

ZYFRA and First Ore-Mining Company to deploy Artificial Intelligence solutions for mining in Extreme North

First Ore-Mining Company, a part of mining division of Rosatom State Atomic Energy Corporation, and ZYFRA, Finnish-Russian digital solutions provider for heavy industries, have signed a Memorandum of Understanding on cooperation in deploying Artificial Intelligence-based solutions in mining and enrichment operations at the Pavlovskoe deposit, where there are plans to build the most northerly ore-mining enterprise in Russia. The document was signed at the St Petersburg International Economic Forum by Igor Semenov, Executive Director of First Ore-Mining Company, and Igor Bogachev, CEO of ZYFRA.

“It is more difficult for companies to operate in extreme climatic conditions because of factors such as the high cost of resources and special work safety regulations. The robotized systems offered by our subsidiary VIST Group, including Intelligent Mine, will reduce equipment downtime by 10-20% and maintenance costs by 15-18%, thereby cutting production costs by 2-3%,” noted Bogachev.

Intelligent Mine is a set of digital technologies for managing open-cast mining processes based on robotized load-haul systems, together with industry solutions in the fields of Artificial Intelligence and predictive analytics. One of the advantages of the system is that it enables extraction of minerals in inaccessible and remote regions with severe climatic and subsurface conditions.

The parties aim to explore a possible project to implement robotics and remote control of quarry equipment at the Pavlovskoe deposit of the Novaya Zemlya archipelago. A bilateral working group will be set up within 45 days for this purpose. The Memorandum covers a period of three years.

“Rosatom State Corporation and First Ore-Mining Company have a strong focus on occupational safety. We are beginning this work in advance, so that the very first ore will be produced using advanced technologies in the safest possible conditions. Cooperation with Zyfra, which has extensive experience in developing digital smart solutions, will help us achieve this,” stressed Semenov.

For reference: