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# **Reason for Priority**

Ensuring that products and services that are widely utilized in the market are safe to use is an important precondition for the development of a sustainable society. Amid advances in technologies such as IoT and AI, it is necessary to ensure quality, including product security, in addition to safety and environmental correspondence. Also customer needs that change in terms of lifestyle, value etc., are an important aspect of quality enhancement.

# Commitment

The Nikon Group sees itself as having a mission to contribute to the healthy development of society by achieving creative, efficient Monodzukuri (manufacturing). To this end, we optimize our production system from a company-wide perspective and consider each Monodzukuri (manufacturing) process from the product planning, development, and design stages, keeping in mind our response to future environmental changes. The most important theme here is quality assurance, which includes safety, environmental consideration, and product security. With the Quality Committee playing a central role, we strive to prevent quality issues by strengthening our quality management system on a global level, developing improvement measures based on quality loss costs, and fostering a culture of quality by improving the quality levels and embedding behavioral principles in *Monodzukuri* (manufacturing).

In addition, in order to meet the increasingly diverse and sophisticated needs of our customers, we will strive to ensure trustworthiness by maintaining and increasing quality, not only in our products, but also in supporting product orders and providing services.

> Yasuhiro Ohmura Director and Senior Executive Vice President Quality Committee Chair

# [Activity Policies]

- Basic Quality Policy
- Quality Management Directive (QMD)

# **(Organizations)**

Quality Committee

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# **Ensuring Quality and Safety**

# **Basic Approach**

The Nikon Group has established a Basic Quality Policy centered around the idea of increasing the value we provide to our customers, and the value that we provide to society, through our products and services. In order to put this policy into practice, we have also established the quality management directive (QMD).

# **Basic Quality Policy**

Based on its Corporate Philosophy of Trustworthiness and Creativity, Nikon has established the following Basic Quality Policy. It aims to increase the value that we provide to customers through our products and contribute to the healthy development of society.

- (1) Enhance brand value and provide highquality distinctive products to the market in a timely manner through creative and efficient Monodzukuri (manufacturing).
- (2) Provide safe and environmentally considered products and earn the trust of customers and society.

# **Strategy**

#### Risk

Customer needs in the market are diversifying and becoming more sophisticated each day, including changes in lifestyles and values. Demand for companies for quality management also grows stronger each year as countries and regions develop various safety and environmental laws and regulations for the sustainable development of society.

**Business Activity** 

Amidst this social environment, the Nikon Group recognizes the importance of ensuring quality that leads to customer satisfaction, including safety and environmental considerations. If we fail to ensure such quality, we risk business continuity with our customers and risk losing social credibility as a company.

# Opportunity

Although the aforementioned trends in the social environment pose risks to the Group, we also recognize these risks as opportunities to earn the trust of our customers and society through rapid response to changes in customer needs, quality assurance, and improvement.

Opportunities also exist for business growth through creative and efficient *Monodzukuri* (manufacturing) by improving brand value and differentiating ourselves from competitors through quality.

# Strategy

Our approach to ensuring trustworthiness by maintaining and increasing quality is providing competitive products

and services that are safe, environmentally friendly and secure.

In this approach, we strive for functional quality management that addresses changes in values demanded by society and our customers, technological innovations, and in *Monodzukuri* (manufacturing). We have created a Quality Manual (QM) based on the QMD for each business unit (including the Group companies). This QMD encompasses the requirements of ISO 9001\* accreditation, and we are implementing swift and appropriate revisions in response to changes in trends and situations happening around the world. The Nikon Group has obtained ISO 9001 accreditation, primarily at production companies, and the rate of accreditation acquisition at Nikon and the Group manufacturing companies is approximately 50% (percentage of companies).

We also established a global quality management system to strengthen global governance, including at overseas subsidiaries that joined the Nikon Group through M&A

We also strive to foster a culture of quality by establishing a system to improve the level of quality education, form behavioral principles in *Monodzukuri* (manufacturing), and ensure product safety and product security in response to technological advances. Through these efforts, we work to prevent quality issues on an ongoing basis.

