Memorandum of Understanding for Financial Co-Sponsorship of the IEEE Transaction on Molecular, Biological, and Multi-Scale Communications (TMBMSC) November 2013

Introduction

This document serves as an agreement between the IEEE Communications Society, the IEEE Computer Society, and The IEEE Nanotechnology Council as inaugural financial sponsors (hereinafter "Partners") for a new publication, the IEEE Transactions on Molecular, Biological, and Multi-Scale Communications.

Background

As a result of recent advances in MEMS/NEMS and systems biology, as well as the emergence of synthetic bacteria and lab/process-on-a-chip techniques, it is now possible to design chemical "circuits", custom organisms, micro/nanoscale swarms of devices, and a host of other new systems. This success opens up a new frontier for interdisciplinary communications techniques using chemistry, biology, and other principles that have not been considered in the communications literature.

Periodical Scope

T-MBMC is devoted to the principles, design, and analysis of communication systems that use physics beyond classical electromagnetism. This includes molecular, quantum, and other physical, chemical and biological techniques; as well as new communication techniques across multiple scales (e.g., nano to micro to macro). Original research articles on one or more of the following topics are within scope: mathematical modeling, information/communication and network theoretic analysis, standardization and industrial applications, and analytical or experimental studies on communication processes or networks in biology. Contributions on related topics may also be considered for publication. Contributions from researchers outside the IEEE's typical audience are encouraged.

Implementation

This Agreement shall be acted upon by the Presidents of the Financial Sponsors with the approval of their respective Board of Governors (BoGs) or Administrative Committees (AdCom). All changes to this Agreement shall require consensus of all Financial Sponsors. This Agreement, upon approval by the appropriate IEEE Technical Activities or other IEEE Boards, shall become a part of the records of the IEEE Technical Activities Board (TAB).

Administrative Partner

The IEEE Communications Society is the Administrative Partner (Partner A) of the Periodical at the inception of this Agreement and shall provide the manuscript handling system for receiving, logging, filing, and delivering submitted manuscripts to associate editors and reviewers in fulfillment of peer-review process. The Administrative Partner is responsible for the finance accounting and the financial reporting to IEEE.

The TMBMSC shareholder ownership will be as follows**:

Partner A (Administrative Partner): The IEEE Communications Society - 90%

Partner B: The IEEE Computer Society −5%

Partner C: The IEEE nanotechnology Council - 5%

**These are the initial shares based on the Administrative Partners assessment of the intended scope. Not later than the 3rd year of publication, the Partners shall agree on the future share allocation based on Contribution Metrics to be defined and determined to be in the best interest of the TMBMSC.

The Financial Sponsors are responsible for all financial and technical obligations of the Periodical. Compliance with financial and technical responsibilities entitles Financial Sponsors to voting privileges on the Steering Committee outlined below. Financial ownership of the Periodical requires that all Shareholders accept the responsibility of the expenses of the Periodical throughout the year and share in the potential profit or loss of the Periodical according to the percentage of shareholder ownership as noted above. Annual distribution of the Profit/Loss will be completed by IEEE in accordance with its established practices for year-end reconciliations. The Administrative Partner will provide oversight of IEEE to ensure the distribution occurs in a timely fashion.

Administration

TMBMSC will be administered by a Steering Committee comprised of representatives of the Financial Sponsors, including a chair, plus the Editor-in-Chief (EiC).

Steering Committee

The Steering Committee shall act as Trustees for the publication and shall have sole administrative responsibility for the Periodical such as:

- Monitor quality and timeliness of the Transaction
- Verify the technical content of the Transaction is in accordance with the established scope and areas of interest
- Establish the periodical budget (page count, subscription rates, etc.)

The Steering Committee shall meet at least annually to review the progress of the Periodical and prepare the budget of the Periodical. The membership of the Steering Committee shall consist of 5 voting members plus the EIC, without vote.

