



KONE Quality and Environmental Manual

1. CEO's Declaration

KONE's mission is to improve the flow of urban life. Our vision is to deliver the best People Flow® experience, by providing Ease, Effectiveness and Experiences to users and customers over the full life-cycle of the buildings.

Our strategy guides us towards our vision. KONE's strategic phase for 2017-2020 is called Winning with Customers. The objective is to drive differentiation further by putting the needs of customers and users at the center of all development

Quality Objectives

KONE quality objectives are:

1. We understand People Flow in and between buildings making people's journey safe, convenient and reliable
2. We provide ease, effectiveness and experiences to users and customers over the full life cycle of buildings
3. Develop solid quality culture

To achieve our objectives, we have defined our **Quality Strategy**.

“KONE delivers the best People Flow experience by improving our competencies, solutions and processes, in order to better understand customer requirements for the life cycle of their buildings.”

In order to achieve our quality strategy we work on the development programs based on the following:

- Improve customer loyalty by taking actions based on feedback from customer transactional surveys.
- Develop, implement and maintain KONE WAY.
- Continuously review risks and opportunities and plan actions to mitigate and to develop.
- Manage full chain quality by implementing our development programs in technology, IT, suppliers, own factories, business processes and service providers.
- Actively participating in organisations developing codes, standards and guidelines.

Environmental Objectives

KONE's **Environmental Strategy** is described below.

For KONE, environmental responsibility is a combination of offering its customers innovative People Flow ® solutions that are both eco- and cost-efficient, and reducing the adverse environmental impacts of its own operations. Our environmental strategy support the ongoing green transformation of the built environment into smart eco-cities, low-carbon communities, and net zero energy buildings.

KONE's environmental policy is to provide innovative, safe, high-quality and environmentally efficient products and services. We strive for continuous improvement in all our business operations. In addition to complying with or exceeding applicable laws, rules, and regulations, we work with our suppliers and customer to increase environmental awareness and minimize our operational carbon footprint as well as improve energy, material, and water efficiency.

This Quality and Environmental Strategy has been communicated to the leaders of our global business units and functions and geographical areas to further cascade to their teams.

Global Business Units define and review the Quality and Environmental Objectives for the Areas. Area Directors and Managing Directors define and review local plans, targets and allocate resources to reach the Quality and Environmental Objectives.

Quality and Environmental performance progress is regularly reviewed in our Quality & Environmental Board.



Henrik Ehrnrooth

KONE CEO

March 29th, 2017



Table of contents

1. CEO's Declaration	2
2. KONE Quality and Environmental Manual.....	6
2.1 Purpose	6
2.2 Scope	6
2.3 Context.....	6
2.3.1 KONE's strategy	6
2.3.2 KONE's culture	7
2.4 Interested Parties	8
2.5 Risk & Opportunities.....	8
2.6 Management of the Quality and Environmental Manual.....	9
3. KONE Activities and Organization	9
3.1 KONE Activities	9
3.1.1 KONE Organization	10
3.2. KONE Quality and Environmental Management System	10
3.3 Roles and Responsibilities for Quality and Environment	10
3.3.1 Global KONE Level Responsibilities	10
3.3.2 Area and Unit Responsibilities	11
4. Customer Focus	12
4.1 Product and Service Offering Definition	12
4.2 Managing Customer Relationships	12
4.3 Tender Preparation and Order Review	12
4.4 Customer Loyalty Surveys and Action Plans	13
4.5 Customer Complaint Handling	13
4.6 Internal and external Communication	13
5. Quality and Environmental Improvement	15
5.1 Quality and Environmental Planning Process	15
5.2 Quality and Environmental Measurements	16
5.3 Feedback Process.....	16
5.4 Internal Quality and Environmental Audits	17
5.5 Preventive and Corrective Action System	17
5.6 Quality & Environmental Operating Model	19

5.7 Containment and Retrofit process.....	19
6. Supplier Quality Management	20
6.1 Preparation and Qualification of Suppliers	20
6.2 Measurement and Management of Supplier Performance	20
6.3 Improvement and Development of Suppliers	20
7. Quality and Environmental Documents	21
8. KONE Way Processes.....	23
8.1 Core Processes	23
8.1.1 Customer Process	24
8.1.2 Delivery Process.....	25
8.1.3 Maintenance Process	26
8.1.4 Solution Creation Process	27
8.1.5 Management & Support Process	28
9. Human Resources Management	29
9.1 Attract.....	29
9.2 Retain.....	29
9.3 Lead	29
9.4 Develop	29
9.5 Knowledge management	30
10. Environmental Management.....	31
10.1 Control of KONE's Environmental Aspects	31
10.2 KONE's Management of Emergency Situation.....	31
10.3 Environmental Performance Reporting	31
11. Work Environment and Infrastructure	32
12. Terminology.....	33
13. Version History.....	34
14. Office Addresses.....	35

2. KONE Quality and Environmental Manual

2.1 Purpose

The purpose of this manual is to describe the KONE Management System with respect to Quality and Environment.

The KONE Management System contributes to the harmonization of our processes and helps us to achieve operational excellence.

This Quality and Environmental Manual is available to all KONE employees and can be distributed to our customers and partners to promote our efforts in continuous improvement.

2.2 Scope

While the KONE Management System is implemented in all KONE Units, the KONE Quality and Environmental Management System is implemented in a select number of KONE Units.

This Manual, supported by KONE Policies, global procedures, global processes, local Quality and Environmental Documentation and the KONE Management System described, complies with the requirements of ISO 9001 and ISO 14001 and is implemented and externally certified according to multi-site certification. The list of applicable locations and scope of activities are described in the certificate schedules.

2.3 Context

KONE's mission is to improve the flow of urban life

We understand People Flow® in and between buildings, and we aim to make people's journeys safe, convenient and reliable.

KONE's vision is to deliver the best People Flow® experience

This means we understand that different types of buildings serve different purposes, which has an impact on the flow of people and on the surrounding environment. It also means we provide Ease, Effectiveness and Experiences to our users and customers, over the full life cycle of buildings.

Ultimately it is the opportunity to improve the flow of urban life and deliver the best people flow experience, which inspires us every day.

