Ensuring Quality and Safety

Policy

When it was founded in 1899, NEC promised its customers to provide "Better Products, Better Services," meaning world-class products and responsible after-sales services.

This was the founding spirit of NEC at a time when it had yet to earn society's trust. We were committed to gaining the trust of customers by having our employees understand and practice "Better Products, Better Services," in order to build a strong foundation for the Company within society.

To realize this aspiration, NEC Corporation introduced quality control in 1946, and has made Companywide efforts to increase quality, such as the ZD (Zero Defects) activities \star_1 in 1965, the quality operation strategy to increase the 7 Qs \star_2 in 1972, and SWQC \star_3 in 1981.

Today, our founding spirit of "Better Products, Better Services" has been carried on as one of the Principles in our NEC Way. We hope that all of our employees will be confident in NEC's quality policy by continuing

Quality and Safety Philosophy

NEC strives to continue improving quality and safety based on the Principles in our NEC Way, including the founding spirit of "Better Products, Better Services."

Action Guidelines

1. Quality management

- Think and act from the standpoint of new value for customers and society.
- 2. Maintain and enhance the NEC brand.
- 3. Ensure that each member of NEC recognizes the importance of quality and strives to deliver better quality.
- 4. Strive to ensure product and service quality, and comply with related laws and regulations.
- 5. Make sincere efforts to address product and service quality problems.

2. Safety management

- Ensure that each member of NEC recognizes the importance of product and service safety.
- 2. Strive to ensure product and service safety, and comply with related laws and regulations.
- 3. Make sincere efforts to address product and service safety problems.

to raise the quality of their own work, the products they create, and the services they provide. Also, we hope to see "NEC Quality" become the preferred and trusted choice of our customers.

In line with this thinking, we have defined our "Quality and Safety Philosophy" and "Action Guidelines" as follows to enforce our initiatives.

- *1 Activities designed to stimulate each employee's autonomy and passion to eliminate defects from their work through creative thinking, cost reductions, and improvements in quality and service
- *2 An initiative to achieve Companywide improvement in the 7 Qs denoting quality in 1) management, 2) products and services, 3) human behavior, 4) workplace environment, 5) relationships with the local community, 6) business results, and 7) corporate image.
- *3 Software Quality Control. This refers to general quality management activities for software.

Quality Management Systems

Today, as society's focus shifts from manufacturing physical products to creating intangible services, quality controls are also changing. At NEC, we have created quality management systems that we implement to realize high-quality products and services that satisfy customers' demands and expectations. In line with our basic stance that "quality is built in through processes," we aim to make continuous improvements to make our processes even better.

Pre-project Assessment

Before embarking upon a new project, we identify the risks involved in executing it and check that sufficient risk countermeasures are in place. In addition to credit risk and contract risk, we consider the OH&S risk of those implementing the project.

Implementation Framework

Quality & Safety Implementation Framework and Quality & Safety Risk Management Framework

One of the most important management issues is how to ensure quality and safety and deal with related risks in products, systems, and services.

NEC is working to clarify a range of actions for this system by defining Companywide rules and standards, and to improve quality and safety. This effort is headed by the Environment and Total Quality Management Division and the Environmental Management Division, the Environment

and Total Quality Management divisions set up in business units (BUs) and consolidated subsidiaries, and the quality/safety management officers appointed in each of the business divisions and consolidated subsidiaries under the business units. Specifically, we have set up the Quality and Safety Action Policy, and we are conducting activities such as complying with quality and safety laws and regulations, improving safe, reliable technologies, standardizing key components, sharing expertise, and taking steps to prevent defects and recurring issues.

In regard to risk management related to quality and safety, we have built a Companywide framework and ensure that it is implemented completely. If a customer's system or critical social system were to experience serious trouble, or a major product incident or infringement of technology laws and regulations were to occur, the matter would be rapidly escalated to management and an emergency troubleshooting meeting would be held. The business division in charge and the specialist staff division confer and reach a swift decision on how customers are to be treated, the response of those in authority, and whatever other PR measures might be appropriate. The consultations are rapid and decisions are made concerning the most appropriate overall policy.

Ensuring the Soundness of Construction Work

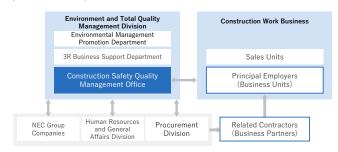
As a Social Value Innovator, NEC garners trust and helps make society more convenient by ensuring the health and safety of workers and by installing NEC-developed products and systems safely and in compliance with relevant laws and regulations.

With a strong awareness of the priority of OH&S in all work, personnel engaged in construction work, all NEC employees, and related workers deliver outstanding technology to build a rich, safe society that offers peace of mind. Moreover, we constantly evolve how we achieve installation that is safe and compliant with relevant laws and regulations. In these ways, NEC ensures the soundness of construction work.

Throughout the Company, construction work is stringently managed to ensure compliance with the Construction Industry Act, the Industrial Safety and Health Act, and other laws. Also, our philosophy is to advance OH&S and ensure that we provide customers with social value by establishing a compliance and OH&S culture at construction sites. With this in mind, we have set out the following action guidelines.