PARTNER A: 3 voting members

PARTNER B: 1 voting member

PARTNER C: 1 voting member

Each Society delegate must be appointed by his/her Society President, shall serve a two-year appointment commencing Jan. 1, and may be re-appointed for one additional term. Each delegate shall have equal (one) vote on matters before the Steering Committee. Representatives unable to attend the Steering Committee Meeting can participate by

teleconference or by transferring their voting privilege to another member of the Steering Committee, provided the Chair is notified in writing of the proxy transfer at least one week prior to the meeting.

The Steering Committee shall elect its Chairperson from amongst its current voting, delegate membership. The Chairperson shall serve as the focus for Committee communications and shall direct, on behalf of the Committee, the operational matters of the Committee to the Financial and Technical Sponsors. Except for the initial Chair, the Chair shall normally be chosen from among current members of the Steering Committee and shall serve for a term of two years, non-renewable. The Chair shall vote only to break a tie. The first chair of the Steering Committee shall be selected by the Communications Society, and the second chair shall be selected by the Engineering in Medicine and Biology Society. Should additional Financial Sponsors join the Steering Committee, they shall name a chair for the Steering Committee in the order in which that Financial Sponsor joined the Steering Committee. The chair shall continue to rotate among the Financial Sponsors, except if a Financial Sponsor shall notify the Steering Committee, in writing, that it wishes to pass on its turn, in which case the next Financial Sponsor, in order, shall have the opportunity to make the appointment, or to pass, until a chair is named. In the event a Financial Sponsor shall withdraw from the Steering Committee, and the chair shall be the appointment of that Financial Sponsor, the term of the chair shall not survive the participation of the Financial Sponsor.

The expense to participate in the meetings of the Steering Committee will be the responsibility of each individual Society. If possible, the meeting shall be scheduled to precede the AdCom/BoG meetings of all financial partners to allow review of preliminary budget submission of the Periodical.

Annually, the IEEE Communications Society of the Periodical is responsible for preparing and submitting the initial budget of the Periodical to the Steering Committee for review. The Steering Committee can approve the Periodical budget provided it is breakeven or better. In the case of a deficit budget, the Steering Committee must receive final budget approval from the Financial Sponsors. All Financial Sponsors will receive a copy of the approved budget for the Periodical simultaneously when submitted to the IEEE TAB Finance Department.

Editorial Management

The EIC and the Editorial Board (see below) are responsible for the editorial content and quality of the *Periodical*.

Except for the founding EIC, the selection of the EIC begins with the appointment of an EIC Search Committee by the *Steering Committee*. The EIC Search Committee shall be comprised of three members - one from each financial sponsor. The EIC Search Committee will make the proper arrangements to make an open call for nominations, advertise the position, accept nominations and interview potential candidates in preparation of selecting an Editor-in-Chief. Appointment of an EIC will be determined by majority vote of the Search Committee. The formal appointment will be made by the President of the Administrative Partner on behalf of all the Financial Sponsoring Societies.

Editor-in-Chief

The Editor in Chief shall be an acknowledged leader in the field of interest of the Periodical. He/she shall agree to assume the roles and responsibilities of the EiC and realize that there will be no remuneration for service to the Periodical. The period of service shall be two years with an optional extension of one year and can be renewed for one additional term.

The function of the Editor-in-Chief (EiC) shall be to oversee the daily operations of the Transaction such as:

- interact with Authors
- maintain the Reviewer Database
- initiate and monitor the review process to its completion
- select Associate Editors and members of the Editorial Board for the approval by the Steering
 Committee
- prepare them for submission to the Steering Committee for approval
- ensure that the Periodical follows IEEE Policy and Procedures
- create the technical content of the Periodical in accordance with the established scope and areas of interest and
- execute policies as established by the Editorial Board and approved by the Steering Committee
- serve as ex-officio, non-voting member of Steering Committee

Editorial Board

The Periodical shall have an Editorial Board to insure appropriateness and quality of submitted manuscripts to the peer review process and other day-to-day matters normally within the purview of an Editorial Board of an IEEE Transactions. The Editor-In-Chief shall select with approval by the Steering Committee Associate Editors to form an Editorial Board as may be appropriate. Associate Editors shall have a term of two years, renewable for one additional two-year term. He or she must then step down for at least a year before being re-considered for the same position.

