"Code of Conduct" Institute of Electrical Engineers of Japan

[Preamble]

This code of conduct aims to embody the philosophy of "the Code of Ethics of the IEEJ" and declares that the members of the IEEJ shall use this as a guidepost for their own behavior in research, development and the application of electricity-related engineering and education practice.

The term "guidepost" means that this code of conduct has two aspects: as criteria for making judgments in the face of problems related to the engineer's ethics and as an action guideline that promotes better behavior.

The members of the IEEJ, as electrical engineering specialists, declare that we will recognize the responsibility for responding to social trust and expectations and fulfill our roles sincerely in accordance with this code of conduct.

Electrical engineering contributed to the industrial development and enrichment of people's lives in the modern civilized society that flourished in the 20th century after the early development stage in the late 19th century. Electrical engineering, as is obvious, is becoming more important as a core technology supporting the social system infrastructure into the 21st century. Many of the convenient, constantly innovating technologies and business model innovations are frequently based on the application of electrical engineering. Therefore, electrical engineering is indispensable for the development of science and technology and the building of a new civilization.

In modern society, particular priority was placed on economic growth to satisfy the wishes of people seeking a materially wealthy society and addressing the rapid increase of the population; therefore, society has consumed a large amount of resources and energy and placed an increasingly larger burden on the environment. The technology for energy supply and passenger and cargo transportation has also caused impacts - from regional environmental problems such as air pollution to global environmental problems such as global warming that affects climate conditions and the ecosystem - in exchange for enormous benefits to people. Modern society has begun to coordinate solidarity and policies internationally and develop technologies to overcome challenges, such as adopting SDGs (Sustainable Development Goals) at the UN Sustainable Development Summit. At the same time, society also needs to be resilient against severe earthquakes, floods, and other natural disasters where the development and maintenance of environmental ethics for the symbiosis of nature and human beings is called for.

In addition, the rapid progress of information and communications technology at the end of the 20th century continued its advance in the 21st century with the development and spread of technologies including the internet, smartphones, and artificial intelligence (AI). Amid the pandemic, digitization has accelerated in many activities as shown in the growth of remote working. While such developments bring convenience they also bring problems—inappropriate use or management of data, invasion of privacy, and security vulnerabilities. Although society is working to address these issues through legislation and other measures, the current situation is not satisfactory, and the development and maintenance of information ethics remain critical.

The concept of aspirational ethics, ethical ideas permeating society with increasing influence, reasons that

individual engineers will contribute to public welfare and in doing so will contribute to their own wellbeing.

Under these circumstances, the members of the IEEJ strive to take actions proactively to build a sustainable society with professional awareness and pride as electrical engineering specialists to ensure a robust right for the next and future generations by maintaining international peace and cooperation. In addition, in order to protect basic human rights, which have been established in modern society after various difficulties, and intellectual property rights that are a driving force for the fair development of industrial society, IEEJ members shall understand the fundamental philosophy of these rights and observe the various rights that are put in statutory form. Furthermore, when contracts are concluded in various situations on a daily basis, any item that may have significant impact on human society and the environment shall be scrutinized and judgment shall be made from the viewpoint of the realization of social justice.

The members of the IEEJ shall strive to harmonize the benefit to be sought by the organization to which each member belongs and those to be enjoyed by society and, when a conflict between the two benefits occurs, the members shall choose an action with the highest priority on the safety, health and welfare of human beings over any other consideration. Also, the members shall contribute to the advancement of scholarship, transfer of culture and development of civilization and fulfill their duty through an interchange with persons of various opinions, with a view from inside and outside of the country.

The individual members of IEEJ recognize that an awareness and behavior with a spirit of self-sufficiency can bring new life to this code of conduct and will take initiative in observing this code of conduct.

The organizational members understand the purpose of this code of conduct and strive to establish an organizational structure in accordance with this code.

Furthermore, the IEEJ, as a professional society, recognizes the social meaning of its existence and role and fulfills its mission by supporting its members and issues public statements prioritizing and ensuring the public interest while cherishing a viewpoint free from preconceived ideas.

Based on the fact that every single issue that may occur on a daily basis cannot be covered in this code of conduct, the members behave recalling the value that they should protect human beings and return to the purpose of the code of conduct when they deal with any issue that is not covered in this code of conduct.

Also, we naturally expect that this document will be reviewed as necessary in changing times because any code of conduct will be affected by the social conditions and values at the time it is established.

1. The members shall hold paramount the safety, health and welfare of human beings and society and contribute to the establishment of a sustainable society.

