

MOTOR

Driving forward

New technologies bring insurance opportunities and challenges



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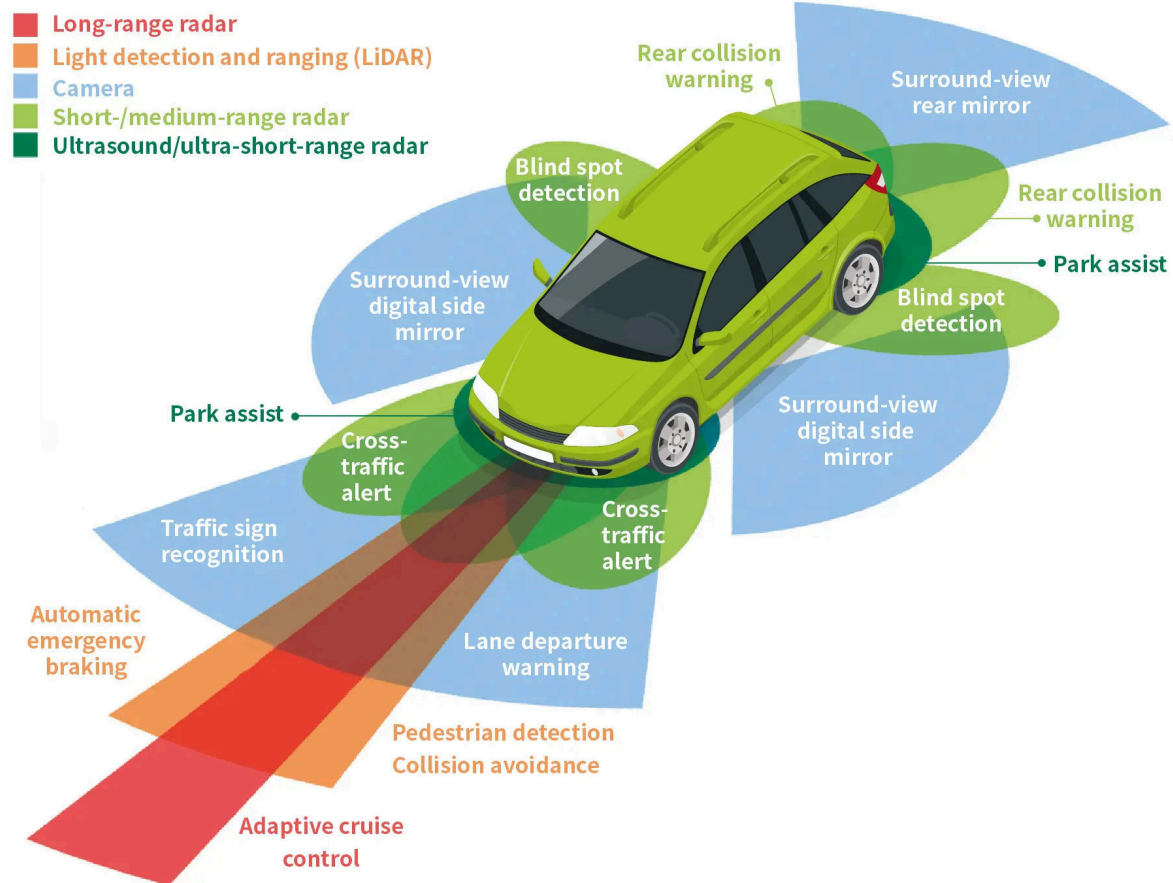
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Advanced driver-assistance systems (ADAS) are revolutionising road safety by enabling vehicles to detect and respond to potential hazards on the road. The technology operates on a network of sensors, cameras and radars that communicate with each other to anticipate the driver's next move and prevent accidents. ADAS are a critical step towards autonomous driving and have become an essential feature in modern cars. However, from an insurance perspective, there are several challenges associated with ADAS that must be addressed to ensure their success.

