ELEVATOR DISPATCHING CONTROL SYSTEM

The SEA company offers a modern system of its own production for monitoring and controlling elevator technological objects. Currently, the equipment that is part of the system is mass-produced at our enterprise and its operational parameters have been confirmed by operation in more than 15 cities of Ukraine.

THE MAIN FUNCTIONS OF THE PROPOSED SYSTEM ARE:

Remote collection and visualization of information about the state of technological elevator objects in real time

Provision of an emergency voice communication channel between the dispatcher and the elevator cabin

Operational control of the main power supply contactor of the elevator station

Notification regarding unauthorized access to technological premises

THE ECONOMIC BENEFIT OF IMPLEMENTING THE ELEVATOR DISPATCHING SYSTEM IS ACHIEVED BY:

- The presence of informational feedback on the activation of the required mode enables the dispatcher to reduce the response time to an emergency situations;

- The presence of remote control over the power supply of the elevator station allows eliminating service calls associated with the need for equipment restarts;

- The ease of installation and minimal requirements for ongoing maintenance;

- The protection of elevator station equipment, achieved through monitoring the state of the power supply status, combining with analyzing sensor signals, and making decisions to suspend operation in case of emergencies;

- Remote technical metering of consumed energy, which allows to reduce working hours and transportation expenses required during detours for taking readings.
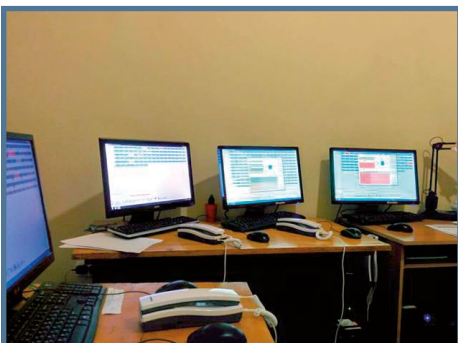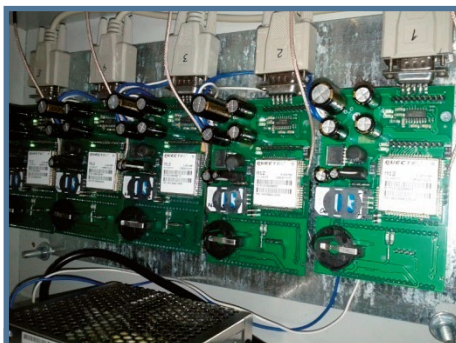
SEA DISPATCHING SYSTEM

