# FAREWELL MESSAGE: LOOKING BACK OVER THE PAST TWO EXCITING AND SUCCESSFUL YEARS

It has been a sincere privilege and a great responsibility to serve as the President of the IEEE Communications Society (ComSoc) for the years 2018 and 2019. Looking back over the past two years, I am very pleased to note the significant successes in meeting our goals in key areas, including conferences, publications, standards, and membership programs. Such success would not have happened without the outstanding efforts of our volunteer leaders, staff, and members who worked together in harmony and relentlessly to take our beloved society to a new level of excellence. I am particularly grateful to our Board of Governors (BoG), whose current volunteer members are listed in Table 1 as well as to our standing Committee Chairs, who are listed in Table 2. A close observation of these tables indicates that ComSoc volunteer leaders consist of a diverse list of dedicated industry and

academic leaders from all over the world. For example, Table 1 indicates that one third of our BoG Members-at-Large (MAL) are female. In addition, about 73 percent of our BoG members are not from the U.S. and come from a diverse set of countries, including Brazil, France, Italy, Spain, Japan, China, Canada, etc.

As the world's leading organization for communications professionals, ComSoc has been at the forefront of technological development within a global professional community working together to create cutting-edge communications and networking technologies for the benefit of humanity through high quality publications, premier conferences, technology standards, and educational activities. However and as stated in my January 2018 President's Page, ComSoc was at a crossroads with significant challenges: A substantial decrease in membership, especially student members; fiscal challenges; open access, etc.

To fulfil our ambitions and address ComSoc's challenges, a forward-looking strategic plan was designed in order to make ComSoc stronger and bring it to new heights. Six key priorities were set forth at the beginning of my term in January 2018 as listed in Fig. 1, to be executed by a harmonious volunteer and staff team. This is done by not only finding and addressing new technical frontiers, but also by enhancing ComSoc's organization structure.

In the following, we will briefly describe the key achievements and most important actions that were undertaken during my term.

## **MEMBERSHIP**

Undoubtedly, membership is one of the major challenges facing our society. Indeed, ComSoc, along with many other IEEE societies, has been plagued by a constant decrease in membership. With much effort, our society managed to stabilize this trend in 2018 and is working hard to reverse it by launching many new initiatives. We have attempted to improve our outreach to prospective members by redesigning our website and reviewing our vision and mission statements to more succinctly communicate what we stand for and why people should join us. We also increased member benefits including a boost in funding for our Distinguished Lecturers Program, free or low-cost admission to our industry summits, establishment of a "member wall" that provides free online content to ComSoc members only, and an increase in members-only events at our flagship conferences.



Khaled B. Letaief

Over the past two years, we have also paid much attention to ComSoc chapters from all over the world, and multiple initiatives have been put in place to motivate chapters to recruit and retain members as well as provide further value added services to our members. For example, we established the Membership and Global Activities Contribution Award, given to outstanding individuals who worked hard in promoting chapter activities and increasing the membership numbers in their local chapters. We also modified the funding policy for chapters, where a baseline funding of US\$1500, which is more than three times the funding in previous years, is provided. Further funding was also provided to chapters that attract new members.

It is gratifying to note that our efforts were rewarded with the 2018 ComSoc membership retention rate achieving a phenomenal 80 per-

cent compared to 53 percent in 2015, and more importantly compared to a 69.80 percent average membership retention rate across IEEE in 2018.

One of our highest priorities at the beginning of my term as President was grooming the next-generation of leaders and particularly students, who not only represent the future of our Society but also the communications and networking technologies community at large. Increasing the number of student members has been indeed very important to us, especially given that the number of our students members has been declining at an alarming rate, a clear and present danger.

To address this, focused and targeted new programs have been initiated to enhance our products and services to better address our student's needs and provide the value they want. Examples include:

Networking with Leaders: At ICC'2018, we initiated the Networking with Leaders event, at which all ComSoc graduate and undergraduate students attending our flagship conference ICC had a chance to exclusively network with ComSoc's leadership, conference sponsors, industry leaders, and keynote speakers. The inaugural event was a great success and has now become a regular networking program held at our flagship ICC and GLOBECOM events.

