

The logo for ORBCOMM, featuring the company name in a bold, white, sans-serif font on a red rectangular background. A small globe icon is integrated into the letter 'O'.

CONNECTING THE
WORLD'S ASSETS

A network diagram consisting of several grey dots connected by thin grey lines, representing a global communication network.

E-BOOK



Distracted Driving: How Can Fleets Help Truck Drivers?

We are living in an age of distraction. How do we maintain communications with drivers without diverting their attention from the road?

Distraction is a tangible risk on UK and Irish roads. UK road accident data reports that in 2015, 'distraction in vehicle' contributed to 2,920 accidents and 'distraction outside vehicle' contributed to a further 1,526 accidents.¹

Distractions driving: How can fleets help truck drivers?

In 2016, out of 1,445 fatal crashes, "failure to look" accounted for 397 instances and officials found a further 140 incidences of contributory factors such as in-vehicle distractions and phone use.²

Figures released by the police forces in the UK say more than 200 drivers per day were caught using a device in the four weeks after new penalties were introduced in 2017.

The risk involved in distracted driving is clearly magnified when driving a larger vehicle such as a Heavy Goods Vehicle (HGVs). In 2016, of the 5,819 accidents involving HGVs on British Roads, 273 were fatalities.³

In 2016, a lorry driver killed a woman and three children when his vehicle ran into their stationary car in Berkshire. The driver had been scrolling through

music on a mobile phone at the time of the crash.⁴ This is one of the worst in a long line of reported cases of distracted driving.

Research from the US says drivers of commercial vehicles are 23.2 times more likely to be involved in an accident when texting than those who are not.⁵ Distraction includes impairment by alcohol or drugs, fatigue, defective eyesight, a driver using a mobile phone, distraction in the vehicle or outside the vehicle.⁶

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Mobile phone usage is a factor in two deaths on the roads every month.⁷
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However, there is good news on the horizon. Almost all distractions are avoidable. With the help of knowledge, training, guidelines and distraction-free technology, lorry drivers are in a better position to stay on the road without succumbing to distractions.



What is distracted driving?

Distracted driving is when a driver pays attention to a second activity while driving. Distraction impacts areas like speed, ability to spot hazards, reaction times and hands-on-the-wheel.

Distraction includes a broad range of activities that might not, at first, sound like a distraction. Distracted driving includes:

- talking or texting on a phone
- eating and drinking
- smoking
- completing paperwork
- watching a video
- changing or tapping on a radio or GPS systems
- Even a conversation with a passenger is classed as a distraction

Driving requires a person's full attention. By turning to a phone, a snack or to a paper map, drivers automatically increase the risk of having an accident.

In such cases, drivers can be charged with "failing to have proper control of their vehicle."

The Royal Society for the Prevention of Accidents (ROSPA)

factsheet on driver distraction⁸ says there are four types:

• **Visual distraction:**

is when a driver must look away from the road to get information, e.g. looking at something outside of the vehicle.

• **Cognitive distraction:**

is defined as a task where the mental requirement involves something other than thinking about driving, e.g. smoking.

• **Physical distraction:**

refers to a time when a driver must take their hands off the steering wheel to touch a device, e.g. using a mobile phone.

• **Auditory distraction:**

refers to a sound that prevents the driver from making the best use of their hearing, e.g. talking on the phone.



Texting is the most alarming distraction. Drivers are four times more likely to crash, injuring or killing themselves and/or other people.⁹

Consequences of distracted driving for HGV drivers

The law around driving with a mobile phone is clear for all drivers on our roads. In the UK, it is illegal to use a handheld mobile phone while driving. You must have hands-free access, such as a Bluetooth headset, a windscreen mount or built-in sat nav. In Ireland, it is illegal to hold or cradle a hand-held mobile phone while driving.

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If professional HGV drivers are found to be using a handheld phone while driving, they will get six penalty points and can face a fine up to £2,500.

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Distracted driving includes any activity that involves dialling a number, writing a text or accessing the internet or other applications.¹⁰ The police can stop you in the UK if they think you are not in control of the vehicle. The law applies even if you are stopped at traffic lights or queueing in traffic.

For car drivers without a “full view of the road and traffic ahead” or without “proper control of the vehicle, the penalty is three points.¹¹ If professional HGV drivers are found to be using a handheld phone while driving, they will get six penalty points and can face a fine up to £2,500, compared to a maximum fine of £1000 for other motorists.



