

# DIGITALISATION

In 2022, FESCO delivered a high level of customer service and secured business processes' automation through a set of digitalisation initiatives.

## BUSINESS DIGITALISATION PROJECTS

### CUSTOMER'S PERSONAL ACCOUNT

MY.FESCO customer's personal account is a self-service portal for our customers.

Improvement of this service is the key priority of FESCO digitalisation. The main objective of the project is to provide a fully digital transportation service. Our efforts on portal improvement made it possible to implement one of the best and most functional solutions in the market.

Priority areas of personal account improvement in 2022:

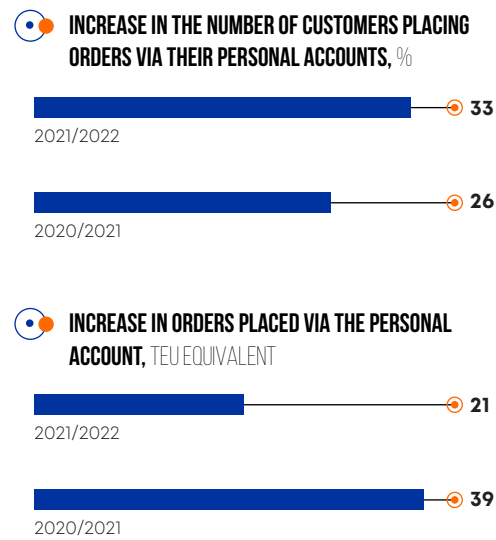
- redesign of the personal account;
- improvement of cargo tracking during transportation;
- transport event notifications;
- digitisation of door-to-door delivery calculations using a map location;
- introduction of a process for approving the possibility of transporting dangerous goods;
- mobile app;
- development of customer feedback collection services.

The personal account was piloted in 2017 and back then only supported requests for intermodal imports from Southeast Asia to Vladivostok and Moscow. Today, the service can be used to request any of FESCO's key transportation services.

In 2022, the growth of orders placed via the personal account continued:

- the number of customers placing orders via their personal accounts increased by 33% vs 26% in 2021;
- TEU equivalent of orders via personal accounts stood at 21% vs 39% in 2021.

In addition, 2022 saw us implement an import substitution programme, which is one of the strategic focus areas of the Company's IT unit.



Source: Company data

Currently, a record 7.5+ thousand users visit [MY.FESCO.com](https://my.fesco.com) every day.

The MY.FESCO services are mainly used to:

- submit and repeat requests for container transportation;
- track the shipping and customs status;
- download scans of accounting and transportation documents without contacting managers or requesting the documents by mail or phone;
- check whether dangerous goods can be transported along import/transit routes;
- conclude contracts;
- file for customs transit clearance.

FESCO also works to develop the following additional services for customers:

- reconcile overpayments;
- request and approve reconciliation reports;
- control user access for their company;
- provide feedback on service quality.

Particular attention is paid to customer integration and communication tools. In 2022, FESCO developed and deployed a set of solutions and digital tools:

- the Company implemented and released API<sup>1</sup> mechanisms to enable FESCO customers to integrate their accounting systems with personal account services;
- we created automation tools and mechanisms for our customers to benefit from the increased transparency of services carried out by foreign countries' agents (booking services, communicating with shippers, working with lines);
- FESCO developed and released new iOS and Android versions of the mobile app (24% of customers used the mobile app in the reporting year);
- the Group introduced centralised communication mechanisms and information alerts on customer shipments via email, Telegram, personal account, and push notifications in the mobile app.

### PRODUCTION SYSTEMS

In 2022, FESCO focused on the development of production systems.

#### FESCO INTEGRATED TRANSPORT

In mid-2022, work was initiated to draft and put in place a new corporate production system, FESCO Management Systems (FMS), to automate the Company's operations. Having considered the current sanctions policy, the Company opted for a domestic development platform 1C:Enterprise 8. During the project's early stages in 2022, work was carried out to describe the Company's business processes, optimise them and design the optimal logic of the information system.

2022 saw the creation and deployment of individual functional modules of the system:

- container fleet repair management;
- management and control of dangerous goods transportation;
- management and accounting for sea line activities;
- management and supervision of expenses for services provided by suppliers.

A pipeline of projects to create and introduce the new production system was approved until 2024. It provides for the system's gradual modular implementation and development with the possibility of step-by-step automation of all business areas of FESCO Integrated Transport (FIT).

The FMS strategy rests upon individual modules and a microservice architecture, which allows to balance the load between subsystems and implement individual functional blocks in stages factoring into business requirements and current priorities.