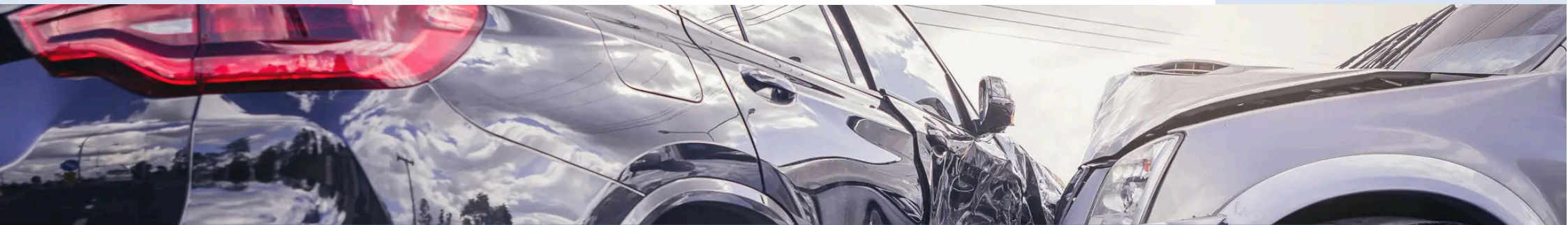
New risks and liabilities

In order to meet its objective of enhancing road safety, the ADAS technology typically offers a range of features, including lane departure warnings, adaptive cruise control and automatic emergency braking. These features take over some of the driver's responsibilities and anticipate potential hazards, preventing accidents.

Advanced driver-assistance systems



While the main aim of ADAS systems is to increase safety, for insurers, they also create new risks, which need to be well understood and appropriately dealt with. For instance, there are concerns that drivers may become overly reliant on the technology and fail to remain vigilant, resulting in accidents. Another concern is that there may be increasing difficulties determining whether an accident was caused by human error or a malfunction of ADAS equipment. And, last but not least, cyber risks will increase due to connected vehicles' continuous interaction with back-end servers.





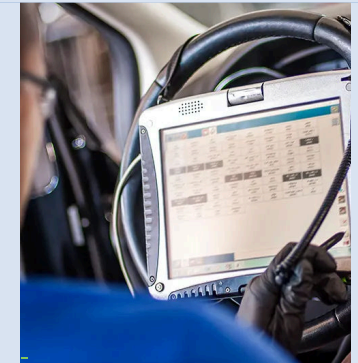
“There may be increasing difficulties determining whether an accident was caused by human error or a malfunction of ADAS equipment.”

Accidents caused not by a driver’s behaviour but due to a malfunction or defect of the vehicle software will also mean another consequence of this technology; a possible shift from motor third-party liability insurance (MTPL) to product liability insurance. This could lead to motor insurers making increasing use of a right of recourse to product liability insurers to recover the amount of the policyholder’s claim. However, and importantly, such a shift does not affect the victims of traffic accidents, who have their compensation guaranteed by motor insurers and the EU’s Motor Insurance Directive.

Of particular importance to the insurance sector — and its customers — is the expectation that while the rise of ADAS is likely to result in accidents becoming less frequent, they will most probably be more expensive. Indeed, repairing high-tech car sensors and radars after an accident is more costly than repairing traditional spare parts. The cost of repairing electric cars is also of increasing concern and is something insurers will need to look at as they seek to keep premiums as low as possible. This is all the more crucial in the current high-inflation environment.

Vital vehicle data

For insurers, having access to the data generated by ADAS would have many benefits, including the possibility to price policies more accurately and manage the claims process with a better understanding of repair costs and the value of each vehicle. Access to vehicle data would also allow insurers to play a greater role in increasing road safety by offering usage-based insurance (eg, pay-how-you-drive policies that reward good driving behaviour) and other features such as driver feedback and coaching. This could help reduce dangerous habits and distractions, such as phone use, smoking or driving while tired.



How to reduce rising repair costs



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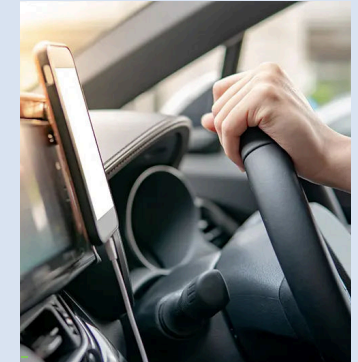
However, currently, access to such data is difficult as vehicle manufacturers use proprietary software and diagnostic tools to control and extract the data, limiting third-party service providers' access to it. As a result, insurers wishing to make use of data to offer connected services to policyholders are forced to find other ways, such as telematic devices or phone applications. Such devices are a poor alternative to having direct access to in-vehicle data (see box).