SOFTWARE
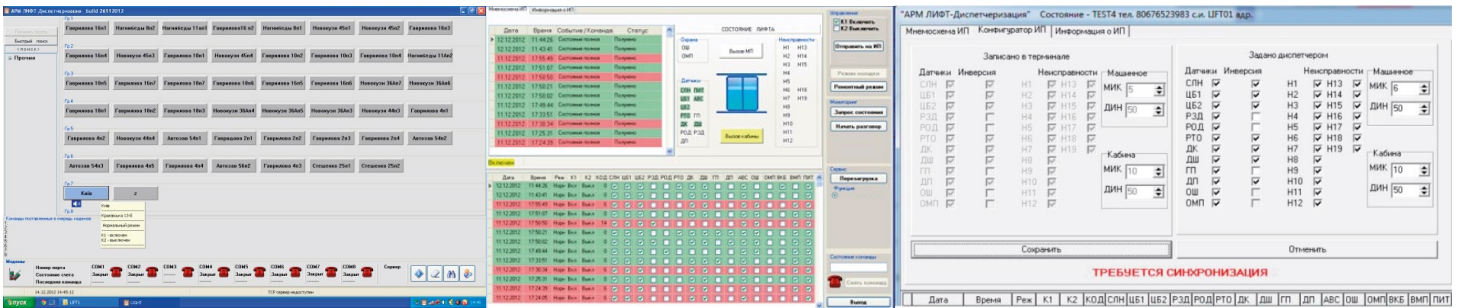
SYSTEM COMPOSITION

Dispatcher's console, implemented on the basis of a personal computer with pre-installed software "Lift - dispatching"
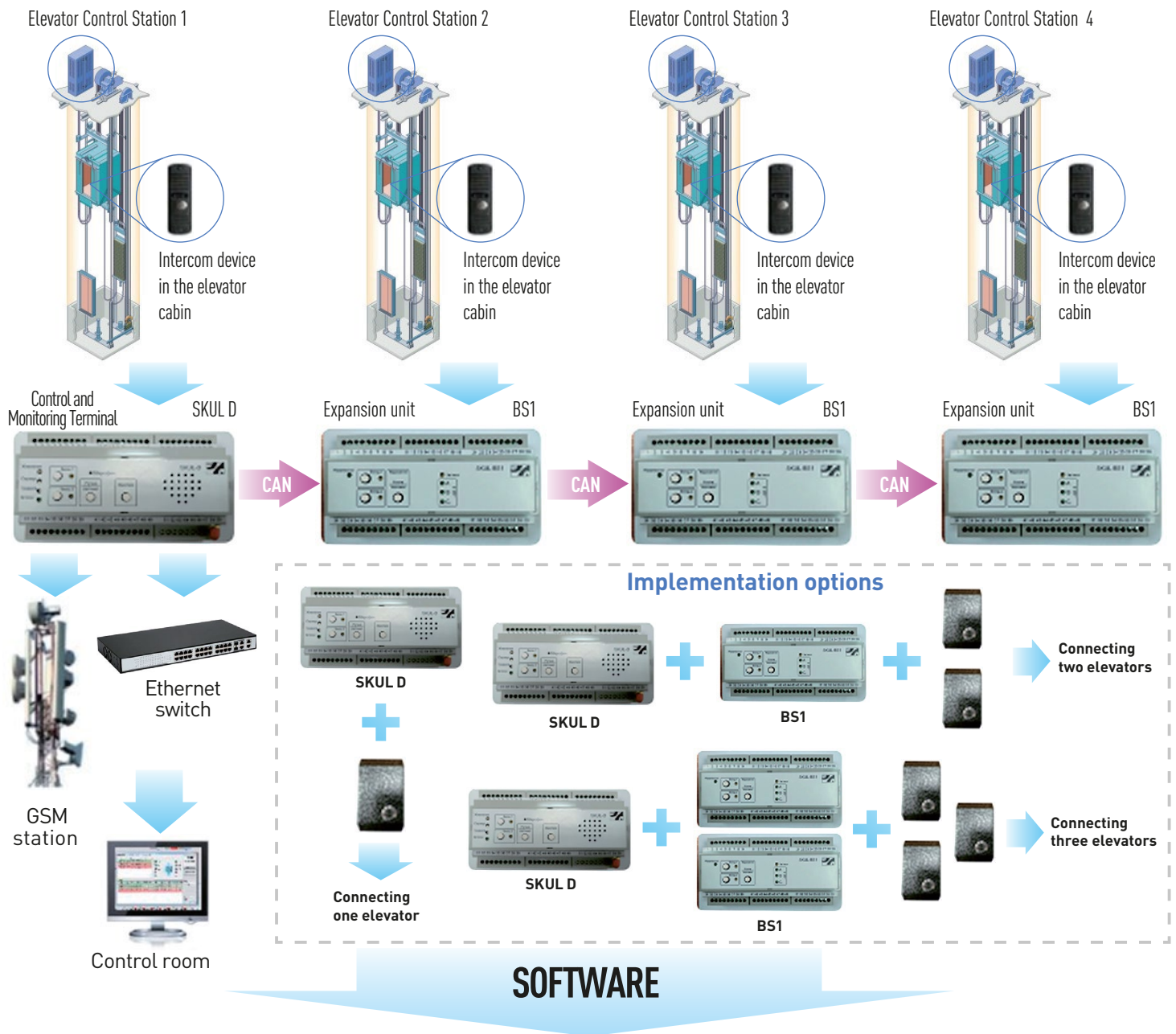
Communication Equipment Set - a dispatch terminal with a telephone handset

Terminal "SEA EDCS" which transmits information to the dispatcher's console via the GSM cellular network

DISPATCH SYSTEM SEA SKUL

Elevator Control Station 1	Elevator Control Station 2	Elevator Control Station 3	Elevator Control Station 4

