new meeting with a time slot and someone willing to chair, which has not been defined during our "dialog" meeting. We suggest that the program chair should host the meeting.

4. Awarding the Best Reviewer

Currently, there is no official recognition of outstanding reviewers, and the attendees thought an incentive would underline the importance given to good reviewing. Therefore, it is suggested that at the next conference, a "Best Reviewer Award" should be announced together with the other awards, and be honored with an official certificate.

This poses the question how the winner can be determined. In a first step, the ranking fed back from the respective thread chairs could be used to filter out those reviewers who have highest ranking in all the reviews they have made for this conference. If after this step, there is more than one candidate left, the Program Chair can then deliberate and determine the winner.

5. A proposal to formalize a reviewing steering committee

Reflecting upon the dialog and its topics, we believe this meeting has made two important steps: first, all the attendees were experienced and/or immersed into the leading part of the reviewing system. Second, only a few but actionable recommendations have been made, so that we are optimistic that they will be implemented. Therefore, we think the "Peer Review Dialog Meeting" where everybody (ranging from reviewers to program chair) is invited on a voluntary base, is not the best way to continue.

Since only one of the two guiding questions has been answered, we believe that a voluntary group is not adequate to answer the question about the number of submissions, the number of reviewers and the acceptance rate in 2020. We recommend that the PC, which ensures continuity over the ongoing succession of conferences, should from a committee for this purpose. Two possibilities exist to position this committee:

- 1. VP Meetings: since the ISDC is a meeting, it would relate to the VP meetings.
- 2. VP Publications: the conference also generates the most accessible publication stream about System Dynamics.

We do not know if the paper downloads from the conference website exceed the impact of conference attendance, but as a first approximation, we would suggest this committee as being under the supervision of the VP Meetings.

By creating this committee, the SD-society could formalize the practice of seven years of volunteer peer-review meetings, recognizing that the quality of the reviewing process is a crucial element of the quality of the conference.

As for dedication attention to the reviewers, we believe that the "reviewer and author workshop" – proposed and developed by Stefan Groesser and implemented for the first time this year – is a more promising approach.

To Do List:

- Guidance in the reviewer form, Bob Eberlein, to include in the submission system for 2012;
- Authors classify paper; Bob Eberlein, to include in the submission system for 2012;
- Delete the "Peer Review Dialog Meeting" from the conference schedule; maintain the Reviewer and author workshop" for the 2012 conference.
- Introduce the "Thread Chair Dialog Meeting" into the next conference's planning.
- Introduce the "Best Reviewer Award" for the next conference.

8/5/2011 Martin Schaffernicht, Stefan Groesser

Appendix: The Peer Review Dialog Meeting at previous ISDCs (2005 to 2010)

The Peer Review Dialog Meeting took place at the ISDCs since 2005. The purpose of the meeting is to help improving the quality of papers presented at the conference. Reviewers, thread chairs, program chairs and policy council members have attended the workshop regularly. Thanks to their efforts, many concerns have been expressed, many ideas have been discussed and some practical proposals have been made. Based on the support from the SDS Office, which we appreciate, we have been able to analyze data about submissions, reviewers and rate of rejection from 2005 to 2010. The results show an interesting development.

A. The propositions over the years

There have been many propositions (for a detailed view, please look into the reports below). In order to gain an overview, we have organized them into the following categories:

- Development: topics that concern the general conduction of the reviewing process
- Author guidance: orientation or help specifically aimed at authors
- Guidance (authors and reviewers): orientation or help that would benefit both authors and reviewers
- Reviewer guidance: orientation or help specifically aimed at reviewers
- Reviewer development: aimed at improving the quality of reviewers (and reviews)
- Bad reviewer exclusion: emergency brake

Since the proposals have extensive text, the overview per year had to be separated from the specific wording. Therefore we present two tables and have color-coded the categories in order to facilitate your reading:

Category	2006	2007	2008	2009	2010
Development	1				
	2				
			3		
			4		
Author guidance				5	6
Guidance (authors and reviewers)			7		
		8		9	
				10	
Reviewer guidance	11				
			12		
				13	
				14	
Reviewer development	15	16			
	17				
			18		
	19				
	20				21
		22		23	24
				25	
				26	
Bad reviewer exclusion	27		28		

The numbers in the years' columns refer to the specific propositions, listed below:

- 1 A clear policy with respect to the trade-off between the quantity of papers needed for the conference and the quality
- 2 A clear sponsorship from the Policy Council
- 3 Develop a current understanding of constitutes a good paper and develop a proposal to the policy council to take the issue
- 4 Peer review has to be considered in the strategy development of the society
- 5 Suggested author guidelines
- 6 Indicate what is expected from papers submitted to our conference
- 7 Develop a form about the basic requirements of a conference contribution/paper

8

Each paper should respond "yes" to at least one of the following questions: is it a contribution to SD methodology, SD technique, an application domain, a client' Would presentation benefit the author?

9 For the main types of contributions, specific guidelines should be defined and made available to authors and reviewers as a checklist

10

Papers written about completed research are expected to describe a series of topics (derived from Forrester's view on what can be achieved with an appropriate simulation model; see Forrester. 2007 System dynamics – the next 50 years, System Dynamics Review 23(2/3) 359–370)

- 11 Make reviewing process explicit (purpose, stages, procedures, decision points
- 12 Assess the need for a more detailed review sheet and eventually elaborate the existing
- 13 For the reviewers web-based evaluation form, it is recommended to take the following checklist
- 14 Suggested reviewer guidelines
- 15 Reviewers should be reviewed.
- 16 Reviewers would like feedback about the quality of their reviews to be given to them.
- 17 The programme committee must [..] refute bad reviews (like three-liners) and ban reviewers
- 18 Assess the current state of reviewer stock and quality
- 19 Authors of papers that are accepted with minor or major observations shall evaluate the review's usefulness

20

Reviewers shall have a discussion forum in order to collaborate in their critique of a submitted paper.

