The results of the deep magnetotelluric sounding on the profile crossing TT line in the south-east Poland

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Twelve deep electromagnetic sounding has been carried out at 500 km long profile running from Pannonian Basin (Hungary), crossing Carpathian Arc to East European Platform (Ukraine). Five electromagnetic components have been recorded simultaneously in eight points in 1995, and supplemented in the remaining points in 1997. Period range

was 5–10000s. The inductor vectors and apparent resistivity curves were calculated in large range of periods. The interpretation, based on 2–D numerical modelling, suggests the presence of the good conductors beneath the Pannonian Basin, Carpathian Range and at the marginal zone of the East European Platform. Between the latter two there probably exists the deep rooted fault. We also have made the attempt to estimate the resistivity distribution deeper in the mantle. We found out that below the Pannonian Basin the good conductor (astenosphere) seems to be at a depth of about 60 km, while on the north part of our profile the depth of the good conductor can be estimated as 150 km.