ПОЛИФЕН — PP — POLYPHEN

ABOUT US

The POLIPHEN Group of Companies traces its history back to 1987.
The POLIPHEN Group was engaged in the implementation of domestic innovations in production during its activity.
The ensuring of fire safety has been one of the direct activities, since the mid of 2000s.
In 2006 the specialized monitoring center was established in Saint Petersburg and the Leningrad Region to provide the security and fire safety of objects with various forms of ownership.
One of the activities of the POLIPHEN Group is the development, production and maintenance of software and hardware for various information exchanging within a single system. The TSASPI- system (central automated notification system) was presented to the market as solution of such development.
At the same time, the Group was engaged in the development of software solutions toward a facility and receiving equipment required as separately as in combination to solve problems of exchanging information with AIS, as also a facility and receiving equipment of various manufacturers and for different purposes. As well as provide the automated and manual control through the TSASPI core or through the "Personal Account" services by any executive devices at remote sites.
In 2016, two system solutions (SPI TSASPI and SPI VDPO) of our enterprises were certified and received diplomas of exhibitions held by the Russian Emergencies Ministry.
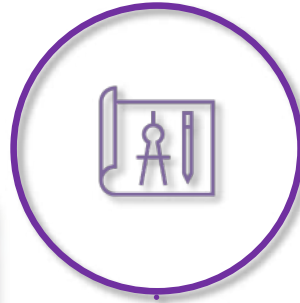
MORE THAN 20
YEARS
OF SUCCESS

DEVELOPMENT,
PRODUCTION OF
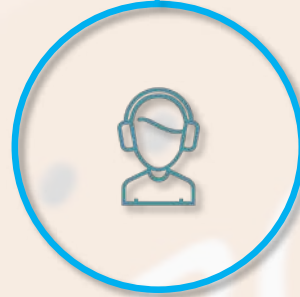EQUIPMENT AND
SOFTWARE

CERTIFICATES,
LICENSES,
DIPLOMAS

SERVICE AND
WARRANTY

SUPPORT WITH
DESIGN

OWN
DISPATCHING
CENTER

INTEGRATION WITH
DIFFERENT SYSTEMS AND
MANUFACTURERS

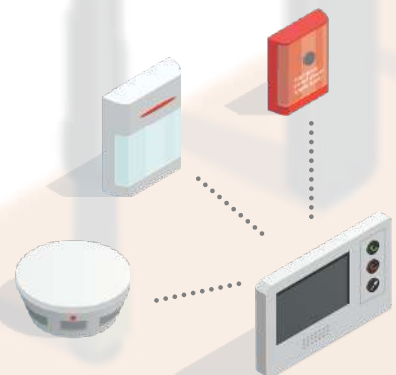MONITORING AND
DATA CENTERS
CONSTRUCTION

SYSTEM OPPORTUNITIES

DATA CHANNELS

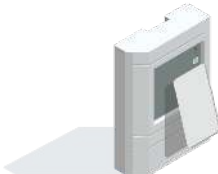Control and management of various systems

ACS (access control system)

CCTV Cameras

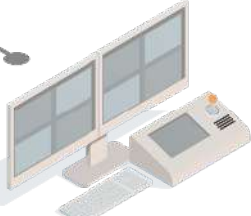Gathering information from the various sensors and metering devices

НОВОЛЕТ

Notification

Emergency communication

Information output to monitors and scoreboards

AREAS OF USE

HOUSING AND COMMUNAL SERVICES

BUSINESS AND SHOPPING CENTERS

INDUSTRIAL ENTERPRISES

PRIVATE HOUSES

TERMINALS AND STATIONS

TERRITORIAL INFRASTRUCTURE MANAGEMENT

MES OF RUSSIA

MINISTRY OF THE INTERIOR

SOCIALLY IMPORTANT FACILITIES

TRANSPORT

ADVANTAGES

RICH EXPERIENCE AND SUCCESSFUL OPERATION FOR MORE THAN **20 YEARS**. HUNDREDS OF PROJECTS WITH RANGE DIFFICULTY HAS IMPLEMENTED BY OUR TEAM