**Student Career Luncheon:** During ICC'2019, we introduced a Student Career Luncheon event. This initiative aims at connecting students or new graduates with prospective employers who are looking to recruit new talent. One hundred and forty students were invited to network with professionals in academia and industry. Due to the very positive response, this initiative will continue at ICC'2020 and will provide our ComSoc students the chance to meet with industry representatives, learn about their companies, and discuss potential employment opportunities. Special thanks go to Wei Zhang for leading this effort.

One Dollar ComSoc Membership for Students: To sustain our position as a major resource supporting the needs of all members throughout the world while at the same supporting the recruitment and retention of students, we have reduced our ComSoc membership to \$1 for all IEEE Student and Graduate Student Members beginning 16 August 2019.

**IEEE ComSoc Student Competition:** We have continued to support student competition focused on proposing communications technology that can change the world. Additional funding was allocated in 2019 to allow the winners to attend

our flagship conference GLOBECOM 2019 and receive their awards. Special thanks go to Stefano Bregni for leading this effort.

We are very excited to report that our efforts have come to fruition with the strong support of the volunteers and staff under the leadership of Nei Kato, Vice-President for Member and Global Activities. Specifically, the continuing drop in our overall membership numbers has now stopped, and more importantly, our efforts in increasing the membership of students have been very successful. A close observation of Fig. 2 indicates that the continuous trend and drop in the number of students joining our Society has been reversed since the beginning of our term, and we are very pleased to note that the total number of ComSoc student members has increased by 62 percent by the end of November, 2019 compared to January 2018 when we started our term as ComSoc President!

#### FINANCE

For any organization, fiscal efficiency is of utmost importance. During the last 10 years, Com-Soc's financial standing was not in good shape all the time. In fact, the Society had two years of significant deficits (2012 and 2013) as can be seen in Fig. 3. During the past two years, fiscal efficiency and transparency was another major priority and concrete actions were taken in order to reduce cost and increase revenue opportunities without compromising our services to members. ComSoc has about 175 different expense categories and 80 products. To ensure proper and efficient operation, we continued to conduct periodic product profitability analyses on the financial performance of our products to determine which, if any, should be eliminated from the portfolio and/or if certain products have intangible value as a "loss leader." The most recent result of the analysis is our decision to terminate the IEEE Wireless Communications Engineering Technologies Certification (IEEE WCETTM) program.

We are very pleased that our efforts have been quite successful, and we are currently witnessing a significant improvement during 2018 and 2019 in terms of our financial performance, moving from a budget deficit in 2017 at the start of my term to a total net surplus of over \$0.86 Million and \$1.80 Million in 2018 and 2019,

respectively, thus extricating ComSoc from a significant financial challenge by identifying new revenue sources, improving the operation efficiencies and reducing costs while finding solutions to deliver products and services to members at stable costs.

The forecast for 2020 is also very positive and we have already taken multiple actions in order to spend our additional income to increase services to our members. My sincere thanks to our treasurer, Fambirai Takawira, ComSoc Staff, particularly Bruce Worthman, along with other volunteers and staff who have helped make this happen.

#### GOVERNANCE AND ORGANIZATION EFFICIENCY

In the area of governance, our Governance Committee (GovCom) has been instrumental in assisting the BoG throughout this term in our efforts to improve efficiencies in our operations. The BoG addressed several major issues, including the