2.3.1 KONE's strategy

KONE's efforts to reach its vision and meet its strategic targets are guided by KONE's strategy. We call our strategic phase for 2017-2020 Winning with Customers. The objective is to drive differentiation further by putting the needs of customers and users at the center of all development. Our strategic targets are : most loyal customers, great place to work, faster than market growth, best financial development and leader in sustainability (such as driving safety, environmental, compliance, social and quality developments)

For the new strategic phase, KONE has defined four "Ways to Win" that support the company in reaching its goals:

Collaborative innovation and new competencies: New technologies are changing our lives and customers' lives faster than ever. Our people drive our success in this change, which requires us to learn and innovate in new ways.

Customer-centric solutions and services: Customers choose partners who best understand their changing needs and help them succeed. We understand these needs, and offer flexible solutions and services which benefit customers and users in the best way.

Fast and smart execution: Customers want their partners in construction projects and building services to be professional, fast and reliable. They choose partners that continuously improve and focus on what is essential. We will increase speed and work smarter to focus on activities that are valuable to the customer.

True service mindset : Customers value partners who strive to understand and take action to exceed expectations. We can make a difference by serving our customers better than anybody else.

The business development initiatives as well as the solution and service development are guided by the Ways to Win. Updates on the new development initiatives and the progress made will be given regularly.



2.3.2 KONE's culture

We are passionate about safety, quality, and the KONE Values, which together form a strong foundation for our company culture.

Safety

We continue to build KONE culture for safety. We promote honest communication and seek active participation from everyone at KONE. We don't accept violations of safety rules and controls.

Quality

We focus on improving lifecycle quality from the perspective of our customers and users.

KONE's values guide the behavior of our personnel towards achieving our strategy. KONE's values are:

Delighting the Customer

Our customers' success is our goal. We work for and with them to identify and deliver solutions that exceed expectations. We stay with them for the total life cycle of our products and services and ensure the safety of users and our people.

Energy for Renewal

We are energized by the drive for continuous improvement. We anticipate and adapt to changing requirements and constantly seek ways to work smarter. We welcome new ideas with an open mind.

Passion for Performance

We keep our promises. We drive new ideas to realization with speed and an obsession for customer-driven quality. We thrive on challenges and take pride in our “can do” attitude.

Winning Together

We can win only by working together. We encourage participation, and we share information and ideas. We trust and respect each other and recognize good performance. Our behavior is characterized by the highest ethical standards.

2.4 Interested Parties

KONE works closely with our stakeholders on the various topics of sustainability, and maintain an active dialogue with them. KONE's main stakeholders are customers, end users, investors, employees, shareholders, suppliers, distributors, industry associations, media, educational institutions, and local communities.

Keeping an open and continuous dialogue enables KONE to collaborate efficiently and ensures a predictable business environment for all parties. More about this collaboration can be found from [KONE Sustainability report](#).

2.5 Risk & Opportunities

KONE continuously assesses and manages the opportunities and risks related to its business environment, operations and financial performance. In addition, KONE's Units and functions systematically identify and assess, as part of the strategic planning and financial processes, the opportunities that are or could become available in their operating environment, and risks that can threaten the achievement of their business objectives.

Key risks are reported to the Risk Management function, which facilitates the risk management process and consolidates the risk information to the Executive Board. The Executive Board assigns the ownership of identified significant risk exposures to specific functions or units. The Board of Directors reviews the KONE risk portfolio regularly on the basis of the Executive Board's assessment.

At Global level, KONE's Board of Directors defines KONE strategic objectives and financial priorities based on the strategic analysis of KONE's operating environment, megatrends, forecasts, industry dynamics, and the current and expected needs of interested parties. KONE Executive Board (EXB) reviews strategic opportunities and decides on strategic priorities and development programs in a monthly forum called Strategy Board. Global Business Lines (BL) and Functions engage in continuous strategic planning to address identified opportunities with the aim of further developing KONE's competitiveness.

KONE's global strategy implementation priorities are summarized in four Ways to Win. Ways to Win are defined for 2017-2020 but the development programs under these Ways to Win are reviewed and redefined at regular intervals. KONE measures the progress of its strategy implementation against five specific strategic targets. KONE' Strategy Development function facilitates the strategic and opportunity identification processes and continuously follows up on KONE's key strategic development programs.

Area strategic planning is done regularly in collaboration between Areas and Global Business Lines and Functions with the aim of aligning Area strategic priorities based on Area-specific opportunity identification. Area financial planning is done yearly with the aim of reviewing and updating long-term (4 years) financial projections, opportunities and risks.

Unit financial planning takes place every year. Unit financial planning consists of reviewing and updating short-term (1 year) financial projections, opportunities and risks. In addition, Units that are delivering Major Projects (MP) will do continuous Major Project risk and opportunity analysis.

KONE's strategy is cascaded, communicated and implemented throughout the organization. KONE has defined a Strategy Facilitator Network that consists of nominated strategy facilitators in every KONE Unit.

2.6 Management of the Quality and Environmental Manual

This Manual is:

- Compiled by the KONE Quality & Environmental Team
- Reviewed at least annually by the KONE Quality & Environmental Board
- Approved by the KONE CEO

This Manual is published on the KONE Intranet. All Area Directors, Managing Directors and Quality and Environmental Managers are informed of each update.

The KONE Quality Team keeps a copy of this version with the original signature.

3. KONE Activities and Organization

3.1 KONE Activities

KONE sells its products and services worldwide.

KONE was established in 1910 and in 2015 employed over 49,000 people. With an annual turnover of 8.6 billion Euros, KONE is one of the world's leading elevator and escalator companies.

KONE maintains close to 1,100,000 elevators and escalators and over 400,000 building doors under service contracts.

KONE has established 5 geographical areas for managing customer relationships.

The core businesses within KONE are:

New Equipment Business (NEB)

Marketing, sales, design, manufacture and installation of elevators, escalators and moving walkways.

Within NEB, Major Projects (MP) is responsible for providing support for large and technically challenging projects.

Service Business (SEB)

Marketing, sales, design and execution of maintenance, modernization and replacement services of elevators, escalators, moving walkways and building doors as well as products and spare parts required for the services provided.

Within SEB, KONE Doors Business (KDB) is responsible for providing door solutions along with maintenance services and modernization solutions and KONE New Services and Solutions (NSS) business unit has been established to co-create new digital solutions to enhance the experience for customers and users within buildings and between buildings. The

team experiments new business models and supports in improving the hit rates for our new equipment and service business.

KONE Operations Development (KOD) is responsible for developing the operations and processes related to safety, quality, environment, and installation globally.

3.1.1 KONE Organization

The latest versions of the KONE organization charts are available on the KONE Global Intranet.

The CEO chairs the KONE Quality & Environmental Board, which includes Executive Board and KONE Quality & Environment Team members according to the agenda.

