Practical experiences with new types of highly modified asphalt binders

Petr Špaček¹, Zdeněk Hegr¹ and Jan Beneš²

¹Skanska a.s., Pavelkova 1133/6, 779 00 Olomouc, Czech Republic
²Total ČR s.r.o., Pobřežní 620/3, 186 00 Praha 8, Czech Republic

E-mail: petr.spacek@skanska.cz

Abstract. As a result of steadily increasing traffic load on the roads in the Czech Republic, we should be focused on the innovative technical solutions, which will lead to extending the lifetime of asphalt pavements. One of these ways could be the future use of bitumen with a higher degree of polymer modification. This paper discusses experience with comparison of new highly polymer modified asphalt binder type with conventional polymer modified asphalt binder and unmodified binder with penetration grade 50/70. There are compared the results of various types laboratory tests of asphalt binders, as well as the results of asphalt mixtures laboratory tests. The paper also mentions the experience with workability and compactability of asphalt mixture with highly polymer modified asphalt binder during the realization of the experimental reference road section by the Skanska company in the Czech Republic.