



# MONITOR AND CONTROL YOUR ELEVATORS AND ESCALATORS





# A COMPLETE VIEW AT A GLANCE

KONE E-Link™ enables you to monitor your elevator and escalator systems in one or several buildings from one location. It is a full-featured facility management tool designed to secure the best possible tenant service quality, reliability and efficiency of the elevators and escalators in your building. KONE E-Link can also be retro-fitted as a stand-alone supervisory tool to enhance the management of virtually any type of installations, new and existing, as well as connected to non-KONE equipment.

## MAXIMIZING PERFORMANCE

The system uses the building's standard Local Area Network (LAN), and the connected elevators and escalators can be monitored and managed via easy-to-use interface on a standard PC. KONE E-Link traffic displays and reports provide an accurate view of the transportation status, demand, traffic performance, and availability of elevators and escalators in the building. This information helps you ensure that the elevators and escalators deliver the best possible performance at all times. Additionally, KONE E-Link has an industry standard interface to Building Management System, to allow easy integration to other facility management systems, if needed.





# FASTER REACTION AND CONTROL

## KONE E-LINK OFFERS THE FOLLOWING BENEFITS:

- Real-time view of equipment status locally and remotely
- Large building complexes or geographically remote buildings can be monitored and managed from a single location
- Traffic history playback of elevator and escalator events for event history, security and legal purposes
- Faster reaction to malfunctions, possible vandalism and troubleshooting
- Faster rescue of entrapped passengers
- Local and remote control and command of equipment, scheduled commands like mode changes and lockings
- Easy integration with other facility management systems in the building
- Easy to use and intuitive user interface



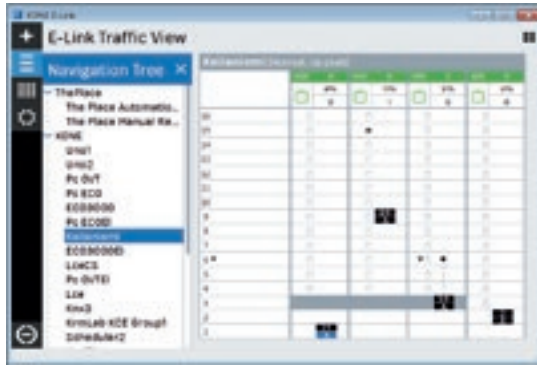
The facility manager has instant review of operational status of all elevators and escalators under his management. Wide variety of reports and statistics are available in real-time.



# KONE E-LINK MONITORING FEATURES

## TRAFFIC MONITORING

Real-time traffic monitoring makes it possible to keep in contact with all elevators and escalators even in a large building. The display can be configured to suit particular needs.



KONE E-Link Traffic View

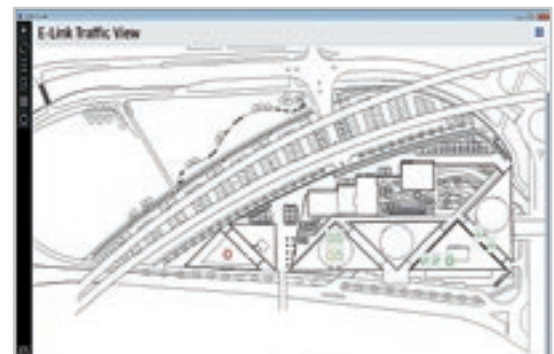


## AERIAL VIEW

Maps, aerial photographs and building lay-out drawings can be used as a reference to locate groups or individual equipment over large geographical area or building complex.