\* ISO 9001: An international standard of quality management system established by the International Organization for Standardization (ISO). The ISO 9000 series is a quality management system for organizations to maintain and manage quality. ISO 9001 certification can be obtained from an officially recognized body.

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## **Governance**

The Nikon Group established the Quality Committee to deliberate and make decisions on important matters related to quality control for the entire Group. The responsible officer (director) of the Production Technology Division chairs the committee, and general managers from each business unit and others serve as the standing committee. Under the Quality Committee, we have established the Products Subcommittee, and Education Subcommittee—the purpose of these is to strengthen the functions of the Quality Committee in preventing quality and environmental problems, meeting legal and regulatory standards and ensuring security, and maintaining and improving manufacturing technologies.

Decisions made at the Quality Committee are shared at the QMS\*1/CMS\*2 Promotion Liaison Meeting which is held twice a year as a forum for exchanging information among all the business units. Based on this, each business unit reflects decisions made at the Quality Committee in its business processes, revising each QM where necessary, thereby strengthening the Quality Management System.

**Business Activity** 

In fiscal year 2023, we continued to promote the three-year plan for quality system rechecks for all business units that started in fiscal year 2021, triggered by the comprehensive review of quality control guidelines in September 2020.

# Quality Management System (As of April 1, 2024)



# **Comprehensively Managing Quality**

The Nikon Group works to improve quality by establishing frameworks to comprehensively manage Nikon Group internal information, such as production-related information, along with external information obtained from customers and the marketplace.

Our measurement of quality loss costs in production processes of each business unit, an initiative we launched in the previous fiscal year, has taken root in fiscal year 2023, and we established a measuring system for improvement measures based on reduction targets and unmeasured items.

We plan to continue to improve this measuring system in fiscal year 2024 while consolidating measurements by business unit and job function to improve upstream processes.

In fiscal year 2023, we also formulated a plan to establish a global quality management system and implement QMS inspections and improvements at overseas subsidiaries that join the Nikon Group through M&A. We plan to begin engaging in these improvement measures in accordance with the implementation plan in fiscal year 2024.

<sup>\*1</sup> QMS: Quality Management System,

<sup>\*2</sup> CMS: Chemical Substances Management System (Management of chemical substances in products)

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# **Risk Management**

The Quality Committee and its affiliated Products Subcommittee lead the identification and evaluation of quality risks in the Nikon Group. Important risk factors are reported to the Risk Management Committee based on discussions at the Quality Committee, which leads the formulation of countermeasures and improvements. The committees also work to reduce risk through internal QMD/CMS assessments and collaboration with our suppliers.

# Implementing QMD/CMS assessments\*

The Nikon Group conducts QMD/CMS assessments to check the status of quality management and the management system for hazardous chemical substances contained in products based on QMD, and investigates, confirms, and evaluates the status of quality management operations throughout the Group.

This assessment is conducted by the Product Subcommittee Chairperson of the Quality Committee, who is responsible for the assessment. In the event of an improper situation, we instruct corrective action or improvement and promptly implement such measures to maintain and improve our quality control activities. Additionally, important findings are reported to the Executive Board Committee and reflected in our internal controls.

In fiscal year 2023, QMD/CMS assessments were conducted for three Nikon divisions and five major Group companies using assessment check sheets adapted to the organization being assessed.

The Nikon Group also makes continuous reviews in order to further enhance the effectiveness and efficiency of

#### these assessments.

\* In fiscal year 2021, the Nikon Group began conducting audits related to existing quality control and the management of hazardous chemical substances contained in products, referring to such audits as "assessments." Our use of "assessment" is synonymous with the term "audit" defined in JIS Q 19011, and refers to a systematic process for the objective evaluation of the degree to which QMD requirements are met.

**Business Activity** 

### **Initiatives for Procurement Partners**

Cooperation from procurement partners is essential in order to promote Quality First initiatives. Therefore, we conclude quality assurance agreements with our procurement partners based on their understanding of the Nikon Group's Quality First philosophy.