1-1 Public welfare before efficiency and profits

The members shall always hold paramount the safety, health and welfare of the public instead of focusing only on efficiency and/or short-term benefits, and shall not leave deteriorated safety, health and welfare unresolved simply for lack of funding, human resources, etc.

1-2 Ensuring safety and environmental conservation

The members shall recognize that electrical engineering can harm human health and welfare through the deterioration of public safety and the environment and shall always make the utmost efforts for safety and environmental conservation to avoid the devastating consequences caused by the erroneous application of technology. The IEEJ and its organizational members shall establish and maintain an organizational structure for taking responsibility for safety and environmental management.2

1-3 Acquisition of safety knowledge and technique

The members shall strive to enhance the expertise and technical competence necessary for ensuring safety as well as observing applicable laws and regulations in running projects and research for electrical engineering.

1-4 Establishment of sustainable society

The members shall contribute to the safety, health and welfare of human beings and society through electrical engineering and shall overcome issues such as economic growth, securing of resources and energies, and environmental conservation, and, at the same time, establish a sustainable society where the next and future generations can live their lives more safely and comfortably while retaining international peace and coordination.

2. The members shall strive to realize harmony with the natural environment, and present and future generations.

2-1 Maintaining a sustainable relationship with the natural environment and present and future generations

The members shall be conscious of their responsibilities as electrical engineers who have a role to play in science and technology. Due to such responsibilities, the members shall take the initiative in ensuring the sustainability of the natural environment which science and technology have damaged, as well as the lives and character of the present and future generations in a mutually harmonious way.

2-2 Feeling of awe

The members shall recognize that they exist and are protected by the natural environment, and present and future generations and at the same time that they are responsible for protecting them and shall maintain a feeling of awe of that existence.

2-3 Humbleness and concentration of wisdom

The members shall humbly accept the limit of individual capacity and build wisdom in collaboration with other specialists to promote research and development of science and technology in order to contribute to the safety, health and welfare of human beings and society on a global and long-term basis.

2-4 Awareness of being a member of society

Members shall extend their visions to fields other than their specialties, not confining themselves within the engineering community, and learn from non-technical fields in order to enhance their ability to have social influence, as a member of society.

The IEEJ shall play a role as being a member of a sustainable society by supporting such efforts of the members.

2-5 Cultivation of a sense of ethics

The members shall recognize that engineers' lack of a sense of ethics will damage sustainable relations with the natural environment and present and future generations. The members shall maintain an interest in cultivating a sense of ethics, not to mention enhancing technical competence, and always endeavor to foster such an atmosphere.

3. The members shall contribute to academic development and cultural improvement.

3-1 Contribution to academic development

The members shall contribute to establishment of a sustainable society through continuous updating, improvement and development of academic and technical activities in electrical engineering.

The IEEJ steadily implements the accumulation and dissemination of scientific and technical knowledge published through the activities of individual members, establishment of various kinds of technical standards and other activities.

3-2 Steady technology transfer

The members shall recognize electrical engineers assume great responsibility for safety design and operation of the social infrastructure systems and transfer technology steadily to the next generation while striving to maintain and improve technical competence.

3-3 Contribution to cultural improvement

The members shall, in addition to providing new technologies, proactively engage themselves in educational and enlightening activities for those technologies through organizations to which they belong and also through academic and professional societies in order to make a sound future society that the new technologies will bring forth and contribute to the improvement of the spiritual culture in society.

3-4 Show a spirit of criticism

The members shall recognize it is their mission as a member of the IEEJ, one of the academic societies, to state constructive criticism on various challenges with regard to electrical engineering under their own responsibility, based on scientific examination, in a timely manner without clinging to preconceived ideas.

The IEEJ shall actively support such efforts of the members, for example, providing the members with opportunities for discussions of these issues, and to make public statements to the society as appropriate.

3-5 Issuance of prompt and appropriate comments

If any electrical engineering incident or accident is reported widely in the media, the IEEJ will issue professional and unbiased comments to endeavor to eliminate any unnecessary confusion.

4. The members shall respect life, property, honor, and privacy of the public.

4-1 Recognition of contradiction in technology

The members shall accept that serious contradictions of the development of electrical engineering that aims at safety, health and welfare may sometimes cause harm to the life, property, honor, or privacy of others and will make efforts to reduce threats to others and the society.

4-2 Recognition of incompleteness in technology

The members shall remember technology is brought about as a result of best efforts within a limited amount of time and budget limitations and that incompleteness always underlies it with risks that defects may present. The members shall strive to ensure safety through extra effort such as fail-safe design and improvement activities including the collection and unification of accident data.