OUR TEAM CONSISTS OF HIGHLY QUALIFIED SPECIALISTS WITH RICH EXPERIENCE IN CREATING INNOVATIVE EQUIPMENT AND SYSTEM SOFTWARE. OUR TEAM ACTIONS TO ACHIEVE HIGH RESULTS

WE HAVE ACCEPTABLE PRICES FOR PRODUCTS AND AN INDIVIDUAL APPROACH TO EACH CLIENT

OUR SPECIALISTS SOLVE TASKS IN THE SHORTEST TIME

OUR SPECIALISTS ARE READY TO HELP FROM DESIGN AND MANUFACTURE, TO INSTALLATION AND SERVICE

HIGH PRODUCTION STANDARDS AND APPLY MODERN TECHNOLOGIES

EQUIPMENT WE PRODUCE SOLVE THE ENTIRE SPECTRUM OF PROBLEMS

"SMART" RAILWAY

THE "TSASPI" SYSTEM REALIZED OPPORTUNITIES

- Provides the fire-notification function from the TSASPI Fire and Alarm System and other manufacturers to more than 4000 protected objects.

- Transfers an information to the "System 112" of the Leningrad region.

- Performs the "passenger-cashier" system requirements with conversations recording and remote listening at OAO "Russian Railways".

- The commercials are broadcast remotely.

- Provides a direct communication channel between information desks on the railway platforms and dispatch center.

- Provides the access control systems functionality, video surveillance, fire alarm systems, intercoms and other systems on real estate objects.

- Displays the timetables and information on scoreboards and TVs, at the stations and terminals of "Russian Railways".
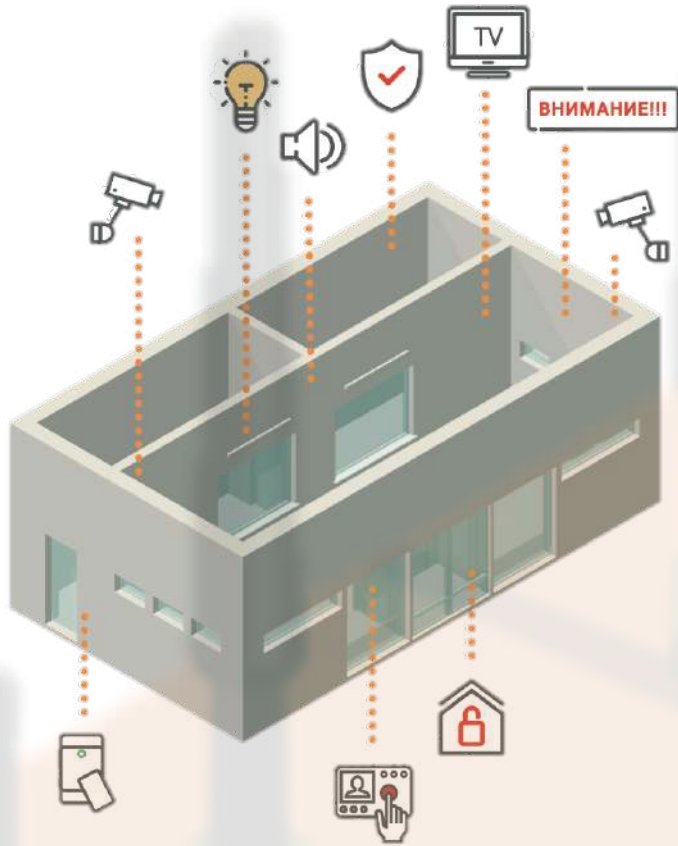
- 16 "smart" passenger stations were organized with integrated TSASPI system at the "Russian Railways" Hub in St. Petersburg, Russia.

- Two fire-fighting units of the Leningrad Region are testing a "smart fire station" mode of system

"SMART" RAILWAY STATION INTEGRATION

"SMART" RAILWAY STATION SCHEME

Capabilities of the "smart" railway station system based on one device "Novolyot" of the TSASPI system:

- Security and fire alarm with fire automatic control functions.

- Round-the-clock video surveillance with information output to the dispatch center and user devices with Internet access.

- Control and management of power and heat supply systems of the station building.

- Remote control of access to the station building with programming of the 'opening and closing' mode.

- Emergency communication channel with the dispatcher.

