

IEEE Tokyo Section Report For 2022

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PART A - SECTION SUMMARY

A.1 Executive Summary – (Please follow the format given below)

- Section Executive Committee Member List

< Section Officer >

Chair: Yoshiaki NAKANO
Vice Chair: Masahiro KOBAYASHI
Secretary: Masayuki SHIGEMATSU
Treasurer: Fumiaki MAEHARA

< Executive Committee Members >

Chapter Operations Committee Chair: Yukihiro BANDO
Fellow Nominations Committee Chair: Akihiko KASUKAWA
Membership Development Committee: Chair: Tomoyuki YOKOTA
Nominations Committee Chair: Shiro RYU
Technical Program Committee Chair: Atsushi KANNO
Publications Committee Chair: Eiji TSUMURA,
Student Activities Committee Chair: Akira NAKAMURA,
History Committee Chair: Hiroshi SUZUKI,
Life Member Affinity Group Tokyo Chair: Hajime IMAI,
Young Professionals Chair: Prakash CHAKI,
Tokyo/Shin-etsu Joint Section WIE Chair: Mamiko INAMORI,
Section Appointing Executive Committee Member: Haruhiko OKUMURA,
Past Tokyo Section Chair: Hideyuki TOKUDA,
Past Tokyo Section Secretary: Yasuhiro TAKISHIMA,
Past Tokyo Section Treasurer: Hiromasa HABUCHI

- Section Highlights
 - General Assembly: The IEEE Tokyo Section's Year 2022 General Assembly was held on March 10th in hybrid.

- Event: Technical Program Committee of the Tokyo Section organized 10 lecture meetings, including, a lecture by IEEE 2022 President K.J Ray Liu with 130 attendees. After the lecture by President Ray Liu, a session of interaction and communication between President and members was arranged and it was fruitful interaction and discussion.
- Management: The Tokyo Section Executive Committee Meetings of 2022 were held 4 times, March 10th with 20 participants, June 29th with 21 participants, September 6th with 21 participants and December 1st with 36 participants.
- Membership Development: Continuing from last year, Tokyo Section sent pin badges which are presented to members of commemorative years (5, 10, 20, 25, 30, and 40 years) for the sake of increasing the retention rate.
- Major Events (International, National)
 - LMAG Tokyo Chair was invited to IEEE R10 SYWL Congress 2022 in Korea, which was held from August 10th to 14th, as a speaker. There were two participants supported financially by Tokyo Section.
 - WIE 2022 was held at The National Museum of Emerging Science and Innovation and online on November 12th, organized by Tokyo/Shin-etsu Joint Section WIE. The total number of participants was 78 including IEEE members.
- Major Chapter Activities
 - Chapter chairs participated in the Japan Council Chapter Operation Committee Meetings(hybrid) held on June 8th and November 27th with all other Chapter chairs belonging to sections in Japan, where they discussed procedures of chapter operations and effective ways of information sharing between chapters and with other IEEE OUs.
 - Three International Conference MOUs were concluded by some joint chapters.
- Major Student and Affinity Group Activities
 - Eight Student Branches of Tokyo Section participated in the event “Student Branch Leadership Training Workshop” (SBLTW) online on 10th June, 2022 and seven branches participated in it on 18th November in Okinawa. In addition, eight study sessions and workshops were organized and held by Student Branches of Tokyo.
 - Eight online study sessions and webinars were organized and held by Young Professionals Affinity Group of Tokyo Section.
 - Life Member Affinity Group Tokyo co-sponsored 9 online and hybrid lectures, and organized “Evening Salon extended” on June 14th to provide an opportunity of interaction with other members. What is more, four technical tours were organized and held by LMAG Tokyo.
 - In addition to WIE 2022 mentioned above, WIE Tokyo-Shin-etsu held two online coffee break sessions on International Women's Day, March 8th, and International Women Engineers Day, June 23rd, with 12 and 18 participants respectively.
<https://ieee-jp.org/section/tokyo/about/wie/activity/event-2022.html> (Japanese only)
- Awards
 - A member of Tokyo Section received IEEE Donald O. Pederson Award in Solid-State Circuits in 2022

A.2 Financial Report – (Please follow the format given below)

- Summary

IEEE
IEEE : Tokyo Section : Region 10 JPY
Income Statement
From Jan 2021 to Adjust 2022

