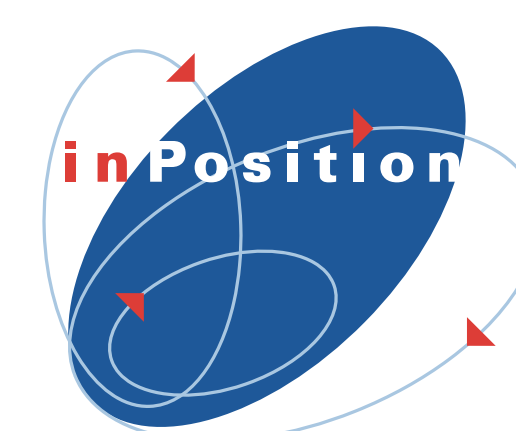


ASPHALT



Advanced Galileo navigation system for asphalt fleet machines



More than 90% of the European road network has an asphalt surface which must be regularly repaired or rebuild. Constant monitoring and control of parameters during **road construction** are significant for the quality and durability of the road. An increasing lifetime will result in a reduction of costs of **road maintenance**.

Key factors during road construction are to optimally manage truck fleets, operate the paver, and steer the compactor. Any sub-optimal operation within this chain may lead to a reduction in **road quality**, what results in reconstruction or decreased lifetime - both cost-intensive.

The **ASPHALT** project aims at developing a cost and precision optimized solution taking advantage of the future Galileo system and EGNOS. Further, the positioning system is closely coupled with the machine control and monitoring system.

ASPHALT addresses the applications in the context of the paving process on a road work site:

- ▶ mass flow control from asphalt plant to the paver
- ▶ asphalt temperature measurement while paving
- ▶ asphalt compaction
- ▶ paver steering
- ▶ thickness and evenness measurement and control

The primary benefits of the outcomes of **ASPHALT** are an increasing quality of the road and decreasing maintenance measures. A potential road lifetime extension by 10% would result in cost savings of EUR 4.5 billion per year.

Secondary cost saving factors are the reduction of traffic jams, resource consumption, air pollution, and CO₂-emissions due to less often maintenance operations. Furthermore, the **safety** will increase, due to lower risk of uneven surfaces with puddles on wet roads and better ride comfort for all users of the road.

www.asphalt-fp7.eu

