

# New realities

**Will extensive driveline revisions be enough to lift the fortunes of Iveco's Stralis tractors in the UK? Ian Norwell listens to senior executives in Madrid and takes two for a test drive**

**T**here's no disguising the figures: with less than 600 UK registrations in 2015, Iveco's Stralis tractor has a mountain to climb. But with its latest upgrade, the market will be in for a surprise. All the way from the gearbox - Stralis XP comes tooled up with all the intelligent fuel-saving aids - this vehicle excels. So a push from Iveco for bums on seats should enable its latest variant to seriously impact the numbers.

Billed as the TCO<sub>2</sub> (total cost of ownership and CO<sub>2</sub>) champion, New Stralis aims to deliver on fuel, CO<sub>2</sub> emissions, noise, driver appeal and much more. And it's no exaggeration. In the last 12 months, I've driven tractors from Mercedes-Benz, Scania, Volvo, DAF and MAN, and any gaps between them and the Stralis XP full-spec models I drove are perception, not reality.

The long association with ZF as a gearbox supplier continues with a new generation of AMT (automated manual transmission). Following the AS-Tronic, we now have the 12-speed Hi-Tronix, a derivative of its new TraXon transmission, but with shifting software developed by Iveco. Not TraXon's dual-clutch version though: like fellow ZF-user DAF, Iveco doesn't consider this worth pursuing yet. Cost and weight rule it out, and the 10% improvement on shifting speeds from Hi-Tronix narrows the gap anyway.

Hi-Tronix is quieter, too, by a claimed 6dB, so it qualifies for night-time

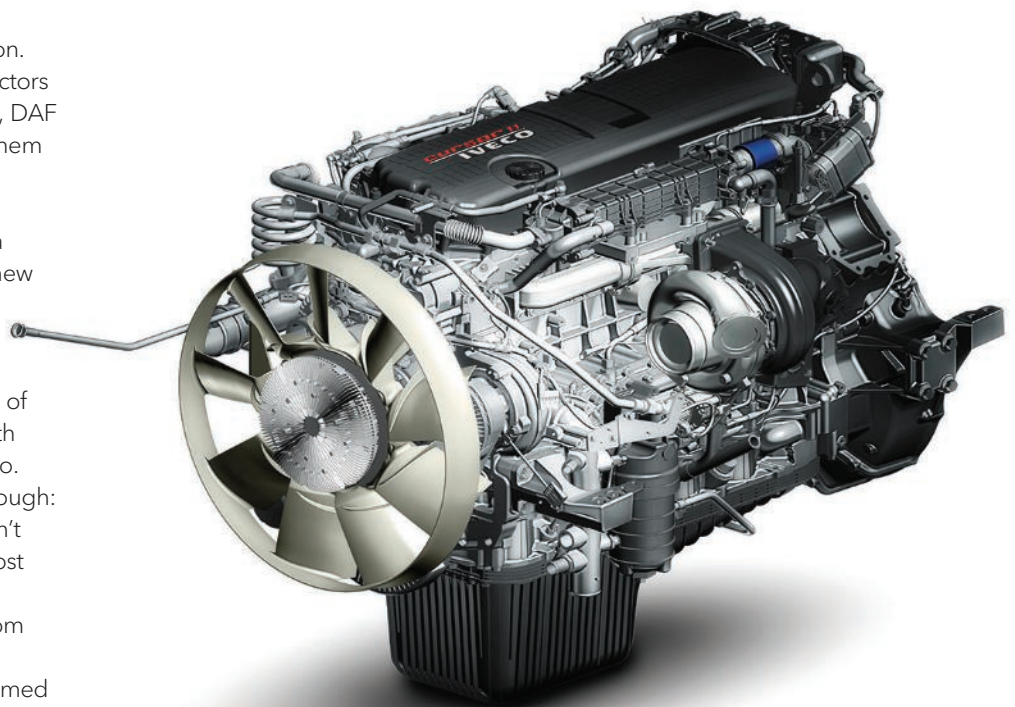
deliveries without encapsulation. And Iveco's version of predictive cruise - Hi-Cruise GPS - also arrives with the XP. As with other systems, this gives GPS data on road topography, and so adopts appropriate strategies for acceleration, deceleration and gear shifting.