Insurers need a legislative framework at EU level that puts drivers in control of their data and ensures a level playing field for all service providers. Such a legislative initiative should build on the recently proposed Data Act and provide direct, independent and non-monitored access to the data generated by the vehicle. The legislative initiative should also allow direct interaction with the driver inside the vehicle through human-machine interfaces (HMI). Furthermore, safeguards to contract requirements and data availability are needed to address current market distortions, including provisions on standard terms for data-sharing contracts, cost elements recovered by fees and a minimum set of standardised data.

ADAS technology has the potential to fundamentally transform road safety, with its expected benefits outweighing the challenges. These challenges must be tackled. For insurers, this means adapting business models to cater to the needs of modern drivers and for vehicle manufacturers it means accepting competition. Last but not least, a legislative initiative must urgently be put forward by the European Commission to create a safe and efficient environment for the integration of ADAS technology and ensure equal access to vehicle data.

Further reading:

- [Response to EC consultation on Data Act proposal](#), Insurance Europe, May 2022
- ["How to make the EU Data Act work from the perspective of insurers"](#), Insurance Europe, September 2022



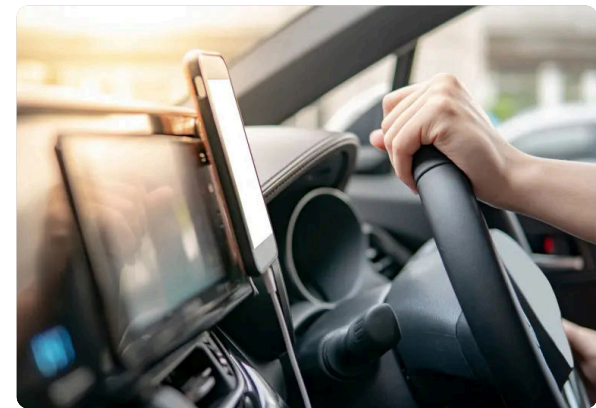
Limitations of app-based telematics



Limitations of app-based telematics

So far, usage-based insurance (UBI) policies have usually relied on telematics devices installed in vehicles to gather data. While reliable, as demonstrated by a positive experience in the Italian market with “black boxes”, these systems are rather costly and difficult to implement, which has led insurers in other markets to make use of more affordable and scalable systems such as app-based telematics.

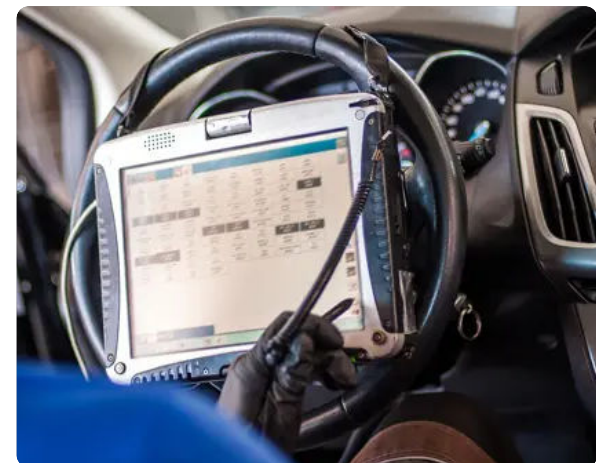
Phone applications do have limitations, however. First and foremost, they have to rely on sensors and operating systems that have not been designed to record vehicle data or a driver’s behaviour and that therefore may not always accurately collect data. Also, poor connectivity or phone malfunctions can lead to incomplete or inaccurate data. Moreover, phone sensors might compromise data accuracy by providing extra or wrong insights into driving data — a smartphone that falls off a seat, for instance, could register the fall as a crash.



How to reduce rising repair costs

As new cars feature more ADAS, the cost of repairing vehicles following an accident is on the rise. One reason for this is the fact that most sensors and cameras, which are central to automatic driving systems, are installed in the bumper or windscreen, which increases the likelihood of them being damaged in an accident. Repairs of new vehicles often require a recalibration of sensors or their complete replacement.

One way to help counter this trend is to liberalise the EU’s market for spare parts that are visible and must match the vehicle. Introducing a spare-parts clause in the recast of the EU Design Directive would allow the visible parts of a car to be repaired with components that do not match exactly the original design but have the same appearance and safety features. This would enable consumers to choose from a wider range of high-quality, reasonably priced spare parts and services that are compatible with their vehicles.



For Insurance Europe’s key messages on the EU Design Directive, [click here](#).