#### DALREFTRANS

In 2022, special attention was paid to one of FESCO's key assets, Dalreftrans, its development and digitalisation of its operations. During the year, digitalisation solutions for the company's business processes were substantially redesigned:

- the customer's personal account added an e-commerce feature for refrigerated transportation;
- rate-setting feature was simplified and scaled up;
- tracking of containers by rail and sea was introduced;
- control mechanisms were put in place to reduce the human factor potentially affecting data accuracy and timeliness.

Dalreftrans became an integral part of FESCO's digital ecosystem, and the customers can now use the information service according to the common standards of the Company.

The development of Dalreftrans' production system coincided with strong operating results, which in turn contributed to the company's growth and an increase in customer demand.

<sup>1</sup> Application Programming Interface.

**PORT VLADIVOSTOK**

**PRIVATE LTE/5G**

A dedicated (private) LTE/5G network was built and commissioned jointly with MegaFon. Private LTE/5G covers the entire infrastructure of the largest universal port in the Russian Far East of over 395 hectares. Thanks to its own digital loop, the port boasts a reliable communication quality, allowing it to automate technological processes and increase the efficiency of cargo handling.

New base stations in the 900, 1,800 and 2,600 MHz frequency bands ensure 100% seamless coverage. The use of all available bands increased network capacity in the areas with the highest concentrations of employees and machinery, and ensured the best signal penetration, highest-speed and stable data transmission.

**PORT VLADIVOSTOK ECOSYSTEM**

FESCO's IT unit drafted and introduced a radiation control solution (Yantar portable system) at the Port Vladivostok site. The following measures were adopted as part of the project:

- integrating and configuring data acquisition through the graphic representation of sensor triggering and taking photographs of the cargo;
- alerting customers of radiation alarms going off because of their cargoes.

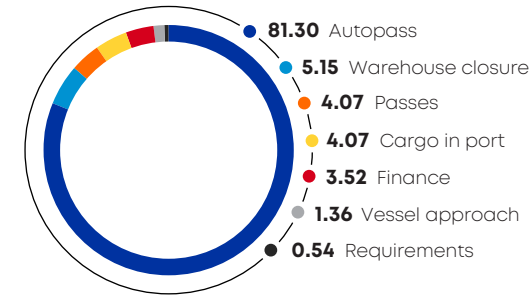
This optimised handling at the terminal and also reduced the time of radiation control inspections to one day instead of three or four days.

Port Vladivostok launched Russia's first electronic export instruction service. Freight forwarders were given an opportunity to issue export instructions using their personal account at the Port Vladivostok website: they can now sign documents with an electronic signature, send them to the information system of the Federal Customs Service, and receive a loading permit. In 1H 2022, over 5,000 electronic loading permits were received from the Federal Customs Service, and in December 2022 more than 80% of export instruction were sent via the new service. It helped automate the work of the Federal Customs Service employees and Port Vladivostok customers, as well as to promptly notify the terminal of the loading permit issued by the Federal Customs Service (speeding up the confirmation receipt from 24 to two hours). This resulted in paperwork reduction by 90% and made customer visits to the Federal Customs Service unnecessary.

Launched in 2021, a new Pocket Port mobile service gained momentum and increasingly attracted both new and existing port customers. In 2022, the web app traffic went up by 2.5 times YoY, averaging 3,000 visits per month. The share of FESCO customers using the app increased to 61% vs 30% in 2021.

The Autopass and Warehouse Closure services remain popular. The plan for 2023 is to expand the existing services and develop new ones to attract new customers.

**THE POCKET PORT TRAFFIC IN Q4 2022, %**



Source: Company data

Port Vladivostok is actively developing API services for integration with its customers through the automated management system. The number of such services doubled in 2022, with the main ones being:

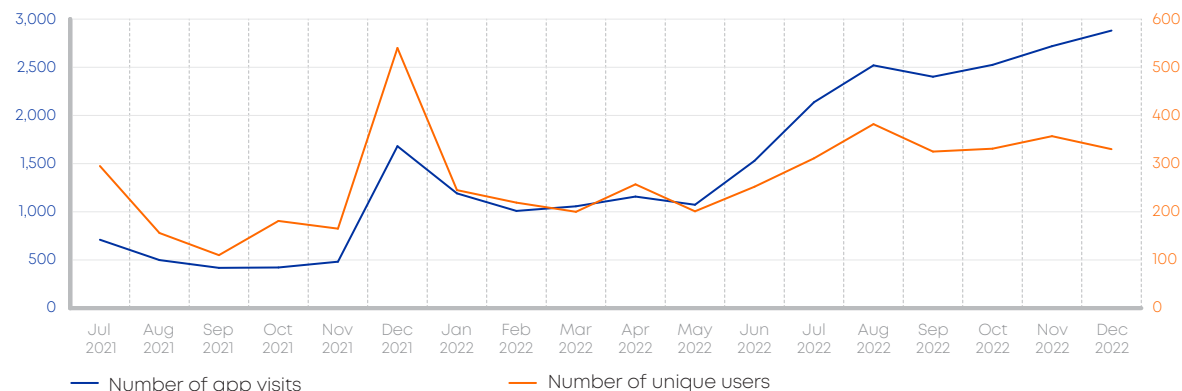
- creation of a pre-application for weighing;
- creation of a shipping order (booking);
- creation of a request to receive dangerous goods at the port.