KONE Quality & Environmental Board meets at least four times per year and conducts an annual KONE Quality and Environmental Review.

3.2. KONE Quality and Environmental Management System



The KONE Quality and Environmental Management System (see figure above) is part of the KONE Management System, which consists of the following:

- Customer focus
- Quality improvement
- Supplier Quality Management
- Quality and environmental documents
- KONE Way Processes
- Human Resources Management
- Work environment and infrastructure
- Safety
- Environment

3.3 Roles and Responsibilities for Quality and Environment

3.3.1 Global KONE Level Responsibilities

The **KONE Quality and Environmental Board** is responsible for the approval of KONE Quality and Environmental strategy and objectives.

Global Business Units and **Global Process Owners** are responsible for defining Quality and Environmental objectives in their respective business areas.

The **KONE Quality and Environmental Team** is responsible for defining and maintaining the KONE Quality and Environmental Management System and supporting documentation as well as proposing Quality and Environmental objectives to the KONE Quality & Environmental Board.

Together with Unit Quality and / or Environmental Managers the KONE Quality & Environmental Team coordinates the management of Quality and Environmental documentation; certification audits for the global certificates and the development of continuous improvement processes. The Team also monitors and supports the implementation of Quality & Environmental processes.

The KONE CEO appoints one member of the KONE Quality Team as the management representative for the Quality Management System and one member of the KONE Environmental Team as the management representative for Environmental Management System.

3.3.2 Area and Unit Responsibilities

Area Directors and Unit Managing Directors are responsible for the implementation of the Quality and Environmental Management System and related processes in their respective areas and units. They provide the resources needed for the purpose.

Unit Management Teams define local Quality and Environmental objectives and local plans to achieve these targets aligned with KONE Quality and Environmental objectives, 3-year plans and approved budgets. Unit Managing Director's appoint management representatives for the Quality Management System and for the Environmental Management System.

Unit Quality and/or Environmental Manager(s) facilitate and evaluate the implementation of the Quality and Environmental Management System and monitor its performance and that of the Quality and Environmental processes.

Unit Management Teams need to ensure that Quality and Environmental Policies and Objectives are communicated and understood throughout their unit.

Unit Quality and Environmental Managers contribute actively to the performance of Quality and Environmental processes.

Unit Quality and Environmental Managers contribute to the development of the KONE Quality and Environmental Management System in cooperation with the KONE Quality & Environmental Teams.

Unit Management Teams and the Unit Quality and Environmental Managers promote the recognition of – and conformance to - internal and customer requirements throughout their units and suppliers.

Units are responsible for ensuring the availability and control of all resources and equipment needed to deliver products or services (personnel, production machinery, tools, measuring devices, software, personal protection equipment, communication, etc.).

Units are responsible for ensuring the protection of all material and products. They are also responsible for any customer property that is entrusted to them.

4. Customer Focus

KONE builds sustainable business by working closely together with customers. All of our processes incorporate customer view in order to proactively respond to their needs and requirements and to exceed their expectations. That means for example:

- Capturing the needs of different types of customers by segmentation of customers based on their business, needs and relationship with KONE
- Pro-active customer communications to share information and identify needs and opportunities
- Product and service offering definition for different needs and segments
- Intensive customer interaction and the use of a customer relationship management tool (CRM)
- Tender definition and order review
- Customer Loyalty Surveys and resulting action plans
- Customer complaint handling and corrective actions
- Local actions or processes to collect customer feedback and share internally Best Business Practices
- Supply Lines support tendering, review Front-line Unit orders and manage feedback from Front-line units

4.1 Product and Service Offering Definition

Global products, service offerings and solutions (combination of products and services) are defined at the corporate level for specified customer segments. New products and modernization offering as well as service offerings are developed jointly by various KONE organizations.

KONE's offering management teams and KONE IT project teams gather customer input from:

- Customer/market surveys, competitor surveys, technology research, innovation and legal code requirements
- Internal surveys, internal reporting, sales figures analysis and feedback from the field
- Customer co-creation projects

Offering teams ensure that this customer input is taken into account when defining new products or service offerings. These products or services may be:

- 1) Pre-engineered and documented solutions (A- and B-process)
- 2) Customer-specified solutions (C-process)
- 3) Services based on defined set of available service options and service levels

KONE has a Product Change process that can be initiated by raising a Product Change request.

4.2 Managing Customer Relationships

Front line units manage KONE customer relationships in order to understand their requirements and fulfill their needs. The follow-up and registration of customer contacts are managed by the use of the Customer Relationship Management (CRM) tool.

4.3 Tender Preparation and Order Review

Front line units proactively identify and manage sales leads and opportunities in their customer base. Sales persons identify customer needs, expectations and requirements by customer interaction and segment based need analysis. Sales persons follow sales leads,

prepare tenders for customers and explain the benefits of KONE products, solutions and services according to customer needs.

Sales managers manage the sales funnel and coach sales. They follow up and review that the tenders meet with customer criteria and KONE's tendering guidelines.

Orders are reviewed by KONE Supply Service to ensure that any deviations from the tender are clarified and confirmed to the customer.

Supply line units support Front Line units to define the offerings that satisfy customer expectations and market requirements. KONE Supply Service reviews material orders to the Supply Line for clarity and completeness.

More information about the tendering and ordering processes is given in section.

4.4 Customer Loyalty Surveys and Action Plans

All front line units regularly conduct customer loyalty surveys. The Global Customer Insight Team facilitates the annual Global Customer Loyalty Survey, a relationship survey, conducted by a uniform method for all front lines and units. Additionally, transactional customer surveys are being developed and introduced to the front line units to support global Business Units in fostering customer loyalty.

Results from the surveys are analyzed and action plans are defined and monitored locally, applying the Preventive and Corrective Action System (CAS) principles.

Actions that have a positive impact on customer satisfaction are shared to Global Business Lines for implementation as Best Business Practice.

4.5 Customer Complaint Handling

Each customer complaint is identified, recorded, followed and leads to:

- Prompt action to resolve the problem to the Customer's satisfaction
- An analysis to decide the need for Corrective Action to avoid recurrence involving another site/job/order/customer

Rules about the Customer Complaints handling process are defined in the KONE Customer Complaints Policy.

Inside the KONE CRM tool is integrated a module for managing Customer Complaints. Same tool includes a module for managing Customer Queries in order to improve responsiveness as well as module for Customer Compliments to strengthen customer-centricity further.

