

"APPROVED"
IT Manager, KGC CJSC

S. E. Konurbaev
_____, 2021

Terms of Reference

for the design of works to upgrade the existing analog radio communication system and organize a digital radio communication system of the DMR Tier III standard at the Kumtor mine and other areas of CJSC Kumtor Gold Company.

№ / List of basic data and requirements	Basic data and requirements
1	Inspection and work place Issyk-Kul region, Jeti-Oguz region, Kumtor gold deposit
2	Customer: Kumtor Gold Company CJSC
3	Contractor: Assigned by the Customer
4	Assignment Upgrading the existing analog radio communication system to a digital radio communication system of the DMR Tier III standard at the Kumtor mine and other KGC areas.
5	Requirements and scope of work performed These works consist of 2 parts: <ol style="list-style-type: none">1. Development of a design for a digital radio communication system.2. Services to organize radio communication for a digital radio communication system of the DMR Tier III standard according to the design. The upgrade of the radio communication system should be carried out without interrupting the operation of the existing analog infrastructure. For a phased transition from a Motorola-based analog radio system to a digital one, it is necessary to maintain the analog radio system. Requirements for the Contractor: <ul style="list-style-type: none">• The Contractor shall have professional knowledge, capabilities (financial, production, labor), experience, material & technical resources, managerial competence• Experience in the construction of digital standard radio communication networks (at least 2 projects over the past 5

		<p>years confirmed by copies of contracts, with the provision of contact details of end customers for confirmation).</p> <ul style="list-style-type: none"> • Availability of its own material and technical resources providing for control and measurement of parameters of radio frequency routes of VHF radio communication equipment of digital standards and antenna-feeder routes of radio communication systems. • Availability of training facilities with the necessary set units of DMR standard basic and subscriber equipment to train the Customer's engineering and technical personnel. • The design documentation of the system shall be developed in accordance with the design standards being in force in the Kyrgyz Republic.
6	Composition and contents of the design	<p>The design should include the following sections:</p> <ul style="list-style-type: none"> • General explanatory note • General layout • Safety section • Other documentation in cases stipulated by the legislation of the Kyrgyz Republic • Design documentation - 2 copies and two full electronic versions on CD (Acrobat Adobe - * .pdf) shall be provided to Kumtor Gold Company CJSC
7	Materials provided to the Customer	<p>Work Execution Plan, a list of persons involved in the work, a list of special equipment, a full report on the work performed, a work performance log</p>
8	Documentation provided by the Customer	<p>The design documentation of the system shall be developed in accordance with the design standards being in force in the Kyrgyz Republic.</p>
9	Documentation provided by the Contractor	<p>Act of Works Performed and warranty obligations for the works performed.</p>
10	Provision of a warranty	<ul style="list-style-type: none"> • Basic and subscriber equipment shall be provided with a warranty for a period of at least 12 months. • Software updates for subscriber equipment shall be covered by a warranty for a period of at least 5 years.