

# SMART COMPETITIVE ADVANTAGES



<beta>



# ABOUT US

# CROSS-INDUSTRY AI SOLUTIONS



To satisfy market demands and your customers' requests you may need an unique competitive advantage. Since 2013 BETA is dedicated to transform advanced technologies and industry expertise into smart solutions that are constantly improving.



# RELIABLE TECHNOLOGY PARTNER



BETA is a reliable technology partner that helps you to:

- Create intelligent competitive advantages that are difficult to copy;
- Find optimal models to work with disparate data in the most effective way;
- Reduce production costs and accurately predict risks.

BETA is a member of RUSSOFT, the leading Russian IT association. We head the Smart City RUSSOFT Committee and have [«Best smart city solution-2019»](#) and [«TOP-10 eco innovators-2020»](#) awards.

You have an understanding of the challenges facing your project.  
We have AI technologies, industry experience and human approach!

# OUR CLIENTS



EXPERTISE

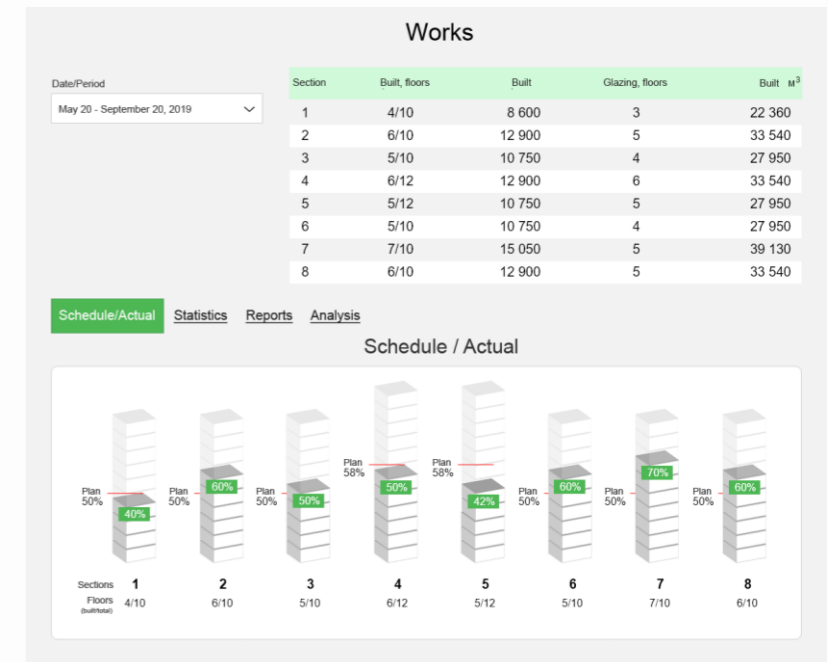
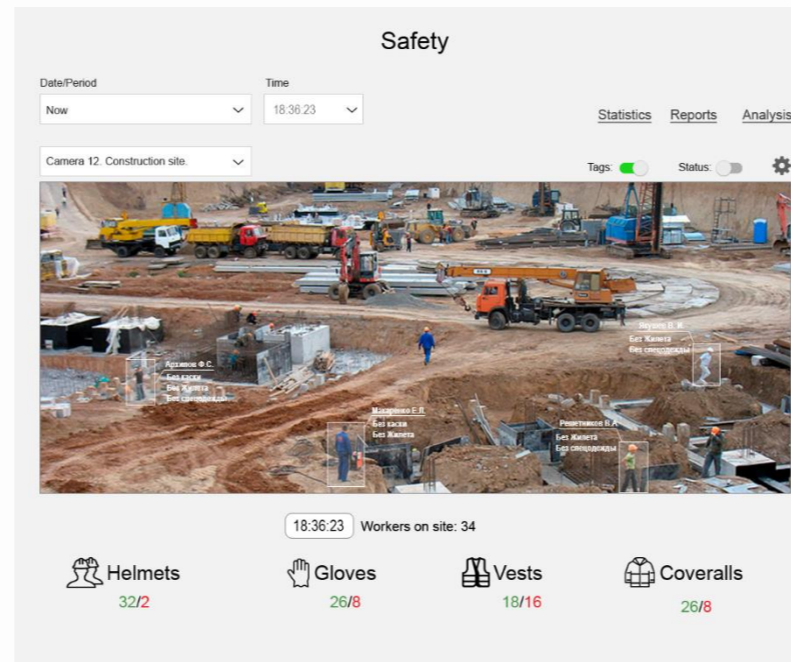
# Smart Construction Control