In 2022, 17 key customers were connected to these services, an increase of 3% YoY.

**INDUSTRY 4.0**

FESCO launched the Smart and Safe Port project. A comprehensive individual video analytics system is being developed and integrated into the port's business processes, including transport monitoring and health and safety monitoring with a single biometric database provided by NtechLab. The project will support the Company in achieving the strategic goals of the port's safety, transparency, and performance improvement, as well as reduce commercial rejects, accidents, vehicle handling time and improve operational safety and handling. The project is slated for completion by the end of 2024.

**THE POCKET PORT TRAFFIC FROM 1 JULY 2021 TO 31 DECEMBER 2022**



Source: Company data

**The Smart and Safe Port project's expected effect**

**Increased efficiency and control of business processes**

- control of container handling and storage processes
- control over access and movement of employees, visitors, and third-party workers
- control over movement of vehicles
- control over security of the territory (outsiders, line crossing)

**Company protection**

- protection of the critical information infrastructure, ensuring data security and confidential information security
- protection of company assets (from potential theft, loss, depreciation)
- prevention of unacceptable losses and operational disasters

**Company image**

- increase in the issuer's rating
- rise in the market value of the Company
- improved credit rating
- lower cost of debt financing as a result of evaluating the effectiveness of the risk management system and the role of using high-tech and artificial intelligence in the port ecosystem

**Workplace safety**

- industrial and occupational safety
- efficiency of occupational health and safety measures

**Managerial efficiency**

- fair evaluation of the business units' performance with due regard to the risk associated with them at more mature stages, including quantitative risk assessment
- creation of a comprehensive risk-based management and incentive system

**IOT<sup>1</sup>**

A telemetry project for online monitoring of machinery and cranes was launched at Port Vladivostok. The project's deliverables are:

- reduced downtime of machinery and cranes thanks to shortened diagnostic and repair times;
- more accurate maintenance planning based on the actual operating hours of each crane and machinery unit;
- ability to assess the qualifications of the personnel operating the machinery and cranes;
- ability to predict and simulate routine and emergency situations.

**KHABAROVSK TERMINAL**

FESCO's Khabarovsk terminal launched a project to upgrade the terminal infrastructure. In the course of the project:

- all main communication lines at the production site and in the administration building were replaced;
- guaranteed operation of redundant Internet links was secured;
- a complete upgrade of video surveillance systems was carried out;

- 99.9% availability of FESCO's corporate resources and information systems at the site was secured;
- corporate IT services of FESCO were provided to the business customer;
- video surveillance system was consolidated, the archive depth was increased.

**ROLL-OUT OF SOLUTIONS FOR MANUFACTURING COMPANIES**

The Company's growth and launch of new businesses revealed the need to automate activities of the new companies in a quick and efficient manner. FESCO opted for proprietary IT solutions already implemented in the Group. This helped to bring down automation time and offer solutions factoring into the specifics and requirements of the companies. In 2022, these solutions served as the basis for the following companies:

- FESCO Dostyk Limited;
- FESCO Turan;
- FESCO Central Asia.

A special focus was made on the development of self-service functionality, including a mobile app and a chatbot in Telegram.

At the end of 2022, a project was initiated to introduce HR document management, an ambitious project to streamline employee relations and minimise the cost of administering the HR function.

**INTERNAL DIGITALISATION**

**DEVELOPMENT AND ROLL-OUT OF UNIFIED ACCOUNTING SYSTEM**

In 2022, a unified accounting system was successfully rolled out at all major Group companies.

**DIGITAL SERVICES FOR FESCO EMPLOYEES**

One of the priority areas of FESCO's IT unit is the quality of digital services provided to employees. In 2022, work continued to create a digital corporate ecosystem, which is particularly important given a consistent increase in the Group's workforce.

