



POLITECNICO DI TORINO
Dipartimento di Georisorse e Territorio



GEORESOURCES AND ENVIRONMENT ASSOCIATION



ITALIAN TUNNELLING ASSOCIATION

INTERNATIONAL CONGRESS
MECHANIZED TUNNELLING: CHALLENGING CASE HISTORIES

Politecnico di Torino, 16 – 19 November 2004

NAPLES METRO
(Italy)

Abstract

The digging of Naples underground new extension is in progress using two EPB Tunnel Boring Machines (TBM). In order to minimize the displacements at level of superposed buildings foundations, the vertical profile was designed to locate the tunnels inside a layer of soft rock, even if this choice puts the galleries about 30 m under the water table. In the paper, beside a short presentation of the project, will be discussed the procedures of excavation and control, the design criterions, and the measures and parameters collected by the monitoring system and by the TBM itself, during the first 1000 m of realized tunnel.