Position	Name	Gender	Country
Board of Governors (MAL)	Lajos Hanzo	Male	United Kingdom
President	Khaled Letaief	Male	Hong Kong
Board of Governors (MAL)	Gerhard Fettweis	Male	Germany
Vice President for Conferences	Stefano Bregni	Male	Italy
Board of Governors (MAL)	Ricardo Veiga	Male	Argentina
President-Elect	Vincent Chan	Male	USA
IEEE Division III Director	Sergio Benedetto	Male	Italy
Parliamentarian	Roberto de Marca	Male	Brazil
Chief Marketing Officer	Zhi Ding	Male	USA
Board of Governors (MAL)	David Michelson	Male	Canada
Vice President TEA	Nelson Da Fonseca	Male	Brazil
Board of Governors (MAL)	Urbashi Mitra	Female	USA
Vice President MGA	Nei Kato	Male	Japan
Board of Governors (MAL)	Chengshan Xiao	Male	USA
Board of Governors (MAL)	Philippa Martin	Female	New Zealand
Vice President ISA	Stefano Galli	Male	USA
Chief Marketing Officer	Rob Fish	Male	USA
Treasurer	Fambirai Takawira	Male	South Africa
Board of Governors (MAL)	Wanjiun Liao	Female	Taiwan
Board of Governors (MAL)	Petar Popovski	Male	Denmark
Vice President	Xuemin Shen	Male	Canada
Board of Governors (MAL)	Ekram Hossain	Male	Canada
Board of Governors (MAL)	Wei Zhang	Male	Australia
Board of Governors (MAL)	Octavia Dobre	Female	Canada
Director of Journals	Robert Schober	Male	Germany
Director of Magazines	Yuguang Michael Fang	Male	USA
Director Online Content	Zhisheng Niu	Male	China
Director Education Services	Fabrizio Granelli	Male	Italy
Director Conference Development	Joel Rodrigues	Male	Brazil
Director Conference Operations	Hikmet Sari	Male	France
Director Member Services	Song Guo	Male	Hong Kong
Director AP Region	Saewoong Bahk	Male	South Korea
Director EMEA Region	Adlen Ksentini	Male	France
Director LA Region	Lisandro Z. Granville	Male	Brazil
Director NA Region	Wahab Almuhtadi	Male	USA
Director Industry Outreach	Ashutosh Dutta	Male	USA
Director Standards Development	Tarek S. El-Bawab	Male	Egypt
Director Standardization Programs Development	Nada Golmie	Female	USA
Director Industry Communities	lan Wong	Male	USA
Director Technical Committees	Tarik Taleb	Male	Finland

Table 1. ComSoc Board of Governors.

elimination of one of our VP positions and moving those functions to two of the other VP positions. Also, the Operating Committee (OpCom) scope and objectives were expanded and BoG delegations were established to increase the effectiveness of this committee. Limits of terms were defined for elected and appointed officers. During our meeting at the IEEE GLOBECOM 2019, a process for documenting earnest efforts for creating diverse lists of candidates for elected and appointed positions will be presented. GovCom has diligently supported the requestors and originators of these motions all along the way to assist in crafting the motions, reviewing them for any overlaps or inconsistencies with existing IEEE and/or ComSoc policies, and preparing them for final presentation to the BoG for their action.

To facilitate the efficient handling of amendments to our governing documents, we have formalized the process for such motions. A motion template was created by GovCom for outlin-

Finance	Fambirai Takawira	Male	South Africa
Governance	Merrily Hartmann	Female	USA
Marketing	Rob Fish	Male	USA
Operating	Khaled B. Letaief	Male	Hong Kong
Operation and Facilities	Khaled B. Letaief	Male	Hong Kong
Strategic Planning	Vincent Chan	Male	USA
Technology Evolution and Initiatives	Paul Hartmann	Male	USA
GLOBECOM/ICC Management & Strategy (GIMS)	Koichi Asatani	Male	Japan
GLOBECOM/ICC Technical Content (GITC)	Matthew Valenti	Male	USA
Women in Communications Engineering (WIE)	Ana Garcia Armada	Female	Spain
Young Professionals	Nury Ramirez	Female	Mexico
Communications History	Dave Michelson	Male	Canada
Distinguished Lecturers' Selection	Shiwen Mao	Male	USA
Emerging Technologies	Jeff Andrews	Male	USA
Technical Committees Recertification	Nelson Fonseca	Male	Brazil

Table 2. ComSoc Standing Committees.

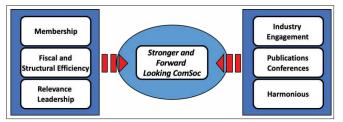


Figure 1. ComSoc 2018-19 strategic goals.

ing each motion (executive summary, pros/cons if the motion is approved, financial implications, and implementation timeline) to provide sufficient background and rationale. All motions are sent to the Governance Committee by a specific deadline for the committee to review and provide feedback on the motion content. Final versions of the motions are prepared. Two weeks before the BoG meeting, all motions are sent to the BoG members to help them prepare for the upcoming discussion. The motion templates are also posted on the Agenda Tool. During the meeting, the motion template is revised with any amendments from the floor and updated (on the Agenda Tool) to reflect the BoG actions taken. After the meeting, the minutes (following the Minutes Outline prepared by GovCom) include a pointer to the Agenda Tool for easy access to all motions addressed by the BoG. This process has added efficiencies to our BoG meetings and has facilitated accurate minutes and updates to our governing documents.