The system allows you to control the process of construction from safety to the progress of on-site works using video-analysis and machine learning, computer vision and industrial IoT technologies.

Smart Construction indeed changes the way of construction control and brings to different level:

- Compliance with operational, production and technological processes;
- Operations costs and risks control;
- Personal and site safety.



# iTraffic. Intelligent vehicle control system

<beta>

The solution is aimed at ensuring transport safety for a region or a city. The trained algorithm and the complex of photo- and video analytics help to track vehicles in any weather conditions and analyze their route and the nature of movement.

## What can iTraffic do?



Identify a vehicle and its speed



Fix non-standard travel routes



Identify "doubles" of vehicles



Predict future probabilistic location of vehicle



Detect stolen vehicles



# Toll Road Management System



BETA Toll Road Management System combined 3 functional modules - vehicle identification, access control equipment, tariffing and processing payments - into a hardware and software complex.

The solution is designed to manage traffic with manual, automatic and non-stop lanes.



# Toll Road Management System



## What can TRMS do?

Tariff and process all types of payments:  
bank cards, NFC, transponders, contactless cards, cash.

Manage barriers, traffic lights, information displays,  
dynamic signs in manual and automatic modes.  
Throughput = 40 vehicles per minute.

Identify and classify vehicles at speeds up to 190 km/h:

- Car number
- Vehicle class
- Weight
- 3D classification

Fix and notify:

- About lane incidents
- On weather conditions: temperature, humidity, wind, pressure, precipitation, sediment / ice / reagents on the road surface

The screenshot displays the TRMS control interface. At the top, it shows the date and time: 20.01.2019 14:35:06 воскресенье. Below this, there's a section for 'Зона оплаты' (Payment Zone) with buttons for 'Полоса' (Lane), 'Въезд' (Entrance), 'Очередь' (Queue), 'Класс ТС' (Vehicle Class), 'Оплата' (Payment), and 'Выезд' (Exit). The 'Полоса' section shows lane 07 with a 'закрыть' (Close) button. The 'Оплата' section shows a '1' button. The 'Выезд' section shows an 'открыть' (Open) button. Below this, there's a section for 'Управление' (Management) with buttons for '1', '2', '3', '4', and a truck icon. The 'Касса' (Cashier) section shows a 'Подтвердить класс' (Confirm Class) button. The 'Инкассация' (Cash Collection) section is also visible. The bottom section shows 'Управление сменой' (Shift Management). The main part of the interface is a table titled 'Состояние полос' (Lane Status) with columns for 'полоса' (Lane), 'статус' (Status), 'состояние' (State), 'RFID', 'ГРНЗ', 'Класс' (Class), 'Сумма' (Sum), 'Тип' (Type), 'Вызов' (Call), 'АПП', and 'Инцидент' (Incident). The table lists various lanes and their current status, including vehicle classes and payment amounts. Below the table, there's a section for 'Состояние на полосе LX5' (Lane LX5 Status) with columns for 'Дата/Время' (Date/Time), 'RFID', 'ГРНЗ', 'Водитель' (Driver), 'Корректировка класса ТС' (Vehicle Class Adjustment), and 'Тип события' (Event Type). This section lists recent events and adjustments.



