R&D Costs

Costs by key R&D areas in 2020, RUB mln (excl. VAT)

Innovative development area	Target	Actual
Transition to smart 35–110 (220) kV substations	55.20	29.30
Transition to digital smart grids with a distributed intellectual automation and control system	153.79	180.15
Transition to integrated business processes and automation of control systems	0.00	0.00
Utilization of new technology solutions and materials in power engineering	2.97	2.32

Digital Transformation

Pursuant to Decrees of President of the Russian Federation, Vladimir Putin, No. 203 dated May 9, 2017 "On the Strategy for the Development of the Information Society in the Russian Federation for 2017–2030" and No. 204 dated May 7, 2018 "On the National Goals and Strategic Objectives of the Development of the Russian Federation for the period until 2024." On January 21, 2021, the Board of Directors of the Company approved the Digital Transformation Program for 2020–2030 (Minutes No.374/2020 dated January 24, 2020).

The Program sets forth the goals, objectives, key principles, and approaches to the Company's digital transformation; it also enumerates the pilot projects and reports the structure of Company's digital transformation management.

The digital transformation looks to changing the logics of processes and transitioning the Company to risk-oriented management.

The objectives of digital transformation:

- Company's adaptability to new tasks and challenges;
- improving the reliability performance of electric power supply to consumers
- improving the Company's operational performance
- expanding the availability of the power grid infrastructure
- developing human resources and new competencies
- diversifying the Company's business through additional services.

Digital transformation phases

Phase	Description	Deadlines
Zero	Pre-digital era: making and implementing a decision is up to human	Phase is over
Phase I	Adoption of effective and tested technologies to lay the hardware and information foundation for further advancement;	2019–2024
Phase II	partial digitalization of the process, pilot testing of promising technology	2023–2026
Phase III	Adoption of technologies proven worthy during pilot tests and completion of introduction of first-level technologies.	2026–2030
	Completion of introduction of technologies proven worthy during pilot tests, continued introduction of second-level technologies	

In the reporting year, the Company implemented projects for the first phase of digital transformation:

- · creating a single network control center;
- implementing the Smart Metering Development Program;
- introducing the Piramida-Seti software;
- creating the Integrated Contingency Management Information and Analysis System;
- · adopting electronic workflow;
- developing the Production Asset Management System (PAMS) in Operations Management System;
- adopting and refining the automated HR and payroll accounting system at Rosseti Kuban on the basis of 1C: Payroll and HR Management 8. CORP of the Company.

All digital transformation projects are implemented in line with the information security requirements.

Funding for the activities of the Company's Digital Transformation Program in 2020 amounted to

386.2 min