

/ Business Overview / Geological exploration

**KOLA PENINSULA**

(Kola MMC)<sup>1</sup>

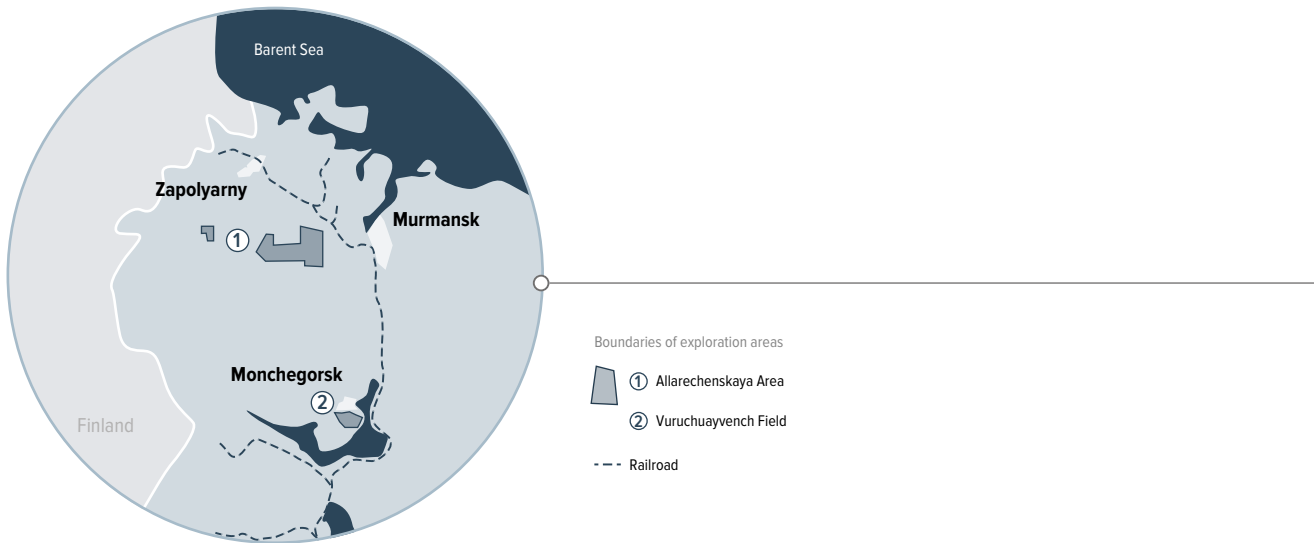
**Allarechenskaya Area**

In 2010–2014, the Company completed geological and geophysical ground surveys and drilling operations in the Area, but did not identify any cost-efficient commercial deposits. In 2016, no geological exploration was conducted; the licence period for the Allarechenskaya Area ended on 31 December 2016.

**Vuruchuayvench Field**

The Vuruchuayvench platinum-group metal deposit is located in the central part of the Kola Peninsula and Murmansk Region, 10 km from Monchegorsk and 5 km from the industrial site of the Severonickel Plant owned by Kola MMC.

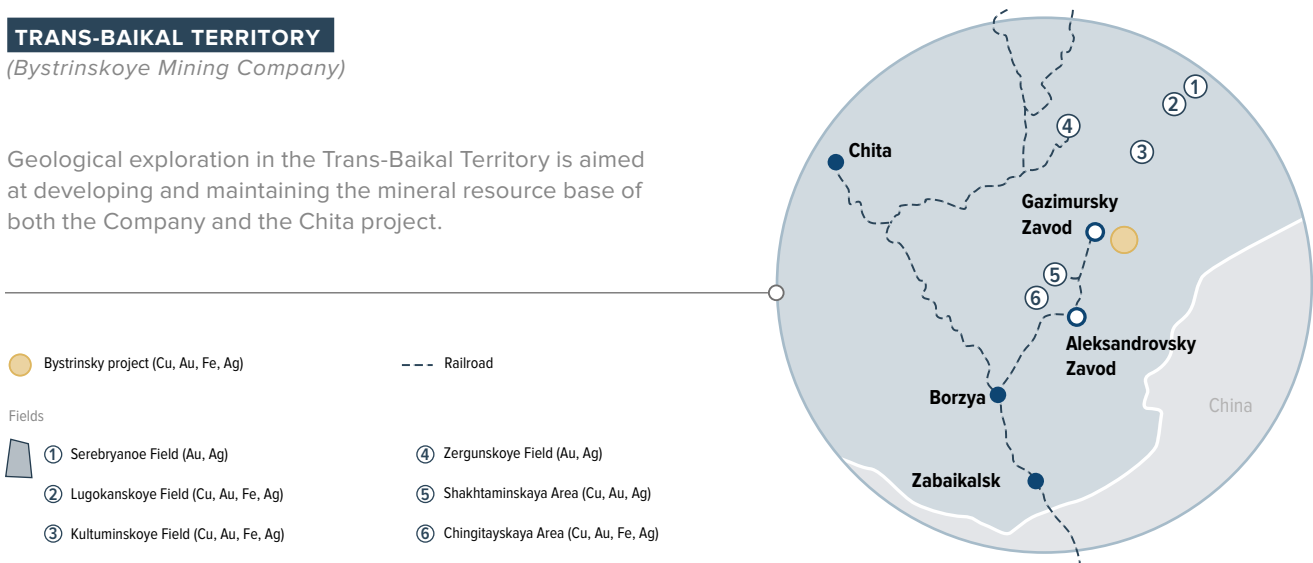
In 2016, due to the unfavourable economic environment, the Company decided to renounce its subsoil use rights to explore and develop the Vuruchuayvench Field.