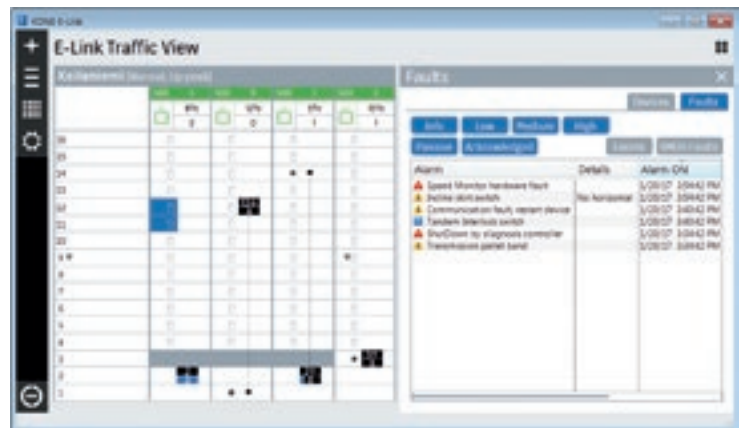


Close aerial view of the building complex layout with equipment



## DEVIATION MONITORING

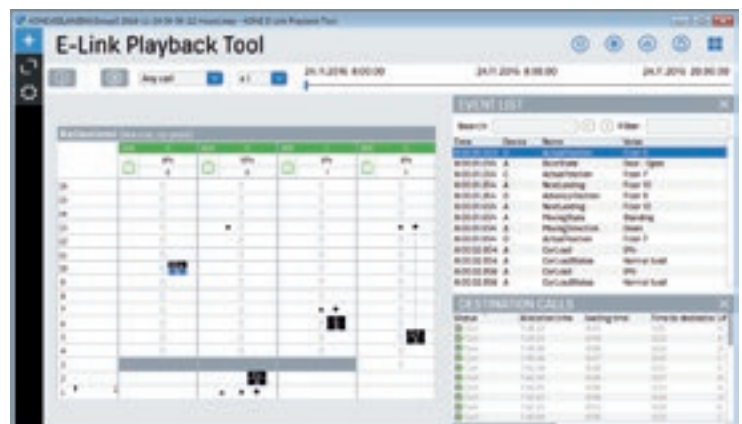
Any deviation from normal operation is logged instantly. An audible and visual alert signal is sent to specified monitors to ensure quick attention. Logged events are stored and compiled in a report. The analysis of this information helps the building owner in liability cases and enables building maintenance personnel to react to minor malfunctions and possible misuse or vandalism.



Deviation monitoring summary showing the operational status of each unit

## TRAFFIC HISTORY PLAYBACK

The history playback facility is a unique KONE E-Link™ feature. The need for playback may arise due to suspected misuse, reported incidents, or complaints by tenants. This feature facilitates reruns and study of elevator and escalator operating events and status changes, as if on a video recorder.



KONE E-Link Playback tool

# KONE E-LINK REPORTING FEATURES

KONE E-link offers a comprehensive set of reports in graphical, easy to read format to allow thorough analysis of equipment performance, availability and operational quality. All data can be retrieved and analyzed using normal office software tools, such as Microsoft Excel.

The availability report reflects the operational quality of the equipment and the maintenance as a whole. It provides a precise reading of the system's operation, including deviations from the normal operating mode.



