

Lecture

Message from the President — Aspirations for the IEICE in 2030 —

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1. Introduction

The Institute of Electronics, Information and Communication Engineers (IEICE) was the first academic society that I joined. I became a member in my fourth year of undergraduate school in order to give my first academic presentation at its “national conference” (now called the “general conference”). However, while I was writing the manuscript, I discovered numerical calculation errors and was therefore unable to submit it by the deadline. As a result, my first presentation in an academic society had to wait until a meeting of the Technical Committee on Circuits and Systems that took place the following year. After becoming a university faculty member, I frequently presented my research results at technical committee meetings and received questions and comments directly from prominent professors, which encouraged me to pursue my research. In addition, the researchers from universities and companies whom I met through research presentations and associated banquets proved to be immeasurably valuable assets in my later research and other academic activities. After I hit my thirties, I served as a secretary on several



technical committees, was a member of the editorial committee for IEICE Transactions, a secretary for IEICE society conferences and eventually became the general secretary for an IEICE society. These roles provided me with ample opportunities to gain extensive hands-on experience in the running of an academic society, particularly in managing technical committees and the activities of IEICE societies. As I became more involved in managing technical committees and societies, I came to view the IEICE as a collaborative forum where researchers voluntarily support one another and work together to invigorate and advance their fields of research. In my fifties, I took leadership roles within the IEICE - first as the chair of a

technical committee overseeing a specific research field, then as president in charge of managing an IEICE society and later as vice president of the IEICE. During the period of the COVID-19 pandemic, when I was the IEICE vice president, the institute's activities were severely constrained, requiring the rapid implementation of a series of new initiatives. This experience made me keenly aware that the institute needed to evolve in step with the times.

Now, having been elected president, I am determined to work on three key priorities: the globalization of the institute, the enhancement of its standing, and the promotion of sustainable management. The aim is to ensure that the IEICE continues to grow and thrive well beyond 2030. Of course, the president cannot accomplish these tasks alone. Success will require close collaboration with the board of directors and active engagement with our members to collectively shape the future direction of the institute.

2. The Environment Surrounding the Institute



The long-standing downward trend in the number of members bottomed out in 2023. The number hovered around 23,000 at the end of FY 2024, which is almost the same level as the

previous year. This was thanks to the increase in the number of student members and junior members (students who are either in their third or lower year of university or in high school). In addition, the number of associate members, a membership category introduced in FY2022, exceeded 1,000. Many of the associate members are active in the fields of electronics, information and communication, and we expect them to participate in collaborative activities across various domains through involvement in IEICE conferences and lectures. The same trend can be said of IEICE transactions. The significant decrease in the number of submissions that began around 2017 has stopped. Thanks to a new policy introduced in FY2021 that allows non-members to submit papers, the number of submissions has seen an upturn since 2023. While this has not yet translated into an increase in the number of papers published, such growth is expected in the future. Thus, the downward spiral of the institute has stopped and begun to reverse.

Even more positive signs can be witnessed in the IEICE general conferences and society conferences. The number of presentations has returned to the pre-COVID level. The banquets at each conference have been attended by several hundred participants. In the two-day poster sessions for junior and student members held at the 2025 general conference, 234 posters were presented. The participants were surprised to see that an elementary school student won the Junior Investigators Award. There were many poster presentations by high school students, indicating that the institute is contributing to the development of young people who are interested in information and communications.

With these emerging upward trends, what kind of future strategy should the institute pursue? I would like to propose the following three key themes as the foundation for the institute's strategic direction.

- (1) Promotion of globalization
- (2) Enhancement of the institute's standing
- (3) Sustainable management of the institute to meet the demands of the new era

In the next section, I will present my vision for the institute's development toward 2030 in alignment with these themes.

