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**FROM MEASUREMENT TO RELIABLE IN SITU GEOTECHNICAL  
SITE CHARACTERIZATION – STATISTICAL DATA PROCESSING**

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**ABSTRACT**

Despite the provisions of the current EN 1990, reliability based design (RBD) is still a kind of challenge for the future in construction. The starting point for the full use of this design approach is an adequate geotechnical characterization of the subsoil, taking into account statistical data analysis to a significant degree.

Both the fact of evaluating soil properties under natural conditions and the availability of measured data in numbers unattainable for laboratory results make in situ testing particularly predisposed to use in RBD procedures.

The minisymposium is intended to provide a platform for the exchange of experience related to the design of geotechnical investigations and the processing of their results using statistical methods. Previous publications indicate continued interest in this problem, although limited to a fairly narrow circle of researchers. The main idea is to summarize the experience of researchers from different regions of the world, which will make it possible to determine to what extent it is possible to analyze the reliability of geotechnical parameter values in the context of using this information in RBD-type processes. The discussion group could be the beginning of a team that, within the framework of TC-102, could prepare recommendations for the design of in situ studies and the statistical analysis of their results in the context of their subsequent use in design. Perhaps the preparation of simple operating procedures in this regard will increase the popularity of the use of statistical data analysis and bring engineers closer to the possibilities offered by the proper design of in situ studies and the processing of their results.