Throughout their tenure, our GovCom members have also spent considerable time scrutinizing our governing documents to ensure they are in compliance with IEEE and TAB policies and to correct any inconsistencies, omissions, or imprecise language. As a result, our governing documents are now stable and will serve the Society well as the next administration conducts business. Special thanks go to Merrily Hartmann and Stefano Galli for their dedication and hard work on GovCom.

#### RELEVANCE AND LEADERSHIP

To maintain our relevance and global leadership, it is vital that we stay ahead and enhance our relevance by broadening our scope to emerging technology areas while exploring and exploiting new technologies to promote the services provided by our publications, conferences, and educational offerings which need to be of the highest quality at affordable prices. In this regard, the ComSoc BoG in 2018 approved new vision and mission statements which describe in a succinct way our lofty

objective to be the global leader for communications engineers, scientists, and professionals. Our new Vision Statement and Mission Statements are given below:

**Vision:** To bring the world together in harmony through communications and networking technology research, application, education, and incubation of new ideas.

Mission: The IEEE Communications Society promotes technological innovation and fosters creation and sharing of information among the global technical community. The Society provides services to members for their technical and professional advancement and forums for technical exchanges among professionals in academia, industry, and public institutions.

The revised Vision Statement and Mission Statement are critical because they convey our reason d'être and will help us achieve our ultimate objective of being the world's most trust-

ed technical professional organization dedicated to advancing communications and information technologies for the benefit of humanity.

### INDUSTRY AND STANDARDS ACTIVITIES

Several ComSoc standards have been progressed in the past two years, from defining the physical layer interface over power line channel with IEEE 1901.1-2018 (IEEE Standard for Medium Frequency (less than 12 MHz) Power Line Communications for Smart Grid Applications), to the new IEEE 1934 (IEEE Standard for Adoption of OpenFog Reference Architecture for Fog Computing) which provides a structural and functional prescription of an open, interoperable, horizontal system architecture for distributing computing, storage, control and networking functions closer to the users along a cloud-to-thing continuum of communicating, computing, sensing and actuating entities, to the ongoing P2413 Standard for an Architectural Framework for the Internet of Things (IoT).

The Vice-President for Industry and Standards Activities (VP-ISA), Stefano Galli, proposed a new framework for Com-Soc's Industry Summits and, more in general, Chapter events to engage industry as well as address the membership decline. Under this new framework, it is an increase in membership value that is sought rather than short-term revenue. Leveraging some desirable attributes of the current practice (Chapter-centric local model, no paper submission workshops, one day events), the new framework aims at making Chapter events self-sustaining engines of membership growth by providing local engineers with low-cost access to technical information on hot-topic trends, education and training, professional growth, and networking opportunities with other local engineers. This framework can also be utilized to raise the interest of students to join ComSoc. Under this framework, Chapters are encouraged to develop a program of events that are free or quasi-free to Com-Soc members and require a higher registration fee for non-members. Leveraging data mining results on past Chapter events that uncovered a high percentage of non-member attendees, non-members would be allowed to attend up to three events at a fee that is higher than joining IEEE/ComSoc and then would not be allowed to attend anymore unless they joined IEEE/Com-Soc. With the goal to use Chapters as the centers for member retention, recruitment, and engagement, an experimental trial with multiple events hosted by four chapters (Princeton, Toronto, South Africa, Bangalore) were launched in 2018 and yielded optimistic results: 43 percent of non-member attendees joined ComSoc. These summits have also proved popular particularly with industry attendees. We intend to expand the number of

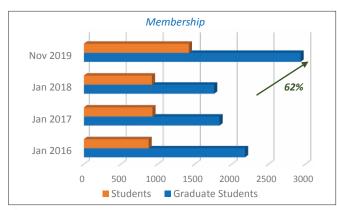


Figure 2. ComSoc student membership since 2016. Encouraging results over the past two years as a result of the many new focused programs to enhance our products and services to better address our student's needs!

experimental summits in 2020 and analyze which regions provide the most members at the most reasonable costs.