# Transistant. Intelligent passenger counting

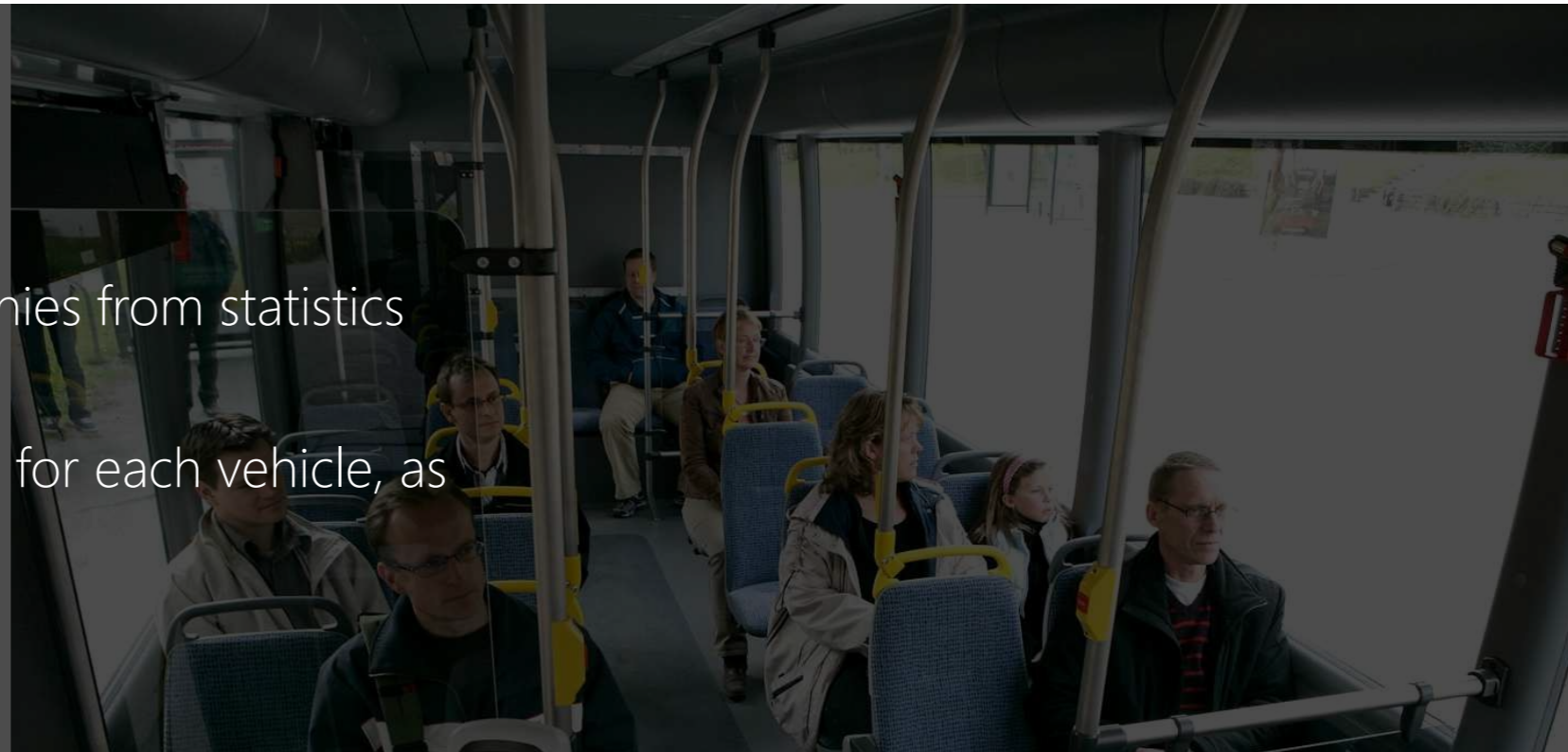


The intelligent solution based on the neural network can analyze video from cameras in the vehicle compartment and automatically count the number of passengers entering and leaving a bus.

The result is an automated and objective control of daily revenue from each route.

What can Transistant do?