- 1. We shall ensure that each person checks and endeavors to improve the soundness of construction work.
- We shall advance compliance with laws and regulations, conduct education and personnel development, implement awarenessraising activities, and ensure Companywide understanding of the importance of occupational health and safety.
- We shall maintain and improve the occupational health and safety management system and move forward through a plando-check-act (PDCA) cycle.
- 4. We shall preempt legal, safety, and quality issues by conducting monitoring and correction in relation to compliance with laws and regulations and occupational health and safety activities.
- 5. We shall preempt legal, safety, and quality issues by implementing risk assessments.
- 6. We shall increase motivation with respect to occupational health and safety through safety conventions and other measures.
- 7. We shall respond sincerely to legal, safety, and quality issues that arise.
- 8. We shall collect information on potential and actual legal, safety, and quality issues and endeavor to preempt issues or prevent their recurrence.

System for Compliance and OH&S in Construction Work



Measures and Main Fiscal 2021 Activities

Compliance with Relevant Acts and Regulations

To visualize the technical laws and regulations with which NEC products must comply, NEC developed a "map of technology laws and regulations" to make it easier to identify what kind of laws and regulations are applied to which divisions' products. By using this map, we strive to comply with those technical laws and regulations by precisely conforming with various countries' domestic laws and regulations, including Japan's Electrical Appliance and Material Safety Act, Radio Act, and Telecommunications Business Act.

NEC is enforcing compliance with relevant acts and internal rules for indications and labels for the quality and safety of products and services. If violations are found or suspected, NEC will properly address the problem by following the direction of the relevant ministries and agencies.

In fiscal 2021, there were no regulatory violations subject to fines or punishments with regard to the quality and safety of our products and services.

Ensuring Product Safety

NEC provides safe, secure products to customers by ensuring that its designs for ICT and multimedia equipment comply with the international standards IEC 60950-1 (JIS C 6950-1)/IEC 62368-1 (JIS C 62368-1), as a matter of course. In addition, we have established our own Group safety standard to reinforce these standards and we also perform risk assessments to ensure product safety.

If product safety issues arise, we provide information on the NEC website and swiftly notify our customers.

Guidelines to Quality Assurance for Machine Learning-based Artificial Intelligence

The past few years have seen the proliferation of systems and services that use artificial intelligence (AI). However, the specifications of AI engines and the processes that produce their analysis results can be difficult for humans to interpret, and traditional software quality assurance guidelines alone may not be sufficient.

Accordingly, in April 2019 NEC addressed this issue by formulating Guidelines to Quality Assurance for Machine Learning-based Artificial Intelligence, which are designed to ensure the quality of AI systems that cannot be covered by traditional software quality assurances alone. We have applied these guidelines to the development of important AI systems.

NEC Ethical Review Committee for the Life Sciences

NEC Corporation is carrying out R&D for commercialization in the life science field. When acquiring people or information and data related to people for trial experiments and research, we follow the guidelines set out by the Ministry of Education, Culture, Sports, Science and Technology, and hold deliberations in the NEC Ethical Review Committee for the Life Sciences, made up of external experts, concerning ethical appropriateness with respect to the objectives of research and the human rights and dignity of research subjects.

Initiatives to Ensure Transparency in Relationships with Medical Institutions

NEC ensures the transparency and soundness of its relationships with medical institutions with a view to gaining widespread understanding of the medical device industry's contribution to the development of life sciences as well as the high ethical standards that the Company adheres to in conducting corporate activities.

Initiatives in the Medical and Healthcare Fields

Aiming to establish commercial businesses in the medical and healthcare fields, we are establishing a management system and moving forward with activities for quality management systems and compliance with relevant laws and regulations.

In April 2019, we received a first-class marketing license for medical devices and established a management system.

With respect to compliance with relevant laws and regulations, for the Pharmaceuticals and Medical Devices Act*4 we have prepared guidelines on compliant advertisement and a checklist for determining which items are covered by the act. Moreover, we have incorporated the guidelines and checklist into the processes of related business entities.

As for quality management systems, we have begun establishing and managing processes pursuant to the Quality Management System Ordinance and ISO 13485:2016. In tandem with these efforts, we are steadily establishing compliance with respective countries' medical device-related laws, such as Japan's Pharmaceuticals and Medical Devices Act and the European Union's Medical Devices Directive.

Developing Personnel Who Realize Safety and Security

In improving product safety and quality, enhancing training and employee skills is extremely important. Therefore, NEC conducts training programs for specific jobs and fields of specialization with the aims of improving practical design and construction skills and providing basic and specialist knowledge on quality and safety management standards as well as technical standards. For example, through our "Safety Review Workshops," which is a specialized program on product safety, we use actual devices to provide practical training on the incorporation of safety into designs. Thanks to this program, we have fostered numerous specialists in safety technology.

Project Management Award

NEC holds an annual presentation of outstanding cases and presents a project management award to the organization or group that demonstrated the best project support, or project team that tackled a difficult project and achieved a particularly outstanding result.

The intent of this award is to raise awareness of the importance of project management among all NEC Group employees and to demonstrate the significance of accomplishment and recovery in those projects that have a high level of risk. NEC also recognizes that the increasing awareness of award-winning cases throughout the Group helps to prevent risks from materializing in new projects through the horizontal spread of risk management practices.

Increasing Awareness of Quality through "Quality Month" Activities

In November, which we have designated "Quality Month," members of the senior management team and experts from inside and outside the Company conduct seminars and dialogues aimed at ensuring that employees are always highly conscious of quality and safety as they work. In fiscal 2021, we raised employees' awareness of quality issues through discussions on such themes as how to think about quality going forward given the anticipated changes in businesses and technologies and how to perform effective quality audits remotely during the COVID-19 pandemic.

^{*4} Act on Securing Quality, Efficacy and Safety of Products Including Pharmaceuticals and Medical Devices