- Voice and text information, notification of passengers, including using the IP-telephony service.
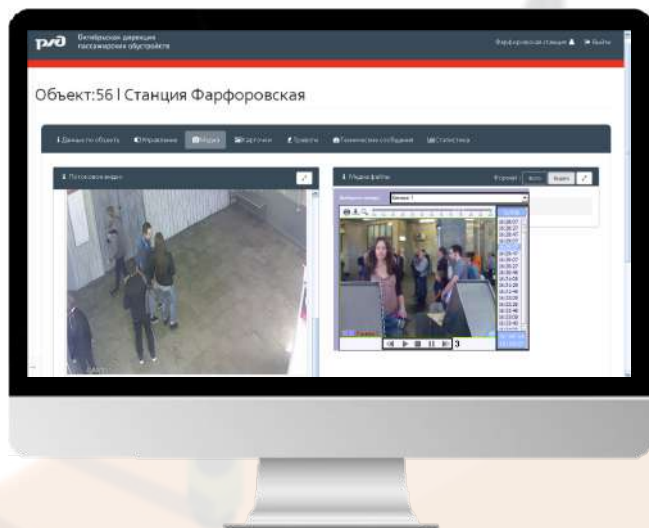
ANALYTICS
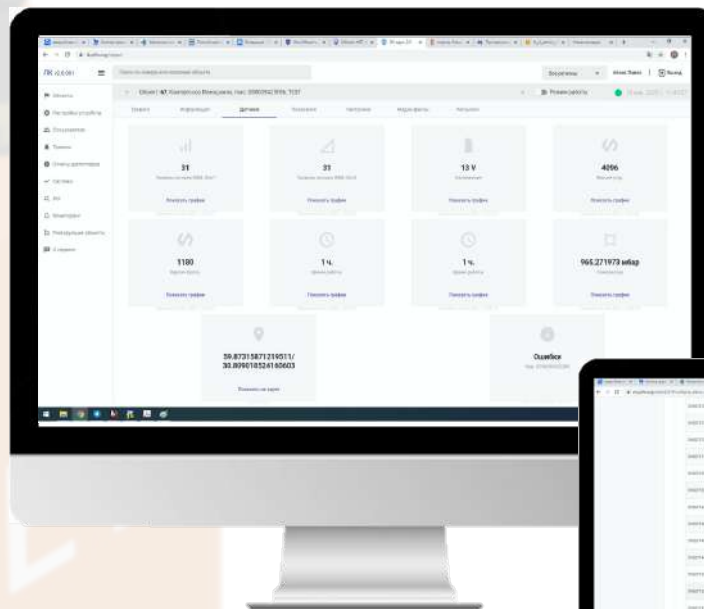
VIEWING ALARMS AND EVENTS

COMPRESSOR UNIT MONITORING AND CONTROL

LIST OF STATISTICAL DATA WITH THE PARAMETERS AND CHARACTERISTICS OF EQUIPMENT OPERATION:

1. OUTPUT PRESSURE CONTROL

2. INTERNAL PRESSURE

3. DIFFERENTIAL PRESSURE

4. DIFFERENTIAL PRESSURE ON THE FILTER SEPARATOR

5. MAIN MOTOR AND FAN MOTOR CURRENT

6. TOTAL OPERATING TIME

7. TIME ON (POWERED ON + HOT STANDBY)

8. OPERATING TIME UNDER LOAD

9. OPERATING TIME WITHOUT LOAD

"SMART" FIRE STATION
OPERATION MODE

The head fire emergency response unit (PSC) receives the signals remotely from the fire alarm control automation system (TSASPI) in automatic or manual mode from protected objects; or by phone from the citizens. After that, the nearest fire emergency response unit will be selected to the place of emergency.

The closest fire emergency response unit will be selected to the emergency location. The notification card is sent to the control unit of the TSASPI PPO subordinate fire emergency response unit, where the route sheet is printed, and the route to the place of heart rate with fire extinguishing plan is displayed on the tablet;;

The dispatcher from the head fire emergency response unit monitors the departure of the fire brigade using video surveillance cameras, and wearable cameras on firefighters' helmets allowing to assess a case scenario of emergency and variant of actions remotely;

The security and fire alarm equipment of the subordinate fire emergency response unit (PSC) provides the dispatcher of the head fire emergency response unit (PSC) with a full security control of the subordinate fire emergency response unit (PSC).