Escalator summary report

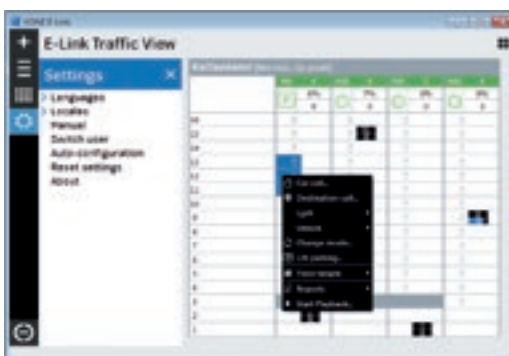


Number of passengers per time unit

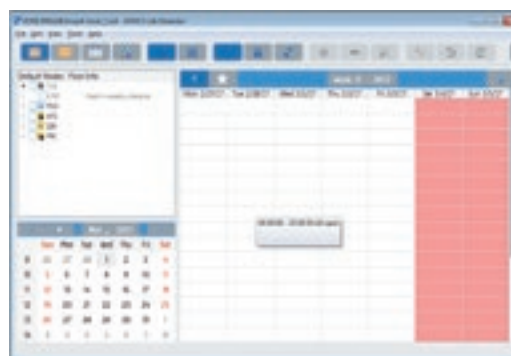


Elevator availability summary report

# KONE E-LINK COMMANDS



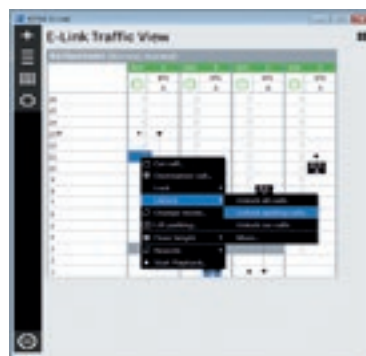
Settings view



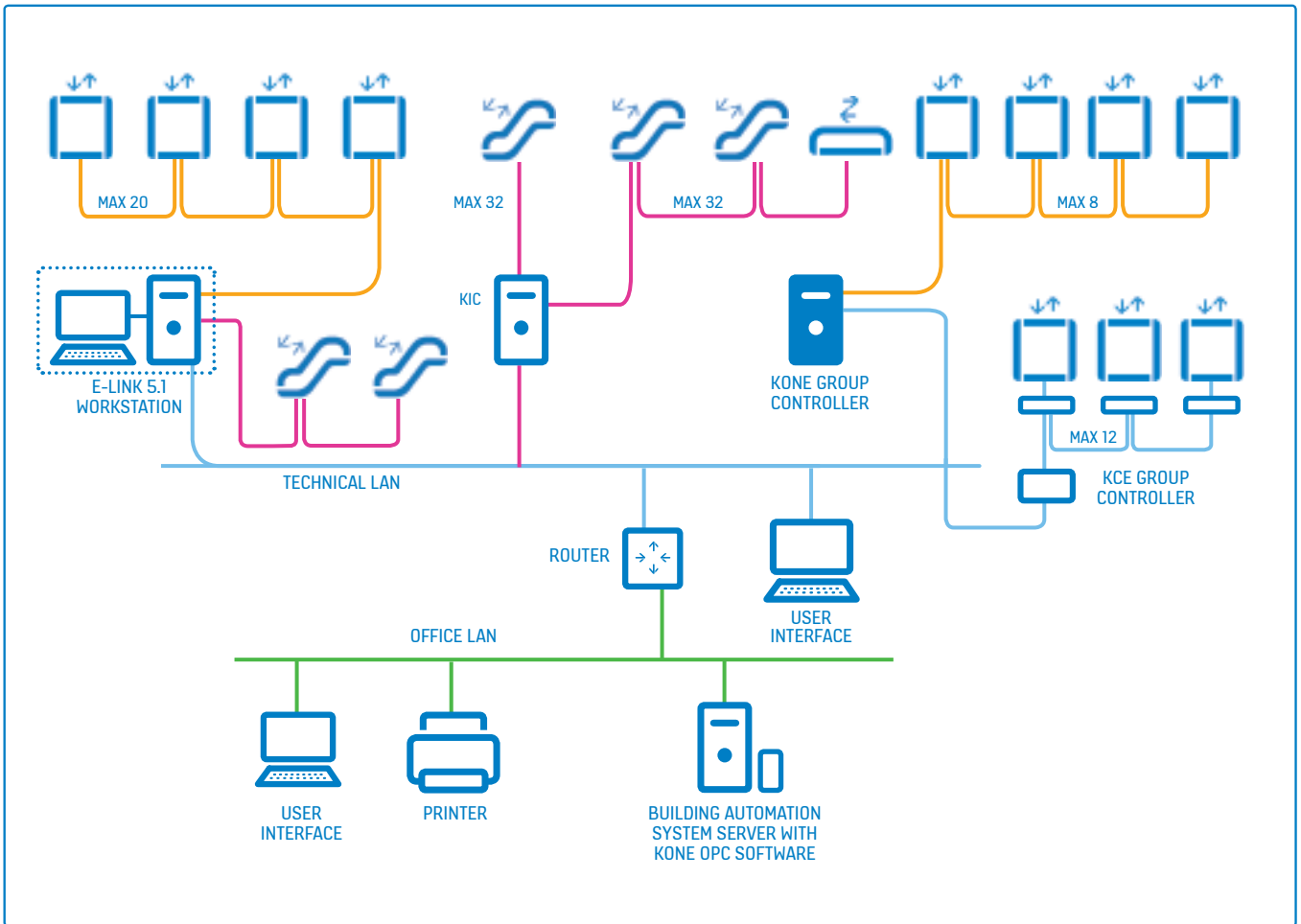
Scheduling

KONE E-Link commands are used to activate and deactivate some of the elevator functions, e.g. out of service mode, various types of elevator calls – priority, destination etc. Prioritizing and controlling of commands by schedule is also available.

