

Tamotsu Nomakuchi

Dr. Tamotsu Nomakuchi is President and Chief Executive Officer of Mitsubishi Electric Corporation.

Dr. Tamotsu Nomakuchi, who received his MSc from Kyoto University, began his career as a research scientist at Mitsubishi Electric's Central Research Laboratory in 1965. In 1975, he received his PhD in Engineering from Osaka University.

Dr. Nomakuchi was elected corporate vice president, General Manager of Information Technology R&D Center in 1995 and promoted to corporate senior vice president, Corporate Research and Development in 1997. After serving as executive vice president, Information System and Network Services, he became President and Chief Executive Officer of Mitsubishi Electric Corporation in April 2002.

ISO Focus: If you were to describe the Mitsubishi Electric Group in a nutshell, what would you say?

Tamotsu Nomakuchi: Mitsubishi Electric was established in 1921 and now has consolidated sales of about 32 billion US dollars. The company is expanding its business in the following fields: energy and electric systems, industrial automation systems, information and communication systems, electronic devices and home appliances. The company has about 100 000 employees in its consolidated global terms, and operates in over 34 countries. Mitsubishi Electric is especially committed to making strong business-

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"Standards must be internationally acknowledged, to ensure compatibility and guarantee interoperability."

es even stronger. The company focuses on such areas as satellites, elevators and escalators, automotive electric and electronic products and factory automation products.

Mitsubishi Electric is in the process of becoming a conglomerate of highly competitive electric-electronic businesses, with its unity stemming from interconnecting synergies.

ISO Focus: How does Mitsubishi Electric, that designs and develops equipment and products for personal, public and industrial use in a broad range of industries, ensure and demonstrate the safety of both its users and its workforce? What benefits do you see for your Company from International Standards to support design, marketing, trade and communication in this area?

Tamotsu Nomakuchi: To tackle the issue of safety within the company, we have established company-wide procedures associated with quality assurance that ensure strict compliance – both inside and outside the company – with any quality-related laws, standards or technical criteria, including product safety. We look to establishing safety and reliability by making full use of related technologies and the International Standards during the developing, designing and manufacturing processes.

In addition, we have established product safety management activity and quality diagnosis as company-wide regulations so as to ensure product safety, and to take action to prevent the occurrence of product defects as well as any recurrence of such. We have also streamlined product safety regulations within each business group and for factory lines, and, through regular and periodic inspections of product safety management, we have striven to make sure our products are safe.

To give a specific example: in the area of home appliances, we ensure



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Mitsubishi Electric Corporation Headquarters, in Tokyo, Japan.

safety through risk assessment based on ISO/IEC Guide 51, *Safety aspects – Guidelines for their inclusion in standards*, ISO 14121, *Safety of machinery – Principles of risk assessment*, and ISO 12100, *Safety of machinery – Basic concepts, general principles for design*. As the top-ranking standard within safety standards in the home appliances field, we have put in place the fail-safe design standard, that reestablishes any malfunction to bring it in line with the standard's safety criteria. This standard seeks to ensure development of reasonably safe, free-from-hazard products that may cause injury or damage to users.



Laser processing machines.

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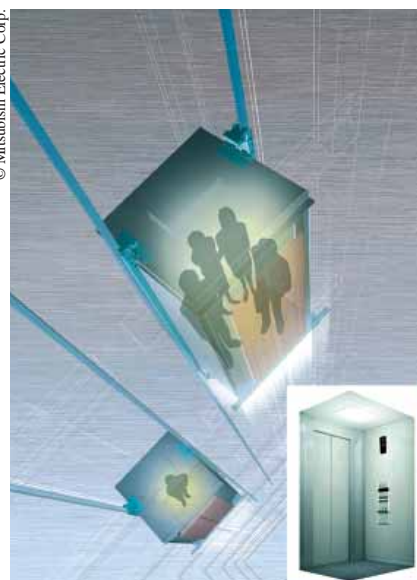
ISO Focus: *With the growing convergence of ICT and electronics, how do you view the cooperation between IEC, ITU and ISO, developed in the context of the World Standards Cooperation? IEC and ISO have successfully joined forces in the area of Information Tech-*

Tamotsu Nomakuchi: *In recent years, there has been a tendency for businesses to spread into new areas and to develop internationally. In view of this evolution, standards must be internationally acknowledged so as to ensure compatibility between operating techniques*



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Large-scale display systems.