4-3 Caution in the abuse of technology

The members shall recognize that technology can become a weapon depending on how it is used, and each member shall strive to take measures to prevent the abuse of technology as much as possible and shall never cause harm to the life, property, honor, or privacy of others as technology users.

4-4 Prevention of defamation and violation of privacy with information and communication technology

The members shall be aware that information and communication technology, including AI, has rapidly grown in recent years can easily cause defamation and violations of privacy and shall exercise extreme caution in using networks and storage systems and the management of electronic information.

4-5 Avoidance of risks due to technology transfer

The members shall make maximum efforts to take all possible measures to ensure to minimize risk in research and development, manufacturing and provision of their products and services and, in the case of overseas technology transfer, strive to take sufficient measures to prevent the leakage of technology that may be a security threat.

5. The members shall respect the intellectual property rights and intellectual efforts of others.

5-1 Shaping a culture to allow respect of creativity and originality

The members shall acknowledge and respect attribution of ideas, techniques and other general intellectual efforts of others, including the organizations they belong to, based on the understanding that research, development and application of excellent technologies and that the provision of education on those technologies is achieved based on the individuals' creativity and originality.

5-2 Encouragement of preliminary surveys to avoid violations of industrial property rights

The members shall recognize that industrial property rights represented by patent rights reflect the results of originality and ingenuity of inventors and that the protection of these rights drive the fair development of industrialized society, and they shall encourage preliminary basic surveys to avoid violations of industrial property rights.

5-3 Promotion of understanding of basic rules to avoid copyright infringement

The members shall understand that copyrights including research papers and software programs are produced as a result of the creativity and efforts of authors as is the case for industrial property rights and that the copyrights often provide significant economic and academic value, and shall respect them and the moral rights of the authors to the maximum extent possible.

The IEEJ, as an academic society, encourages the members to observe the basic rules to prevent the IEEJ from violating the copyrights held by the others in its publications of various types and kinds.

5-4 Prohibition of unauthorized acquisition, use and disclosure of trade secrets

The members shall recognize any technical or operational information useful for business activities that is controlled as secret is valuable intellectual property subject to legal protection and shall protect these rights with the greatest care to avoid unauthorized acquisition, use and disclosure of them.

6. The members shall treat fairly all individuals regardless of their beliefs, religion, race, nationality, gender, age, disability, etc.

6-1 Respect for others

The members shall not discriminate against others because of their beliefs, religion, race, nationality, gender, age, disability, occupation, job title, employment status, and so forth and shall respect diversities in these factors and strive to realize a society based on equal opportunity and justice in collaboration with others.

6-2 Prohibition of discriminatory practices

The members shall strive to eliminate their own sense of discrimination, and at the same time eradicate discriminatory infringement practices against others through abuse of a superior position, including sexual harassment, power harassment and academic harassment.

6-3 Caution about characteristics of technology that facilitate discrimination and bias

The members, in recognition that technology can possibly facilitate and expand discrimination and bias, shall make efforts to prevent such effects and fully consider any detriment to individuals who may be discriminated through the developing technology.

6-4 Collaboration with persons in different fields

The members shall be aware that electrical engineering has a close relationship with politics, economy, legislation and other disciplines and also to general social life and shall make efforts to solve various large-scale and complicated social issues through extensive communication and collaboration with a diversity of concerned people.

7. The members shall strive to enhance professionalism and make our best efforts with pride and responsibility for our duties.

7-1 Continuous professional development

The members, in their electrical engineering work, shall recognize that the required expertise and sense of ethics in the world today change over time and always strive to acquire technical knowledge and skills and improve the competences necessary to take ethical actions and the observation of laws and regulations.

7-2 Establishment of environment for interested parties to improve their professional competences

The members shall strive to not only develop their own competences as electrical engineering specialists but also provide opportunities and establish an environment for individuals working under their supervision and other related parties to maintain and improve their professional competences.

7-3 Promotion of research and development in consideration of social implications

The members shall fully consider impacts and risks that electrical engineering may have on society in their research and development activities and the application of their achievements.

7-4 Overconfidence of maturity of technologies

The members shall always consider safety and shall not be overconfident in the maturity of electrical

engineering. They shall also pay attention to possibilities of new incidents that may lead to new technical issues.