KONE E-link™ enables calls and commands to be issued by an authorized user to individual elevators or groups of elevators. For example, locking of each car and hall call buttons either individually or in specified groups is available. The system carries out the locking automatically in accordance with a user-configurable weekly program.



Locking landing calls



### E-LINK FUNCTIONS AND FEATURES

- Traffic monitoring
- Deviation alarms
- Elevator and escalator operation reporting
- Operational event history
- Traffic history playback
- Elevator calls and commands
- Elevator locking
- Remote monitoring
- Scheduled calls and commands

### INTERFACE TO BUILDING MANAGEMENT SYSTEM

- OPC Data Access 2.05A

### MAXIMUM SYSTEM SIZE

- Total number of elevators: unlimited
- Total number of escalators: unlimited
- Total number of user interface computers: unlimited

### MONITORING

- User configurable real time traffic displays
- Status displays
- Building layouts

### REPORTS

- Calls per hour
- Calls per floor
- Waiting times per hour
- Waiting times per floor
- Elevator availability
- Elevator operation summary
- Escalator operation summary
- Number of alarms, alarm log

### ELEVATOR STATISTICS

- Number of hall calls
- Hall call time
- Number of starts
- Start load
- Stop time
- Run time
- Cycle time
- Re-levelings
- Number of starts in bank
- Availability
- Operational Time

### DOUBLE-DECKER ELEVATOR STATISTICS

- Lower deck load
- Upper deck load
- Both decks serving time

### DESTINATION ELEVATOR STATISTICS

- Number of passenger calls
- Waiting time
- Time to destination
- Transit time

### ESCALATOR STATISTICS

- Availability
- Run time
- Number of starts
- Number of emergency stops
- Number of disturbances

### PLAYBACK

- Display of traffic history
- Linked with operational event history

### ELEVATOR CALLS AND COMMANDS

- Car calls
- Priority calls
- Attendant service
- Independent service
- Simplex service
- Out of service
- Special parking
- Scheduling possibility
- Escalator remote control