To further engage industry, a Synergy in Industry and Academia R&D Collaborations panel was introduced during ICC'2019. Renowned panellists from industry and academia discussed the current challenges of industrial R&D, including the need for more industry/academia collaboration and the role that ComSoc and IEEE can play in facilitating this synergy. This exclusive discussion with elite panellists will take place again at ICC 2020.

### **PUBLICATIONS**

In the past two years, significant actions were taken to further enhance ComSoc's leading role in communications and networking through high quality publications in journals, magazines, and online content.

ComSoc journals and magazines are characterized by their high quality and excellent reputation. This is evident from their high impact factors as published by the Web of Science, and very positive feedback from the IEEE Periodical Review and Advisory Committee (PRAC) which periodically reviews our publications. For example, IEEE Communications Surveys and Tutorials currently has an impact factor of over 20, which is the highest among all journals published in the field of telecommunications. Likewise, the IEEE Journal on Selected Areas in Communications has an impact factor of 9.3, and all of our established Transactions and journals have impact factors above 4. In addition, ComSoc magazines, including the IEEE Communications Magazine, IEEE Wireless Communications, and IEEE Network, have an outstanding reputation in terms of impact factor - 11, 10.356, and 7.503, respectively - and they are all ranked among the top 10 publications in the field of telecommunications. Our journals and magazines' impact factors have significantly increased and in some cases more than doubled over the past five years.

The striking improvement is a direct result of the tireless and dedicated work of the Editors-in-Chief, Editors, and Reviewers of our journals, magazines, and online content, under the leadership of the Vice President of Publications, Sherman Shen; Director of Journals, Robert Schober; Director of Magazines, Michael Fang; and Director of Online Content, Zhisheng Niu.

Over the past two years, we have made significant efforts to include emerging technical areas such as artificial intelligence (machine learning in particular), 5G systems and beyond, edge/fog computing, blockchain and big data, in our well established journals and magazines to further extend their scopes. Further-

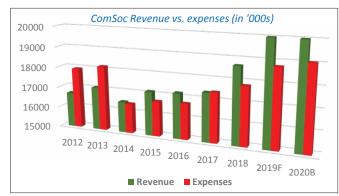


Figure 3. ComSoc financial performance, 2012-2020.

more, we have launched the option of having an additional fifth page for all ComSoc Letters journals for the benefit of our members to include more research results.

Recently, ComSoc also launched a new open access all-electronic technical journal, the *IEEE Open Journal of the Communications Society*. The open access journal will publish high-impact research results in the general area of communications and networking with a rigorous and extremely rapid one-stage peer-review process. The scope encompasses research papers reporting novel fundamental theoretical contributions, experimental and measurement results, and new applications of communication systems and networks. This journal will complement our existing journals and is expected to attract more students and non-ComSoc members to enhance the technical content in communications and networking due to its open access nature. The first issue of the journal will appear in January 2020.

ComSoc also provides various unique formats of online content to our members, including (but not limited to) Webinars, Tutorials, Best Readings (BR), and ComSoc Technology News (CTN). Since its initiation in 2002, the online platform has been recognized as an alternative and sometimes more effective way to promptly catch up with emerging technology trends. In the past two years, we have enhanced this via 1) creative and comprehensive presentation of technical materials from leading experts in the fields; and 2) prompt online posting of such presentations. Our online content is not simply a supplement to the print publications, but serves as a portal or a starting point for our members to fast jump into a new field and to have an overall picture of a specific technology. In particular, our successful Best Readings (http://www.comsoc.org/bestreadings) is a collection of articles, books, and papers which focuses on a featured topic. It aims at providing our members with a friendly starting point to a new technical topic. For example, if you want to learn about eHealth, go to Best Readings, where experts have compiled a complete introduction to the field. On the other hand, we have CTN (http://www.comsoc.org/ctn), which presents a set of recent articles. It highlights ongoing research activities that may impact tomorrow's telecommunications products, and should be of interest to our industry members. Our team has been working diligently to keep the content fresh and comprehensive. To further enhance our online content, we are in the process of forming a dedicated editorial team to work closely with the ComSoc technical committees and the emerging technologies sub-committees. We are also working on a pilot project to create mobile video modules for the IEEE Transactions on Wireless Communications.

