

While a temperate maritime climate doesn't encourage too much spending on winter preparation, a severe cold event could be in prospect. Ian Norwell examines what fleet managers should do to insulate themselves from the chilly blast of criticism

urrent computer models favour a positive North Atlantic oscillation pressure pattern which, we're told, suggests a milder winter. Has that put your mind at rest? Historical records suggest otherwise. And the more venerable among us will recall the winter of 1963. If such whiteouts descend, there's not a lot to be done. But there have been plenty of nuisance winters in between, where significant snowfall separates the well prepared from the rest.

Any review of what to do about approaching winter must start with your diminishing grip on reality as

temperatures drop. That'll be tyres then. Most tyre makers will tell you that winter tyres start to be effective at about 7°C above freezing. That's when they overtake summer tyres in terms of grip.

Recent tests at -12°C in Sweden (*Transport Engineer*, March 2015, page 10) demonstrated the capability of winter tyres beyond any doubt. In conditions that would be regarded by most as undriveable – compacted snow and ice with no road contact – Continental HDR2 winter M+S (mud and snow) 385/55 R22.5s gave sufficient traction from the four driven wheels of a seven-axle drawbar to climb moderate gradients at 60 tonnes. They

even tolerated normal braking downhill.

However, the concept of separate winter and summer tyre is now being blurred by Michelin, which launched its CrossClimate light vehicle tyre at the Geneva show and is already attracting a lot of attention from the UK's blue light operators. The tyre giant claims that its new spec combines summer and winter technologies to offer road holding, energy efficiency and durability comparable to its summer tyres, along with cold weather performance of its winter versions.

## **ALL SEASONS**

Admittedly, this tyre for all seasons is initially only aimed at car-derived vans, at 15 to 17 inches, but with Michelin set to launch additional sizes next year, the heavy brigade should take note. In the meantime, head of fleet services at Cheshire Police, John Heussi, who tested the tyres at MIRA's handling circuits, says: "The CrossClimate's ability to perform in all weather conditions is of huge interest."

British Gas was also impressed, stating that it intends to fit Michelin CrossClimates to its fleet of 13,000 light commercials. "On dry roads there was absolutely no doubt they performed as well as Michelin's summer tyres, and they outperformed the winter tyres and all-season tyres by some margin," comments fleet manager Colin Marriott. "It was a very easy decision."

Beyond tyres, though, we don't live in a land of snow chains and shovels, so the basics can be dealt with by adding



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a few workshop units to the next scheduled maintenance. Most winter breakdowns fall into three categories: cooling systems, tyres and, top of the list, electrical faults, including batteries. Few drivers these days have the workshop background that lets them fix glitches themselves, and health and safety rules generally don't allow them that latitude anyway. This makes it all the more important to do what you can in the workshop and avoid annoying failures on the road

So with service intervals on newer trucks getting longer all the time, it's worth adding a winter checklist to one of your six-weekly inspections. Water ingress in wiring looms is being designed out by trucks with foam-

encapsulated harnesses, but at least check the junctions.

Older trucks need a little extra care. Anti-freeze concentrations gradually lose their bite, and a stiff winter will seek out the weak. Hoses past their best need checking - weak spots are usually found on bends and curves where the rubber perishes more quickly. This is easily done by hand when the hoses are still warm: soft spots mean a thin wall.

Meanwhile, batteries must be near the top of the list of ignored and abused truck components. Inconvenient and only noticed when they fail, they get a tough press. But gathering the energy to turn over an engine with 40-plus litres of cold, sticky engine oil when there's ice in the yard is a big ask, and drivers may not always think to report a slow churning start. Once it's fired up, it's forgotten.

## **PREPARATION IS KEY**

But when the going gets tough, well, you know the rest. Your greatest asset in marginal conditions – and the one that could save you from a call-out to a stranded truck – can often be your driver. With the Driver CPC rolling onward, you will have been through the basic courses, so maybe now's the time for a winter driving tips session? Not a winter holiday, or a skid control course. The best value for money is one that

helps your drivers maintain traction. That needs skill as well as the right tyres.

That said, no matter what technology is deployed or driver skills perfected, everything counts for naught if the gritters don't get on the case in time. Local councils are on a hiding to nothing here. There will be limited praise for getting it right, but get it wrong and the tabloids go to town. However, they have been working on it, with ESPO – one of the biggest public sector not-for-profit organisations – buying salt and grit in bulk.

ESPO is owned by six midlands councils, and procurement service manager Gary Ford comments: "Highways departments are generally well organised on winter salt supplies, but you do see a more proactive approach after a severe winter. After the last really bad weather in 2010/11, we found highways departments planning further ahead, taking delivery of salt."

For him, being prepared is everything. "Historical data suggests we're due a cold winter in the next couple of years, so prudent local authorities should work with their supply chains to assess winter maintenance needs and secure supplies." Despite salt's preferred diet being the metals that vehicle and component makers use, it does keep the wheels turning.

## Better by design?

Truck makers have been making their vehicles better able to cope with hard winters by adding features such as heated diesel lines, automating air dryers and even improving cab insulation. But has much of it been driven by legislation? Richard Whiting, head of certification and homologation at Horiba MIRA, doesn't think so. Certification legislation is largely driven by safety requirements, he reminds us, and even those can be "surprisingly woolly".

"For example, there is a requirement for truck cabs to have efficient defrost and demist systems, but the interpretation of 'efficient' is given no specific criteria to attain," explains Whiting. For him, the forces of market competition play a bigger part in pushing winter reliability, and he adds that each EU country has its own opportunity to add extra legislation. Look at the mandatory fitment of winter tyres in parts of Scandinavia.