Financial Row	Amount
Sales	
2.10 - Meeting & Social Events	¥16,000.00
3.10 - Rebate from IEEE HQ	¥4,731,695.00
3.20 - Region Receipts	¥215,597.00
3.30 - Sections or Councils	¥2,542,760.00
3.32 - Receipts from MGA Board, other Major Boards	¥180,000.00
3.34 - IEEE HQ & Societies	¥16,531,468.00
3.40 - IEEE CB Account Interest	¥57,498.00
3.45 - Non-IEEE CB Account Interest	¥84.00
Total - Sales	¥24,275,102.00
Gross Profit	¥24,275,102.00
Overheads	
4.10 - Meetings & Social Events Expense	¥909,001.00
4.30 - Advertising IEEE(Expense)	¥422,440.00
4.80 - Student Activities Expense	¥488,276.00
4.90 - Other Program Expenses	¥1,166,495.00
5.10 - Occupancy Expense	¥628,001.00
5.30 - Salaries Expense	¥1,247,922.00
5.50 - Support to Sections/Chapters Expense	¥17,474,819.00
5.60 - Other Management & General Expenses	¥1,477,044.00
Total - Overheads	¥23,813,998.00
Operating Profit	¥461,104.00
Net Profit/(Loss)	¥461,104.00

- Any other financial activities
Budget management was reinforced by monthly monitoring of executed activities of each committee and AG.

PART B - ORGANIZATIONAL ACTIVITIES

B.1 Membership Development Activities

- Total number of active members in the past 3 years.

Grade	Number 12/31/2020	Number 12/31/2021	Number 12/31/2022
Life Fellow	208	217	
Fellow	121	102	103
Life Senior Member	106	116	121
Senior Member	504	506	501
Life Member	351	388	410
Member	5,385	5,299	5249
Associate	187	145	135
Graduate Student Member	598	577	616
Student	139	179	208
Others (HM, PM, LA)	2	2	2
Total	7,601	7,531	7558

- Summary and evidence of work done to improve the value of membership, which leads to retention and growth of members
 - The Membership Development Committee (MDC) made every effort to enhance membership. The MDC distributed emails to renew membership and promote up-grading to Senior Members.
 - As a step to make IEEE more recognized in many events all over Japan, MD Coordinator had kept collaboration with chapters and Japan Office since 2019 to secure time slots for introduction of IEEE activities in the session of events and to install booths of IEEE promotion for distributing PR materials (MD kit) on the sites of the events. The MD kit was distributed in three events and conferences, ICCCI in July, IEEE WF-IoT 2022 in October and IEEE TOWERS in Tokyo in November.
 - 11 members were newly selected as IEEE fellows from Tokyo Section in 2022: (Toshihiko BABA, Michiel BACCHIANI, Xinkai CHEN, Yusheng JI, Abderrahmane KHEDDAR, Moriyasu MIYAZAKI, Hiroyuki MIZUNO, Masato MOTOMURA, Yoshihiro OHBA, Nobuyuki SUGII, Kiyohisa TERAII)
 - Fellow Nominations Committee (FNC) distributed emails to promote nominations for Fellow Members. And FNC analyzed what element encourages to apply to Fellow Grade by questionnaire to Fellow members. The results will hand over to next committee officers.

B.2 Chapter Activities

- Total number of Chapters in the Section is 38 shown below.

#	Chapter	#	Chapter
1	Signal Processing (SP-01)	20	Electronics Packaging (EP-21) [previous name: Components, Packaging & Manufacturing Technology (CPMT-21)]
2	Broadcast Technology (BT-02)	21	Oceanic Engineering (OE-22)
3	Antennas & Propagation (AP-03)	22	Control Systems (CS-23)
4	Circuits & Systems (CAS-04)	23	Robotics and Automation (RA-24)
5	Nuclear & Plasma Sciences (NPS-05)	24	Education (E-25)
6	Vehicular Technology (VT-06)	25	Professional Communication (PC-26)
7	Reliability (R-07)	26	Electromagnetic Compatibility (EMC-27)
8	Consumer Electronics (CE-08)	27	Systems, Man & Cybernetics (SMC-28)
9	Instrumentation & Measurement (IM-09)	28	Geoscience & Remote Sensing (GRS-29)
10	Aerospace and Electronic Systems (AES-10)	29	Society on Social Implications of Technology (SIT-30)

