

Infrastructure safety:

Working towards Road Safety Vision Zero objective



Road safety is the first priority of the toll road operators. The social contract of motorway companies is to safeguard the safety of road users and their workers first and also to guarantee congestion-free traffic on their network.

Nevertheless, the ambition of the toll motorway sector is to reach the objective set by the European Commission and the United Nations: Vision Zero. The European Commission is currently implementing its EU Road Safety Policy Framework 2021-2030 - next steps towards 'Vision Zero', its long-term strategic goal to get close to zero fatalities and zero serious injuries on EU roads by 2050 (Vision Zero). As an intermediate step, its medium-term objective is to reduce deaths and serious injuries by 50 % by 2030, as already enshrined in the 2017 Valletta Declaration on Road Safety. To reach this target, the toll road operators represented in ASECAP already put in place, on a daily basis, actions aimed at ensuring high road safety standards for the users, therefore fulfilling the EU Road Safety Policy Framework 2021-2030 and implementing directly, at the same time, the EU Directive on road safety infrastructure management along the TEN-T road network.

The motorway infrastructures are designed and built with highest quality and technological standards which make them the safest infrastructure than any other road infrastructure. It requires significant investments and efforts made possible thank to the user/payer principle providing sustainable financing.

In 2023, the network under construction covers 1,452 Km, marking a significant increase from 1,207 Km in construction in 2022 (+ 20.31%) and 1,026 Km in construction in 2021 (+ 41.52%). Of the total network under construction in 2023, 110 Km are focused on widening projects.

Key actions performed by toll road operators to safeguard road safety

Road safety is the result of the efficient and close interaction between the infrastructure, the vehicle and the driver. A motorway is an infrastructure specially designed and built according to the highest quality and technological standards, in order to guarantee to all drivers 24/7 the best safety conditions, high levels of service and driving comfort in all weather conditions. To make the network safe, the maintenance and operation is done all year long by patrollers 24 hours a day and operators managing the traffic control centres in order to make appropriate road management decision and actions.

Toll road operators permanently act at four levels on their network to improve road safety and reduce the number of road casualties:

Appropriate accident prevention measures

Accident prevention remains the priority for toll road operators by taking appropriate measures & actions:

- Maintaining the road network with the highest possible standards of safety 365 days in all weather conditions.
- Ensuring an effective infrastructure safety management by carrying out regularly road safety audits and inspections.
- Providing real time traffic information: queues at toll stations, accidents, road works, weather and road conditions, travel time information and other relevant information for the driver.
- Deploying cooperative intelligent systems (C-ITS) to detect automatically incident and provide real-time traffic information.
- Ensuring the safe management and protection of traffic on work sites by early warning through

proper road signing and the use of different communication means (internet, traffic radio, sms, variable message signs), including the protection of road workers.

- Setting up of high-performance protective fences designed both to resist the impact and to absorb the energy.
- Fast removal of stopped vehicles and other possible dangers.
- Providing high quality service areas where drivers/users can rest.

Quick accident response

It is of utmost importance in order to save lives, reduce the impact of an accident and restore the

traffic conditions on the infrastructure. The key operations/procedures undertaken by toll road operators are:

- Prompt road patrols reaction: secure the accident area, clear & clean the road section affected.
- Activate the emergency response and cooperate with the fire brigades, police and emergency services.
- Early assistance and warning in case of accident.
- Prepare appropriate traffic management plan.

Collection and analysis of data accident

The objective is to investigate the main causes of accidents and then implement successful strategies with proper actions on the infrastructure and / or drivers' behaviours.



Awareness-raising campaigns: #(S)heWorks #ICare Campaign



There is an increasing number of accidents involving staff and people working on the network to make it safer (police, ambulance, towing...) due to distraction of drivers mainly. Road safety both for our customers and our staff is remaining our first priority. Ensuring the safety of staff working on motorways while every year patrol staff tragically lose their lives in the course of their duties is a top priority of road infrastructure operators. The goal of those campaigns

is to encourage drivers to have a responsible behaviour on the motorway, ASECAP members run awareness & education campaigns using different communication tools (videos, spots, books, games. The initiative has been launched in 2023. It is a one-day event bringing together patrol officers and truck drivers and aiming at drawing attention to the safety of motorway workers and the well-being of lorry drivers. ASECAP has endorsed this campaign, initially launched by Atlandes A63 motorway company in southern France and taking place every year on 20 June. This campaign has since been replicated in all ASECAP member countries either with onsite event or disseminated throughout social media.