Such integration makes it possible to provide savings of up to 1 million rubles of budgetary funds per year for 1 subordinate fire and salvage unit.

Crisis command center (TSUKS)

Fire emergency response unit without dispatcher (Smart PSCH)

Automatic receiving and displaying the "fire" signal from automatic fire alarm

1 1 2

Route order automatic printing

Sound alarm and voice notification activation

Start Response

Receiving and filling out an alarm card from citizens

АУ ЦАСПИ ППО

АУ ЦАСПИ 4

Video transmission to the "Personal Account", Response controlling

Selection of a responding fire department and sending an alarm notification

Real-time voice transmission to a fire emergency response unit

Firefighter helmet video transmission

Fire response, arming the building, automatic door locking

FIRE ALARM CENTER 131
completed project

FIRE ALARM CENTER 112
With integrated "Smart fire alarm" system
completed project

FIRE ALARM CENTER 131 Otradnoe village
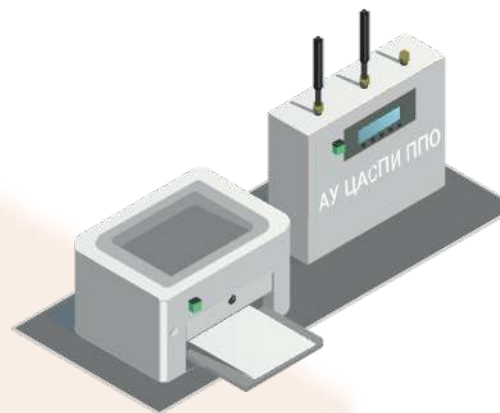
AU TSASPI automatic alar system with printer
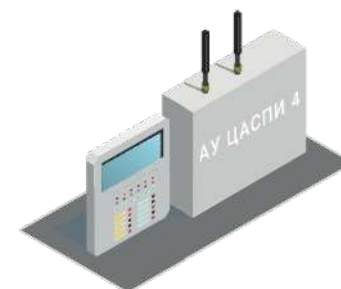
AU TSASPI 4 with keyboard

AU TSASPI PPO automatic fire alarm system with phone and monitor display

PC with Personal and Fire alarm account monitors

Subordinate fire department 112, Shum village

ADDITIONAL FEATURES OF THE OFFERED SYSTEMS AND SOLUTIONS

PERFORMANCE CONTROL
AND ANALYTICAL DATA PREPARATION

CCTV VIDEO TRANSFERRING FROM OBJECTS

SMS
NOTIFICATION

APK "NOVOLYOT" INTEGRATES with:

- installed Monitoring and management systems in transport
- Driver identification system
- Driving style control system
- CCTV
- Counting passenger traffic system
- Alarm button
- Fire-extinguishing monitoring and control systems
- Fire signal transmission system to various structures such as Ministry of Emergency Situations, EDDS, TsUKS, etc.)
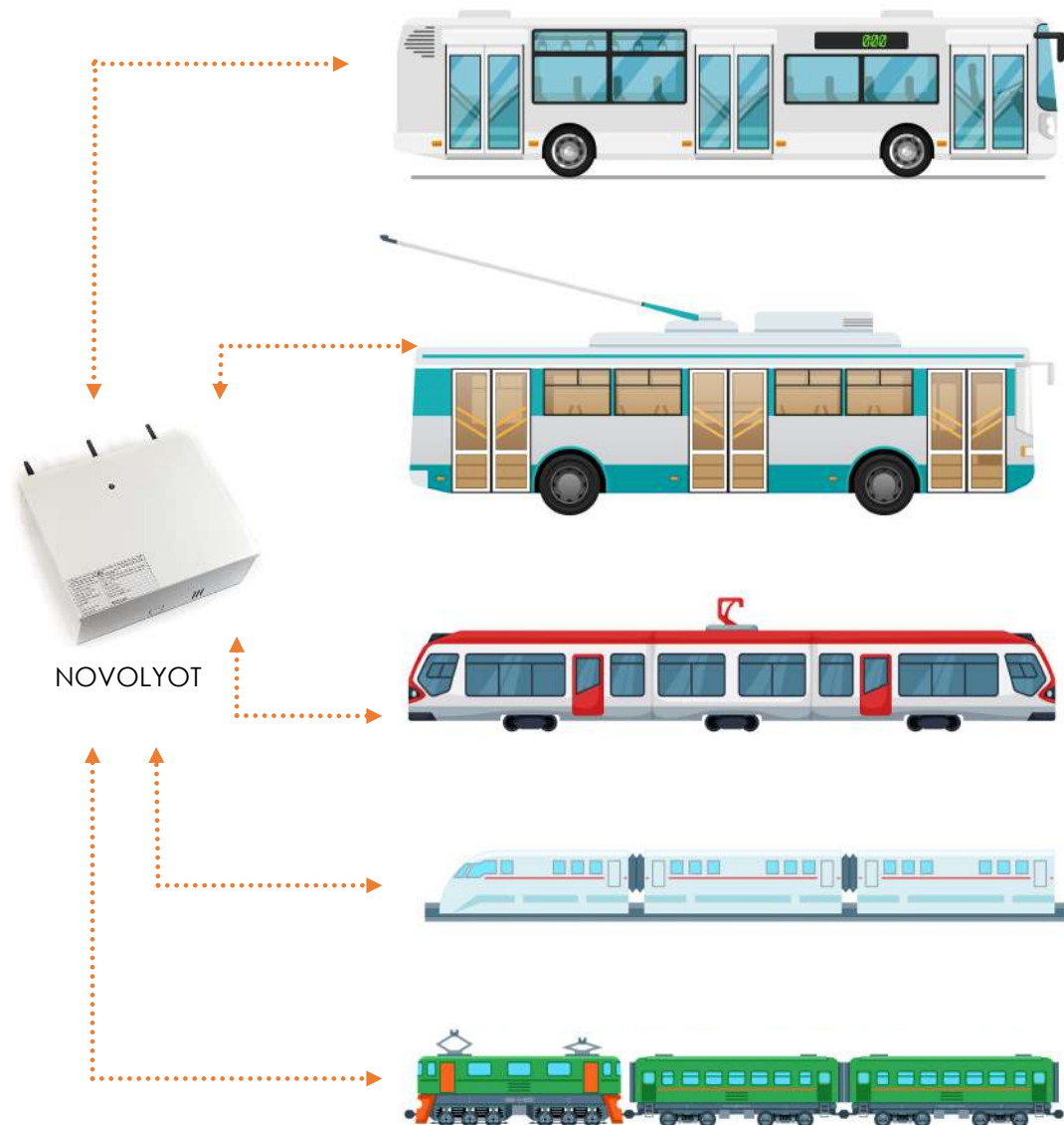
NOVOLYOT

POWDER FIRE EXTINGUISHING MODULE

The most common modules for the transport fire-extinguishing systems, designed to extinguish the most classes of fires and ignitions (A, B, C).

Modules "Buran-7KDT" are designed to extinguish fires in transport. Made for increased dynamic, vibration and temperature loads arising during the operation of various objects, equipment, special machines and railway transport.

The module has small overall dimensions and a special design allows the extinguishing agent to be supplied through pipelines to hard-to-reach places of protected objects

Due to their small overall dimensions, Buran-0.3 modules are recommended to be used to protect electrical cabinets, cable wells, cable ducts, storage cells in shelving-type warehouses, spaces behind suspended ceilings, raised floors, etc.

At present, fire extinguishing systems based on Buran-0.3 are installed on the rolling stock of the Moscow metro, in spaces behind suspended ceilings, in cable ducts of buildings and many other objects.

Due to their small overall dimensions, Buran-0.5 modules are recommended to be used to protect electrical cabinets, cable wells, storage cells in shelving-type warehouses, spaces behind false ceilings, raised floors, etc. Nowadays, the projects on Buran-0.5 basis have been developed to protect cabinets with high-voltage electrical equipment for suburban electric trains and track machines for various purposes (snow removal, track-laying machines, motorized railcars, etc.)

Modules "Buran-2.0" are designed to extinguish fires at facilities with high ambient temperatures from -50 ºC to +100 ºC.

These modules are compact and can be installed in confined space.

2 models "Buran-2.0" are produced:
• "Buran-2.0 (1)";
• "Buran-2.0 (1K)" direct-flow spray (for cable channels).