We've seen surprisingly large fuel gains from this technology on other brands and, with driver shortages not relenting, Iveco points out that the system continues to deliver even with lower skilled drivers. Other Hi-Tronix functionality includes manoeuvring

mode (creep), rocking function to recover grip on poor surfaces, four reverse gears and a new range of PTOs.

What about power? As part of a drive for ever cleaner vehicles, Iveco has been putting considerable effort into alternatives, and the new Stralis NP (natural power) does not disappoint. Clément Chandon, Iveco's manager for gas, explains that these use CNG or LNG (compressed or liquefied natural gas), adding that Stralis NP is the "first serious contender" for long-haul gas-powered tractors, with a range "up to 1,500km".

The Cursor 9 NP engine is rated at 400bhp and 1,700Nm torque - an improved delivery over previous gas engines and Euro 6C compliant. It also limbos down to a claimed best-in-class on noise, at 71dB for Piek compliance. Compared to diesel, fuel economy is better, too, and CO<sub>2</sub> emissions are slashed. So plenty of positives, although the refuelling infrastructure remains an issue, albeit improving.



***“Smart EGR is purely employed for fuel economy, and not for emissions control. With just 8% EGR, there is no impact on radiator size, no extra maintenance, no weight increase and no parked regeneration”***



### So what about my test drives?

Well, the XP-480 and XP-510 both performed well. All the drivetrain technology you've come to expect elsewhere is on board, and it works as it should.

In-cab noise, typically underrated as a fatigue-inducing element – was also very low. Both trucks held on to long grades well, and interior comfort, and ride and handling have all taken an uplift.

As with DAF's XF, Iveco has spent money where you can feel it. So the expense of a new cab design has been foregone in favour of drivetrain improvements and driver comfort. And it works.

Indeed, if perceptions can follow this reality, it will have an impact on Iveco's market share.

My version was the classic 4x2 tractor for European 40-tonne operation (the three-axle version doesn't arrive until late 2017) and, yes, it was impressive. The arguments get more compelling every time I see a gas-powered truck, but NP Stralis puts it more in contention than any other to date. For UK operators running at 40 tonnes – 2,366 4x2 tractors were registered in 2015 – Chandon confirmed that there will be demo vehicles arriving in late September.

### EXHAUST GAS RECIRCULATION?

Back on the conventional engine range and there is a change – with exhaust gas emissions technology. Iveco's approach to EGR (exhaust gas recirculation) has been emphatic: no EGR. The firm is on record saying its high-efficiency SCR (selective catalytic reduction) is sufficient to avoid the complexities of forcing exhaust gases back through the block.

So it came as some surprise to learn that two of the engine ratings for the new Stralis XP (the 480bhp and the 570bhp, from Cursor 11 and 13) use a 'Smart EGR' system. Gianalberto Lupi,

head of Iveco's heavy business line, insists this is not a retrograde step. "Smart EGR is purely employed for fuel economy, and not for emissions control," he explained. "It allows an earlier start to injection." Indeed, all the advantages of Hi-SCR have been retained. "With just 8% EGR, there is no impact on radiator size, no extra maintenance, no weight increase and no parked regeneration."

Iveco views this tweak as the next step, not a backwards one. Other engine modifications include: new injectors, turbocharger, pistons and rings (with lower friction); lower viscosity oils; an anti-idling function; and smart auxiliaries, such as the alternator, air compressor and steering pump, all of which are now on part-time working. More robust crankcase construction also allows a 100 rpm engine down-speeding for peak torque at cruise speeds. They're all developments seen elsewhere, but there's nothing missing. It's a complete job well up to benchmark.

Moving on to tyres, Iveco has chosen Michelin's newest X Line Energy as OE fitment – claimed to be the first

to receive an 'AAA' rating for rolling resistance. Iveco feels this complements its driveline efforts. Fleet managers can also take a tyre management contract created by Michelin Solutions as part of Iveco's 'TCO2 Live' package, which brings together R&M, driver training and an uptime guarantee.

As with all packages, this will need inspection and tailoring, but the range of provision is there to work on. Certainly, though, the new tyres contributed to noticeably low noise levels on test. With a hushed environment usually only expected from top brands, noise was relegated to wind around the mirror housings on a blustery day. **TE**