Machine-room-less elevator AXIES.

nologies (cf. JTC1) and in the area of conformity assessment where they have developed a comprehensive tool box of International Standards and Guides relating to first, second and third party conformity assessment. Would you encourage further synergies?

and systems and to guarantee interoperability between systems. It is our sincere hope and expectation that IEC, ITU and ISO will cooperate and promote together, under the framework of World Standards Cooperation (WSC), activities that help develop International Standards and to establish evaluation criteria. This will result in the creation of standards that enable compatibility and interoperability.

Information and communication technologies (ICT) are foundation technologies that support many social activities, and have led the growth and development of the Internet. In this field as well, International Standards have played a major role.

Due to the massive spread of the Internet, information systems are now largely inter-connected, enabling the rapid distribution of individual and organizational information. In such an environment, measures to enable information security are essential.

Guest View

ISO/IEC 15408 – the standard that enables objective evaluation of the quality of information security – sets out seven grade evaluation levels; in certain cases today, procurement at private and government levels is contingent upon acquisition of the ISO/IEC 15408 certification. Our company has been awarded ISO/IEC 15408 certification for systems in the financial field; acquisition of this certification for products and systems may in the future become necessary in other fields, as well.

An information security management system (ISMS) based on ISO/IEC 17799, *Information technology – Security techniques – Code of practice for information security management*, has been introduced and promoted in Japan together with the country's personal data protection Act. Much in the same way that ISO 9000 and ISO 14000 have been broadly utilized, ISMS will become increasingly accepted in the future.

“We are eager for ISO, IEC and ITU to continue making efforts to create guidelines related to patent policies and frequently asked questions.”

ISO Focus: The incorporation of patented technologies in standards is crucial, especially in the area of information technologies. ISO and IEC have a common policy on this matter [i.e. that International Standards may contain patented technologies, but that they should be made available under reasonable and non-discriminatory (RAND) conditions] and are working on the convergence of our policy with that of ITU. What are your views on this?

Tamotsu Nomakuchi: In most cases, technical standards in the area of information technologies include intellectual property rights (IPRs), which may perhaps encourage competition-restrictive practices by taking advantage of IPRs with a view to using them in an adverse way. We therefore recognize that this issue will become



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increasingly important to our industry in the future. In order to address this issue, it is essential for all standardization bodies to streamline their rules and regulations when working with IPRs relating to technical standards. We welcome the recent studies that have reviewed patent policies among ISO, IEC and ITU. These studies mark the beginning of a new era.

We are eager for ISO, IEC and ITU to continue making efforts to create guidelines related to patent policies and frequently asked questions (FAQs) with a view to helping in their implementation, as well as to investigate measures for overcoming obstacles that restrict the spread and use of technical standards because of IPR-related competition-restrictive practices. We look forward to seeing measures such as clarification of reasonable and non-discriminatory (RAND) conditions, investigation of IPRs in the early stage of developing standards, and/or the confirmation of intent to join patent pools.

ISO Focus: How have ISO International Standards – such as ISO 14000 for environmental management – helped Mitsubishi Electric to grow and progress as well as to implement its procurement policy?

Tamotsu Nomakuchi: Regarding ISO 14001, operation of the PDCA (Plan, Do, Check and Act) Cycle in accordance with the ISO standard is extremely helpful for improving performance and ensuring observance of the law. With regard to performance, from the viewpoint of MET (M: Material, E: Energy and T:

Toxicity), we have established and promoted specific targets in the following areas: effective utilization of resources; efficient use of energy; and reduced use of substances potentially harmful to the environment. In November 2004, ISO 14001 was revised and, in response to this revision, we will continue to increase and promote our contribution to the environment. For our company, environmental management is of the utmost importance; we must fulfil our social responsibility. We have reduced the envi-

ronmental impact by making full use of our company's technologies and products. Secondly, we have developed an environmental business by giving feedback and know-how to businesses and clients. Such activities result in a synergy between environmental management and environmental business.

Our company promotes universal design and ecology, and provides top products that are both user-friendly and eco-friendly. With the concept of universal design, hyper-eco products and hyper cycle technology after use, we are striving to improve the safety and user-friendliness of our products, as well as to reduce their impact on the environment.

ISO Focus: What new areas of standardization would the Mitsubishi Electric Group like to see coming out of ISO?

Tamotsu Nomakuchi: For sustainable development at a global level, it is vital to reduce the environmental burden through toxic substances control, energy saving, and the promotion of recycling. As I mentioned above, Mitsubishi Electric Group puts stress on this point and is developing continuous activities. In this area, where all countries and firms are required to conduct cooperative activities based on a general agreement, necessity for International Standards will be rapidly getting higher. We would greatly like to expect ISO's continued leadership, in cooperation with IEC and ITU as well as other standards organizations. ■