HGV drivers caught twice using a mobile fine or acquiring 12 points on their licence will appear before the magistrates' courts. Drivers can be referred to the traffic commissioner and could face a driving suspension of up to four weeks.¹²

Operators are also subject to action by the Traffic Commissioner in the event of one of their drivers caught using a handheld device behind the wheel.

“Our message is simple and clear: Do not get distracted by your mobile phone while driving. It may seem innocent, but holding and using your phone at the wheel risks serious injury and even death to yourself and other road users.”

- Chris Grayling, UK Transport Secretary

What can drivers do?

Most drivers are professionals and very proud of the trucking profession they pursue. That does not mean there isn't a time or space where the mind can wander, or an urgent message takes attention off the road for a second.

Distraction can affect even the most experienced truck driver. For lorry drivers, distraction can include a range of things; phone or GPS use while driving, fatigue, lack of sleep, inattention, or simply a wandering mind.

Distractions are compounded when other factors, like fatigue, weather, and other road users are added; the challenges multiply.

However, drivers can minimise distractions by taking the following precautions:

Get the set-up right: First thing's first, to ensure driver and road safety, drivers who use a mobile phone should only use a hands-free phone located in close proximity – so that they can reach it while restrained by properly installed and adjusted seat belts.

Plan the route: Drivers should ensure they know where they are going before setting out. Add destination points to the GPS before leaving and use voice settings to ensure there is no need to tap a screen while driving.

Focus attention: When a driver is 'looking', they might not actually be 'seeing'. When a driver puts their attention on a task other than driving, they can begin to suffer from 'inattentive blindness.'

Inattentive blindness refers to when we fail to read situations as they are happening right in front of our eyes.¹³

Fatigue reduction: Use breaks wisely. Take one when fatigue suggests it is required and do not take risks with attention.

Talk to the boss: It is possible to mitigate against distracted driving at a company level, by requesting distraction-free technology in the cab. Talk with the driver manager about policies surrounding distracted driving.

After interacting with an information system such as a phone or other device, it can take nearly half a minute to regain full attention.¹⁴



What can fleets do?

Distracted driving is not simply a safety issue. Driver distraction can affect all areas of the business, from insurance costs as a direct result of accidents to miles per gallon (MPG).

Here are some of the best ways fleets are addressing driver distraction today:

Choose devices that prevent distraction: Examine existing technology to assess the impact of technology deployment inside the truck which may exacerbate truck driver distraction. Choose technology which has features that actively reduce distraction.

Force a mobile phone block:

Installing a mobile-phone blocker will ensure drivers will not be able to use a phone while driving. This strictly enforces the Department for Transport (DfT) regulations on a driver.

Design training around reducing distraction:

Incorporate driver distraction reduction in training programmes. Encourage your entire fleet of drivers to practice safe driving and to think about everyone else around them.

Truck-specific navigation: Reduce driver distraction with a truck-specific navigation. GPS designed for trucks reduces anxiety for the driver. Truck-specific navigation gives drivers the confidence that they do not need to worry about any surprises that may be on the road ahead, like low clearances or changing speed limits.

Implement action policies: Introducing distraction-free policies will help drivers stick to guidelines. Ensure distracted driving is included in the driving policy in writing. Prohibit phone calls to drivers from dispatchers while they are driving; their duty status should be easily seen through the telematics system.

To minimise the risk of distracted driving, fleet managers can look to policy documents and get buy-in from drivers. The policy can outline the company's stance on device usage while driving, how it will be monitored and enforced.

Give rewards based on non-distracted driving:

Fleets with a culture of driving without distractions make for a safer, distraction-free environment. Using rewards or gamification encourages and incentivises drivers to stay focused on the road and perform better than their peers.



What can ORBCOMM do?

With years of experience in the trucking industry, ORBCOMM is aware of the challenges of communicating with drivers without taking their focus from the road ahead.

That is the reason ORBCOMM's user-friendly technology is built to proactively combat driver distraction. Through a simplified user interface and smart information restrictions, it ensures the driver's eyes stay on the road and hands stay on the wheel.

The system caters for automatic arrival/departure notifications, truck-specific turn-by-turn navigation to the destination, pop-up forms based on arrival/departure or driver input, spoken instructions based on proximity to destination, POD docket scanning, signature capture, auto-form filling, and more.