To further improve our key performance indicators and our service to the authors and readers across all journals and magazines, our Director of Journals and Director of Magazines in coordination with the Vice-President of Publications have played a leading role in

developing and implementing a set of guidelines and best practices for newly appointed Editors-in-Chief and Editors of ComSoc journals and magazines. Furthermore, we are preparing a set of guidelines for the Memorandums of Understanding (MOUs), which will form the basis for the operation of journals and magazines that are co-sponsored with other IEEE societies.

# **TECHNICAL AND EDUCATION ACTIVITIES**

Technical and Educational activities represent one of the key pillars of our Society and undoubtedly have played a key role in the advancement of ComSoc in the past two years. In particular, technical committees (TCs) have provided outstanding support to ComSoc conferences and publications. The Technical Committee Board has gone through a major restructuring by redefining the role of TCs in ComSoc, their structure and Policies and Procedures. Special Interest Groups have been formalized in TCs' structures for allowing the rapid establishment of groups to work on cutting edge technologies. Elections and awards procedures have been adopted to promote transparency and consistency. Two new TCs were created: the Smart Grid Communications TC and the Molecular Biological and Multi-Scale Communications TC after a successful period of incubation of these two groups. Moreover, five Emerging Technologies Committees were created: Machine Learning for Communications, Intelligent Networks, Full Duplex Communications and Aerial Communications, and Quantum Communications and Information Technology. A newsletter was recently launched for disseminating information about Technical Committees and Emerging Technology Committees activities. The Newsletter will feature short technology oriented articles, interviews and news from TCs. The Newsletter can be accessed at https://www.comsoc.org/publications/tcn

The most representative activity of the Educational Services Board (ESB) was the continuation, consolidation and enhancement of the ComSoc Schools Series. The initiative started as a set of ComSoc Summer Schools (2015-17). As a result of the great interest and support by attendees, these series are now a permanent and well-structured asset in the ComSoc educational offerings. Each year, an open call is published to enable ComSoc members to present their proposals and then, depending on the availability of funding, one or more editions are supported. The 2018 ComSoc Summer School was held in Shanghai, June 26-29. It was co-organized with the Shanghai Institute of Fog Computing Technology (SHIFT), and attracted more than 100 students from more than 15 countries. Following the success of this initiative, ESB was able to support three events in 2019: A ComSoc Spring School held in conjunction with IEEE WCNC 2019 in Morocco; a ComSoc Summer School co-organized by National Instruments at their HQ in Austin, Texas, USA July 16-19, 2019; and a ComSoc Autumn School in Barcelona, Spain, in November 5-8, 2019. The call for the 2020 ComSoc Schools was published in February 2019, and four proposals are being finalized for 2020.

ESB is also experimenting with other formats for educational events for young audiences in addition to the ComSoc Summer School. These include co-located sessions with ICC and GLOBE-COM, targeted to young audience (e.g., Young Engineers & Scientists Initiative (i-YES) in collaboration with Young Professionals).

In addition to organizing events requiring a physical presence, ComSoc educational activities include a growing set of online courses on emerging and relevant topics provided by renowned experts in the telecommunications field. Among the most popular topics in 2018-19 ComSoc Training offers were: 5G New Radio, Wireless for the IoT, Introduction to WiFi, Background Concepts of Optical Fiber Communication, Satellite Data Communications and VSAT Networks, LTE Fundamentals, Network Function and Virtualization and Software-Defined Networking and the Road to 5G, and IoT and M2M Essentials. These activities are critical for further enhancing ComSoc's services to ComSoc members and to the community at large and will be further expanded in the future.

I am grateful for the hard work and dedication of all volunteers within the Technical and Educational Activities portfolio, particularly the Vice-President for Technical and Educational Activities, Nelson Fonseca, for his commitment and significant contributions.

## **CONFERENCES**

Conferences represent another key pillar of ComSoc. They not only contribute to the generation and distribution of technical content for members, but also sustain ComSoc activities with their financial return. In fact, conferences alone yield more than half of the total revenues in the ComSoc budget.

The total financial revenues (fully or in part) from financially sponsored Conferences in the ComSoc budget reached \$11M per year, stable over the last few years. Besides immediate financial revenues, conferences that are technically relevant and have a good reputation bring additional profit also from IEEE Xplore downloads. In 2017, for example, nearly \$2M were accounted as total net distribution to ComSoc from IEEE Xplore, for financially sponsored/co-sponsored and technically co-sponsored past events.