3. Institute Revival Plan for 2030 (Figure 1)

I will pursue the following revival plan to advance the development of the institute toward the year 2030

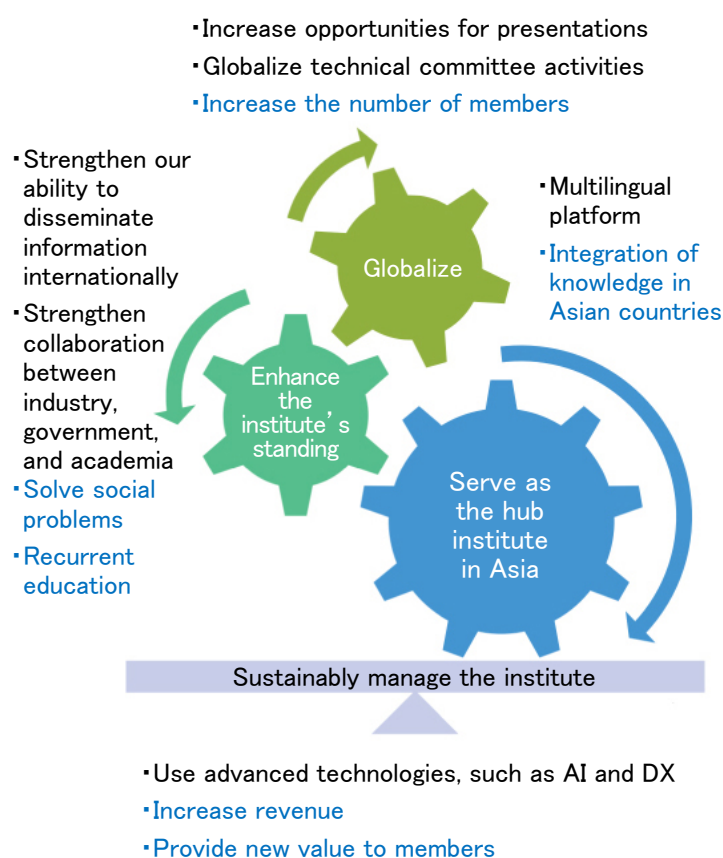


Fig. 1 The Institute Revival Plan

3.1 Promotion of Globalization

As the ICT field continues to evolve on a global scale, the globalization of the institute is both necessary and inevitable. The IEICE needs to foster international research and development, growing into an academic society that contributes meaningfully to the global community. Therefore, a key strategic focus will be to boost two key performance indicators of globalization: the number of overseas members and the number of papers submitted from abroad. To achieve this, I will promote initiatives that leverage the unique strengths of our institute to bring about future-oriented growth.

(1) Organizing flagship international conferences

A key aspect of globalization is to increase opportunities for overseas members to present their research. For example, we will further internationalize the International Conference on Emerging Technologies for Communications (ICETC), the flagship international conference held annually by the Communications Society, so that it becomes a global forum where researchers and engineers from around the world can gather. In addition, I intend to invite societies, including those other than the Communications Society, to organize interdisciplinary flagship international conferences. This will increase the opportunities for overseas members to present their work regardless of their specific field of research. The Engineering Sciences Society plans to host a flagship international conference in 2026 in conjunction with an existing international event. Other societies have also begun discussions on launching similar conferences. I will actively support and promote the expansion of this

initiative.

(2) Expansion of technical committee activities involving overseas researchers

While the IEEE in the United States is the world's largest academic society in the ICT field, our institute has ample potential to become a leader in Asia. For example, we can stimulate research activities across the entire region by exporting our long-established and unique technical committee framework to other Asian countries. Furthermore, the multilingual translation platform—described in detail below—will make it possible for researchers in Asian countries to share knowledge and collaborate with each other in their own languages. By expanding our technical committee activities, the institute aims to establish itself as a central hub for research and development in Asia, while also increasing international membership and the number of papers submitted from abroad.

(3) Multilingualization efforts

To further accelerate the globalization of the institute, the IEICE launched the IEICE Digital Library in FY2024. It is a multilingual translation platform and has been translating English-language transactions into 15 different languages since its establishment. In the coming years, we plan to extend this platform to our journals to improve services for our international members. We aim to evolve this platform into a future "hub of knowledge" in the Asian region by incorporating not only our institute's content but also that of other institutes across Asia. Our goal goes beyond mere translation. We aim to build a

comprehensive and open ecosystem where knowledge can flow freely across language boundaries.

These multilingualization efforts are part of our broader challenge to bring about an "integration of knowledge" that respects linguistic diversity. Our goal is to create a forum where researchers can freely express their ideas and actively exchange knowledge without being hindered by language differences. While we recognize the complexity of this undertaking, we are committed to the formation of a well-balanced global knowledge community.