### ELEVATOR LOCKING COMMANDS

- Scheduled locking
- Manual locking

### OPERATIONAL EVENT HISTORY

- Alarms
- Deviations
- Status changes

### SYSTEM CONFIGURATION

- Languages: call for availability

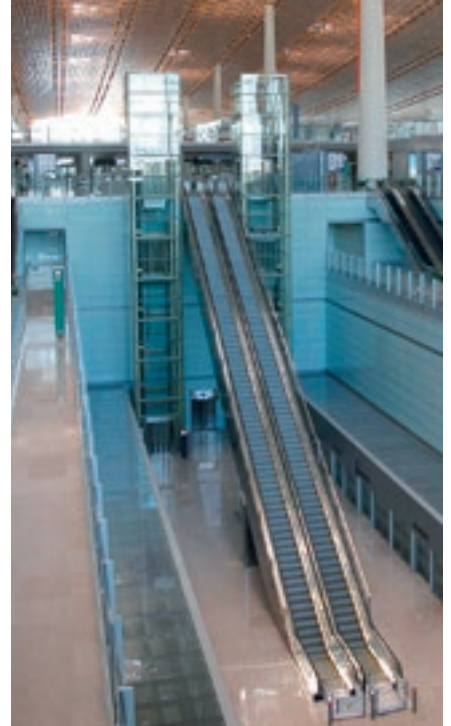
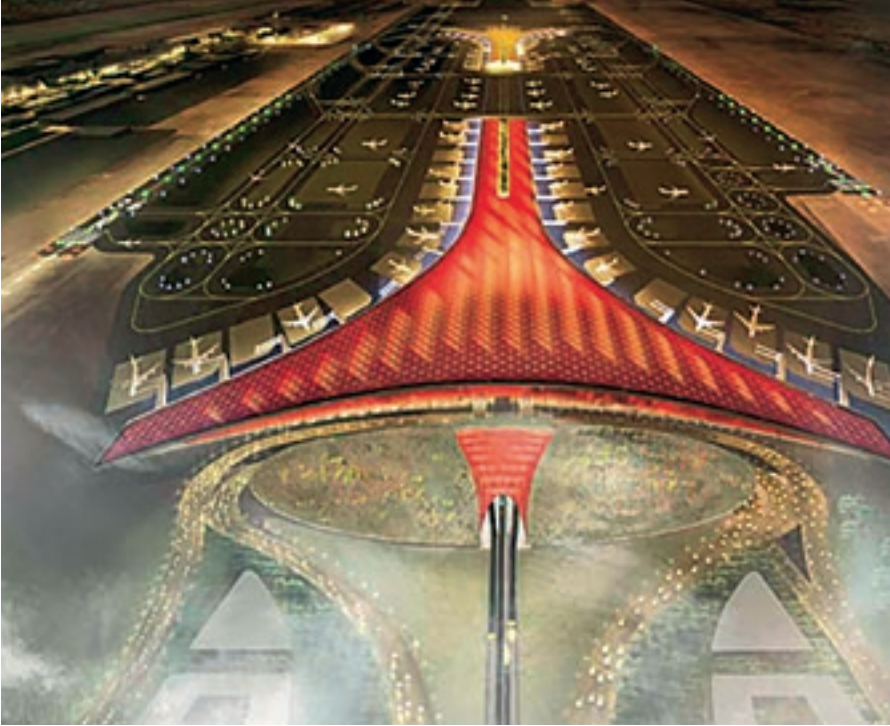
### NOTE!

Elevator calls, and commands are only available if the corresponding options are ordered with the elevator control system.

Not all the corresponding features of E-Link can be obtain when used in conjunction with non KONE equipment – please check with local KONE representative.



# REFERENCES



## CAPITAL AIRPORT – BEIJING, CHINA

The world's most modern airports, such as Beijing Capital Airport, utilize the latest technology to meet the challenges of transporting over 40 million passengers annually. The 192 elevators and escalators in 900 000 m<sup>2</sup> area were linked to the KONE E-link™ monitoring system to guarantee high service level and productivity. The OPC interface was utilized to integrate elevators and escalators to Building Management System.



## THE WATERSIDE CONDOMINIUM – SINGAPORE

KONE E-link is also ideally suited for managing the portfolio of residential buildings in customer's property. Via VPN Internet access the facility manager can login to KONE E-link from anywhere and enable the remote monitoring of valuable system information in big residential complexes.



## ST. OLAV'S HOSPITAL – TRONDHEIM, NORWAY

All logistics are handled by Automatically Guided Vehicles, which use the passenger elevators via a WLAN connection to KONE E-Link OPC interface. This transportation solution from KONE is a crucial part in making the complex hospital logistics run.



## 122 LEADENHALL – LONDON, UK

KONE E-Link is used to monitor the performance and traffic of the 28 elevators and 6 escalators in the 122 Leadenhall building in London. The customer has a keen interest to track the performance and service level of the equipment in this unique, state-of-the-art iconic building.

KONE provides innovative and eco-efficient solutions for elevators, escalators, automatic building doors and the systems that integrate them with today's intelligent buildings.

We support our customers every step of the way; from design, manufacturing and installation to maintenance and modernization. KONE is a global leader in helping our customers manage the smooth flow of people and goods throughout their buildings.

Our commitment to customers is present in all KONE solutions. This makes us a reliable partner throughout the life cycle of the building. We challenge the conventional wisdom of the industry. We are fast, flexible, and we have a well-deserved reputation as a technology leader, with such innovations as KONE MonoSpace®, KONE NanoSpace™ and KONE UltraRope®.

KONE employs close to 52,000 dedicated experts to serve you globally and locally.

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