

عنوان مقاله:

Solving Complexities in Tunnel Budget & Schedule Control with Geotechnical Baselines & Risk Management

محل انتشار:

سومین کنفرانس منطقهای و دوازدهمین کنفرانس تونل ایران (سال: 1396)

تعداد صفحات اصل مقاله: 10

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خلاصه مقاله:

Tunnelling is the Art of dealing with Geologic Uncertainties . Tunnel designers decide the future success at an early project stage. Designers are the managers of tunnel construction. Designers choice of design and contract model is the managing tool in construction. Contract & Risk Management of Underground Works for both conventional and mechanized tunnelling shall follow procurement developments. Fundamental requirements for tunnel design and construction contracts are • Evaluation/classification of ground conditions and particular project requirements • Design with subdivisions in stages, following the project and construction development • Construction Methods suitable for standard plant, equipment and material • Risk Management Plan (RMP) in context with Geotechnical Baseline Report (GBR) • Flexible Contractual Models for fair remuneration. Demand for proper designed and contracted Underground Works is continuously growing. Conventional and TBM Tunnelling are both well suited for tunnelling in difficult, complex and rapidly changing geological and geotechnical conditions. It is paramount to maximize safety and to minimize construction cost by selecting optimum driving cross section, driving methods and suitable lining during the design and construction phases. During tunnel excavation simultaneous and joint decision by the contract partners must be realized within predetermined limits to manage flexible response to changing ground and ground behaviour conditions. While information exchange happens increasingly fast to the benefit of projects, the most important feature of a tunnel project remains contract model and geotechnical baselines. Contract models are based and do depend on valuable professional traditions where the project shall be implemented. Tunnel Construction is facing conditions of distributed teams and requires around the clock collaboration and coordination as well as the ability to successfully navigate throughout the life cycle of the project. Today's projects and program managers need tools that deliver the necessary project schedule and budget commitments. They need the ability to integrate project and program resources with other departments and at other locations to ensure project success. With tools to accurately forecast project completion dates and costs against estimates, strategic adjustments can be made throughout the project lifecycle and confidently make and keep commitments to the customers. With real time key performance indicators, ... metrics, and financial data, deep analytical capabilities and advance warnings are recei

كلمات كليدى:

Geotechnical Baseline Report, Risk Management Report, Geologic Uncertainties, Ground Investigations, Budget, Schedule, Construction Cost, Construction Supervision, Project Management

لینک ثابت مقاله در پایگاه سیویلیکا:

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