4.6 Internal and external Communication

Well planned and delivered communications internally and externally supports the company's business targets. Via external activities and visibility we aim to strengthen the KONE brand, create shareholder value and attract future employees and shareholders. Via internal communications we wish to create a understanding on our mission, vision and strategy and contribute to employee engagement, productivity and ultimately the quality of service our customers experience.

At KONE we promote active dialogue and open communication. As a stock-listed company, there are certain rules and regulations that we need to follow in all of our communications not forgetting our values and Code of Conduct.

Disclosure guidelines define the key rules for internal and external communication related to publishing material or non-public information and public information.

KONE publishes annually a set of four global reports and brochures - Financial statements, Sustainability report, KONE in brief and References. The materials can be used in all external communication with our customers, potential and new employees, students, media and other relevant stakeholder groups.

KONE has procedure describing internal and external communications related to Environmental topics and separate procedure which describes the reporting to the authorities as required by the Lifts Directive.

5. Quality and Environmental Improvement

Quality and Environmental improvement in KONE includes:

- Quality Planning, Development of Quality & Environmental Systems, Improvement actions and Quality & Environmental reviews
- Quality & Environmental Measurements, Feedback Process and internal Quality & Environmental Audits
- Preventive and Corrective Action System (CAS) and method (DMAIC or LIFT)
- Quality & Environmental Operating Model
- Containment and Retrofit Process

5.1 Quality and Environmental Planning Process

Quality and Environmental objectives are defined at a corporate level. KONE Global Business Lines set Quality and Environmental targets in accordance with the KONE Quality and Environmental objectives.

A **quality objective** seeks to increase customer satisfaction, reduce non-conformities and/or implement a standard process.

An **environmental objective** seeks to reduce our impact on the environment by improving performance in specified environmental aspects.

A **quality target** is the level to be reached for a Quality objective. It is numerical and time related and is established for every Quality objective.

An **environmental target** is the level to be reached for an environmental objective. It is measurable, where practicable, consistent with the environmental policy, time related and established for agreed environmental objective.

We plan our processes and improvement actions, which we monitor in our Quality and Environmental reviews:

Planning of quality processes and systems seek to improve the ability of business processes to meet customer and other requirements (e.g. Feedback Process, CAS). The Corporate and Unit Quality organizations are responsible for planning while the Business Units are responsible for the implementation of the corresponding processes.

KONE Global Quality and Environmental Management System contains Corporate Quality and Environmental Manual and a number of Corporate procedures.

Planning of improvement actions in KONE Core Processes incorporates measurable objectives and targets. Business Lines are responsible for this planning.

KONE develops long term and short term plans (budget). In the budget instructions, each Business Line localizes the global quality and environmental objectives and targets for the coming period.

Unit Management Teams are required to develop plans to reach the targets set within the Corporate and local Quality and Environmental objectives relevant to the Unit.

Objectives and targets for individuals and managers are communicated within the Performance Discussion process (PD).

Quality and Environmental reviews are organized at least annually at the Corporate and Unit level.

During Quality and Environmental reviews the following aspects are examined in order to evaluate the need for further Preventive or Corrective Actions:

- Previous Quality and Environmental Reviews
- Customer Complaints and Customer Loyalty Surveys
- Result of internal and external audits
- Feedback and Non Conformance processes
- Performance of processes and conformity of products and services
- Quality and Environmental objectives monitoring
- Needs and expectations of stakeholders
- Preventive and Corrective Action Lists
- Performance of external suppliers and subcontractors
- Other Quality and Environmental measurements
- Risks and opportunities
- Significant Environmental aspects

Quality and Environmental reviews also review current legal and other regulatory requirements, pending changes such as new regulations, new KONE Policies, instructions and new technologies in order to identify potential impacts on the Quality and Environmental Management System

5.2 Quality and Environmental Measurements

Quality and Environmental measurements help management to monitor the performance of Quality and Environmental processes and the progress of Quality and Environmental objectives.

Needs and expectations of interested parties are taken into account when defining Quality and Environmental measurements.

The monitoring of these measurements is assigned to people who are responsible for taking appropriate actions.

In addition to Global Quality and Environmental objectives, KONE units may define local measurements and Quality and Environmental objectives for processes, products and services.

Unit Management Teams set targets for these Quality and Environmental measurements that are reviewed in Quality and Environmental meetings. Corrective action is implemented when a deviation is detected.

5.3 Feedback Process

Through this process each **KONE unit** has the opportunity to give clear feedback inside the company or to **external suppliers** about any product, process or service problem, or any improvement opportunity.

This feedback should contain all the information necessary for the receiver to fix the problem as quickly as possible and also find the root cause to take proper Corrective Actions to prevent recurrence of the problem.

All KONE personnel are responsible for using the feedback process to report any non-conforming product to the corresponding supplier or KONE unit. A person who detects a non-conforming product takes appropriate actions to prevent its un-intended use in its non-conforming condition and initiates a feedback.

Within the KONE units, the Feedback Process is also used to report internal non-conformances and improvement requests. The process follows the KONE Quality Procedure.

The Feedback Process is monitored by a set of measurements. The global Feedback Process is described in a KONE Quality Procedure.

The Feedback Process is related to the Supplier Quality Management and the Preventive and Corrective Action System (CAS).

5.4 Internal Quality and Environmental Audits

The KONE Quality & Environmental Organization regularly conducts Corporate Quality and Environmental Audits. The purposes of Corporate Quality and Environmental Audits include:

- Bringing objective and factual information about performance of processes to management so that it can initiate the best Preventive and Corrective Actions
- Enabling management teams to review the strengths and weaknesses of the Quality and Environmental Management System and the application of the system and pointing out potential risks in reaching the targets
- Checking that operations are carried out according to process descriptions and related requirements such as legal and other regulatory environmental requirements
- Identifying opportunities to improve business performance in terms of customer satisfaction and loyalty, quality of products and services, interfaces between different organizations and cost reduction
- Verifying that processes meet Business objectives

Corporate Quality and Environmental Audits are coordinated by the KONE Quality Team or Unit Quality and/or Environmental Manager(s) and conducted by trained and qualified internal auditors. The audit reports are used as an input to Quality and Environmental meetings to find areas for improvement and to take Preventive and Corrective Actions.

The audit methodology, responsibilities, reporting and handling of results are described in Internal Audits Corporate Procedure.

5.5 Preventive and Corrective Action System

The KONE definition of a Preventive Action is:

An action to eliminate the root cause of any item that potentially causes customer dissatisfaction, internal inefficiency or other undesirable situation.