11	Computational Intelligence (CIS-11)	30	Power & Energy (PE-31)
12	Information Theory (IT-12)	31	Dielectrics & Electrical Insulation (DEI-32)
13	Technology and Engineering Management (TM-14)	32	Magnetics (MAG-33)
14	Electron Devices (ED-15)	33	Industry Applications (IA-34)
15	Computer (C-16)	34	Power Electronics (PEL-35)
16	Microwave Theory & Techniques (MTT-17)	35	Photonics (Formerly LEOS) (PHOT-36)
17	Engineering in Medicine & Biology (EMB-18)	36	Solid-State Circuits (SSC-37)
18	Communications (COM-19)	37	Intelligent Transportation (ITS-38)
19	Ultrasonics, Ferroelectrics & Frequency Control (UFFC -20)	38	Electronic Design Automation (CEDA-44)

- Number of Chapters formed in the current year is zero
- Number of active Chapters (Chapters who have reported required number of meetings during the year) is 38, i.e. all the Chapters are active.
- Summary of Chapter activities (Chapter wise with attachment table/information)
 - Total number of events such as technical meetings held by Chapters in Japan is over 280
- Chapter chairs participated in the Japan Council Chapter Operation Committee Meetings (hybrid) held on June 8th and October 27th with all other Chapter chairs belonging to Sections in Japan, where they discussed procedures of chapter operations and effective ways of information sharing between chapters and with other IEEE OUs.
- With the introduction of IEEE's TCS Fee in 2019, Chapter Operation Committee (COC) responded to the conclusion of MOU and sponsorship, especially for joint chapters. Tokyo Section approved two MOUs in total for TCS/FCS in 2022.

B.3 Professional and Continuing Education Activities

Summary of continuing Educational activities including conferences, technical activities, training courses, and distinguished lecture programs with attachment table / information

- In total, 10 lecture meetings and four Technical Tours with lecture were held during the year of 2022.
<https://ieee-jp.org/section/tokyo/event/kouen/kouen2022.html> (Japanese only)

B.4 Students Activities

- Total number of Student Branches in the Section is 13. The Student Branches are as follows: University of Tokyo (1976), Tokyo Institute of Technology (1994), Keio University (1994), Yokohama National University (1995), Tokyo City University (2004), Tokyo Denki University (2005), Meiji University (2007), Tokyo University of Science (2009), Waseda University (2010), Chuo University (2012), Tokyo University of Agriculture and Technology (2012), University of Electro-Communications (2015), Aoyama Gakuin University (2017)
- Number of Student Branches formed in the current year is zero.
- Section level student activities (student congress, paper and other contests, awards etc) are listed below.
- Seven Student Branches (SB) from Tokyo Section participated in SBLTW in Okinawa organized by Japan Council SAC on November 18 to 19th

- IEEE Student Branch Research Presentation Encouragement Workshop 2022 was held on November 25th in hybrid to encourage SB activities through research presentations and activity reports, and to gain the IEEE SB awareness by promoting to the students in college of technology.
- Number of active Student Branches is 7 (Student Branches who have reported required number of meetings during the year)
- Summary of Student Branch activities (Student Branch wise with attachment table/information)
- The Student Branches of Tokyo Section actively organized and held events in 2022. i.e. eight study sessions and workshops, four membership development activities in their University events, and Research Presentation Encouragement Workshop.