On top of those financial revenues, both sponsored and co-sponsored conferences bring significant intangible "revenues" to ComSoc: Highly relevant and technically rigorous conferences serve our members, hence, they are key to not only retaining our members but also to attracting new ones. Undoubtedly one of the main reasons why ComSoc members enrol and renew their membership, year after year, lies in the technical excellence and reputation of ComSoc Conferences and Publications. ComSoc Conferences, in particular, are an extraordinary opportunity for members to network with the best experts in their field of interest.

A strategic goal of ComSoc's Portfolio Conferences is to ensure the highest geographical diversity and maximum coverage of all Regions, aiming at giving all members in all regions the opportunity to attend highly relevant technical conferences nearby. This is achieved by balanced rotation plans, applied by the Steering Committees of all major conferences in selecting sites among candidate locations.

The overall distribution of all ComSoc Portfolio Conferences is well balanced across the four Regions. In the last five years (2015-2019), their geographical distribution has been as follows: 25.4 percent in the AP Region, 35.1 percent in the EMEA Region, and 39.5 percent in the NA/LA Region.

Moreover, for our flagship Conferences ICC and GLOBE-COM, an 18-month geographical rotation plan was decided a few years ago, according to which both ICC and GLOBECOM are assigned cyclically to the NA/LA, EMEA, and AP Regions. In this way, each of the three main Regions is assigned one of the two flagship conferences every 18 months.

Our flagship conferences ICC and GLOBECOM are supervised by two specialized Steering Committees, namely, the IEEE GLOBECOM/ICC Technical Content (GITC) Committee and IEEE GLOBECOM/ICC Management and Strategy (GIMS) Committee, to address the technical and management aspects of these two ComSoc flagship conferences, respectively. The joint complementary action of these two specialized Committees has proven very beneficial to our flagship conferences.

In the last five years and under the guidance of GIMS, both ICC and GLOBECOM have confirmed their stable good financial performance, with the number of paying attendees in the range of 1200 to 1800 with a positive surplus thanks to the hard work of volunteers and staff who were able to put together excellent programs but also attract sponsorship from industry and other organizations.

On the technical side, the strict paper review standard selection process (acceptance ratio in the range of 36 percent to 40 percent) and the stability of the Technical Program structure (more than 10

Symposia covering all ComSoc subject areas and a broad Industry Forum & Exhibit), as defined by GITC, have consolidated ICC and GLOBECOM as the two main general conferences on Communications and Networking that cannot be missed. This is not just a perception, but it is demonstrated by some quantitative evidence. In particular, the Impact Factor of ICC and GLOBECOM has grown significantly over the years. For example, in 2019, Google Scholar ranks ICC and GLOBECOM among the top 20 publications with the highest *h*5-index in the area of Computer Networks and Wireless Communications. (The *h*5-index is defined as the largest number *h* such that *h* articles published in the last five editions of a conference have at least *h* citations each.) In particular, the *h*5-index of ICC/GLOBECOM is even higher than some IEEE Transactions, while the only conferences having a higher index are IEEE INFOCOM (a ComSoc conference with the highest *h*5-index) and ACM/SIGCOMM.

In 2018, we started a thorough process of consolidation and analysis of the ComSoc Conference Portfolio, defined as all those conferences where ComSoc is a full or partial financial sponsor. Currently, our Conference Portfolio includes 28 events financially fully sponsored by ComSoc (see the ComSoc web site for the full listing). With few exceptions, each of these events is held once a year. In particular, we evaluated the financial and technical performance of all of our Portfolio Conferences, by focusing initially on the following small set of Key Performance Indicators (KPI) over the last five years (2014-2018):

- Attendance indicators: Number of paid registrations, complimentary registrations, and total registrations.
- · Financial indicators: Revenues, expenses, and surplus.
- Technical indicators: Number of submitted papers, number of accepted papers, and acceptance ratio.

The analysis of the collected data has provided some significant insight into the operation and performance of our conferences, which is essential for future planning and strategies. For example, a stable good financial performance (surplus mostly well above 25 percent) and good selectivity (paper acceptance ratio firmly below 40 percent) of our flagship conferences ICC and GLOBECOM has been confirmed throughout the period under study. Moreover, INFOCOM has been confirmed as the most selective conference in the ComSoc Portfolio, with a paper acceptance ratio in the range of 15–21 percent, which is more commonly seen in high-quality Journals rather than conferences.

