Safety Transport Information

Prepared by WG-17 Transport Safety

Safety Info TS 12/20

In Vehicle Distraction Management

Introduction

Driving a vehicle safely in a fast moving and dynamic environment takes a large amount of concentration by the driver. Anything that distracts the driver to lose their concentration on the road ahead, even for just a few seconds, can have disastrous consequences that puts their life and those of the public at risk. Drivers need to be aware that relatively common actions can cause a distraction and lead to an incident while management need policies, procedures and training in place to recognise these risks and mitigate them.

Scope

This Safety Information provides an overview of the types of potential in vehicle distractions and steps that can be taken to reduce them to improve the transport safety performance of gas company and their contractors' delivery vehicles, for the transportation of industrial and medical gases.

This TSI focuses on distractions in the vehicle that are within the driver's direct control. Distractions outside the vehicle that takes the driver's attention away from the road ahead, for example an incident on the other side of the road, should not be forgotten.

Definitions

Distraction – something that prevents someone from concentrating on a task.

In-vehicle communications device – any device that facilitates two-way communication.

OBC – onboard computer.

Sat-Nav – satellite navigation.

Entertainment system – includes radios and digital media.

Learning more about vehicle data management

1. Do your drivers recognise which of their actions could be distracting them from driving?
2. Do you train your drivers in the different types of distraction?
3. Do you train your drivers in recognising which actions could be distracting?
4. Do you communicate the possible fatal consequences of being distracted?
5. Do you review your practices ensuring they do not increase the risk of the driver being distracted?
6. Do you have policies in place to ensure equipment is not used while driving that could be distracting?

If the answer to any of the above questions is 'no', then you should consider taking action!

THIS TRANSPORT SAFETY INFORMATION GIVES GUIDANCE ON THE TYPES OF DISTRACTION AND ACTIONS THAT WILL HELP TO IMPROVE SAFETY IN ROAD TRANSPORT.

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Categories of distractions

There are 3 main categories of distraction:

Visual – A visual distraction is one that makes the driver take their eyes off the road ahead

Manual or mechanical – A manual distraction is one that makes the driver take their hands off the steering wheel

Cognitive – A cognitive distraction is anything that takes the drivers mind off driving

Any action that a driver takes that can lead to one of these types of distraction increases the risk of being involved in an incident.

A distraction does not always fall solely into one of these categories and can be a combination of two or more. For example, texting while driving means the driver has to look away from the road, take their hand off the wheel to operate the phone and concentrate on reading or keying the message. Therefore, texting while driving means the driver experiences visual, manual and cognitive distraction. When an act results in multiple types of distraction, it significantly increases the risk and the likelihood that an incident will occur.

Distractions can significantly affect:

- visual search patterns;
- hazard perceptions;
- reaction times;
- decision making processes;
- ability to maintain speed, throttle control; and
- road positioning.

Management responsibilities

Management has the responsibility to mitigate the risk of distraction wherever possible and communicate to the driver population the potential of an incident from the remaining risk. While certain actions are deemed illegal in many geographies, for example, use of handheld mobile phones, not all distraction risks are specifically covered. Therefore, gases companies cannot solely rely on legal definitions to reduce the risk of distractions within their distribution fleets.

Management should review their work processes to determine and understand the associated risks. Policies that take into account the guidance in this publication should be put in place to ensure that steps are taken to mitigate and clearly communicate to their drivers the potential risks and everyday actions that can be taken to reduce the potential of having a serious incident.

Management should consider the use of technology that helps detect and avoid distraction or mitigate consequences, see EIGA Info TS 09 *Vehicle Specification and Maintenance* [1].[1]

Once distractions risks have been reviewed communicated and drivers trained, management should regularly follow up, check understanding and reinforce the importance of compliance. When incidents occur, the possibility of distraction should be actively investigated and when instances of deliberate non-compliance are found then disciplinary action should be considered.

Some of the areas that should be considered for potential distraction risks and training are summarised below.

Maintaining visibility

Drivers should maintain full forward visibility and be able to see all mirrors through the side windows at all times. Any item that impedes visibility should not be placed in the windscreen, windows or dashboard. Conditions or items that can cause a distraction include:

- stickers/posters
- documentation
- electronic equipment such as fans
- decorative lights
- flags
- ornaments of any type
- fogged/iced windscreen

Items that are required to be displayed or fitted on the windscreen such as permits, toll transponders and cameras should be in locations that do not restrict visibility such as at the top of the windscreen, above the driver's eye line.

In-vehicle communications

An in-vehicle communication device includes any mobile phone, smart phone, some OBCs, CB radios and any other two-way device including, blue-tooth connected devices that can send and receive messages. Research shows that when operating a vehicle, the use of these devices, including hands free devices, are a major distraction which can significantly increase the risk of an incident [2, 3].

Management should ensure that the work process and daily practices do not encourage unnecessary and excessive communication to the driver. It should be considered that the in-vehicle equipment reverts to being disabled while the vehicle is in motion and/or work practices require the device to be switch off or set to silence operation.