- Identify and count passengers in a bus
- Separately identify children
- Exclude employees of transport companies from statistics
- Display the analysis for any period
- Provide summary and detailed statistics for each vehicle, as well as for the entire fleet

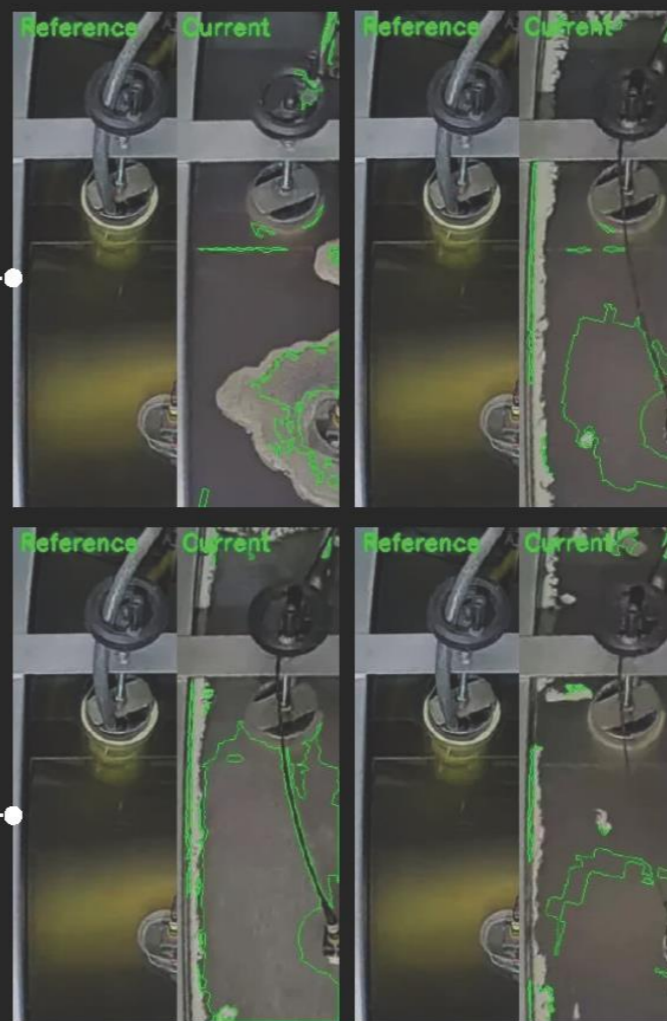


# BPure.AI

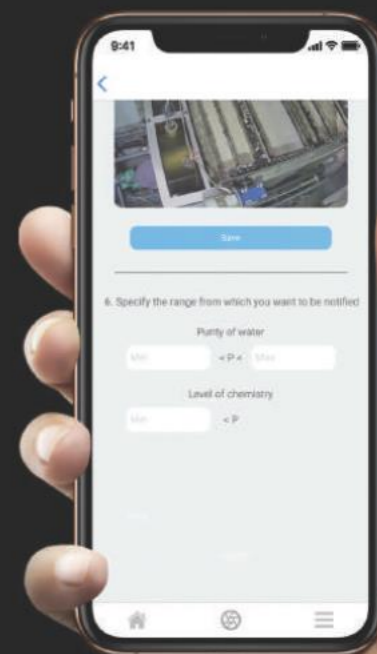
## Artificial Intelligence in Water Treatment

A system specifically created for water treatment systems and facilities, leveraging the best of computer vision with AI power behind.

- ANALYZE, REPORT & ALERT any set conditions gathered through monitoring: water discoloring/foaming, contamination, deposits, foam, foreign materials, etc.
- PREDICT equipment possible failures
- REDUCE service costs by 30%



Лучшее решение для умного города по версии премии «Цифровые вершины» 2019, организованной РАНХ, Правительством Москвы и Департаментом информационных технологий Москвы.



