

# Case Study:

## Staffordshire Fire and Rescue Service



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Like all UK fire and rescue services, the Staffordshire brigade is involved in a wide range of activities from attending fires and road traffic incidents, to checking homes and businesses, and working proactively in the community.

This diverse work pattern calls for a range of different vehicles and Staffordshire Fire and Rescue Service has a 200-strong fleet, including 120 cars and vans, plus 80 trucks, spread across 35 different locations. The fleet includes a Mercedes-Benz Unimog fitted with Michelin XZL tyres which is used specifically to respond to incidents which require off-road access.

### The Michelin approach

Michelin XZL tyres are an all-round fitment suitable for use both on and off-road, giving good grip on all types of terrain, from mud and sand to grass, snow or tarmac.

These specialist tyres are common fitments on military vehicles which require exceptional off-road performance. They are also a popular choice on civil vehicles which require uncompromising off-road ability to match their safety and comfort when driving on sealed roads.

Michelin XZLs were fitted as original equipment to the Unimog when it was delivered in 2011 in line with the fire authority's fleet-wide Michelin policy.

The XZLs are a tough and reliable fitment which can be operated at inflation pressures to match the specific off-road conditions they are used in, maximising grip and cross country capability.

They feature substantial sidewalls with an undertread protected by metallic reinforcement to withstand the traditional impacts and tears which an off-road tyre must endure.

Their unique capabilities make the Unimog ideally suited to the demands placed upon the brigade's primary off-road vehicle during everyday incident call-outs.



## Results

Staffordshire has large rural areas of grass and woodland which are prone to fires during hot, dry summers, and the Fire and Rescue Service is also regularly called upon to help farmers rescue livestock during periods of bad weather. The standard fire appliances do not have the ground clearance or traction to travel cross country, and so the Unimog is called out for incidents that occur in more remote areas.

“The Unimog is based at Cannock which is surrounded by a lot of woodland. It includes a high pressure pump, foam and specialist animal rescue equipment on board, so it can deal with grass fires or stranded livestock, which could not be reached by standard appliances,” says Workshop Controller, Dave Fletcher.

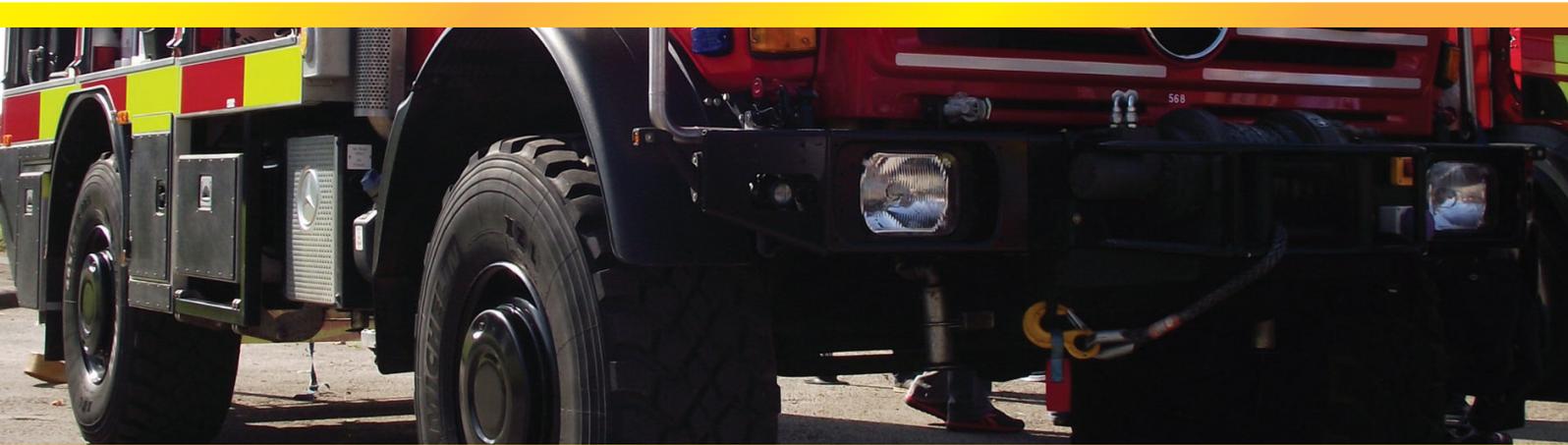
The comprehensive nature of the on-board equipment means the vehicle must be permanently laden, even when there is a requirement to reduce tyre pressures to travel off-road. However, this is no obstacle to the Michelin XZLs, which are unique for being able to operate at the lower pressures required whilst still maintaining the same load capacity.

“When the vehicle first arrived Michelin’s technical team conducted field tests to determine the optimum tyre pressures for road, firm off-road and soft off-road conditions. They are now written on a plaque affixed to the vehicle, to help the crew deflate the tyres to the appropriate pressure for the terrain they have to negotiate at that time.”

The long winter of 2012/2013, followed by a hot summer, meant the Unimog has been frequently called out to deal with different incidents in the area and has performed well on and off road.

“There have been no issues at all with the Michelin XZL tyres,” says Dave Fletcher. “In addition to the driver’s daily walk-around checks, we carry out a detailed safety inspection every eight weeks, including checking the sidewalls. There have been no signs of damage to-date and we haven’t had to replace a single XZL tyre.

“When they do need replacing, we will definitely fit the Michelin XZLs.”



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