

# The EYES have it

As pressure builds to mitigate front nearside blind spots on heavy truck cabs, Brian Weatherley examines lower door glass panel conversions increasingly offered by truck makers and dealers

There's no doubt that TfL's CLOCS (Construction and Logistics Cycle Safety Scheme) has played a major part in kick-starting the quest to help HGV drivers spot cyclists and other vulnerable road users. Yet, for manufacturers and operators alike, one of the biggest issues remains the absence of a standard for direct vision.

It's not just about London either. Without a national standard, the industry could end up with a plethora of conflicting safety requirements.

For DAF Trucks' UK managing director Ray Ashworth, a non-prescriptive approach is desirable. "Certain cities have views on what we build. What I'd like to say to them is: 'Give us the problem and let us solve it.'" However, if TfL does go prescriptive? "Then my wish would be to run with that TfL standard countrywide," he answers.

Late last year TfL commissioned TRL (Transport Research Laboratory) to create that missing standard. Indeed, following discussions to determine how to quantify vision, TRL expects to deliver a draft in time for the next CLOCS conference, on 23 March 2016 at ExCel London.

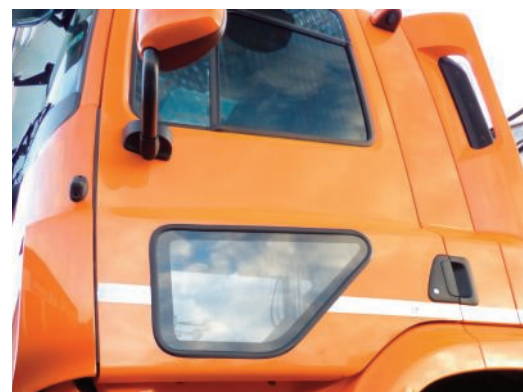
Documents seen by this journal suggest the standard will use a grading system for product benchmarking. TRL is

currently consulting with OEMs and operators. In the meantime, several manufacturers and dealers are already offering lower window glass conversions in truck nearside doors to help drivers spot cyclists and pedestrians in the front nearside blind spot area.

DAF offers two for the CF, the first from specialist converter Cheshire-based Astra Vehicle Technologies. AVT's Astra Clearview costs £1,180 and employs an 'e' marked toughened safety glass pane, fully bonded and rubber sealed into the lower door. To aid demisting, the existing window and door card are vented, while the secondary internal glass is rubber seal mounted for maintenance access. Unlike some conversions, Clearview still allows the main window to be lowered. Together with Autoglaze and selected DAF dealers, AVT is now providing nationwide support services.

## LOWERING WINDOW

Elsewhere, Ashford, Kent-based DAF dealer Channel Commercials has developed its own conversion. It has already supplied 10 CF tippers with modified nearside doors to Brett Construction. Fleet sales director Russell Ades reports: "We've moved beyond the pilot and are beginning to market it. The biggest opportunity is in retrofits."



Channel's conversion involves fixing an OE spec glass panel into the CF's lower door, using a rubber seal. "We thought about bonding it, but we went for a heavy-duty glass rubber surround, not least to ensure no water ingress," explains Ades. On the inside, the lower glass pane has a bespoke GRP surround that fits within the CF door trim panel, retaining the speaker and door pocket.

Although the main window is fixed, Ades says it could be lowered, as per the Astra conversion. "We've got the base option and can build on it." Do drivers need to lower the nearside window? "As trucks are increasingly equipped with air con and climate control, there's little need," responds Ades. Price for the Channel conversion is £1,200 and the dealer also has fitments for the LF.



For Iveco UK's technical director and former Ford Trucks engineer Martin Flach, there's a certain irony here. More than 30 years ago, Ford's Cargo cab launched with deep glass sections on both door leading edges – and was dismissed by many as a gimmick. While the same feature appeared on first-generation Eurocargo/Eurotech cab doors, the glass was ultimately blacked-out with a dot matrix, since carried over to the New Eurocargo.

However, Flach reports: "If we get a request for a lower glazed panel, we'll look at it." That said, he cautions: "They're not exclusively the answer." Flach wants a C&U-style standard for OEMs – in much the same way as that applied to mirrors.

"Within the European Commission, people spend a lot of time creating clear

legislation. That is what's needed: it's all just a bit too vague." And he adds that any standard will also need to take into account variations in vision caused by cab heights and wheel sizes. "What you'd need for a 7.5-tonner with 17.5in wheels would be quite different to an 8x4 with 22.5in wheels."

Meanwhile, MAN also now offers extra lower glass as a retrofit on its TGX/S heavies, TGM middleweights and TGL lights, all of which share the same door panel. The OEM has already supplied several to London-based operators. However, MAN's Swindon engineering team is now developing a larger Mk II glass panel, likely to be sourced and fitted by an aftermarket specialist. While the Mk I allowed for a limited drop of the main window, Mk II will have a fixed window. Prices are on application.

### TOP SCORE

Moving on, with its Econic low-entry chassis scoring highest on nearside vision, Mercedes-Benz is not offering door conversions on its Arocs, Antos or Actros chassis. "We've looked at them ... [but] with a lot of operators wanting direct vision, Econic is ideal."

What about Renault? You may recall the firm's extended lower glass on its original Premium nearside door. That factory-fit option is continued on the D distribution cab from 10–26 tonnes, priced at £350. A retrofit mod is also available on its C and K construction multi-wheelers. On the D cab, the standard one-piece main window is replaced by a twin-pane laterally opening unit. On the C and K conversion, the main window is fixed.

As for Scania, for the moment it relies on dealer conversions rather than on-line options. However, word from the Swedes is watch this space. Mods are currently offered by Midlands-based dealership Keltruck and Scania South East, the wholly-owned dealer group.

Keltruck's Cycle Safety Door costs £995 ex-VAT and takes two to three days to fit at its West Bromwich bodyshop. The exterior toughened safety glass is bonded to the door (there's also an interior pane) and has a rubber surround. The modification, which fits "all models of Scania", is completed by a neat revised interior door panel. DHL's Scania Urban concept vehicle, shown at the last CLOCS conference (2015), used this Keltruck conversion.

Scania South East's equivalent CLOCS-compliant safety window, for P and R cabs, costs more at £1,295. Its Mk I version featured two halves and a bespoke outer door skin with new interior panel featuring a European standard safety glass pane bonded between. However, Mk II uses the standard factory outer door skin with the glass bonded directly to the door. The existing inner door panel is retained as well. Kent-based Ardula has a Mk II fitted to one of its new eight-wheelers.

Finally, Volvo offers a window retrofit on its FM for £1,500, through its dealer network. The conversion involves cutting a hole in the passenger door in situ before adding an interior stiffener frame behind the door skin. The lower glass pane is then bonded directly to the door for a flush fit before fixing the main door glass. FL and FE models can also take factory-fitted lower glass for £350.

So, with TRL's direct vision standard waiting in the wings, what should operators and manufacturers expect? "There's a real need to quantify the benefits of these lower door window apertures," advises Dr Steve Summerskill, senior lecturer in product and industrial design at Loughborough University, who conducted last year's TFL cab vision scoping project. However, other gaps in vision need attention, too, he warns. "Extensive blind spots caused by the A-pillar and mirror mountings are not solved by lower door windows." **TE**