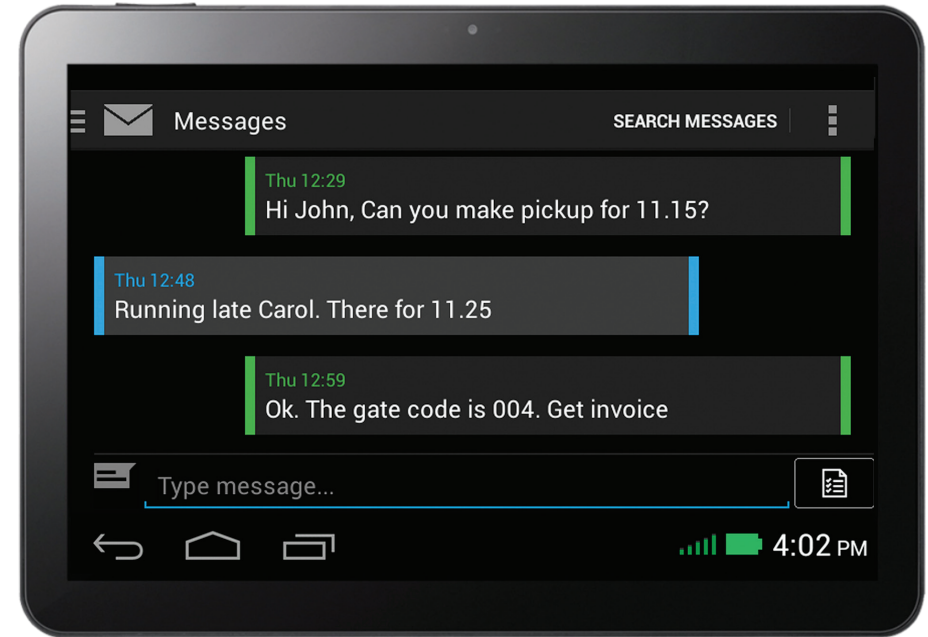
Two driver modes to avoid distraction: Driving requires full attention on the road. When stopped, there is a lot more opportunity to perform other tasks safely. That's why ORBCOMM's technology utilises two separate displays depending on driving activity:

- **Drive time:** The device is locked when the wheel speed is greater than zero. This screen only displays navigation and information on jobs and hours. There is very limited functionality; for example, you can tap maps to enlarge them or tap to go to the home screen only.
- **Non-drive time:** Drivers have access to all applications on the home screen layout, which includes all the information the fleet wishes to display.

Messaging made better. All messages use text-to-speech functionality (TTS). Messages are automatically read aloud to the driver. If a message is marked as urgent by a dispatcher, it will be repeated in the cab. The driver must pull over, get out of drive time and acknowledge it. Vehicles and drivers can be tagged and categorised, and messages can be delivered in groups to the drivers who need them.

Distraction-free navigation: The in-cab navigation integrates with truck-specific navigation providers including Garmin®, TomTom® or ALK Co-Pilot®. Truck-specific navigation provides optimal routes based on vehicle profiles according to height, weight, and length. Like a GPS for a car, these maps can read directions aloud, so there is no need to tap a screen.

With lifetime updates, every map is up-to-date. There is no need to call dispatch for directions or spend time poring over paper maps.



What can ORBCOMM do?

Automatic job updates: Automated workflows ensure a driver isn't distracted by where their next stop will be. The automatic workflows display only the forms and other information the driver requires to complete their job at the right time.

Using the customisable workflow engine and forms builder, dispatchers can deliver every piece of paperwork directly to the driver, who doesn't need to lift a finger from the wheel.

Distraction-free colors: The colour palette for the in-cab display is designed to actively reduce distraction. Grey and black were chosen specifically and are especially important for night time driving to reduce glare.

For alerts, there are two colours: red and amber. These are used only at the most important times such as amber when there is less than one hour of drive time left or red if there is no drive time left.

Red also stands for a "failure." Depending on the configuration of each fleet, a red alert could refer to a mechanical failure. Red can also show if there is a temperature fail in a reefer. There is no change in colour unless there is a fault.



Sources

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Our Customers



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ORBCOMM (Nasdaq: ORBC) is a global leader and innovator in the industrial Internet of Things, providing solutions that connect businesses to their assets to deliver increased visibility and operational efficiency. The company offers a broad set of asset monitoring and control solutions, including seamless satellite and cellular connectivity, unique hardware and powerful applications, all backed by end-to-end customer support, from installation to deployment to customer care. ORBCOMM has a diverse customer base including premier OEMs, solutions customers and channel partners spanning transportation, supply chain, warehousing and inventory, heavy equipment, maritime, natural resources, and government. For more information, visit www.orbcomm.com.