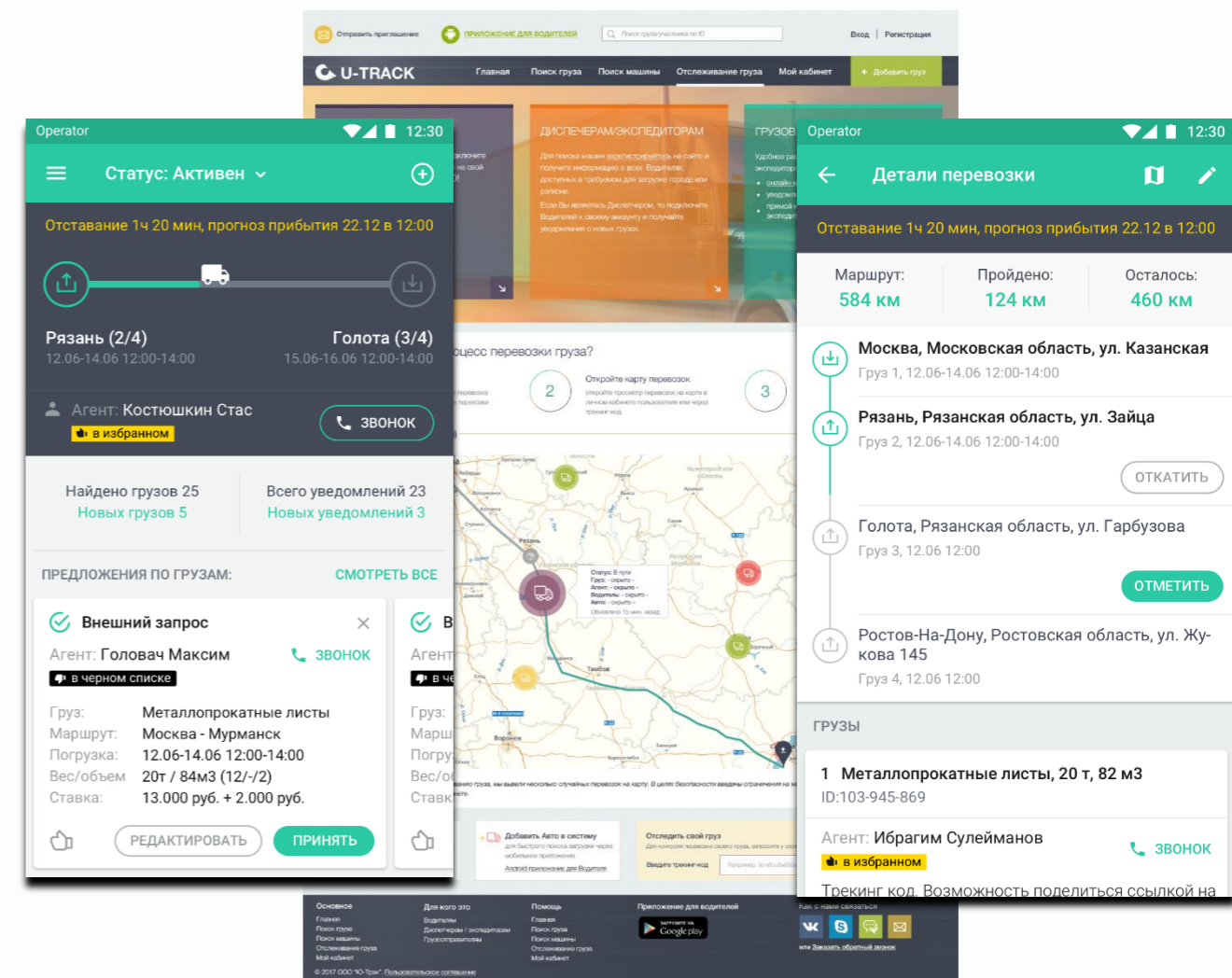
# U-Track. Freight Management Service



Cargo transportation service allows you to automate and ensure transparency of operations between cargo owners, carriers and agents.

## What can U-Track do?

- Track in real time all cargo movements, the duration of parking and the technical condition of the vehicle.
- Search for a contractor by 18 parameters.
- Keep a history of each user.
- Dynamically generate the cost of services in real time.
- Provide online communication between freight forwarders, cargo owners and agents.
- Analyze and rate counterparties based on objective indicators.