To quantitatively understand and manage the state of maintenance of the QMS, we conduct a self-evaluation using the Self-assessment Sheet once every three years. We also conduct QMS assessments for procurement partners that we have determined to be important.

In fiscal year 2023, we conducted QMS assessments for 101 procurement partners. For procurement partners that did not meet Nikon's required standards, we discuss countermeasures and implement systematic improvements with them.

We have worked to integrate these measures with our high-affinity environmental management system assessments since fiscal year 2022. In fiscal year 2023, we defined our assessment methodology and plan to conduct trial operations with procurement partners going forward.

Furthermore, we added a section to provide feedback on quality/environmental accident cases on the survey questionnaire, aiming to improve quality.

# **Indicators and Targets**

## **Indicators and Targets (Target Fiscal Year)**

Degree of achievement of the plan to review the quality management system in response to changes in the business environment: 100% (every fiscal year)

#### FY2023

#### Plan (Action Plan)

Revision of Quality Management Directive (QMD) **Results** 

1.Implemented QMD revisions related to Fabless in August 2023

Drafted QMD revisions for new business launch and Components Business in July 2024

#### FY2024

#### Plan

1.Revision of Quality Management Directive (QMD) 2.Establishment of QMD for overseas Group companies

### **Indicators and Targets (Target Fiscal Year)**

Ratio of management system status monitoring and improvement plan implementation: 100% (every fiscal year)

# ► FY2023

#### Plan

Completion of assessment implementation based on annual plan (at least eight departments/companies)

#### Results

Conducted assessments for eight departments and companies

#### FY2024

#### Plan

Completion of assessments based on annual plans (at

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least eight departments/companies, mainly in overseas Group companies)

# **Indicators and Targets (Target Fiscal Year)**

Comprehension of basic training on quality (business units, Group manufacturing companies): 80% or more (FY2025)

#### FY2023

#### Plan

Training participation rate: 80% or more (business units, Group manufacturing companies in Japan)

#### Results

Conducted e-learning for QC Levels 3 and 4 at business units and Group manufacturing companies in Japan Participation rate: 93%

#### FY2024

#### Plan

Training participation rate: 80% or more (business units, Group manufacturing companies in Japan)

# **Major Initiatives**

# **Small Group Activities**

The Nikon Group has been promoting small-group activities since 1979, believing that they are essential for ensuring high quality and that each and every employee has a high level of awareness and takes the initiative in improving daily operations. In fiscal year 2023, 698 groups and 5,935 people participated in such activities at Nikon Group companies in Japan and overseas.

Furthermore, every year in July the Nikon Group holds

Nikon Group Select Small Group Activity Presentation presided over by the company president, where the best activity groups from each region get together to talk and educate each other. In fiscal year 2023, more than 190 employees participated, including executives, and the excellent presentations were used as a reference for improvement activities in each unit.

**Business Activity** 

# **Quality Training and Raising Awareness**

The Nikon Group believes it is imperative that each and every employee acquires the relevant knowledge and quality control skills, tailored to the specific requirements of individual employees' positions, levels and specialties. Based on this approach, starting with the Nikon Group in Japan, we are promoting internal education and awarenessraising related to quality in order to raise the standard for all employees and strengthen and foster the development of selected members from the workplace.

The Technical College program, a forum for training and educating young engineers, had 1,134 participants in the mandatory training course on quality control in fiscal year 2023. In addition, the Expert Package Training program, which aims to develop experts in statistical quality control, has completed its eighth term, and a total of 150 students from the first through the eighth terms are active in the field.

We produced e-learning video materials in English, Chinese, and Thai for overseas employees. We are also planning to implement the same trainings in our overseas companies as those required at companies in Japan. We will continue our efforts for roll-out in fiscal year 2024.

