

## **EVALUATION OF PAVEMENT SURFACE TREATMENT WITH MICRO ASPHALT ON MAIN ROADS IN YUGOSLAVIA**

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### **SUMMARY**

Pavement surface treatments by the micro asphalt were applied for the first time in 1990 on selected sections of main roads in Republic of Serbia and Monte Negro. Main reasons for the use of micro asphalt were insufficient pavement skid resistance and macro texture. The old pavement wearing courses were constructed of asphalt concrete with limestone aggregate. Up to 1990, on the road sections in question, there were a few traffic accidents per year under wet pavement condition.

Measurements of pavement surface condition indicators before and few weeks after application of the micro asphalt were carried out. The measurement were repeated in 1995 too. All collected data enable evaluation of the micro asphalt for the technical, road safety and economics point of view. Micro asphalt surfacing evaluation show that this technology improve pavement skid resistance, macro texture and impregnation. On the available data, it is concluded that traffic accidents are reduced after micro asphalt application. When the pavement bearing capacity is relative good but with low skid resistance with or without thermal cracking in asphalt pavement surfacing and when the resource of stone aggregate with good polish stone value is so far from site, it is economically to use the micro asphalt instead of conventional overlay with asphalt concrete layer. The life cycle of one micro asphalt application is 5-7 years on main roads depending of traffic and climate condition. After that perode the distress type as well as weathering and ravelling appear.