7-5 Realization of a work-life balance

The members, in recognition that each of them is part of a society, shall endeavor to achieve a good balance between work and life and perform their duties sincerely and actively on a constant basis with pride and responsibility in accordance with a sense of compassion, and at the same time, they shall value social exchanges with family members and local communities.

7-6 Pursuit of wellbeing as professionals

The members shall study their specialized and related fields for their own growth and through such activities pursue their own wellbeing by contributing to others and society.

8. The members shall disclose, appropriately in a timely manner, when making technical decisions any factor that may adversely affect the public and the environment.

8-1 Establishment of a system for disclosing information

The members shall always pay attention to confirm that the organizations they belong to have the organizational culture and an established system for prompt and appropriate decision-making, for disclosing information including a disclosure procedure on a daily basis and encourage the organizations to resolve any insufficiencies found.

8-2 Acquisition of accurate information

The members shall recognize that information on accidents and safety may have significant impacts on the public and environment and always strive to acquire and as specialists confirm accurate information.

8-3 Disclosure procedure

If information may have significant impact on the public and environment and it is determined that there is no alternative but disclosing it to ensure the public safety, even though it can cause disadvantages to the members and/or the organizations they belong to or violate confidentiality; the members shall determine the reason for the disclosure and examine the acceptance of the disclosure in accordance with the disclosure procedure established by the organizations to which they belong.

8-4 Fulfillment of social accountability

The members shall disclose in a timely manner, while paying attention to using the appropriate expression for the target audience and shall recognize accountability by providing clear explanations that can be easily understood by non-specialist persons.

8-5 Handling of non-disclosure information

If disclosure is considered inappropriate for safety, benefits and so forth for the public, the members shall not disclose such information, while recognizing that they may have to explain the reason for nondisclosure when necessary.

- 9. The members shall ensure academic integrity and fairness in making technical assertions and judgments without placing emphasis on self-interest or organizational interest.
- 9-1 Differentiation between organizational benefits and technical assertions/decisions

The members shall behave independently, autonomously and sincerely in making any technical assertions or decisions instead of placing a priority on organizational benefits.

9-2 Respect for facts

The members shall make scientific and technical statements based on the facts that have been obtained by scientific methods. In other words, they shall always ask themselves questions about any exaggeration, distortion and other one-sided expression in favor of themselves, as well as falsification, fabrication, plagiarism, concealment, and so forth.

If any act of misconduct by one/some of the members is evident, the IEEJ strictly responds to it. The IEEJ also takes prompt and appropriate measures for restoration of their social confidence to help the member(s) whose reputation has been damaged by any accusation that is not based on factual evidence.

9-3 Storage and management of sources and data

The members shall store and manage any sources used as the basis for their assertions and decisions and records, including test data they obtain by themselves, so that they can trace them later as necessary.

The IEEJ publishes academic journals, paper journals, technical reports and books, and runs a library in order to support such activities of the members.

9-4 Differentiation between facts and inferences

The members shall recognize they do not know everything, no matter how they improve their competence, and shall see clear differences between given facts, derivation from academic theories, inferences based on their own experience and so forth.

9-5 Integrity and fairness in technical assertions and decisions

When the members have discussions with others, they shall treat individuals sincerely and in a fair manner, whether they are electrical engineering specialists or not, and shall use appropriate expressions that can be understood by them.

9-6 Sincerity and justice in the society

The conduct of the members in the society shall always be sincere and just and they shall never use the society activities to breach laws and regulations including the competition law.

10. The members shall seek opinions and criticism from the others in a straightforward manner in technical debates, and respond to them sincerely.

10-1 Openness in debates

The members are required to have an attitude of seeking candid opinions and criticisms from others and of attentively listening to others without discrimination. And they shall remember that any single insincere or unfair act committed by any member will discredit engineers as a whole.

10-2 Acceptance of negative comments

The members shall communicate with others and sincerely accept any negative comments in order to obtain a new viewpoint instead of seeking to enhance knowledge and competence by themselves.

10-3 Interchange with other engineers

The members shall strive to have discussions with engineers in the same technical field and also communicate actively with those in different technical fields and shall debate sincerely to enhance competence of not only themselves but also others and correct any mistakes in a courageous manner.

The IEEJ provides opportunities for people to interact with each other by holding annual meetings, lecture meetings, workshops, training sessions, observation-tours, etc. and also cooperates and coordinates with related academic societies in different technical fields within and outside the country.

"Code of Conduct" was translated from the Japanese version of April 25, 2007 into the English version and approved by the IEEJ Board of Directors on July 26, 2013.

"Code of Ethics" was revised on July 14, 2021.

End