Furthermore, every year during Quality Month in November, Nikon hosts the Quality Month Conference. In

fiscal 2023, we welcomed Dr. Shinichi Sasaki, well known for his book The Toyota Own-Process Completion, to lecture on Own-Process Completion and Quality Assurance Human Resource Development: Toward the Creation of New Customer Value. Dr. Sasaki shared with us his experiences and spoke on the effects of the own-process completion on quality improvement, including how it applies to white-collar workers. He also discussed the benefits of own-process completion from the perspective of human resource development. This lecture was attended by approximately 150 Nikon Group executives and employees and 120 procurement partners, including those watching via the simultaneous webcast.

# **Quality Education Programs for Employees**

(Applicable to: Nikon Group in Japan)

- Mandatory training for all employees
- E-learning for all employees Basic Quality Control Training (QC Grade3) Introduction to Statistical Methods Training (QC Grade 3)
- Basic Quality Control Training for new employees
- Specialist training for engineers
- Expert package training (comprehensive training that combines experimental design and multivariate analysis, etc.)
- SQC\* leader training (basic training combining Q7, N7, exam and estimation, etc.)
  - \* Statistical Quality Control (SQC)

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# **Ensuring Safety of Products and Services**

The Nikon Group regards safety as an integral part of the quality of our products and services, and believes that our most important mission is to provide safe products and services to its customers. We give due consideration to the safety of products and services for the entire lifecycle of the product from the planning stage, right through to disposal. Our Basic Quality Policy states clearly our commitment to ensuring safety, and we also incorporate this commitment into QMD and the regulations of each business unit, which must be adhered to. In addition, we confirm in our regular QMD and CMS assessments that each division and department is implementing the safety-related matters incorporated in those QMDs and rules.

In addition, the Nikon Group is obliged to conduct safety assessments for all of its products. In line with the established the Safety Design Principles Sort (Safety Design Principles [General Standards], Common Standards and Product Area-Specific Safety Design Standards) which are based on international standards. etc., we are putting in place safety designs to pin-point and eliminate any potential risks and hazards.

In fiscal year 2023, we revised three standards. These rules included the X-Ray Equipment Safety Standards that ensure the safety of equipment using X-rays, the EMC Standards that ensure the electromagnetic compatibility of electronic equipment, and the *Industrial* Equipment Safety Design Standards that ensure the safety of industrial equipment. Note that the number of serious product accidents relating to safety\* for fiscal year 2023 was zero.

The Nikon Group ensures safety through design reviews at the development and design stages and inspections of manufacturing processes during mass production. We also obtain certification from third-party certification bodies as necessary.

**Business Activity** 

\* Serious product accidents related to safety: Based on the definition of serious product accidents used in the Consumer Product Safety Act.

### **Product Security**

Even during the rapid growth in technologies such as IoT and AI, the Nikon Group is strengthening and improving quality management systems in order to provide safe products and services to customers.

In fiscal year 2023, we worked to formulate and establish rules and regulations for each business unit regarding security management, which we reinforced with the Product Security Countermeasures Standards revised in fiscal year 2022. We also invited guest speakers to hold seminars aimed at disseminating knowledge on product security management in response to future planned product security regulations enforcements.

## **Product and Service Safety Training**

To ensure the safety of our products and services, the Nikon Group conducts a variety of periodic safety education programs for employees, including the Safety Design Principles Sort that define standard of safety design, the Product Liability Act, and the Electrical Appliance and Material Safety Act.

In fiscal year 2023, approximately 740 employees of the Nikon Group in Japan participated in the educational training courses provided in the previous fiscal year by the Quality and Environmental Administration Department

of the Production Technology Division and the Technical College. We offered in-person, online, and on-demand training for employees to take and repeat as needed, ensuring retention of safety design knowledge.

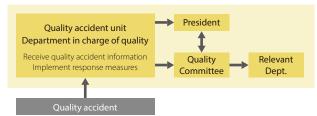
### Response in Case of an Accident

The Nikon Group carries out planning, design, manufacturing, quality assurance, sales, logistics, and services with sufficient consideration to product safety. In the event of a quality problem in the market, including safety issues, or even if there are concerns regarding such an occurrence, we immediately cooperate with the relevant departments to ascertain the facts and promptly take any necessary measures in accordance with our escalation response procedures\*. Additionally, quality problems that have a significant impact on customers are reported to top management and disclosed promptly, and a system is in place to respond appropriately to customer inquiries.