3.2 Enhancing the Institute's Standing

With the aim of elevating the standing of our institute and solving social issues, we will strengthen our ability to disseminate research results internationally, reinforce collaboration between industry, government, and academia, enhance the circulation of information from our institute, and promote recurrent education initiatives.

(1) Strengthening international dissemination of research results

The steps being taken to strengthen our capacity to disseminate information internationally include enhancement of the quality of IEICE transactions and expansion of our international research networks. For the former, we will encourage increased submission of papers, and collect outstanding research results for global distribution. This will help raise both the institute's visibility and the impact factor (IF) of the institute's transactions. To do this, we plan to boost the number of submissions by introducing a system which will

recommend the publication of exceptional presentations from technical committee meetings in transactions. Additionally, we will organize special issues of transactions aligned with the same themes featured in domestic and international conferences, including flagship international events. The IF of our transactions has been steadily rising thanks to more than a decade of ongoing efforts, such as the release of English-language Transactions B on IEEE Explore and the improved circulation of IEICE transactions through the introduction of the multilingual translation platform. Furthermore, as a new strategic initiative, we are also exploring the publication of premium transactions with a level of prestige comparable to that of Nature and Science. Our goal is to create transactions with a high IF not only by publishing invited papers and survey papers authored by leading researchers, but also by attracting outstanding submissions from a wide range of fields beyond the boundaries of our institute.

(2) Strengthening collaboration between industry, government, and academia

We are committed to solving social problems in the field of information and communications by promoting collaboration between industry, government, and academia. One key initiative is the promotion of information and communications engineering, which focuses on the comprehensive management (design, construction, operation, and maintenance) of the information and communications infrastructures that underpin our daily lives. To support this effort, we have established “the

Division.” Functioning similarly to an IEICE society, this division brings together contributing members from corporations to discuss issues and explore solutions related to information and communications infrastructures.

In addition, to make the institute more appealing to corporate members, we have launched “the Corporate Initiative.” It is a forum where members work to address social issues from a corporate perspective and explore new business opportunities. Four subcommittees have already been established. The subject being studied by one of them, “the Subcommittee on the Examination of Social Systems in Which AI Interoperates,” has been adopted as part of the medium- to long-term research strategy for the Science Council of Japan's “Future Science Advancement Initiative” and its discussions have been actively featured in symposiums and conferences. To further enhance the institute's contribution to society, we will continue to establish subcommittees under the Corporate Initiatives as needed while promoting collaboration between industry, government, and academia to help solve social challenges.

(3) Strengthening information dissemination from the institute

The IEICE aims to serve as a bridge between academia and society by actively sharing its views on social issues. In August 2024, it released the presidential statement on job-hunting by university students. The statement called on companies to “shift to recruitment practices that respect the educational opportunities of both undergraduate and

graduate students" and to evaluate candidates based on their genuine abilities, as demonstrated through their involvement in academic societies, rather than relying on one-day internships and similar methods designed to secure their hasty consent to join the company.

We will continue to fulfill our social responsibility and raise the profile of the IEICE by presenting proposals and issuing presidential statements to national and local governments. While the IEICE has traditionally maintained a strong presence in universities and industry, it has not clearly communicated its potential contributions to government. To address this situation, the institute has submitted a proposal to the 7th Science and Technology Innovation Basic Plan in the form of a presidential statement. I outlined the following key roles the IEICE can play: (i) serving as a forum for intensive discussions in fields where Japan has demonstrated its excellence; (ii) providing a forum for initiating or developing collaboration between industry, government and academia; (iii) fostering young people interested in ICT-related careers and providing recurrent education for professionals already working in the field; and (iv) building inclusive forums where individuals can freely express their ideas and actively exchange knowledge, unhindered by language barriers.