**TRANS-BAIKAL TERRITORY**

(Bystrinskoye Mining Company)

Geological exploration in the Trans-Baikal Territory is aimed at developing and maintaining the mineral resource base of both the Company and the Chita project.



<sup>1</sup> In 2016, no geological exploration was conducted on the Kola Peninsula.

### Bystrinskoye Field

The Bystrinskoye Field is located in the Gazimuro-Zavodsky District of Trans-Baikal Territory. The closest residential areas are Novoshirokinsky, 14 km north-east of the field, and Gazimursky Zavod, a district centre 25 km to the north-west.

In 2015–2016, to increase the volume of development-ready reserves on the flanks and deep horizons of the field, the Company launched a follow-up exploration exercise. Drilling showed that the commercial mineralisation extended into both flanks of the explored areas and deep horizons.

### Bystrinsko-Shirinskoye Field

The Bystrinsko-Shirinskoye Gold Field is located in the Gazimuro-Zavodsky District of Trans-Baikal Territory, 24 km south-east of Gazimursky Zavod. The Bystrinsko-Shirinskoye licence block is adjacent to Bystrinskoye Field.

In 2015–2016, the Company launched a pilot mining project on the Field using in-situ chlorination.

### Zapadno-Shakhtaminskaya and Tsentralno-Shakhtaminskaya Areas

In 2015, the Company obtained a subsoil exploration licence to prospect for and appraise deposits of copper, gold, iron and associated minerals in Zapadno-Shakhtaminskaya and Tsentralno-Shakhtaminskaya Areas.

These areas are located in the south-eastern part of Trans-Baikal Territory, 22 km away from the Borzya – Gazimursky Zavod railway, and

span the Alexandrovo-Zavodsky, Shelopuginsky and Gazimuro-Zavodsky Districts. The licence blocks are located in immediate proximity to the well-developed infrastructure of the former Shakhtaminsky mine, with the settlement of Vershino-Shakhtaminsky sitting right in the middle of the area.

In 2016, the Company launched a comprehensive prospecting and exploration project in the area, including geochemical and geophysical operations and geological traverses. A number of prospecting gold-copper mineralisation areas were identified; further prospecting is currently underway.

### Chingitayskaya Area

In 2015, the Company obtained a subsoil exploration licence to prospect for and appraise deposits of copper, gold, molybdenum and associated minerals in Chingitayskaya Area. The Area is located in the Alexandrovo-Zavodsky District of Trans-Baikal Territory, 25 km north-west of the district centre. Near the licence block, some 3 km to the south, there is a Borzya – Alexandrovsky Zavod asphalt road (managed by the territorial government) and the Borzya – Gazimursky Zavod railway. In 2016, the Company launched a comprehensive prospecting and exploration project in the area, including geochemical and geophysical operations and geological traverses, which showed no potential for discovering an iron-copper-skarn field in the area.

## AUSTRALIA

*(Norilsk Nickel Cawse)*

### Honeymoon Well Development Project

In 2016, geological exploration under the Company's Australia licences focused on the Honeymoon Well Nickel Project (Wedgetail, Hannibals, Harrier, Corella and Harakka Fields) and prospective Albion Downs North and Albion Downs South Areas.

The geological exercise featuring drilling operations identified a sulphide nickel mineralisation on the flanks and deep horizons of the Wedgetail Field. The results served as the basis for a feasibility study of the potential Wedgetail mining. The Company

also completed a technological research programme aimed at determining the talc content in ores mined at the Hannibals Field and assessing its impact on the processes.

In 2016, to further assess the potential of Albion Downs North, the Company launched electromagnetic geophysical ground surveys and desktop studies of chemical analytical data obtained earlier. The results were used to estimate the West Jordan site's resources and conduct a feasibility study for open-pit mining.