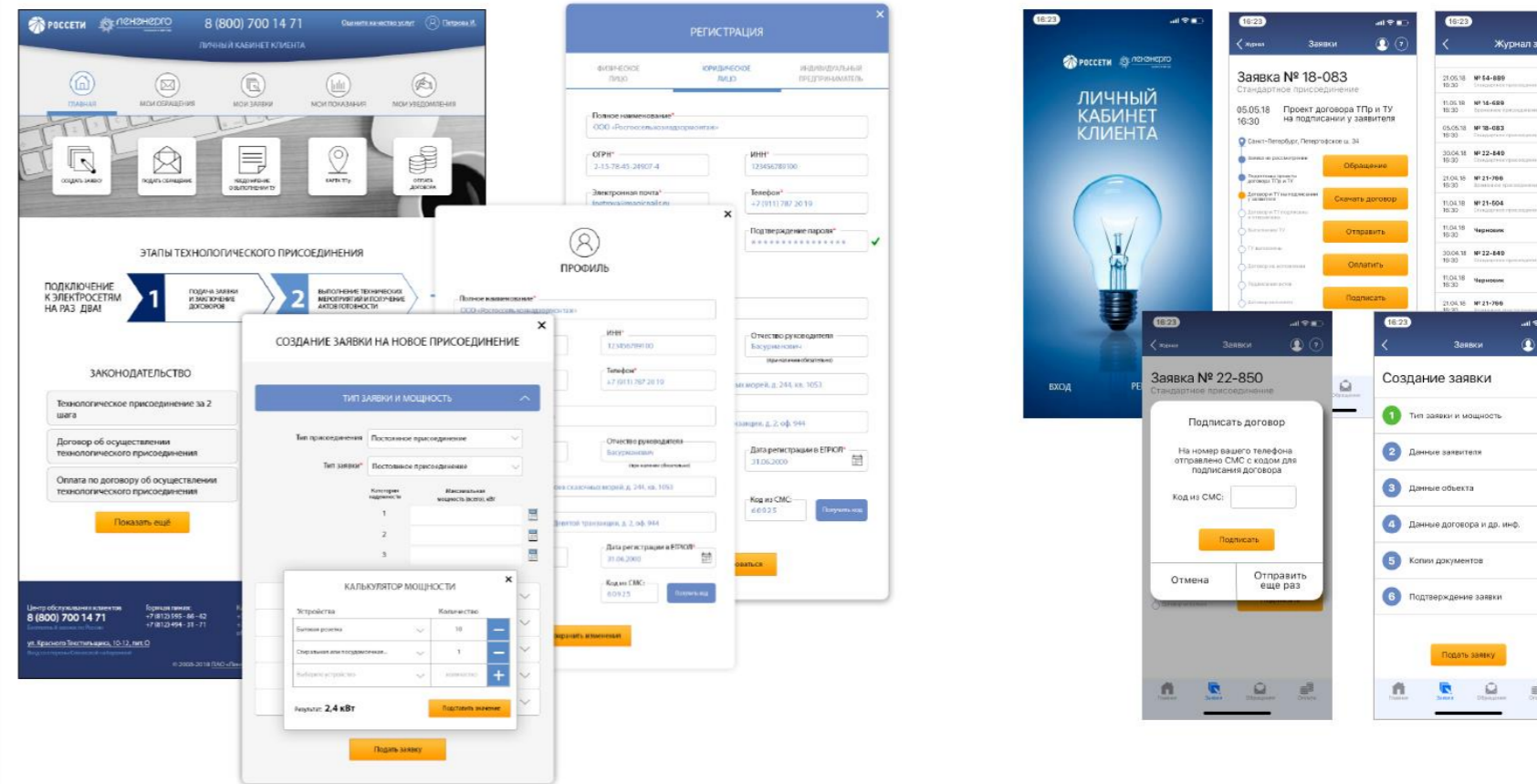


# LENENERGO Customer Account

Mobile app and web-service for the federal energy distribution company, which connects the St. Petersburg and the Leningrad region facilities with energy networks. 80% of users have completely switched to online. The processing speed of applications has increased by 24%.

