

OPTIMIZATION OF THE SERVICE LIVES OF HIGHWAY SURFACE COURSES

Cécile Giacobi*

Pavement expert, Autoroutes du Sud de la France, France

Eric Layerle

Technical director, Autoroutes du Sud de la France, France

* ASF, Direction de l'infrastructure, Direction technique, Quartier Ste Anne,
Vedène, 84967 Le Pontet, France, eric.layerle@asf.fr

ABSTRACT

With more than 2 550 km of highway being managed, Autoroutes du Sud de la France (ASF) is the most important French toll highway network. With such a long length, the network is necessarily very diverse and each highway has different specifics in terms of traffic, geometry and/or climatology.

Products used for pavements should, therefore, be adapted to these disparities. Indeed, the same asphalt mixture will mature with time differently according to the stresses to which it is exposed. The risk in using unsuitable products is to have highways with different levels of service, or to need to do premature maintenance works on some sections.

Learning from its experience, ASF has set up an internal policy of pavement maintenance. This policy, more particularly, defines:

- the nature and performance of asphalt mixtures depending on the different types of highway,
- the nature of components materials (bitumen, aggregate, etc),
- the requirements for acceptance control, the level to reach and the control methods employed.

The set up of this kind of measure allows ASF to optimize the life time of surface courses on its network. In this way, the median service life has noticeably increased during the ten last years. ASF can, therefore, reduce constraints to customers, reducing their personal exposure to traffic risks, while offering them safety and comfort.

KEY WORDS: Pavement, highway, lifetime, surface course, work specifications