Modules "Buran-2.0" are widely used to protect diesel generator sets, fire-hazardous compartments of various special equipment and vehicles

LENINGRAD REGION GOVERNOR'S SITUATION CENTER

ADDITIONAL INFORMATION RESOURCE OF THE SITUATION CENTER USING THE 'TSASPI' TECHNOLOGY

CITY VIDEO SURVEILLANCE SYSTEM

GATCHINA
VSEVOLOZHSK
SOSNOVYY BOR

GIS

- DETERMINATION OF THE LOCATION OF SUBSCRIBERS
- RNITS
- ELECTRONIC CARD

APC "Safe City"

SINGLE CENTRAL CONTROL FACILITY (On Stand-by)

SITUATION ROOM CENTER

INTERACTIONS WITH SUBORDINATES UNITS

MONITORING CENTER
SYSTEM 112
CALLS, MINISTRY OF EMERGENCY SITUATIONS, MINISTRY OF INTERNAL AFFAIRS, AMBULANCE, ETC.

GOVERNOR'S SITUATION CENTER

CONTROL BY RESPONSIBLE PERSONS
ONLINE SITUATION MONITORING
RECEIVING INFO ABOUT EVENTS
VISUALIZATION OF EVENTS USING
CCTV CAMERAS
VIDEO CONFERENCE

«TSASPI»

REMOTE CONTROL OF APS PERFORMANCE
EMERGENCY OUTPUTS STATUS INFORMATION
FIRE ALARM
SECURITY ALARM
ACCESS CONTROL (ACS)
REMOTE CONTROL OF EXECUTIVE DEVICES
INFORMATION INTERACTION WITH THE SERVICE 01
INFORMATION BOARD (INFORMATION DISPLAY, SOCIAL ADVERTISING)
CITY PUBLIC ALERT
EMERGENCY TERMINAL
"CITIZEN - POLICE OFFICER"
SMART DOORPHONE
SENSITIVE ALARM
INFORMATION FROM SENSORS
(LEAKS, GAS CONTENT, TEMPERATURE, ETC.)
ONLINE INFORMATION TRANSFER FROM MOBILE
CAMERAS OF SERVICES 01, 02, 03

SITUATION CENTER OF KAZAN

VIDEO ANALYTICS

CCTV MONITORING

VIDEO CONFERENCE

CONTROL BY RESPONSIBLE PERSONS

TELECOMMUNICATIONS

EMERGENCY TERMINAL "CITIZEN - POLICE OFFICER"

CITY PUBLIC ALERT

INFORMATION TABLE

"SMART" DOORPHONE

LOCATION OF EVENTS

MOBILE ARM

SITUATION CENTER OF KAZAN
Based on "Novolyot" fire alarm control system

INFORMATION SUBSYSTEM

FORMATION OF SITUATION CARDS

MANAGING RESOURCES

MONITORING AND CONTROL OF FACILITIES

PERIMETER PROTECTION

ACCESS CONTROL (ACS)

FIRE AND SECURITY SIGNALS

INFORMATION FROM SENSORS

GEO POSITIONING

GEOINFORMATION SYSTEMS

DETERMINATION OF THE LOCATION OF SUBSCRIBERS

GLONASS

INTERACTIONS WITH SUBORDINATES UNITS

SITUATION ROOM CENTER OF UNITS
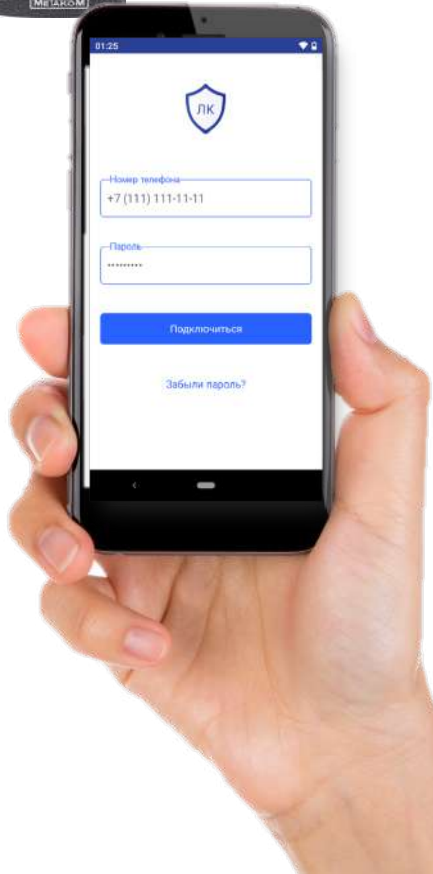
"SMART SCHOOL"