The function of the Editorial Board shall be to review and offer guidance to the technical content of the Periodical. The function of the Editor(s) shall be to implement the policies established by the Editorial Board and approved by the Steering Committee.

Reporting Process

The Steering Committee will submit a written report regarding the progress of the Periodical to the participating Societies (both Financial and Technical) annually by 31 December reviewing the Periodical's progress over the year (page count, timeliness, citation factor, etc.) and review of the budget.

Startup Considerations

The IEEE Transaction on Molecular, Biological, and Multi-Scale Communications (TMBMSC) will begin publication in July 2015, as a quarterly journal with a page count of approximately 300 pages per year.

TMBMSC will be incubated through a series of special issues in the IEEE Journal on Selected Areas in Communications. This series will consist of at least two issues, first appearing in mid-2014, and the second appearing in early 2015. TMBMSC will take over the paper flow from the special issues within JSAC, and will attract papers via existing IEEE conferences. Relevant IEEE conferences and workshops include:

- MoNaCom, a workshop on molecular and nanoscale communications, normally held alongside IEEE communications conferences (previously held alongside ICC and Infocom); and
- "Special Topics" symposia at IEEE ICC: the first track on molecular and nanoscale communication will be held at IEEE ICC 2014 in Sydney, Australia.

Additionally, aggressive advertisement will be put in place by the IEEE as well as the two partners through their web sites and existing publications, thus ensuring that paper submission and publication/production schedule will be met as per expectations.

Subscriptions

All Sponsors (Financial and Technical) shall offer the Periodical to their members according to the rates established by the Steering Committee and confirmed by the participating Financial Sponsors. The Steering Committee shall also establish rates for other Society and IEEE members as well as non-member subscribers.

Electronic Distribution

The Periodical will continue to be included in the IEEE All Society Periodicals Package (ASPP) and its subpackages as well as the IEEE Electronic Library/IEEEXplore. With an acceptable Letter of Agreement endorsed by the Steering Committee, financial co-sponsors may include the Periodical in their individual Society Member Digital Libraries. Revenue distribution of the Periodicals inclusion as part of any Society Member Library will be distributed annually and in accordance with the shareholder sponsorship as outlined in this Letter of Agreement.

Arbitration

In the event of a disagreement regarding the Periodical among the Financial Sponsors, a review panel consisting of the Chair of the Periodical Committee and other members appointed by the Periodical Committee will meet to resolve the issue.

In the unlikely event the review panel is unable to come to a resolution by majority vote, all parties agree to request for an Arbitration Committee selected by TAB for mediation and resolution of the issue.

Agreements, Durations and New Agreements

All agreements must be approved by the TAB Periodicals Committee.

The period of this Agreement shall be 5 years from the date of signature of the Financial Sponsors and all Financial Sponsors are obligated to commit to the Agreement.

- 1) Withdrawal of Agreement: In the event that a PARTNER wishes to withdraw from this Agreement, the REMAINING PARTNERS retain all the rights to the PUBLICATION and will continue to publish the periodical. Notification of intent to withdraw must be made one year prior to the expiration of this agreement. The remaining partners need to sign a new agreement with the new % of financial ownership.
- 2) If a new Financial Sponsor is added during the course of the MOU, a new document specifying the new percentage of financial ownership needs to be signed by all Financial Sponsors.
- 3) At the termination of the agreement, a new Agreement needs be signed by all Financial Sponsors with possible new % of financial ownership.

As Financial Sponsors this agreement is accepted by:

Signed for / by the (Administrative) PARTNER:

VK BRANGAVA 22/11/2013 NAME VIJAY BHARGAVA

Title PRESIDENT, IEEE Comm Soc.

Signed for / by the PARTNER:

Signed for / by the PARTNER:

PRESIDENT IEEE COMPUTER

B