- 21 The thread-chair assessments are not fed back to reviewers. It has been suggested that this might be done to give them a signal for future reviews:
- 22 Offer a "reviewer workshop" during future conferences
- 23 There might be an exercise for reviewers
- 24 There might be an exercise for reviewers
- 25 Authors Assess the Received Reviews

26

Enable reviewers to see the reviews of others of the same paper after all reviews have been submitted

- 27 The minimum quality of reviews shall be defined and assessed; formally deficient reviews shall be eliminated and the reviewer will be suspended for one year.
- 28 It should be possible to lay off reviewers

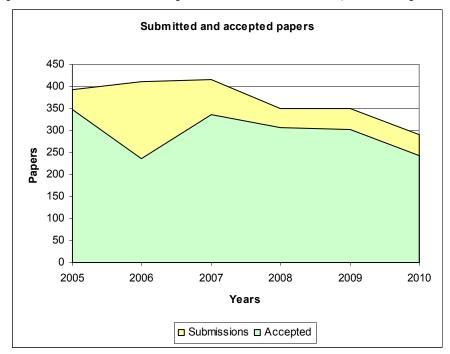
Some propositions have been made more than once. This is explained by the fact that not all propositions became implemented. This, in turn, can have diverse reasons: even though in general, the reports have been welcomed, some propositions can be too expensive (in time, effort or money), or there may be diverging points of view.

One notable proposition which is implemented for the first time this year is the workshop for reviewers and authors.

One notable proposition which still awaits implementation is a mores structured form for reviewers (also useful for authors) which has been greeted after the 2009 report and reiterated in the 2010 report.

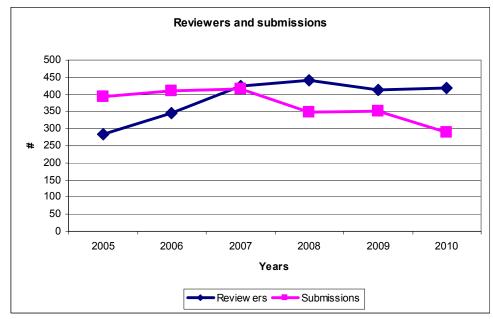
B. Some interesting developments in average data

1. Absolute numbers of submissions and accepted papers have decreased over the years. Visual inspection shows that the acceptance rate has increased (see below, point 3).



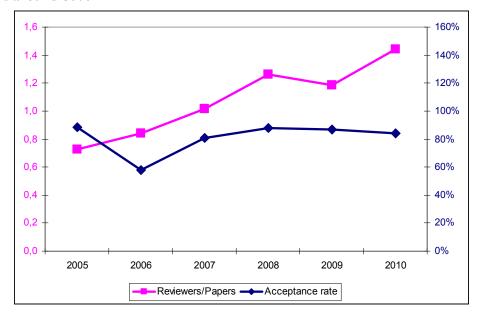
Variable	Years					
	2005	2006	2007	2008	2009	2010
Submissions	393	411	417	349	350	290
Accepted	347	237	336	307	303	244

2. From 2005 to 2007, there were more paper submissions than reviewers. This has changed around 2007. From then on, there are more reviewers than submissions.



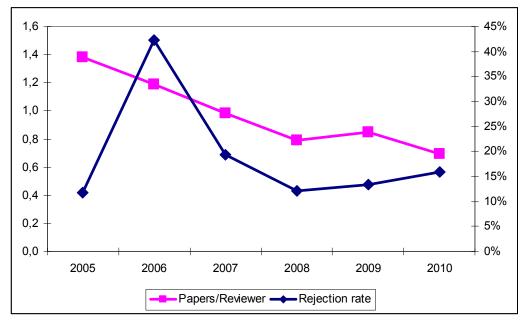
Variable	Years						
	2005	2006	2007	2008	2009	2010	
Reviewers	285	345	423	441	414	418	
Submissions	393	411	417	349	350	290	

3. Even though the rate of reviewers per submissions increases, the acceptance rate remains around 80%



Variable	Years					
	2005	2006	2007	2008	2009	2010
Reviewers/Papers	0,7	0,8	1,0	1,3	1,2	1,4
Acceptance rate	88%	58%	81%	88%	87%	84%

4. Over the years, the average number of papers per reviewer has declined, as has the rejection rate



Variable	Years						
	2005	2006	2007	2008	2009	2010	
Papers/Reviewer	1,4	1,2	1,0	0,8	0,8	0,7	
Rejection rate	12%	42%	19%	12%	13%	16%	

Limitations

The data currently available do not allow us to analyze the quality of the papers or the quality of the reviews. Reviewers are being ranked by their thread chairs, and in reviewer assignment the policy is to have at least one highly ranked reviewer per paper. Since we do not currently know the frequency of reviewers in each of the ranks, we can only present average ifnromation.

Summary

The analyses lead to the following questions:

- 3. How would we like the number of submissions, the number of reviewers and the acceptance rate to be in 2020?
- 4. What shall we achieve at the 2012 conference in St. Gallen, Switzerland?

Martin Schaffernicht (martin@utalca.cl) Stefan Groesser (stefan.groesser@unisg.ch)