In fiscal year 2023, we took measures to prevent damage from occurring, spreading, or recurring against 12 incidents with following these procedures. These measures are also reviewed annually, and suitably revised if needed.

\*These procedures stipulate that in the event of a quality accident, our first priority is to ensure the safety of customers, related parties, and employees, responding promptly and in an organized manner to minimize damage and maintain public trust.

## Flowchart Outlining Communication After Accidents Occur



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# **Quality Issues Encountered in FY2023**

The Nikon Group manages the use of specified hazardous substances in compliance with the laws and regulations of each country for chemical substances contained in our products. We also require our procurement partners to provide information on chemical substances contained in their products.

In fiscal year 2023, we suspended shipments of the Nikon Professional series binoculars after the artificial leather straps attached to the bodies were found to contain levels of bis(2-ethylhexyl) phthalate (DEHP)\*2 that exceed the standard value for the total concentration of phthalates specified in the EU REACH Regulations\*1. This incident was the result of a lack of thorough guidance and management of parts suppliers in the Nikon Group.

We take this matter very seriously and are reviewing the relevant regulations and re-educating relevant employees on the management of chemical substances contained in products.

To prevent recurrence, we are working to strengthening our investigation process for chemical substances contained in our products and by offering guidance and thorough management to our suppliers.

- \*1 REACH is a European Union regulation on chemicals management came into effect on June 1, 2007 that stands for Registration, Evaluation, Authorisation, and Restriction of Chemicals.
- \*2 Strict specifications came into effect on July 7, 2020 concerning the total concentration of four phthalate esters, including DEHP. (Annex XVII Entry 51 to REACH (EC) No 1907/2006)

Management and Reduction of Hazardous Chemical Substances 

⇒ p.094

#### Information Provision for Safe Use

In the Nikon Group, we provide appropriate information for all products to ensure that customers can use its products and services safely. For example, information on correct usage and information to help safeguard against accidents due to misuse or carelessness is provided directly on the products themselves and in instruction manuals.

**Business Activity** 

Information which needs to be disclosed is stipulated in Nikon's proprietary Safety Design Principles Sort and we are confirming its appropriateness in product risk assessment or in safety evaluation. Additionally, certification marks are indicated in accordance with the laws and regulations of each country or region where the product is sold. For example, products with wireless functions are labeled as compliant with the Radio Act of various countries and regions.

Furthermore, in fiscal year 2023, there were no violations of laws, regulations, etc., with regard to safety labeling and information provision.

#### **Customer Satisfaction Initiatives**

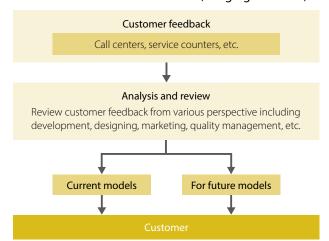
The Nikon Group strives to improve customer satisfaction and trust by providing products and services that are unsurpassed in safety and quality, and also useful to society. The Nikon Group has previously built a system.

# Product Development for Imaging Products Based on Customer Feedback

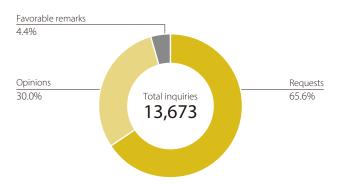
At the Nikon Imaging Products, feedback is received through call centers, service counters and NPS\* staff from general and professional users as well as users who use photographic equipment in businesses worldwide. After careful analysis, customer feedback is examined from a range of different perspectives by departments such as the Product Development, Design, Marketing, and Quality Assurance Department. The results are reflected in our products and services leading to improved customer satisfaction.

\* Nikon Professional Services (NPS): A membership-based support services for professional photographers who use Nikon products.