(4) Promoting recurrent education

As technological innovation gathers speed, one of the institute's key missions is to provide a place for continuous learning. Through providing recurrent education, the institute is creating an environment where both its members and engineers in the broader

community can stay current with the latest knowledge and technological advancements. The institute currently offers two main recurrent education programs "the IEICE Advanced Seminar" (in an on-demand format) and "the Advanced Electrical and Electronics Engineer Development Program," which has been accredited by the ECE Program of the Japan Federation of Engineering Societies. The IEICE Advanced Seminar serves as an effective platform for ongoing professional development. To meet diverse needs, we plan to expand the number of IEICE Advanced Seminar courses in the coming years from the current five to more than ten. We will also enhance the value and relevance of course content by selecting topics based on feedback from supporting member companies, enabling these courses to be used as part of their in-house training programs.

We will also design and implement new ECE Program-accredited programs to provide many more engineers with structured, step-by-step learning opportunities. Through these initiatives, we will strengthen the services we provide to our members and contribute continuously to the education of society at large, thereby further solidifying IEICE's role and purpose.

3.3 Sustainable management of the institute to respond to the new era

As can be seen from the rapid advancement and widespread adoption of generative AI in recent years, ICT technologies are evolving at an extraordinary pace. To respond to this dynamic landscape, we will actively integrate these advanced technologies into the management of the institute. This will enhance our ability to

support the activities of our members more effectively, and position the institute as a hub for the dissemination of advanced knowledge.

(1) Efforts toward sustainable management of the institute

The IEICE maintained profitability for six consecutive years through FY2023. However, from a long-term perspective, there are concerns that we may see a decline in membership due to the falling birthrate and a reduction in the number of papers published in IEICE transactions. As a strategy to ensure the sustainable operation of the institute in the future, we will expand revenues from technical committee activities and international conferences conducted by IEICE societies in addition to increasing revenues through globalization and enhancement of the institute's standing as already mentioned. Through these various initiatives, we intend to build a resilient and sustainable management structure that continues to serve the interests of our members and fulfil our broader social responsibilities.

(2) Adopting advanced technologies for more efficient institute operations

We will improve the operational efficiency of the secretariat and member services by actively utilizing the latest technologies, including generative AI. The translation service for overseas members mentioned above is one example of these efforts. We will also apply cloud computing to the institute's systems to further improve the efficiency of the institute's operations.

(3) Providing new value to members

In March 2025, we held a trial matching workshop, called “Advanced Research Track (ART),” a new approach to job-hunting in which students present their research through posters and are scouted by recruiters from companies attending the event. We will continue to implement and firmly establish ART, while also supporting the development of career paths for researchers by conducting matching workshops and recurrent education programs.

4. Conclusions

As outlined above, we will promote the globalization of the institute, enhance its standing, and explore its ideal form for the new era leading up to 2030. I ask for the continued support and cooperation of all our members in realizing these goals.

The recent revitalization of the IEICE general and society conferences is a direct result of the active participation of our members in both conference presentations and management. As the president of the institute, I would like to express my heartfelt gratitude for your involvement. To honor our long-standing members, we have introduced a recognition program that awards commemorative pins in different colors based on the length of membership — specifically for 20, 30, 40, and 50 years. I would like to ask all members for their continued participation in, and support for, the institute.

Finally, as the president, I remain fully committed to the development of the institute toward the year 2030. Together with all of you, I am determined to shape the institute into one that is truly suited to meet the challenges and opportunities of the new era. I sincerely invite

you to join me in this important endeavor.

発表の機会の増加	Increase opportunities for presentations
研究会の国際展開	Globalize technical committee activities
会員数の増加	Increase the number of members
国際発信力の強化	Strengthen our ability to disseminate information internationally
産学官連携の強化による社会問題の解決	Solve social problems by strengthening collaboration between industry, government, and academia
リカレント教育	Recurrent education
多言語化プラットフォーム	Multilingual platform
アジア諸国の、「知の統合」	Integration of knowledge in Asian countries
グローバル化	Globalize
ステータス向上	Enhance the institute's standing
アジアにおけるハブ学会	Serve as the hub institute in Asia
サステイナブルな学会運営	Sustainably manage the institute
AI 技術や DX 化など先進技術の利用	Use advanced technologies, such as AI and DX
収益の拡大	Increase revenue
会員への新たな価値の提供	Provide new value to members
図 1 学会リバイバルプラン	Fig. 1 The Institute Revival Plan