## Functions

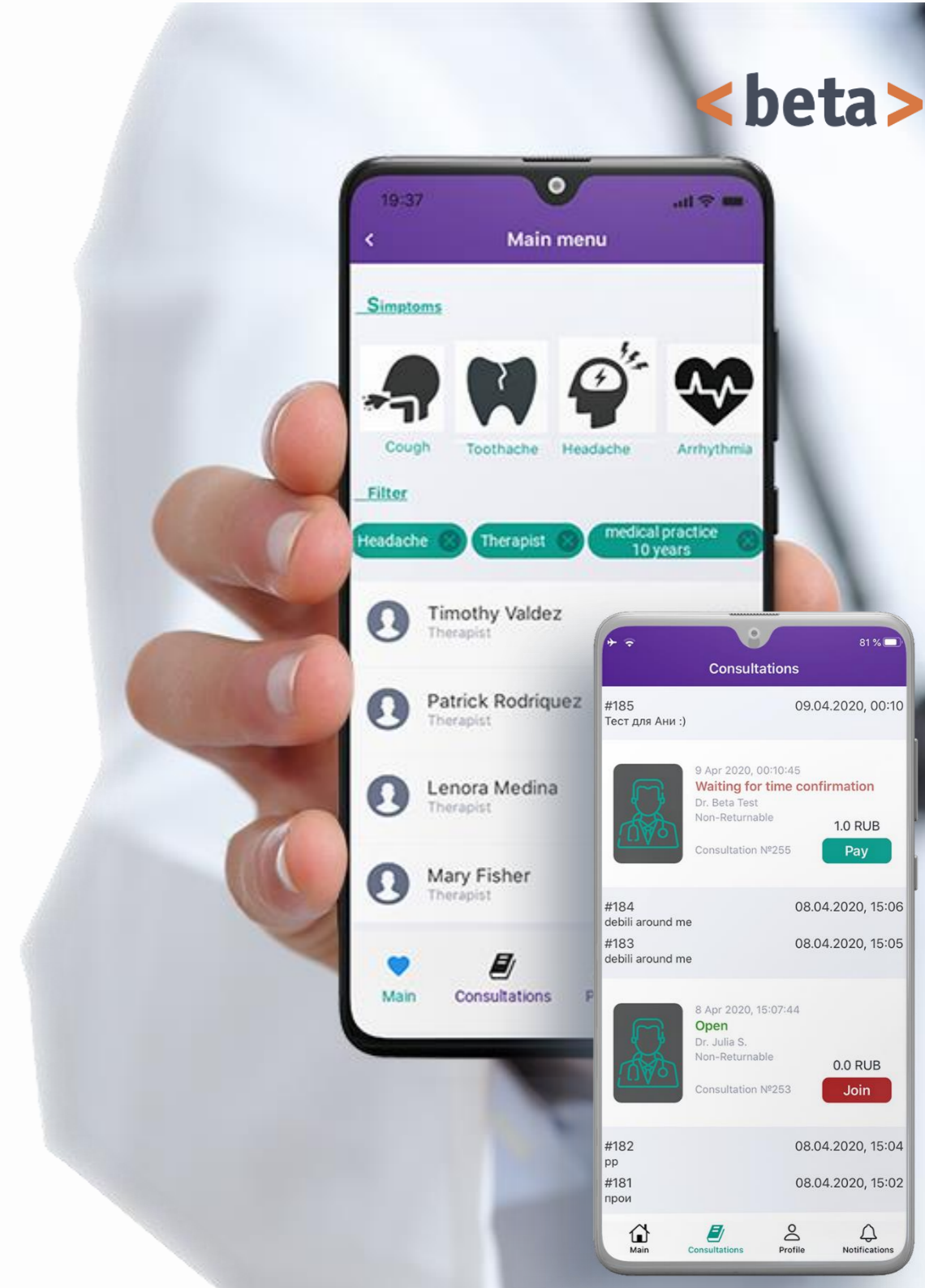
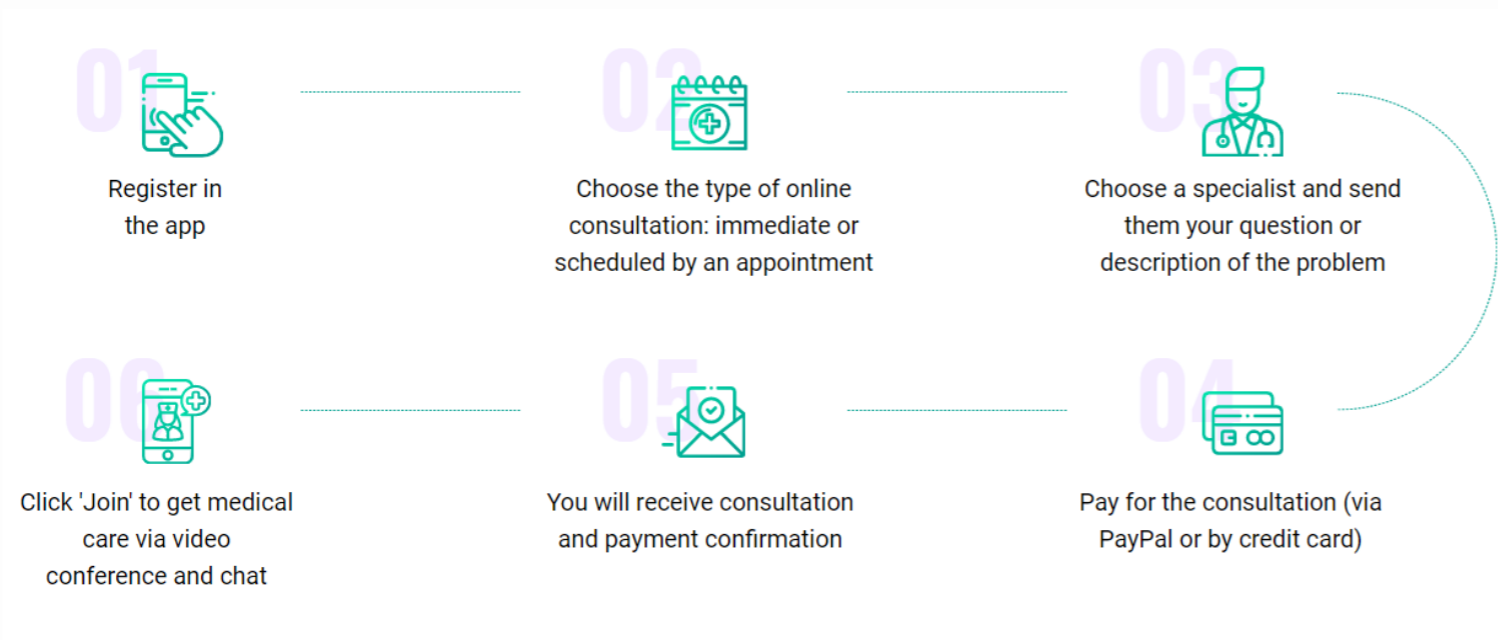
- Login through the Unified Identification and Authentication System
- Integrated electronic document management system
- Online calculator & online payment
- Survey creation module
- E-mail and SMS informing



# WTC. Telemedicine Service

Mobile App and web-service providing the most comfortable way to receive quality medical care 24/7.

## How does WTC work?



CONTACT US



## RUSSIA

St. Petersburg, Marshal  
Govorov St., 35/5, 198095  
<https://smart.beta.spb.ru/>  
[info@beta.spb.ru](mailto:info@beta.spb.ru)

## USA

2076 16th Avenue, Suite A,  
San Francisco, CA, 94116  
<https://asrp.tech/>  
[contact@asrp.tech](mailto:contact@asrp.tech)