A best practice is to ensure the vehicle is legally and safely parked before any communications are undertaken. In an emergency, drivers should stop and safely park but there may be specific situations, for example a potential hijack, where the driver will need to judge the individual circumstances.

Satellite navigation

Sat-Navs can greatly assist drivers but if used poorly they can create a distraction. Drivers need to understand how to use them safely:

- Only use Sat-Navs with software that is appropriate for the type of vehicle and goods carried, do not use non-heavy-goods-vehicle Sat-Navs for commercial vehicles. The use of Sat-Nav functionality on a smart phone is often not appropriate.

[1] References are shown by bracketed numbers and are listed in order of appearance in the reference section.

- All journeys shall be planned in advance and all inputs completed before starting the journey.
- The unit shall be positioned safely, not obscuring vision (for example in the wiper sweep areas) and away from any airbags.
- If it is believed incorrect instructions are being given or alterations are necessary, the driver shall stop in a safe location to reprogram and NOT attempt this whilst the vehicle is moving.

Data entry equipment

Many companies have data entry screens, either fixed or mobile, located in the vehicle. The use of these should adopt the same principles of safety as those used with Sat-Navs, as entering data whilst driving is a serious distraction.

The reading of maps/directions/route plans

Drivers have little control of the vehicle if they are trying to read directions or follow a map whilst driving. Therefore, before they commence an unfamiliar journey they should:

- read and understand any provided information;
- make themselves aware of the route; and
- plan regular stops to assess progress, if necessary.

Entertainment systems

Operating entertainment systems such as a radio, CD players, portable music devices whilst driving requires the driver to take a hand off the steering wheel and their eyes off the road. Operating them is a distraction and should be avoided where possible. If used, these systems should be set before commencing the journey and changed when the vehicle is stopped.

The use of head/earphones whist driving prevents the hearing of traffic sounds and warnings. This also impairs driving performance and therefore should not be allowed.

Consumption of refreshments

There have been many distraction instances in the gas companies and contractors caused by the spilling of hot drinks, opening containers/cans/wrappings and choking whilst driving. The greatest risk is often the act of reaching for or accessing refreshments. Therefore, drivers should:

- not handle or consume any food or drink that can cause a loss of control; and
- plan journeys to accommodate the time required to consume refreshments whilst the vehicle is safely parked.

If circumstances dictate that refreshments should be consumed, for example, cold water to prevent dehydration, the risk should be evaluated carefully, with consideration given to the container/packaging (size, opening etc) and location.

Smoking and electronic cigarettes

Smoking whilst driving can be a source of distraction. There have been many incidents of cigarettes being dropped, inflicting burns and/or causing fires which have led to serious incidents.

Electronic cigarettes can also be a source of distraction. The manufactures also warn that the heating element could be a source of ignition and therefore also a fire risk.

Therefore, drivers should:

- not smoke or use electronic cigarettes whilst driving or carried as a passenger in a commercial vehicle, either moving or stationary;
- not smoke or use electronic cigarettes in the vicinity of the vehicles; and
- plan journeys to accommodate their smoking in safe areas.

Other distractions:

There are various other things that can contribute to driver distraction. These include:

- stress and wellbeing of the driver;
- fatigue (see EIGA Info 12 *Managing Driver Fatigue* [3]);
- poor ergonomic layout of equipment;
- rubbish in cabin;
- insects;
- extremes of temperature;
- new or unfamiliar equipment; or
- passengers (however they present less risk than hand-free devices [4]);

These items should be considered and mitigated where possible before starting journeys.

Conclusions

In vehicle distractions are a major root cause of many serious road incidents experienced by gas companies and contractors. Unfortunately, many often perceived minor actions can lead to the driver being distracted. The over-riding principle is that drivers should:

- always be in control of their vehicle;
- always retain at least one hand on the wheel; and
- not undertake any actions that could contribute to loss of control.

Drivers need to be aware of any outstanding distraction risks, the possible consequence and the actions they can take to prevent a distraction incident taking place. Management should consider the possibility of distraction in the actions they ask and expect the driver to undertake, devise working practices and implement equipment that will minimise the risk. Any outstanding risks should be communicated, compliance monitored and reinforced.

Where deliberate actions have been taken by the driver or other transport function personnel that have led to an incident or put themselves or the public at risk, then disciplinary action should be considered.

References

Unless otherwise specified, the latest edition shall apply.

[1] EIGA Info TS 09, *Vehicle Specification and Maintenance*, www.eiga.eu.

[2] https://www.rospa.com/media/documents/road-safety/mobile-phones-and-driving-factsheet.pdf.

[3] EIGA Info 12, *Managing Driver Fatigue*, www.eiga.eu.

[4] *Passenger and Cell-Phone Conversations in Simulated Driving* (Drews, Monisha Pasupathi, Strayer), Proceedings of the Human Factors and Ergonomics Society 48th Annual Meeting, 2004, www.hfes.org.

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