Preventive Actions address potential problems. In general, the Preventive Action process can be thought of as a risk analysis process. Examples where Preventive Actions take place in KONE include contract and design reviews, risk assessment and FMEA during the development phase.

KONE Feedback and Change Request processes are used to inform supply line units of non-conformities and improvement requests enabling them to take Preventive and Corrective Actions at an early stage.

The KONE definition of a Corrective Action is:

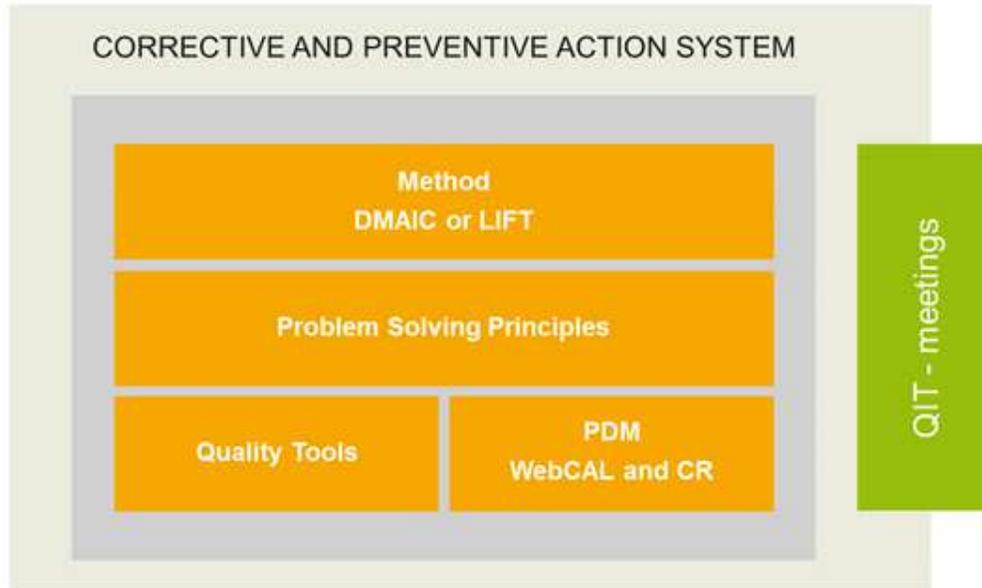
A **change** in the way we do things that **eliminates** the root cause of a **problem**.

Each problem is an opportunity to improve.

The Preventive and **Corrective Action System (CAS)** is used to ensure that problems requiring local Preventive or Corrective Action are recorded, reviewed and monitored by management.

CAS guides KONE employees to analyze information and develop and manage Preventive and Corrective Actions.

Product changes are managed with a Change Request (CR) process, which is described in a KONE Standard.



Corrective Actions are implemented to systematically eliminate problems from our processes and services, thereby leading to improved customer satisfaction and efficiency.

CAS includes the Corrective Action Methods (DMAIC or LIFT) and use of Quality Tools when necessary.

A quality and environmental meeting structure (organization) is used to monitor and progress Preventive and Corrective Actions that are recorded in WebCAL.

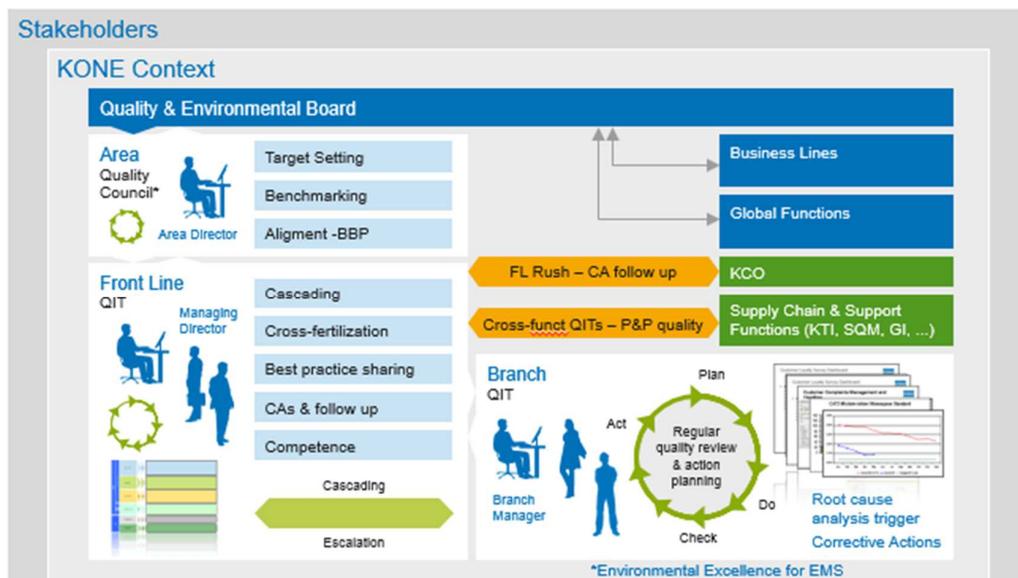
The Preventive and Corrective Action System is described In CAS Corporate Procedure.

5.6 Quality & Environmental Operating Model

In support of our Vision to deliver the best People Flow® experience, the Quality & Environmental Operating Model (see picture below) was developed as a proactive approach to ensure that:

- Quality & Environmental targets are set, communicated and followed up in collaboration between Quality & Environmental Board, Areas (Quality), Environmental Excellence Coordination Meetings (Environment) and Environmental Legal Steering Meetings, Front Lines, Business Lines and Global Functions
- Product and process improvement opportunities are identified, shared and acted upon in Quality Improvement Teams (QIT) both for Quality and Environment
- Corrective and Preventive actions are effective

The following diagram illustrates how the Quality & Environmental Operating Model is organized within KONE.



