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**UTILISATION OF MICROTUNNELING TECHNOLOGY FOR CONSTRUCTION
OF THE NEW GAS PIPELINE BETWEEN AZERBAIJAN AND EUROPE**

Abstract:

Due to the increase of the gas demand in the European market, a new 42" pipeline is under construction to link the Shah Deniz gas field in Azerbaijan to western Europe.

In this context, Bessac has been awarded four sensitive portions of the project to be constructed trenchless by microtunneling and then pipe pulling.

The two first portions are located in Azerbaijan & Georgia, on the SCPX project.

Microtunneling is used to limit environmental impact to install the pipeline underneath the Kura river.

Each portion consist in a 1.8m id microtunnel excavated from a 20 m deep shaft to pass under the river. In Azerbaijan, the drive is 1000 m long and in Georgia, it is 600 m long. The two other portions are located in Albania, on the TAP project.

Microtunneling is used in narrow valley context to pass under mountains. Each drive consists in a 1.8m id microtunnel excavated from a 8 m deep shaft. The drives are 595m and 555m long. After the construction of the microtunnels, the most challenging part of this kind of project is the installation of the 42" steel gas pipeline in the tunnels.

The pipe installed on roller in surface and is then pulled in the tunnel with a linear winch up to microtunneling launching shaft.

Once the pulling operations completed, the annular void between the pipeline and the microtunnel is grouted.

These projects are accomplished in an oil & gas context with very high QHSE standards. All these drives have been successfully completed in 3 countries and in various and challenging geotechnical conditions.