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Penetration Testing

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Dynamic probing / Swedish weight sounding



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Penetration Testing

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Introduction

The first European Symposium on Penetration Testing – ESOPT I – was held in Stockholm, Sweden in 1974. During its Brighton meeting in September 1979 the Sub-Committee on Standardization of Penetration Testing in Europe decided to arrange a second international symposium. The Netherlands National Society for Soil Mechanics & Foundation Engineering was honoured with the request to organize this symposium.

The theme of the second European Symposium on Penetration Testing – ESOPT II – was set to be the interpretation of penetration tests:

- Cone Penetration Test (CPT),
- Standard Penetration Test (SPT),
- Weight Sounding Test (WST) and
- Dynamic Probing Test (DPA and DPB).

Recommended standards for these tests were presented by the Sub-Committee on Standardization of Penetration Testing in Europe to the Executive Committee of the International Society for Soil Mechanics & Foundation Engineering during its Tokyo meeting in July 1977. The recommendations were adopted and have been included in the minutes of the Executive Committee meeting and published in volume 3, page 95–152, of the proceedings of the Tokyo Conference. A further report with a recommended standard for the Light Dynamic Probing Test (DPL) was presented to the Executive Committee at its Stockholm meeting in June 1981 and will be published in the last volume of the proceedings of the Stockholm Conference.

Following a call for papers the Scientific Committee of ESOPT II was agreeably surprised to receive not less than 168 summaries. 142 of these materialized into symposium papers written by authors from more than 30 different countries all over the world. Roughly 2/3 of these papers are on Cone Penetration Testing, while the remaining 1/3 are equally distributed over Standard Penetration Testing and Weight Sounding Testing plus the Dynamic Probing Tests. About half of all written papers have been selected for short oral presentation at the symposium.

The proceedings of this symposium are divided in two volumes. Volume 1 contains the state-of-the-art reports plus the papers on SPT, WST, DPA, DPB and DPL, while volume 2 contains the state-of-the-art report plus all papers on CPT. The proceedings have been edited by the Scientific Committee of ESOPT II.

The Scientific Committee has had comprehensive discussions about the most efficient way of presenting the written material. Several classifications attempts were made and rejected. Finally it was decided to simply arrange the papers according to the type of test, although it was realized that this method could not yield a unique result since some papers treat more than one test. Within their category the papers are arranged in alphabetic order by the name of the (first) author.

One of the lists the Scientific Committee itself used was considered to be so helpful in finding papers of a certain kind that it was decided to include this list in the proceedings. The list clearly demonstrates that the reader interested in only one of the four types of penetration tests, may also find relevant material in one of the sections