

Norwegian wood

UK plc doesn't face enough bad weather to invest in specialised winter driver training. That's a contention that was tested in last month's disruptive snow and ice in the north, west and south. The truth is that with the D-CPC now firmly established, it shouldn't be too hard to find a training course that will include the basic techniques of driving on low-friction surfaces, even if it doesn't major on them.

The author's experience with Scania in Trysil, Norway highlighted areas where drivers need to actually reverse some of the accepted techniques that have been drilled into them for driving in normal conditions. The use of retarders and engine brakes are at the top of that list.

Test vehicles waiting for me on the snow and ice were predominantly long-haul tractor-trailers and drawbars, up to 60 tonnes gw. But there was also a selection of models in Scania's new XT construction chassis, and being

Scandinavian specification, they also came in high gross weights. An R580 6x4 rigid tipper,

Scania's winter driver training is always a worthwhile event. Two hours north of Oslo, Ian Norwell took to the frozen Norwegian main roads and forest tracks, to learn the techniques of safe winter driving

with a tri-axle, drawbar tipping trailer, was delivering some enviable productivity at 50 tonnes gross. A different way to slice the same pie was a G500 XT 8x4 tipper, with a tandem axle tipping trailer, also freighted to 50 tonnes. It used the smaller cab, but with obvious construction-friendly robust trim and fittings.

For test drivers faced with a totally white landscape, the only way forward was to assume that underneath the ice and snow were solid foundations. However, stopping was to be avoided, as restarts were an uncertain affair. A top tip for such conditions is to keep a sensible pace to match the topography, and let the momentum handle gradients where possible, instead of traction.

When we were unexpectedly

balked, and forced to halt, a couple of useful devices were at hand. With the limited slip differential already engaged, the throttle response can be expanded to give greater finesse when moving away on the suspect surface, especially after standing for a few minutes with quietly

melting snow under the drive axle tyres. Much like the manoeuvring mode on some tractors, it executes the same power delivery from a much larger throttle pedal movement. There is also a load transfer function that will temporarily move virtually all the weight from a bogie to a single axle, to help traction. A display keeps you in touch with exactly where the weight is.

But on a 5km descent of the on-highway route, with patchy ice conditions, and at significantly higher



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speeds, other techniques were needed. UK driver training generally underlines the value of all auxiliary braking devices, like exhaust brakes, retarders and intarders. Used intelligently, they can extend the service life of foundation brakes dramatically, thereby cutting the cost of a major maintenance item for the fleet engineer. And today's retarders are more powerful than ever (Scania's R4100D, fitted to the R730 test chassis, has a maximum output of 4,100Nm). Fleet workshops will be used to seeing drive axle tyre wear increase as the reverse torque making its way back up the drivetrain hits the road. These hard-working tyres are now providing the 'stop' as well as the 'go'.

NO SNOW SKIDS

But on slippery surfaces, and especially with articulated single-drive combinations like the UK's ubiquitous 6x2 tractor and tri-axle trailer, a retarder deployed at the wrong time or in the wrong conditions can be catastrophic. Braking a six-axle combination using just one axle leaves them very vulnerable. Apart from uneven braking on the tractor, the entire trailer is un-braked, and in freezing conditions it is unsafe. So on that long descent in Norway, at -12°C, with icy patches on the road, the instruction from Scania's professional demo driver was 'no retarder'.

Of all the vehicles tested, an R730 8X4/4 nine-axle rigid and drawbar combination with timber-carrying bodywork and a central chassis-mounted crane took the prize for stability and unashamed luxury. Although the R730 has been tested as a regular 6x2 tractor before, its ability to morph into a forest extraction chassis, and to give the driver the feeling of being totally in command on the icy highway, too, was impressive.

Tyre manufacturers also deserve a mention here. The 'mud and snow'-

marked and cross-climate tyres from the likes of Michelin and Continental are now delivering astonishing performance in winter conditions. Scania's test fleet in Trysil, Norway was shod with Continental's Winter M+S 315/80R22.5 cases. Pressing the brake pedal with what felt like a negligent level of pressure brought an amazing level of stopping power on compacted snow.

But you don't need a Nordic whiteout to get the benefit. Winter tyres are reckoned to start improving grip at temperatures as high as +5°C. If it's wet, and you find yourself on a patch of low-friction road surface like SMA (stone mastic asphalt), the difference in tyre performance could be critical. SMA seems to be more common around newly reinstated inspection covers on carriageways. It may give a smart, smooth finish and wear well, but it's the bane of motorcyclists, and can catch any vehicle out.

Apart from increasing observation and planning distances, the single biggest take-away for drivers from Trysil must be the avoidance of auxiliary braking devices in slippery conditions. And that tyres are your only grip on reality, however good they are. **TE**

BUILDING A MARKET FOR TELEMATICS

Most fleet managers controlling a long-haul fleet are familiar with the value of a telematics system. However, the construction sector seems to be among the last to come to the party.

That's according to Darrell Taylor, onboard sales and services manager for Scania GB. He says: "The penny is still dropping for mixer and tipper operators that telematics can do something for them." He asserts that they have as much to win as any fleet, and size is no barrier either. "The vast proportion of our telematics customers run fleets of 15 vehicles or less," he says. The pool of operational data - across all transport sectors - that Scania now uses comes from over 300,000 of its 'connected' vehicles worldwide, including every UK-registered Scania since January 2011.

Taylor says that no matter how specific or niche the operation, someone else, somewhere, is already doing it and providing service data that can be mined. Daunting complexity can be demolished, too. A driver's manual that runs to 1,800 pages, or 34Mb, can be converted into operationally appropriate apps, or short YouTube-style videos.

Among the lava flow of numbers that spills forth from its connected database is the worrying statistic that UK vehicles have the worst track record worldwide for idling times. Argues Taylor: "Cutting unnecessary idling is an easy win, and at nearly 16% we Brits need to shape up."

