05

TRAVEL FOR BUSINESS

Organisation and compliance with breaks for resting

5.1 | **Measuring accident statistics**

5.2 | **Recording commuting and work-related travel**

5.3 | **Setting up a mobility plan that includes public transport**

5.4 | **Carsharing**

5.5 | **Tiredness and the effect of stress on driving**

CAMPAIGN ROAD SAFETY AT WORK

VISION ZERO RISKS ACCIDENTS DEATHS

AAA.lu ASSOCIATION D'ASSURANCE ACCIDENT

UEL

SÉCURITÉ ROUTIÈRE LUXEMBOURG

CFC CENTRE DE FORMATION POUR CONDUCTEURS

LE GOUVERNEMENT DU GRAND-DUCHÉ DE LUXEMBOURG
Ministère de la Mobilité et des Travaux publics

Measuring accident statistics

Before setting up a road safety action and prevention plan, road risk within the company must clearly be identified. For this, the company needs to measure accident statistics, record journeys and analyse how they are organised.

Accident analysis involves recording all accidents that occur during travel for work and when commuting. It is important to specify whether these road accidents resulted in personal injury or only material damage. This analysis aims at collecting data that is often scattered across departments within the company and at comparing them over time.

Here is an example of a table that can be used for starting such analysis:

	Year n-2	Year n-1	Year n
Number of workplace/commuting accidents reports submitted to AAA			
Number of commuting accidents			
Number of work-related traffic accidents			
Total number of days lost due to work-related traffic accidents			

To complete accident analysis, risk factors associated with driving situations need to be identified. Investigating the causes of accidents will help complete the road accident prevention plan. Such data collection will include, for example:

- The number of people and vehicles involved.
- The location of the accident.
- The manoeuvre that caused the accident.
- The weather conditions.
- The state of the vehicle.

Recording commuting and work-related accidents

In a first step, vehicles used for business trips must be recorded and their mileage estimated.
The average annual mileage per employee, which results from this analysis, is an indicator of employees' degree of exposure to occupational road traffic risk.

Position	Type of vehicle *	Average annual mileage per vehicle of the same type *	Average annual mileage per employee in this position
Technician (operates multiple sites)	station wagon	40,000 km/year	4,000 km/year
Site manager	construction van	15,000 km/year	15,000 km/year
Worker (passenger in the site manager's van)	-	-	15,000 km/year
Sales representative (1 car for 2 sales representatives)	city car	20,000 km/year	10,000 km/year

* This information is usually recorded in the vehicle logbook, as shown in chapter 4.5.

To record commuting, which also includes trips for lunch breaks, the company should ask employees, e.g. via a form, how they travel to and from work. The form can be detailed and include questions regarding travel times and schedules as well as specific means of transport used. It can then e.g. be used to measure employees' interest in carsharing.

Employee	Postcode/place of residence (home address)	Distance between home and work	Usual means of transport
XY	Bertrange	10 km	By car exclusively
XX	Luxembourg	4 km	By bus no. (...) and by bike once a week
YY	Pétange	30 km	By car from home to (...) station, then by train
ZZ	Diekirch	40 km	By car three times a week and twice by bus

Setting up a mobility plan that includes public transport

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Analysis of accident statistics and recording travel patterns help set up a coherent mobility plan which aims at reducing and optimising travel while making it safer.

So what measures can be taken to reduce occupational risk associated with travel?

1. Avoid travel → eliminate risk (teleworking, videoconferencing)
2. Reduce travel → reduce exposure to risk (travel organisation and route planning)
3. Use safer means of transport → minimise risk (public transport)

When managing occupational traffic risk, avoiding journeys obviously eliminates that risk, whereas reducing the number of kilometres travelled through better organisation reduces exposure to that risk.

When comparing the safety of various means of land transport with the number of fatalities per 1 billion kilometres travelled, buses are approximately 15 times safer and trains are up to 100 times safer than cars. This simple fact shows how public transport can substantially contribute to increasing travel safety.