**DIGITAL INFRASTRUCTURE**

• Anti-sanctions measures

In 2022, due to the international context, FESCO focused on projects seeking to counteract sanctions. In particular, the Company was looking for solutions based on the Russian data centre and software; we were also considering the possibility of abandoning Microsoft cloud services, as well as user and network equipment of companies that introduced sanctions against Russia. As a result:

- a dedicated strategy was worked out; the migration of all FESCO email to a Russian cloud service is nearing completion;
- a concept was developed to stop using Office 365 cloud services (video conferencing, cloud portal, data library), the concept implementation is nearing completion;
- market analysis was performed, a solution was worked out, and pilot testing of Russian-made network and user equipment is currently underway.

These measures enabled the Company to minimise risks and secure stable operations.

• Development of FESCO's branches and offices

Despite global turbulence, FESCO is actively opening new offices in Russia and abroad and expanding existing offices.

- The Moscow office was expanded, new offices are being opened in Kazakhstan, Uzbekistan and the Russian cities of Kazan, Krasnodar, Khabarovsk.
- A structured cable system of Dalreftrans, FIT office in Vladivostok and Stroyopttorg in Khabarovsk was upgraded.
- The project for IT consolidation and modernisation of foreign offices (Korea, China) and the introduction of unified standards for network and user equipment and software were completed.
- Data centre equipment in Hong Kong was replaced resulting in improved performance and resilience of the shipping management systems.

- To improve radio communication quality and increase coverage at production sites, radio communication development and standardisation projects were implemented.
- FESCO is actively recruiting young and ambitious employees. The Far Eastern Federal University launched a project office featuring a training module for students. Under the project, students will be able to find themselves in the FESCO office, undergo training and try themselves as new employees of the Company – all this without even leaving the university.
- FESCO pays great attention to customer relations and is actively developing a contact centre service. In 2022, voice menus of the Group companies was reconfigured and a general number 8-800 was introduced.
- Despite foreign policy difficulties, FESCO was actively developing, maintaining and upgrading equipment, and setting up new workplaces. In 2022, nearly 1 thousand workplaces were set up and over 70 thousand requests to technical support service in connection with infrastructure and information systems were processed.

<sup>1</sup> Internet of Things.

## CYBERSECURITY

According to reputable IT experts, cyber security risks for large businesses increased manifold in 2022. This is also confirmed by FESCO's Security Operations Centre (SOC) aimed at information security monitoring. In the reporting year, the SOC identified 136 security incidents, which is almost twice as many as in 2021. With the threats of the global digital space increasing, FESCO is systematically improving the security of its information infrastructure.

In 2022, FESCO added a number of effective cutting-edge solutions to its cyber security suite. The Company introduced a system for recording the actions of privileged users of the Company's corporate network (system administrators, developers, etc.), as well as the system for controlling the actions of employees when working with corporate data. The mechanism of remote user access to information resources got a two-factor authentication function. The internal segment of the corporate network is now equipped with hardware and software for detecting hacker tools. These measures significantly enhance the protection of information infrastructure from malicious attacks, reducing the risks of destructive effect on FESCO's digital services.

New 2022 challenges drove the need for import substitution as regards certain cyber security systems operated by the Group. In the reporting year, the Company successfully substituted imports of both hardware and software responsible for the firewall function.

## CUSTOMER EXPERIENCE MANAGEMENT

The Company's communication with customers is underpinned by the following principles:

- FESCO is the leader in the container transportation market in terms of quality. We develop internal regulations for our processes and seek to standardise and automate them in line with a continuous improvement approach;
- FESCO is quick to launch new projects. Our system easily adjusts to changes as we constantly develop and test hypotheses on potential opportunities and rely on quick project launch practices;
- FESCO appreciates the loyalty of its key customers. We build seamless communication channels by focusing on consistent interaction and personalised approach to key customers. We foster loyalty in response to our consistent delivery against the commitments we have taken on.

### OUR CUSTOMERS

FESCO's customer base:

**>17,000**

customers in 2022

**>2,000**

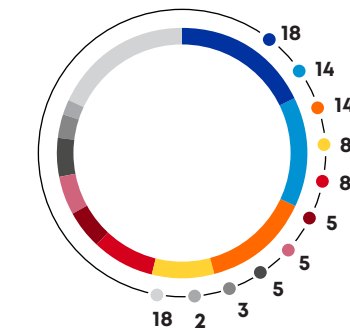
new customers acquired in 2022

**>45**

client offices, including in Southeast Asia, Central Asia, and Europe

FESCO provides its services in the most essential industries.

FESCO TRANSPORTATION IN 2022 BY CARGO TYPE, %



- Chemicals
- Timber
- Machinery and equipment
- Food
- Paper, including wood pulp
- Motor vehicles
- Metal products
- Construction materials
- Non-ferrous metals
- Fabrics
- Other

Source: Company data