B.5 Affinity Group Activities

- Young Professional (YP)
Tokyo Section YP continued to have varied activities with much enthusiasm.
 - YP Tokyo annual Kick-off Meeting was held on January 30th, 2022 online with 14 attendees for discussion of action plan.
 - As mentioned in “Major event in Affinity Group”, eight online study sessions and webinars were organized and held by Young Professionals Affinity Group of Tokyo. Themes and topics of the sessions and webinars varied from professional to career seeking for young engineers, such as Robotics, Coding and personal episodes in IEEE.
 - IEEE Tokyo YP Students’ Transition and Elevation Partnership (IEEE STEP 2022) at Yahoo! JAPAN Research was organized and held by YP Tokyo on November 15th (online) with more than 30 attendees. Three researchers in Yahoo! JAPAN Research presented their field and research.
<https://iee-jp.org/section/tokyo/about/yp/activity/the-12th-ieee-tokyo-yp-step-event.html> (Japanese only)
 - YP Tokyo co-sponsored WIE 2022 organized by WIE Tokyo Shin-etsu Joint Section on November 12th and supported IEEE TOWERS 2022 in Tokyo on November 26th.
- Women In Engineering (WIE)
 - WIE Tokyo Shin-etsu Joint Section Board meetings were held on February 22nd (online), June 17th (online), September 3rd (hybrid) and November 7th(online), with 8, 7, 9, 8 attendees respectively.
 - In addition to the WIE 2022 and Online Coffee Breaks mentioned previously, “Red carpet ceremony 2022” was held on December 10th in which members who contributed well to activities of WIE and elevated to Senior Member in 2022 were awarded. There were 25 participants including member’s family.
- Life Member (LM)
Tokyo Section LMAG continues to work very actively. In 2022, it had many lecture meetings and events to attractive sites, including previously mentioned lectures and Technical Tours.
<https://iee-jp.org/section/tokyo/en/about/lmag.html>
 - LMAG Tokyo’s General Assembly was held on March 10th in hybrid with 16 attendees.
 - Six Board meetings were held on March 10th (onsite), May 2nd (online), June 14th (onsite), July 13th (onsite), August 18th (online), December 21st (onsite).
 - The Chair and Vice Chair of LMAG Tokyo participated in R10 LMAG Meets on June 19th(online), August 12th (in Korea) and October 16th (online).
 - A lecture meeting “Unpredictable age. Life, industry and happiness uncovered by data” by Mr. Kazuo Yano sponsored by IEEE Tokyo Section TPC and co-sponsored by LMAG-Tokyo was held on Zoom Webinar on March 10th, 2022 with 46 attendees.
 - “Evening Salon extended” was held at Kikai Shinko Kaikan in Tokyo on June 14th, 2022, including a lecture meeting “Space Travel is about to start, how about Japan ?” by Prof. Tadashi Takano sponsored by LMAG-Tokyo and co-sponsored by IEEE Tokyo Section TPC in hybrid with 98 attendees.

- A lecture meeting “Technology review of Cu interconnects for VLSI and Atom switch for industrial application” by Mr. Munehiro Tada sponsored by IEEE Tokyo Section TPC and co-sponsored by LMAG-Tokyo was held on Zoom Webinar on June 30th, 2022 with 54 attendees.
- A lecture meeting “Artificial Photosynthesis: State of the art and Future Prospect” by Prof. Haruo Inoue sponsored by IEEE Tokyo Section TPC and co-sponsored by LMAG-Tokyo was held on Zoom Webinar on July 13th, 2022 with 55 attendees.
- A lecture meeting “Nonlinear fiber optics and their applications to communications” by Mr. Shu Namiki sponsored by IEEE Tokyo Section TPC and co-sponsored by LMAG-Tokyo was held on Zoom Webinar on July 27th, 2022 with 53 attendees.
- The Chair and Vice Chair were participated in R10 SYWL Congress 2022 in Korea from August 10th to 14th and the Chair gave a speech about LMAG Activities in Tokyo and milestone program.
- A Technical Tour to KDDI Transmitting Station sponsored by LMAG-Tokyo and co-sponsored by IEEE Tokyo Section TPC was held on August 24th, 2022 with 21 attendees.
- A lecture meeting “R&D of On-Chip High-Voltage Generator” by Prof. Toru Tanzawa sponsored by IEEE Tokyo Section TPC and co-sponsored by LMAG-Tokyo was held on Zoom Webinar on August 26th, 2022 with 80 attendees.
- A Technical Tour to JAXA Sagami-hara Campus sponsored by LMAG-Tokyo and co-sponsored by IEEE Tokyo Section TPC was held on September 29th, 2022 with 29 attendees.
- A lecture meeting “Research on Green Multicore Architecture and Its Power Reducing Parallelizing Compiler” by Prof. Hironori Kasahara sponsored by IEEE Tokyo Section TPC and co-sponsored by LMAG-Tokyo was held on Zoom Webinar on October 6th, 2022 with 55 attendees.
- A Technical Tour to ANA Maintenance Center sponsored by LMAG-Tokyo and co-sponsored by IEEE Tokyo Section TPC was held on October 26th, 2022 with 35 attendees.
- A lecture meeting “Wireless AI: A New Sixth Sense to Deciphering our World” by Prof. K. J. Ray Liu sponsored by IEEE Tokyo Section TPC and co-sponsored by LMAG-Tokyo was held in hybrid on November 1st, 2022 with 130 attendees.
- A lecture meeting “Involved in research and development of video coding” by Prof. Seishi Takamura sponsored by IEEE Tokyo Section TPC and co-sponsored by LMAG-Tokyo was held on Zoom Webinar on November 2nd, 2022 with 39 attendees.
- A lecture meeting “Humanoid Robotics and Its Applications” by Prof. Atsuo Takanishi sponsored by IEEE Tokyo Section TPC and co-sponsored by LMAG-Tokyo was held on Zoom Webinar on December 13th, 2022 with 42 attendees.
- A Technical Tour to The Railway Museum & JR-East R&D Center sponsored by LMAG-Tokyo and co-sponsored by IEEE Tokyo Section TPC was held on December 14th, 2022 with 19 attendees.
- Three News letters were issued in April, September and December.
https://www.ieee-jp.org/section/tokyo/lmag/newsletter/2022/34_e.pdf
https://www.ieee-jp.org/section/tokyo/lmag/newsletter/2022/35_e.pdf
https://www.ieee-jp.org/section/tokyo/lmag/newsletter/2022/36_e.pdf

