

## **Gas-PRS – a decision support tool for selection of optimum transcontinental natural gas pipeline routes**

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Transportation of natural gas from the production fields to remote consumption centres through transcontinental pipelines requires selection of the optimum route at the project planning stage. The present paper describes Gas-PRS (Gas Pipeline Route Selector), a decision support tool that defines the optimum transcontinental pipeline route from a set of alternative options. The tool, developed in the Visual Basic language, uses the Analytic Hierarchy Process (AHP) multi-criteria method, to assess the pipeline project risks, project costs and potential development of the intermediate gas markets. Data from a natural gas database are imported to Gas-PRS, to aid the decision maker in the rating of the alternative pipelines. The tool is applied in the case of the pipeline projects of S.E. Europe, transporting natural gas through the South Energy Corridor from the broader Caspian region to the western European markets.

The paper is divided into five sections. The first introduces the purpose of the paper. The second presents the used AHP method. The third describes the Gas-PRS tool. In the fourth section the tool is applied in the S.E. Europe gas projects. The fifth section comments on the results of the tool.