Intercom device in the elevator cabin

Intercom device in the elevator cabin

Intercom device in the elevator cabin

Intercom device in the elevator cabin

Control and Monitoring Terminal — SKUL D

CAN

Expansion unit — BS1

CAN

Expansion unit — BS1

CAN

Expansion unit — BS1

GSM station

Ethernet switch

Control room

Implementation options

SKUL D

SKUL D + **BS1** + Connecting two elevators

SKUL D + Connecting one elevator

SKUL D + **BS1** + Connecting three elevators

SOFTWARE

SYSTEM COMPOSITION

Personal computer connected to the Internet

Providing user access through a web interface from any device connected to the Internet, such as a computer, smartphone, tablet, etc.
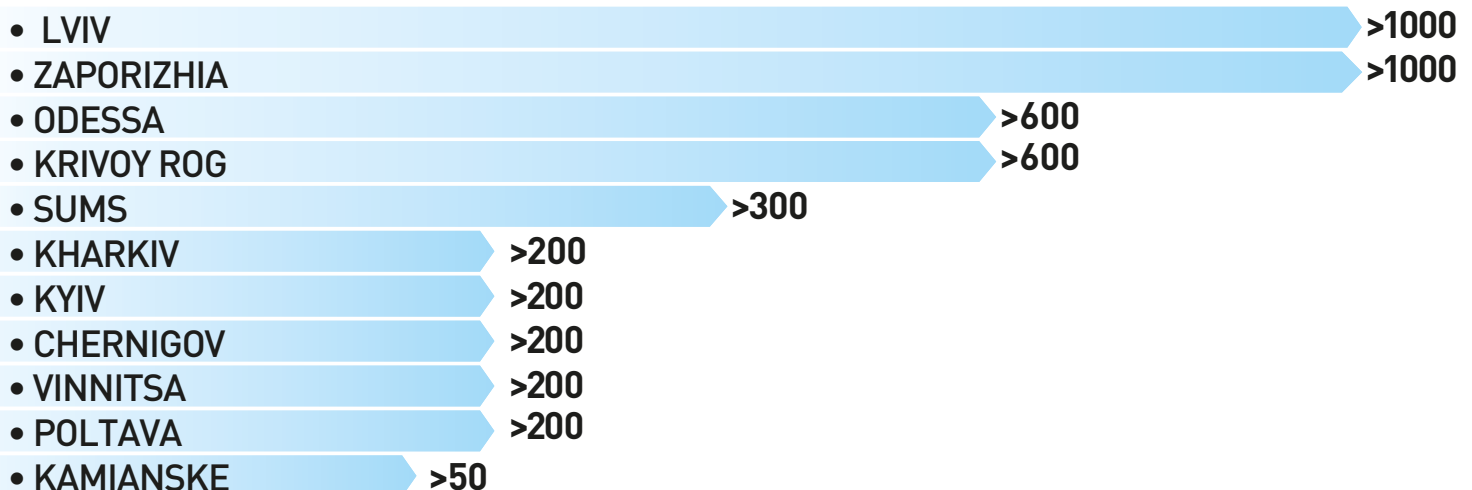
	SEA EDCS	SEA SKUL	
		SKUL D Control and Monitoring Terminal	BS1 Expansion unit
Communication channel	GSM/GPRS	GSM/GPRS • Ethernet (Internet) • Combined (GSM/GPRS+Ethernet)	—
Number of inputs for interacting with the elevator controller (automation control)	13	4	16
Number of control channels	2	2 – high voltage* 4 – low voltage**	2 – high voltage* 2 – low voltage**
Number of inputs for monitoring security sensors	2	4	2
Backup battery	+	+	+
Additional features		• Voltage measurement for each phase of 380 VAC; • Remote software updates.	• Voltage measurement for each phase of 380 VAC; • Expansion bus; • Remote software updates.

* Used for controlling contactors, lighting, etc. ** Used for controlling electric locks, sirens, etc.

ADVANTAGES OF COLLABORATING WITH SEA COMPANY:

• All the equipment is mass-produced on our own automated assembly line;

• Implementation of new algorithms and system upgrades is carried out by SEA's engineers;

• Reliable technical support is provided;

• Specialized mobile operator tariffs designed specifically for SEA Company are used to guarantee the fulfillment of all dispatching tasks;

• Warranty and post-warranty maintenance services are available.

Elevator installations, which have already been completed:

• LVIV — >1000
• ZAPORIZHIA — >1000
• ODESSA — >600
• KRIVOY ROG — >600
• SUMS — >300
• KHARKIV — >200
• KYIV — >200
• CHERNIGOV — >200
• VINNITSA — >200
• POLTAVA — >200
• KAMIANSKE — >50

SEA INNOVATIONS & EFFICIENCY

RELIABLE OVER 30 YEARS PARTNERSHIP