B.6 Awards & Recognition Activities

- No Award constituted by the Section in 2022.
- Awards and Recognitions received by the Section, and members in the Section, from R 10 and IEEE HQ during the year is as follows.

[IEEE Technical Field Awards] IEEE Donald O. Pederson Award in Solid-State Circuits
 “For pioneering contributions to low-power, analog-to-digital converters in systems on a chip (SoCs) for digital video applications.”
 Akira MATSUZAWA (Tokyo Institute of Technology)

B.7 Communication Activities (Newsletter, Home Page, E-mail etc.)

- Newsletter (name and number of issues in the year)
- The Publications Committee issued a newsletter named “Tokyo Bulletin” Eight times during the year of 2022.

<https://iee-jp.org/section/tokyo/en/report/bulletin.html>

- Home Page of the Section (give the URL and how often it is updated)
Tokyo Section home page has been updated with much effort a couple of times each month.
<https://iee-jp.org/section/tokyo/en/>
- Other means of contacts with Section members including social media
Besides the bulletin, the information on professional and technical meetings was timely distributed to members by IEEE eNotice (e-mail).

B.8 Industry Relations

- Membership growth and retention
 - Tokyo Section has collaboration with Japan Council Industry Promotion Committee (IPC) to share the current situation of companies regarding IEEE activities and to discuss the way of expanding opportunities for companies to recognize and be engaged in IEEE.
- Activities for/with industrial members
 - Several Industry members from the Tokyo Section participated in "IEEE Metro Area Workshop (MAW) in Tokushima2022", for a purpose to activate the industry relation, organized by IEEE Shikoku Section.
 - In addition to usual SYWL workshop mainly organized by JC SAC, YP, WIE and LM, "Industry" was also joined to SYWL Workshop in Tokushima this year and formed "SYWL+I", which was held on October 8. Several companies from Tokyo Section had opportunities to introduce the company to students and students had opportunities to gain some information and talk to the engineers who work for the companies.

B.9 Humanitarian Technology Activities

- Humanitarian Technology related activities supported by the Section including collaboration with other OUs.
 - Tokyo SIGHT supported a lecture in The 27th IEEE Engineer Spotlight held on September 16th, 2022, "Role and endeavor of communication technology for achieving society implementation of Maas and automatic operation" (93 attendees).
 - Tokyo SIGHT also co-organized "Career Navigator" with JC EA in Kodaira dai 2 junior high school. A member of Tokyo SIGHT participated in it as one of the navigator to talk about their specialized field and experience to give some opportunities to think about the future career for junior high school students.
- SIGHT Activities are same above.

B.10 Community Activities

- IEEE Social activities (Family day, IEEE day, Engineers Week)"
 - Tokyo Section had a celebration for newly selected IEEE Fellows on March 10th, 2022.

PART C - OTHERS

C.1 Special Events

- Please briefly describe the importance of special events and the outcomes achieved

- As previously mentioned, IEEE 2022 President K.J Ray Liu made a courtesy call to the Dean of the School of Engineering in the University of Tokyo and gave a lecture November 1st. 130 people were attended and after the lecture, a session of interaction and communication between President Liu and IEEE members was arranged and it was fruitful interaction and discussion.
- Funding secured from the IEEE and external sources including sponsorships
Not applicable

C.2 Relationship with National and International Societies and Non-Government Organizations (NGO)

- Nature of relationship and details of any formal agreement signed
IEEE Tokyo Section had original MOU between IEICE (The Institute of Electronics, Information and Communication Engineers)
- Details of joint activities
Supporting each other's sponsored events automatically.
- Benefit to IEEE members (for example discounts, access to technical information etc.)
Members of IEEE Tokyo Section also can reach IEICE information of their events.
- Benefit to Section (for example help in membership development, venue facilities, cost saving etc.)
Supporting the publicity to deliver emails to the IEICE members at each event.