15 times safer

100 times safer

To develop a corporate mobility plan, please visit
www.mconcept.lu

Carsharing

Carsharing offers clear advantages in terms of road safety in addition to its obvious economic, environmental and social benefits.

First and foremost, carsharing reduces the number of cars on the roads and helps reduce traffic density. It contributes to a smoother, less stressful traffic flow due to less risk-taking and potentially fewer road accidents.

With drowsiness and tiredness increasing the risk of accidents eightfold, carsharing can be an effective way to reduce the risk of falling asleep at the wheel. Driving can be shared among passengers or the wheel can be entrusted to the most rested person. Studies show that most people find that having company in the car helps them stay fully alert.

Carsharing also means transporting passengers safely. Drivers take fewer risks on average when they have passengers than when they travel alone. In risk psychology, the fear of being judged by colleagues encourages drivers to adopt a smooth driving style, compliant with the Highway Code. The liberties that drivers sometimes take when driving alone are greatly reduced when they travel with passengers.

Ultimately, it seems logical that two persons sitting in the front would be more alert to dangerous and unexpected events, such as a person unexpectantly crossing the road or a car braking suddenly. A passenger's warning can save valuable milliseconds of reaction time in such situations.

So do choose a reliable and responsible carsharer!

The sign above indicates a lane recommended for carsharers. Carsharing drivers are not required to use this lane. The number corresponds to the minimum number of occupants required for a vehicle to be considered doing carsharing. In this specific case, the vehicle must travel with at least 2 persons.

Tiredness and the effects of stress on driving

Tiredness

Tiredness is the cause of one in three accidents on motorways, it must therefore be taken seriously.

According to international statistics, between 20% and 30% of work-related traffic accidents are caused by drowsiness. Lack of sleep, circadian rhythm disorders linked to night work, and daytime sleepiness associated with sleep apnoea syndrome are among the main causes of tiredness. Tiredness is a major cause of accidents, especially on long, monotonous journeys that do not require the driver's sustained attention.

A few tips:

- Make sure you sleep well (no noise, no lights, well-ventilated room).
- Take a light meal and drink plenty of water before you set off.
- Ensure that ventilation is good and temperature comfortable inside the car (it should not be too hot or too cold).
- Take active breaks regularly, at least every 2 hours (walk around, stretch).
- At the slightest sign of drowsiness, find a safe place to rest.

Stress

What is stress?

According to the World Health Organization (WHO), "stress is a state of worry or mental tension caused by a difficult situation. Stress is a natural human response that prompts us to address challenges and threats in our lives. Everyone experiences stress to some degree. The way we respond to stress, however, makes a big difference to our overall well-being."

Can stress at work have a negative effect on driving?

While it is hard to establish a clear cause-and-effect relationship between stressors and road accidents, it is undeniable that excessive stress while driving increases the risk of incidents or accidents because it directly affects the driver's behaviour and ability to process information.

Tiredness and the effects of stress on driving

What are the specific stress-generating factors associated with driving a vehicle?

Stress-generating factors are among others:

- Traffic conditions (density, rush hours, jams, roadworks, unclear traffic regulations, etc.).
- Weather conditions (aquaplaning, black ice, light and visibility conditions, extreme temperatures, wind and draughts).
- State and quality of the vehicle (seat adjustment, ergonomics of pedals and instruments, interior and exterior lighting, air conditioning).
- Noise pollution (engines, road surface, tyres, etc.).
- Distractions (music and conversations while driving, telephoning while driving, use of sat-nav).

By reorganising work, **following measures** can help reduce the risk of stress while driving:

- Good travel planning and optimised route allocation.
- Organising an intermediary between the customer and the driver (such as a dispatch service or a hotline). This can help overcome some difficulties related to delivery times or appointments.
- Preparing journeys while taking into account traffic density, weather conditions and route choice.
- Avoid distractions while driving (such as telephoning, engaging in complex and stressful conversations, etc.).