### Customer Feedback Flowchart (Imaging Products)



### Breakdown of Call Center Inquiry Analysis and Investigation (Japan, FY2023)



\* This breakdown of call center inquiries does not include questions regarding retail stores or product usage of the total 53,000 inquiries received.

### Column

## Responding to Requests for Additional Functionality

Nikon takes requests from customers around the world very seriously and strives to satisfy customers by incorporating the features they seek into our products.

The flagship mirrorless camera Z 9, released in December 2021 represents one example of our efforts. We incorporated the auto-capture function in the third major update (version 4.00) released in June 2023. This feature enables automatic shooting, making photography possible in places and environments inaccessible to the photographer. Such features allow users to focus on safety and the natural environment. In October of the same year, we released version 4.10, which features the new [Birds] and [Airplanes] AF subject-options at the request of our customers. These new options detect and focus on birds and airplanes, and have been well received by many customers. Nikon will not only continue to develop new products, we will update functions to meet the needs of our customers even after they purchase our products.





Shooting with the Auto Capture function



Shooting with the [Birds] option



Shooting with the [Airplanes] option

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# **Improving Services in the Imaging Products Business**

For our imaging products business, along with our customer first mindset, we aim to provide services that make customers say, "I am really happy I chose a Nikon product." In order to achieve this goal Nikon has established a Service Division at the Nikon Head Office. As of the end of March 2024, we have an organization that can provide consistent services to more than 200 repair service facilities and direct contact points (customer service counters) in 70 countries and regions around the world. We are also striving to improve service quality through diverse initiatives.

### Maintaining and Improving Repair Quality

Once a year, we conduct an assessment at all Nikon regional headquarters service locations to check whether the accuracy of the equipment and tools meets our standards. Additionally, in order to monitor repair quality at each site, repair data is collated by the Service Division headquarters at the Nikon Head Office on a monthly basis to verify the absence of any issues. At the same time, so as to be able to provide high-quality service in all countries and regions, we have introduced a cloud service that enables sharing of information on Nikon products and quality management, and through which we offer regular guidance to all service facilities, including local distributors and authorized repair service providers, in those countries and regions where Nikon does not have its own service facilities, with the aim of maintaining and improving service quality.

We are also working to improve service quality control and quality in individual countries and regions. For example, the employees of Nikon Group sales companies conduct yearly assessments of each authorized repair service provider in Europe, China, and India based on assessment

lists of each region, as well as visit each service provider individually to hold technical seminars.

**Business Activity** 

## Enhancing Customer Satisfaction

Twice a year, in order to enhance customer satisfaction, we provide training on product knowledge that makes effective use of e-learning for employees involved with service provision, and online technical training sessions using web conferencing systems.

In the Imaging Products Business, we strive to educate each staff member involved in our services on product concepts and functions to ensure said employees are able to advise customers on the best settings for their cameras in specific settings. At headquarters, we gather and consolidate real customer testimonials and share this information globally.

To ensure customers use our imaging products over the long term, we offer various maintenance packages tailored to our customers. These packages offer repair services in addition to high-precision inspections with cleanings and tools. To improve customer convenience, we posted a trouble-shooting guide on the Nikon website for customers to diagnose issues before requesting service.

Through measures such as these, we are working to not only sell products, but also provide added value.

### Customer Satisfaction Survey Results

(%)

	FY2019	FY2020	FY2021	FY2022	FY2023
Customer satisfaction	86.6	87.0	86.9	88.4	87.0

<sup>\*</sup>The above figures include satisfaction with call center response in the Americas, Europe and China.

# Strengthening the Foundation of the Organization to Utilize Design in Management

The Nikon Group has established an organization and operational structure that encourages design to enhance the value of the experience of products and services delivered. By deepening our understanding of our clients' essential needs and utilizing the design process in our approach to their solutions, we aim to revitalize our efforts. In addition, in order to deliver even more value to the customer's experience of our products and services, we are focusing on traditional graphic design for not only all contact points items, but also on movie and exhibition booth design.

In this way, we will continue to make use of design in our management to make the Nikon brand more valuable to our customers.



https://www.nikon.com/company/technology/design/