Reinforcement and safety of the road-shoulders on a rural road

The challenge

- Most of the rural roads in Europe were built at a time where the transition of one vehicle at once was enough. Today, it is impossible to respond to the evolution of the current traffic namely to allow the transition of two parallel crossover vehicles. The vehicles are forced to move on the road-shoulders which results in the formation of serious rills alongside the asphalt. Due to the changes between the asphalt and the road-shoulders, sometimes the vehicles get overturned or cause front accidents.
- In addition to the problems concerning people’s safety, the local authorities must compensate the drivers or road-passengers, for damages caused in accidents.
The Solution
Stabilization of road-shoulders with GeoGlobe® filled with sand, ballast or gravel mixed with seeds.

The alternative method
The enlargement of the road is not a viable option from an engineering perspective, considering that the terrains are private or residential. The enlargement of the road isn’t justified from a safety point of view, because this would allow higher speed of vehicles and also because of the low volume of traffic in those roads.

GeoGlobe® method and its advantages
The reinforcement of existing road – shoulders without enlarging the road to ensure the safety of the passengers in view of the limitations of the surface and of respect for the landscape framework.

The technology – simple, fast, safe, economical
A layer of GeoGlobe® filled with local sand, gravel or ballast is installed above a geotextile in a slightly deeper trench and parallel.

The result
Stable road-shoulders protected from the effects of erosion caused by the rain or passing wheels. The layer of GeoGlobe®, covered with green vegetation offers environment friendly solution, which results in protection of the road and the safety of the people, since most vehicles do not get overturned anymore in the road-sides.

The solution was found to be effective, safe and economical and the number of accidents due to the road shoulders has decreased.