INCLUDES:

- o CCTV
- o ACS
- o TOURNET AND STREET GATE CONTROL
- o NOTIFICATION SYSTEM
- o DISPLAYING INFORMATION ON MONITORS (SCHEDULE, INFORMATION MESSAGES)
- o "SMART" CALL
- o CONNECTING THE ALREADY EXISTING SYSTEMS INTO ONE SYSTEM (CONTROL, MONITORING)
- o LIGHT CONTROL
- o CONTROL AND MONITORING OF THE HEATING SYSTEM
- o VENTILATION CONTROL AND MONITORING

SMART DOORPHONE

IT'S A SOFTWARE AND HARDWARE COMPLEX AND CAN INSTALL ON ALREADY EXISTING DOORPHONE PANELS AND DOES NOT REQUIRE THE OWNER TO PURCHASE ANY ADDITIONAL EQUIPMENT.
THE SYSTEM ALLOWS TO USE BOTH METHODS OF DOORPHONE CONTROLLING: THE STANDART METHOD ALLOWS TO USE CHIPS, KEYS, KEYFOBS. THE MODERN ONE ALLOWS TO USE THE DOOR ACCESS CONTROL.
BY INSTALLING THE APPLICATION ON SMARTPHONE, USER WILL BE ABLE TO DO A NUMBER OF THINGS:
- ✓ VERIFY BY SCREEN OF MOBILE PHONE OR TABLET WHO WILL COME TO THE DOOR OR CALL YOU;
- ✓ CAN TALK WITH GUEST;
- ✓ OPEN OR CLOSE THE DOOR;
- ✓ VERIFY THE VISITS OF OTHERS;
- ✓ DON NOT TO WORRY ABOUT YOUR LOVED ONES, YOUR PROPERTY, USING THE CITY AND OUTDOOR VIDEOCAMERAS.
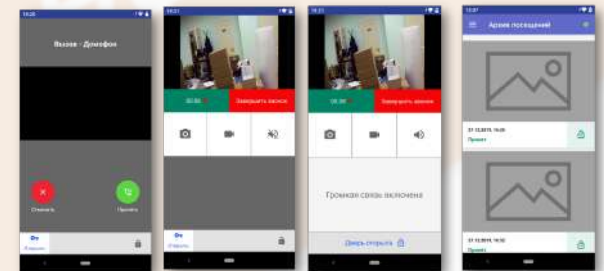
Log on to the private account

Notification from the managing company
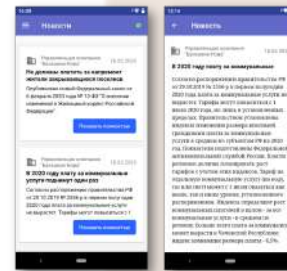
CALL MODE AND ACCESS ARCHIVE

- ✓ DOES NOT REQUIRE EXCHANGE EQUIPMENT

- ✓ THE SMARTPHONE SCREEN DISPLAYS WHO IS IN

- ✓ YOU CAN ANSWER EVEN IF YOU ARE NOT HOME

- ✓ OPPORTUNITY TO OPEN DOOR FROM MOBILE DEVICE

- ✓ YOU CAN CONTACT THE EMERGENCY SERVICE 112

- ✓ SENDING NOTICES FROM THE MANAGING COMPANY

- ✓ POSSIBILITY TO CONNECT PUBLIC METERS FOR THE MANAGING COMPANY

- ✓ POSSIBILITY TO CONNECT ADDITIONAL CAMERAS

TELECOMMUNICATION
TECHNOLOGIES
DEPARTMENT OF KAZAN

CERTIFICATES

CERTIFICATES

CERTIFICATE OF INCORPORATION

«NOVOLYOT» CERTIFICATE

ПОЛИФЕН — PP — POLYPHEN

THANK FOR KIND ATTENTION!