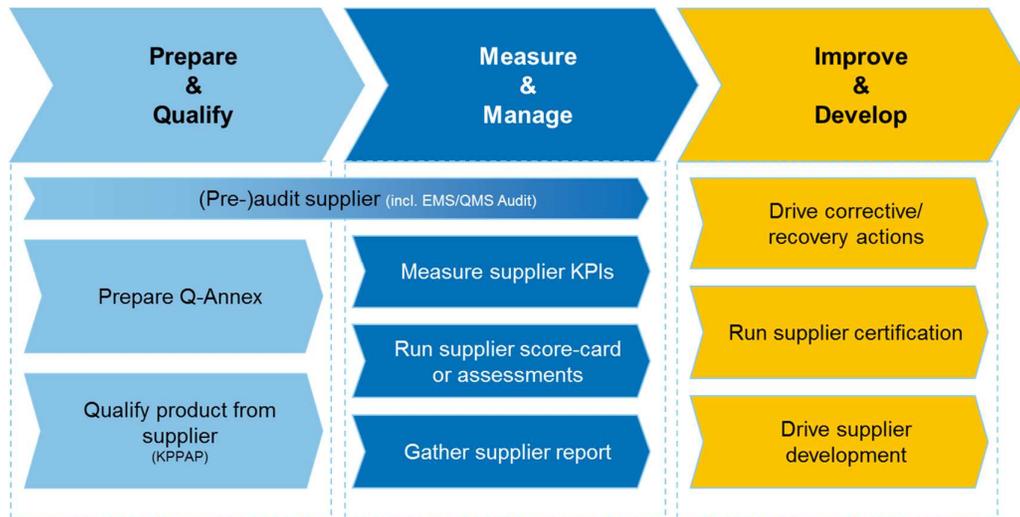
5.7 Containment and Retrofit process

Purpose of the Containment and Retrofit process is to ensure efficient, timely managed and coordinated way to manage reported non-conformities. To manage these cases, KONE investigates reported non-conformity, prepares corrective actions and executes containment at full chain.

Possible retrofits for non-KONE equipment may also follow this process when applicable.

One input for Containment and Retrofit process is Early Warning process. The purpose of the Early Warning process is to spot the critical issues quickly and resolve them before they become recurrent issues. When the Early Warning process detects a non-conformity which requires containment or retrofit actions, the identified Early Warning case will be managed to resolution under Containment and Retrofit process.

6. Supplier Quality Management



KONE's Sourcing organization aims to continuously improve customer value and profit contribution while at the same time trying to optimize total cost of ownership. Supplier Quality Management (SQM) is a part of KONE's Sourcing organization. KONE SQM is responsible to support Sourcing through Supplier qualification and preparation, to measure and manage supplier quality and performance on a regular basis and to improve and develop suppliers to best support KONE's targets. To ensure reliable quality KONE pursues long-term integral relationships with its strategic suppliers. KONE's Supplier Quality Management processes are described as part of KONE Core processes. KONE's supplier management activities are concentrated around 3 main areas:

6.1 Preparation and Qualification of Suppliers

SQM supports Sourcing in the supplier selection and implementation process through qualification of suppliers, support in contract negotiations and qualification of individual production parts from suppliers. Supplier assessments are done through questionnaires and audits which include quality and environmental aspects. Quality targets and quality control plans for our suppliers are defined in quality annexes as part of our supply agreements. The qualification of parts from suppliers happens through a dedicated parts approval process.

6.2 Measurement and Management of Supplier Performance

SQM monitors the performance of suppliers using KONE Processes (KPI measurements, supplier scorecards, supplier assessments, supplier reports) on regular basis. Suppliers are audited additionally on regular basis. Regular performance reporting between KONE and key suppliers is conducted in order to motivate both parties to improve continuously towards the agreed quality targets. Meetings with key suppliers are held regularly in order to review the performance and define Preventive and Corrective Actions.

6.3 Improvement and Development of Suppliers

SQM proactively works with suppliers in order to improve their performance. This is done through initiation and management of corrective actions or through dedicated supplier development projects. Supplier development projects focus on continuous and proactive waste elimination, variation reduction and overall productivity improvements. In addition, KONE's Supplier Excellence Certification Program assesses KONE's key supplier's sites based on criteria such as ISO 9001 and ISO 14001 quality and environmental management systems, performance scorecards, and supplier audit results.

7. Quality and Environmental Documents

KONE Policies are documents that describe KONE requirements to KONE Units. Policies are intended to drive change and harmonization throughout KONE global operations.

In some Units it is also necessary to have local Policies in order to fulfill country specific legal requirements.

The KONE Quality and Environmental Manual is a document that describes the KONE Management System focused on Quality and Environment and is available to all Units. It is communicated to all KONE managers and employees and can be distributed to KONE Customers and Partners.

In ISO 9001 and ISO 14001 certified Units, the KONE Quality and Environmental Manual is a part of the Quality and Environmental Management System.

A KONE Procedure is a document that describes an overall standard process. It clarifies the requirements, steps and responsibilities in the process and identifies the support documents and systems to apply the process.

KONE Procedures are available to all Units. In ISO 9001 and ISO 14001 certified Units, they are part of the Quality and Environmental Management System.

KONE Way Process Descriptions are documents describing KONE Global Processes.

Global Process Owners are responsible for keeping the process descriptions up to date and for reviewing them.

In the next chapter the first three levels of the KONE Way Process descriptions are published. The latest versions of these KONE Way Processes are available in the Global KONE Intranet.

Most of the KONE Way Process Descriptions are documented up to level four on corporate level and available to all Units. In ISO 9001 and ISO 14001 certified Units, they are part of the Quality and Environmental Management System. The level four corporate descriptions form the basis for the unit documentation (process description/procedures).

The Quality and Environmental Board reviews the KONE Quality and Environmental Manual, KONE Procedures and KONE Way Process Descriptions once a year or when needed.

Local Quality and Environmental Instructions give additional information about carrying out activities. Local Quality and Environmental Instructions can also be forms or checklists.

Technical Documents and Standards are used in KONE. These document types have their own management rules.

Quality and Environmental Records are maintained as evidence of quality and environmental conformance. The records management rules are defined in a specific KONE Procedure.

KONE Quality & Environmental Manual

KONE Policies

KONE Procedures:

- Document Control
- Management of Quality and Environmental Records
- Management Review
- Internal Audits
- Corrective & Preventive Actions system
- Feedback + Handling of Non-conformities
- Supplier Quality Management
- IFT Directive (where applicable)
- KONE Code of Conduct
- Distribution Code of Conduct
- Supplier Code of Conduct
- Competition Compliance
- Environmental Aspects Identification, SEA, targets setting including risk and opportunities
- Environmental Communication
- Environmental Legal and Other Requirements
- Environmental Reporting Handbook
- Restricted Substances Management
- Restricted Substances Requirements
- Green Building Requirements
- Environmental Excellence in Field Operations
- Waste Management Guide

KONE Way Process Descriptions:

- Customer Process
- Delivery Process
- Maintenance Process
- Solution Creation Process
- Management & Support Process

Technical documents and standards

LOCAL INSTRUCTIONS

8. KONE Way Processes

KONE Way is our One Way of doing business in our relationship with our customers, our delivery of products and services, our creation of new solutions, and the management and support for these processes. These processes are deeply embedded in our policies, systems and tools.

