

Press release*Nur-Sultan, December 23, 2019***«KazTransOil» JSC announces about modernization of trunking radio communication network along oil trunk pipelines to digital DMR standard**

«KazTransOil» JSC has completed the main stage of modernization of the existing trunking communication network along oil trunk pipelines. The analog trunking system of the MRT-1327 standard, which has worked for over 20 years, was replaced by a digital professional trunking radio communication system of the DMR Tier-III Pro standard. As a result, the largest professional digital trunked radio communication system in Kazakhstan was put into operation, consisting of 80 base stations of trunking radio communications.

The business of «KazTransOil» JSC is related to servicing oil trunk pipelines with a length of more than 5 thousand kilometers in remote places where there is no coverage of cellular and other types of communications. The only techno-economically viable solution is to create your own trunking radio communications network, as in the case of any modern oil pipeline companies in the world. SATCOM today is an expensive solution with per-minute billing for the use of the satellite segment.

The technological re-equipment of trunking radio communications made it possible to ensure further uninterrupted operation of personnel operating the main oil pipelines, and the performance of all scheduled and unscheduled work at the facilities of the main oil pipeline using radio communications. It increased the existing coverage area from 89% to 94%. According to the total measurement data of the radio communication coverage area along the main oil pipelines, there are 6% of the zone with a complete lack of radio communication, which is approximately ~ 231 km out of the total length of the main oil pipelines measured by a specialized device of 4,271 km. The main reason is the large number of short sections with no connection, the difficult terrain and the remoteness of these sections from existing base stations.

The modernization of the trunking radio communication network made it possible to widely use the data of digital technologies and opened up new possibilities: doubling the throughput of the trunking radio communication system without increasing the existing frequency resource, the rapid creation or integration of geographically dispersed groups, the operational management of the entire trunking network, devices, and the allocation of allowed call types individual subscribers and groups of subscribers, tracking GPS coordinates of technical personnel and moving autotransports, the control base stations parameters (temperature, VSWR, transmitters output power), the purpose of the call priority, etc.

The next stage of modernization of the professional trunking radio communication network involves work to ensure 100% coverage of trunked radio communications (for car radio stations) along the entire length of the oil pipelines of «KazTransOil» JSC.

For reference:

A trunking communication system is a radial-zone communication system that automatically distributes communication channels between subscribers. The term "trunking" refers to the method of access of subscribers to a common dedicated channel bundle, in which a free channel is allocated to the subscriber for the duration of the communication session. "KazTransOil" JSC is a National Main Oil Pipeline Operator of the Republic of Kazakhstan. The Company is a part of NC "KazMunaiGas" JSC Group. The Company owns a diversified network of main oil pipelines with total length of 5.4 thousand km. Production facilities of "KazTransOil" JSC are located in Shymkent, Karaganda, Pavlodar, Turkestan, North Kazakhstan, Atyrau, Mangistau, West Kazakhstan, Kyzylorda, Almaty, Aktobe regions of the Republic of Kazakhstan.

**Department of Public Relations and Internal Communications
KazTransOil JSC**