In 2019, all data of the 2018 Portfolio Analysis have been updated. Moreover, a much deeper technical analysis on further indicators has been initiated, including the number of days from submission deadline to acceptance notification; number of unique reviewers; average number of reviews per paper; days from conference to submission to IEEE Xplore; citation index (Google Scholar *h*5-index), IEEE Xplore downloads; etc.

The portfolio performance analysis of our conferences has been one of the major tasks during the 2018-19 period. We are extremely pleased that such an analysis was able to demonstrate the high quality and relevance of the majority of our portfolio conferences. At the same time, it was instrumental in helping us identify critical challenges that need specific attention and follow-up actions to address such challenges.

Clearly, the great success of our conferences is a direct result of the tireless and dedicated work of the conference organizers and ComSoc Staff under the leadership of the Vice President for Conferences, Stefano Bregni; Director for Conference Development, Joel Rodrigues; and Director for Conference Operations, Hikmet Sari.

# **DIVERSITY AND INCLUSION**

Over the past two years, the Society took a proactive role to improve diversity across the board. Our BoG has recently passed a series of motions aimed at helping us understand the

current makeup of the Society and to ensure diversity efforts are being undertaken. At our BoG1 meeting in 2018, a motion was passed to track statistics on gender, region, and professional sector across various parts of the Society including publications. A readout of these statistics at BoG2 resulted in the creation of a series of diversity-related goals including increasing by 10 percent the representation of women on ComSoc editorial boards and as Editors-in-Chief. To further our efforts regarding diversity, our Bylaws (June 2019 version) have been updated to include the following provisions: "For each position (elected and appointed), there shall be documentation attesting that an earnest effort was made to identify a diverse set of qualified candidates and that no discrimination was made pursuant to IEEE Policy 9.26." GovCom was charged to develop a process for this documentation for addition to our Policies & Procedures. Based on discussions with IEEE Diversity and Inclusion staff, a basic outline for the process was prepared that addresses the diversity factors of gender, geographical region, and professional sector. That outline is now used by the Nominations and Elections Committee as they prepare the ballot for the 2020 election, and by the President-Elect as he prepares his appointments for his 2020-2021 term. Feedback from these two efforts will be incorporated into the final process that will be presented to the BoG for approval in December 2019.

### In Closing

Serving as President of ComSoc, the world's leading organization for communications professionals, has been a once in a lifetime opportunity for me that allowed me to lead and contribute to the success of this great organization. Looking back over the past two years, I have good reason to express my happiness given the many successes we had. We have accomplished much together in these short two years which passed too quickly. For that, I wish to express my sincere thanks to the many volunteers and staff that helped me and our beloved organization during these past two years. They include our Board of Governors, Standing and Ad Hoc Committees Chairs, volunteers that participated in these committees, ComSoc Staff, and the IEEE Staff associated with our Society. I am particularly grateful to our Society members, without whom we would not have a Society. Special thanks go to IEEE Division III Director, Sergio Benedetto, for his constant support and advice; our CIO, Zhi Ding, for his insights and hard work in enhancing our online and IT department; our Parliamentarian, Roberto de Marca, who was always there to make sure that proper rules and procedures are followed; and finally our Vice Presidents: Stefano Bregni (VP-Conferences); Stefano Galli (VP-Industry and Standards Activities); Sherman Shen (VP-Publications); Nelson Fonseca (VP-Technical and Educational Activities); and Nei Kato (VP-Member and Global Activities). Without their commitment, hard work, and support, none of the achievements and successes over the past two years would have had happened.

Finally, I would like to conclude by extending a very warm welcome to our incoming President, Vincent Chan, a renowned scholar from MIT with an extensive management and leadership experience. I am confident that under his leadership, ComSoc will be in good hands and that we will continue to grow and prosper with your continued participation.

It has been a privilege, an honor, and pleasure being your President, and I thank you from the bottom of my heart for all of your support and trust. We have accomplished a great deal together, and there is much more we can do to take ComSoc to new heights.

Happy holidays and I wish all of you a wonderful, prosperous, and successful 2020!