8.1 Core Processes

KONE Way process architecture consists of five Core processes: Customer, Delivery, Maintenance, Solution Creation and Management & Support. Next two levels of these Core processes are listed in this chapter.



8.1.1 Customer Process



The purpose of KONE Customer Process is to ensure that we are easy to do business with while ensuring efficiency and best possible experience

Manage customer engagement	Create demand	Sell	Manage sales
<ul style="list-style-type: none"> - Manage customer cases - Measure customer loyalty (NPI) - Manage transactional surveys 	<ul style="list-style-type: none"> - Create campaign - Follow-up marketing campaigns - Manage leads 	<ul style="list-style-type: none"> - Sell new equipment - Sell modernization - Sell maintenance contracts - Sell repairs - Sell to cross-border clients 	<ul style="list-style-type: none"> - Plan sales - Manage sales funnel - Manage offering and pricing - Manage account

8.1.2 Delivery Process



Plan, prepare and execute People Flow solution projects, delivering a great customer experience professionally and profitably.

Plan	Source	Make	Manage project	Fulfill
<ul style="list-style-type: none"> - Plan FL Sales and Operations - Plan global supply 	<ul style="list-style-type: none"> - Identify, contract and manage supplier - Manage supplier quality - Purchase FL materials and services - Purchase SL materials and services 	<ul style="list-style-type: none"> - Prepare production - Produce, pack and ship products - Monitor production - Manage errors in production - Manage feedbacks in factory - Measure production performance - Monitor material management activities - Develop and perform Total Productive Maintenance (TPM) - Maintain Production Planning (PP) master data 	<ul style="list-style-type: none"> - Initiate project - Validate project - Plan project - Execute project - Handover project 	<ul style="list-style-type: none"> - Manage order - Manage site and install - Engineer solution - Supply KONE materials - Manage materials to site

8.1.3 Maintenance Process



Defining and aligning the foundation for customer loyalty, quality productivity and profit in maintenance.

Manage maintenance operations	Perform maintenance
<ul style="list-style-type: none">- Budgeting and planning- Manage safety- Customer and quality- Portfolio and growth- People and performance	<ul style="list-style-type: none">- Monitor connection- Perform maintenance work- Manage material- Support maintenance operations

8.1.4 Solution Creation Process



Develop and maintain innovative and cost-competitive new solutions that give a performance edge to our customers.

Develop concepts	Develop solutions	Manage product changes	Release solutions
<ul style="list-style-type: none"> - Foster Front end innovation - Manage uncertainties (Blue boxing) 	<ul style="list-style-type: none"> - Initiate Project - Validate Concept - Specify requirements - Finalize product design - Prepare process - Validate process - Close project 	<ul style="list-style-type: none"> - Maintain - Manage product costs - Retire - Terminate - Containment & Retrofit 	<ul style="list-style-type: none"> - Plan release (KR1) - Develop release content (KR2) - Implement release content (K5M) - FL localization (K5S) - Sell new solution (K5ESU)

8.1.5 Management & Support Process



The way we manage and support all the other processes and operational work at KONE

Manage company	Manage people	Manage finance	Manage master data	Manage safety
<ul style="list-style-type: none"> - Develop strategy - Manage mergers and acquisitions - Manage planning and forecasting - Control operations - Record to report - Manage stakeholder relationships - Manage IT - Manage KONE Way - Manage governance, risk and compliance 	<ul style="list-style-type: none"> - Plan resourcing - Manage talent - Manage competences - Manage performance / reward 	<ul style="list-style-type: none"> - Purchase to pay - Contract to cash - Cash and bank - Manage treasury transactions 	<ul style="list-style-type: none"> - Manage customer data - Manage material data - Manage product data - Manage equipment data - Manage fixed assets - Manage person data - Manage supplier data - Manage intracorporate partners - Manage maintenance contract data 	<ul style="list-style-type: none"> - Manage safety policy and objectives - Manage safety risks and incidents - Assure safety - Promote safety

9. Human Resources Management

People processes support the achievement of business targets by attracting, retaining, leading and developing people. These four processes include several sub-processes, policies and practices that are outlined in KONE Policies and Guidelines.

In addition to these enabling processes, Human Resources management plays an important role in strategy communication and supporting management process.

In KONE Strategy development process, KONE analyses the need for new competences and knowledge which are needed in order to succeed in deploying KONE Strategy. KONE actively involves suppliers, partners, customers, information providers and other stakeholders in co-creation, market and business environment understanding, knowledge sharing and benchmarking.

9.1 Attract

Each KONE Manager is responsible for having the necessary resources in place to meet business objectives. The processes, policies and practices that support managers in attracting the right people with the right knowledge are:

- Resource planning (in conjunction with budgeting)
- Unit capability planning
- Recruitment
- Collaboration with Education Institutions
- Apprentice and trainee programs

9.2 Retain

To retain and keep people motivated, KONE needs to listen and act on feedback from employees. In addition KONE needs to offer people career and development opportunities inside the company and make sure that our compensation packages stay competitive. The processes, policies and practices that support KONE in retaining the right people are:

- Employee Survey
- Management Review Process
- Successor Planning
- Potential Identification
- Internal Labor Market
- International Assignment Process
- Global Reward Policy and related processes

9.3 Lead

To achieve business results, KONE needs superior leadership, including systematic performance management. The processes, policies and practices that support leadership are:

- Performance Management; Performance Development and Managing Performance Improvement Processes
- 360 Degree Leadership Development Tool
- Leadership Development
- KONE Values
- Coaching and mentoring

9.4 Develop

The processes, policies and practices that support KONE managers in developing their people are:

- Individual Development Planning (as part of Performance Development Process)
- Unit capability planning
- Competence Management

Competence Development equates to 70 % on the job learning, 20 % learning from others and 10 % formal training.

9.5 Knowledge management

KONE HR processes are applied to develop internal competences and to acquire knowledge from outside. KONE is an active participant in organizations developing codes, standards, and guidelines which enables us to get the knowledge about the potential future requirements. KONE Patenting process secures protection of key innovations. We actively collect lessons learned after key projects to share best practices and learnings.

KONE WAY processes and KONE WAY role descriptions describe the needed competences and knowledge to be able to operate the processes. KONE Way processes also define the key IT tools to be used to support the process and to capture the process and customer related information.