C-ITS as a public goal to safeguard safe mobility and efficient traffic management

C-ITS – the cooperative intelligent transport systems – deployment and applications will play a crucial role in achieving the "Vision Zero" goal in road safety by establishing the vital direct link between vehicles



themselves, road infrastructure and other road users, delivering warnings to road workers and vehicles and helping to prevent accidents and to reduce their severity. Therefore, ASECAP members foresee that C-ITS has a great potential to further improve the health and safety for road users and workers on road works sites. Furthermore, with increasing penetration rates of cooperative connected and, in future, also automated vehicles, C-ITS will contribute enabling collaborative traffic management to reducing congestion and to creating a smooth traffic flow: it has a positive impact

on fuel consumption that is reduced and, hence, CO2 emissions and air pollution are reduced. ASECAP members are already investing massively to upgrade, adapt & modernize their motorways for full deployment of autonomous vehicles.

Traffic injuries and fatalities

One of the key indicators for assessing infrastructure safety is the number of injuries and fatalities in the network.

ASECAP infrastructure safety figures*

2021	2022	2023
17,182	18,874	19,729
466	526	483
511	624	543
66.6	67.6	68.4
1.8	1.9	1.7
2.0	2.3	1.9
258,097	279,051	288,364
	17,182 466 511 66.6 1.8 2.0	17,182 18,874 466 526 511 624 66.6 67.6 1.8 1.9 2.0 2.3

Scope

- (1) Personal injury rate: number of injuries per billion kms travelled on motorways
- (2) Fatal accident rate: number of fatal accidents per billion kms travelled on motorways
- (3) Fatality rate: number of fatalities per billion kms travelled on motorways

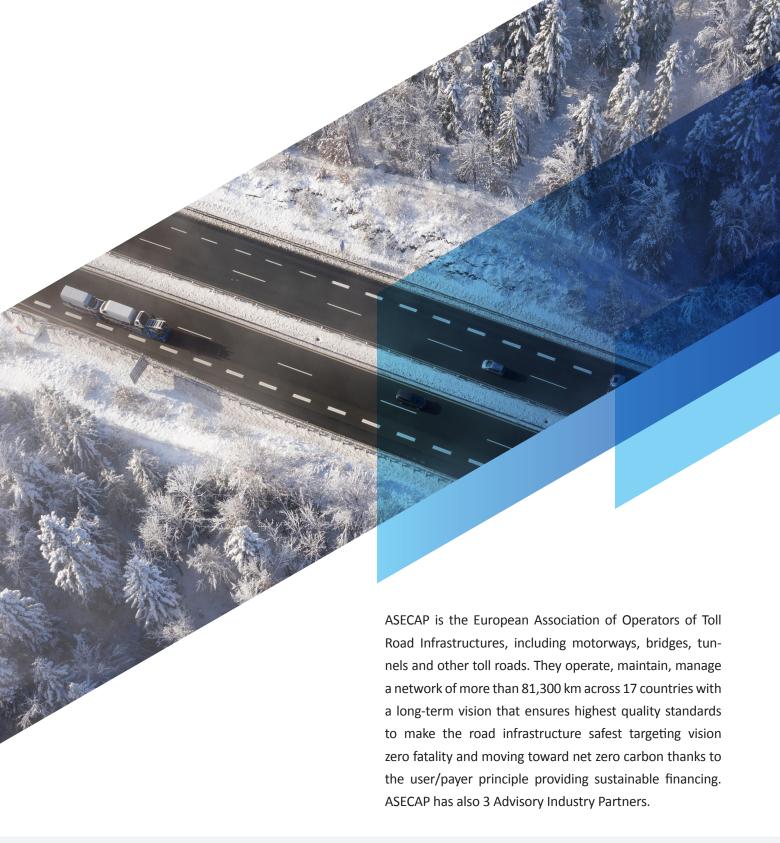
In 2023, the ASECAP EU members saw 19,729 injuries and 483 fatal accidents resulting in 543 fatalities. To evaluate safety trends over time, it is useful to examine rates such as the personal injury rate, fatal accident rate, and fatality rate, which account for the number of kilometres travelled on motorways and allow for meaningful comparisons across years.

In 2023, the personal injury rate was 68.4 injuries per billion kilometres driven on motorways, which is relatively stable compared to 67.6 in 2022. The fatal accident rate improved to 1.7 fatal accidents per billion kilometres driven on motorways in 2023, down



from 1.9 in 2022. The fatality rate also decreased from 2.3 fatalities per billion kilometres driven on motorways in 2022 to 1.9 in 2023. These reductions in rates suggest ongoing progress in enhancing road safety over time.

^{*} Data cover the ASECAP EU members network without Germany and Hungary.





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