C.3 Collaboration with other IEEE Sections

- Support extended to neighboring Sections
- Joint activities with any other Section
Tokyo section had collaborative activities with other sections in Japan such as MAW2022 and Japan SYWL + I workshop held in Tokushima on October 17th and 18th.
- For the management sake, chairs and other delegates participated in joint meetings organized by Japan Council, which includes SAC, MDC, and HC to share information and discuss common subjects with other sections.

C.4 Support extended to Sub-sections & Society Chapters within the Section

- Support extended for organising technical, educational and professional activities
 - Tokyo Section approved two MOUs in total for TCS/FCS in 2022.
- Joint activities for membership development
- Support extended for the formation of a Sub-section or transition of a Sub-section into a full Section

C.5 Best Practices of your Section (which you would like to share with other Sections for the benefits of members)

- Tokyo Section continued utilizing an office tool “Garoon” which is installed in 2019 for the sake of information sharing, communication promotion, expediting discussion and decision, optimization of office work effort, and so on among the members of the executive committee.
- For online communication, Tokyo Section keeps “Zoom” and “WebEX” license in collaboration with Japan Council.

- To enable to work efficiently from home for COVID prevention and during the business trip, file sharing system was implemented to the Tokyo Section office in collaboration with Japan Council.

C.6 Problems anticipated and suggestions for solutions, if any

- Reporting, communication and decision-making is still to be improved for smooth activities, perhaps by system automation, procedure optimization, modifying role assignment, and so on.
- Due to COVID-19, the conventional method to hold events needed to change. In 2022 online or onsite-online hybrid types of events became common and there were more participants in many cases. However, some problems are still to be solves such as deep interaction, sub-group discussion, direct experience on demonstration, and onsite tours. Establishing common VR platform

PART D - GOALS AND PLANS

D.1 Continuation of project/activity in progress and their implementation plans

- To encourage and support YP, LMAG and WIE joint activity to build a cross generation network.
- To promote support of Japan Council's operation and develop closer ties with other sections in Japan.
- To support Student Branch activities in corporation with R10 and support further establishment of new Student Branches in Tokyo Section.

D.2 Goals and Future Plans

- Membership recruitment and retention
- To increase the relationship with IEEE and industry members, and to provide benefit for industry members as well as academic members
- To increase management efficiency and effectiveness
- To ensure the sustainable growth and financial stability considering currency exchange rate and membership
- To enhance collaboration:
 - Regional communities and other non-IEEE societies
 - Other IEEE Sections (joint activities with neighboring sections)
- Comprehensively analyze the opinion of members and various information and make use of it in section activities.

D.3 Any innovative ideas to make IEEE more creative and value added for sustaining the membership retention and recruitment goals.

- It is known that increasing fellow and senior grade members is effective for membership retention. For that purpose, it would be necessary that their qualifications be even more respected and attractive. IEEE may need to add valuable privileges to those members in extensive scenes of IEEE activities, e. g. IEEE invites more fellows/seniors to major IEEE conferences/events, or IEEE takes measures to make their presence higher to public, local/global communities, government and so on.
- For the retention and recruitment of industries, it may be effective to make more benefits to those organizations with a certain number of members, e. g. price discount for those in IEEE events.
- Point accumulation system for voluntary work or participation in IEEE activities may be useful for membership retention.
- It would be effective to make tighter relationship with industries to make rankings of the organizations open to public every year according to their contributions to IEEE, e. g. number of members, number of

participants to IEEE events, special support to activities, and so on, in addition to presenting awards to them.

D.4 Business Plan for Sustainable Growth and Financial Stability.

- Selling tools and data for research use may be another source of income. They may be made by IEEE or provided by IEEE members. For example, AI model of proposed technologies and bigdata for public use are really valuable for many researchers as benchmark resources.
- Returning more portion of membership fee to local organizations (councils/sections) is very effective to enhance their activities. Particularly office management only by volunteers or few employees is very tough work for councils or sections with a large number of members.