KONE strives to ensure that the information systems needed in running KONE businesses are adequately protected from security related threats. Access to the key IT tools is controlled, data backups taken regularly and the computers of KONE employees have anti-virus protection to reduce risk of information theft and encryption to reduce risk of loss of data in case the computers are lost. KONE reviews it's security practices regularly to drive continuous improvement.

10. Environmental Management

KONE's Quality & Environmental Board and Executive Board, both chaired by the CEO, are responsible for the company's environmental management. Environmental reviews of the progress of KONE's Environmental Excellence program (i.e. Environmental Strategy) are conducted regularly during the Executive Board and Quality & Environmental Board meetings. More information about organizing environmental management at KONE is in Chapter 3.3. Roles and Responsibilities for Quality and Environment and in Chapter 5.6 Quality & Environmental Operating Model.

10.1 Control of KONE's Environmental Aspects

In order to meet the Environmental challenges of our Main Business Processes, KONE has identified Environmental Aspects throughout the scope of its operations where ISO 14001 is implemented.

Their significance is evaluated systematically according to our corporate procedure on assessing environmental aspects.

The data regarding identified aspects is revised periodically, according to our internal processes

Derived from the significant environmental aspects and from KONE's Environmental Strategy, our procedures and instructions aim at guaranteeing that KONE's operations have a minimal effect on the environment.

10.2 KONE's Management of Emergency Situation

KONE has also identified possible environmental risks and opportunities related to its products and operations.

Procedures and Instructions have been defined to manage potential emergency situations. By responding to these situations, it will allow KONE to control, reduce, mitigate and prevent environmental impacts that may be associated with its operations.

KONE reviews the emergency preparedness and response procedures as needed, especially after an accident or an emergency situation.

Risk assessments are organized according to our internal procedure, while procedures and instructions are updated when necessary.

New Environmental Aspects are identified by using the information received in the form of internal feedback, customer complaints, injury reporting, etc. according to our procedures and communicated to relevant stakeholders as necessary.

At KONE, environmental communications related to abnormal situations is included in global and local guidelines for crisis communications.

KONE's preventive and corrective actions are taken according to the CAS principles.

10.3 Environmental Performance Reporting

KONE has established a process and responsibilities for reporting its environmental performance. The environmental data is published in the annual KONE Corporate Sustainability Report, which has been published since 2008 to describe the development and results of sustainability performance. The reporting follows GRI reporting guidelines as far as they are applicable. To ensure high data quality, KONE's environmental data published for

scopes 1 and 2 (direct and indirect energy use) and partly scope 3 (other relevant indirect emissions) is assured by an objective third party.

11. Work Environment and Infrastructure

KONE gives all its employees the resources to work in the best possible conditions and to the level of quality required by our customers.

KONE Global Facilities Policy creates a harmonized approach to the selection and management of physical KONE sites and premises. KONE provides hardware and software as needed to perform work properly.

Field employees are provided appropriate clothing, tools, Personal Protection Equipment and vehicles to perform their work.

KONE ensures that the installations and maintenance sites and factories where our employees are working have suitable environment, ergonomic, safety and quality conditions.

KONE has defined its global Safety Management System in a KONE Policy.

This system includes training in the use of approved methods and tools, Personal Protective Equipment, fall protection, manual handling (lifting), site inspections by management, lost-time injury interviews, local injury-frequency-rate targets and reporting to the KONE Safety Director.

Each Unit conforms to its country-specific safety regulations. The Global Safety Function supports the development of local Safety Management Systems.

12. Terminology

CAS: Preventive and Corrective Action System; includes organization, methods and tools for preventive and corrective actions.

LIFT: a Corrective Action method; **L**ist all aspects of the problem, **I**dentify several root causes, **F**ormulate an action plan, **T**erminate the problem permanently.

DMAIC: a method that defines standard phases for managing business process improvements. The required steps are: **D**efine, **M**easure, **A**nalyze, **I**mprove and **C**ontrol.

GRI: Global Reporting Initiative. The GRI guidelines are widely used for the reporting of economic, environmental, and social performance.

QIT: Quality Improvement Team; a team that meets regularly to identify problems and organize preventive and corrective actions.

PCM: Product Change Management; a set of definitions, rules and processes to develop product specifications throughout the lifetime of the products. Also includes production, installation and maintenance methods.

NEB: New Equipment Business; includes all elevator and escalator supply lines, front-line sales and all related supporting activities.

SEB: Service Business; includes field activities involving installation, maintenance and tendered repairs of elevators and escalators.

MP: Major Projects; is a global team of KONE experts that specialize in providing solutions in all high-rise building, airport and metro projects.

WebCAL: A tool to monitor and manage Preventive and Corrective Actions.

13. Version History

Changed by: Minna Kostamo-Rönkä, Jaana Niemi, Marja-Leena Siltakorpi, Olivera Batoz
 Checked by: Mikko Korte, J Sivaraman, Hanna Uusitalo
 Approved by: Henrik Ehrnrooth

Issue	Date	Description of change	Ref CR	Approved by
	2017-02-20	Changes based on new KONE Strategy 2017 and new ISO-9001:2015 and ISO-14001:2015 requirements (Quality and environmental policies, external communication, knowledge management). Picture updates, KONE WAY Processes updated.		Henrik Ehrnrooth
	2016-10-31	Changes based on new ISO-9001:2015 and ISO-14001:2015 requirements (context, interested parties, risk and opportunity management (Chapter 2)). All pictures updated, Quality and Environmental objectives updated (chapter 1), Customer Focus updated (Chapter 4), added 5.7 Containment and Retrofit Process, KONE Way Process updated (Chapter 8).		Henrik Ehrnrooth
	2014-06-23	KONE CEO change.		Henrik Ehrnrooth
	2014-02-10	Environmental objectives updated (Chapter 1), Safety, Quality, Installation added to Section 3.1, Quality Operating Model added (Section 5.6), Supplier Quality Management updated (Chapter 6), list of procedures and policies updated (Chapter 7), KONE Way process descriptions checked and figures updated (Chapter 8), Roles and responsibilities related to environmental management updated (Chapter 10, Sections 3.3 and 5.6), Environmental Performance Reporting added (Section 10.3), new document layout		Matti Alahuhta
	Years 2001-2011	Several revisions		

14. Office Addresses

KONE Corporation
Keilasatama,3
P.O. Box 7
FIN-02151 Espoo, Finland
Tel +358 204 751

KONE website on the Internet: www.kone.com

