

Association of British Insurers Response to the Transport Select Committee Call for Evidence

The roll-out and safety of Smart Motorways

About the Association of British Insurers

1. The Association of British Insurers is the voice of the UK's world-leading insurance and long-term savings industry. A productive and inclusive sector, our industry supports towns and cities across Britain in building back a balanced and innovative economy, employing over 310,000 individuals in high-skilled, lifelong careers, two-thirds of which are outside of London.
2. The UK insurance industry manages investments of over £1.6 trillion, pays over £16 billion in taxes to the Government and supports communities across the UK by enabling trade, risk-taking, investment and innovation. We are also a global success story, the largest in Europe and the fourth largest in the world.
3. The ABI represents over 200 member companies, including most household names and specialist providers, giving peace of mind to customers across the UK.

Consultation Response

Introduction

4. The ABI welcomes the opportunity to comment on the Transport Committee's call for evidence on the safety of Smart Motorways. The ABI has long campaigned on issues relating to road safety and insurers will continue to advocate for meaningful action that will make motorways and high-speed roads safer for users, reduce road traffic accidents, and limit the harm sustained should an accident occur.
5. We are broadly supportive of the Government's plans to improve the safety of Smart Motorways and hope that the proposed changes are implemented in an expeditious manner. There has been a lot of public discourse and engagement with various stakeholders on those issues already. As such, we wish to take the opportunity here to focus on the potential negative interactions between Smart Motorways and assisted and autonomous driving technologies. We hope the issues raised in this call for evidence will help the Government futureproof Smart Motorways and create a more resilient system in light of upcoming technological changes.

Demand

6. Smart Motorways are designed to increase the flow of vehicles but may not have the intended effect of reducing traffic jams. Widespread use of Smart Motorways could lead to the phenomenon of "[induced traffic](#)" where predicted benefits of new roads are quickly eroded.

Safety

7. The safety aspect of Smart Motorways has been much debated. The Department for Transport's [Evidence Stocktake](#) found that between 2015 and 2018, the death toll on Smart Motorways by traffic volume was slightly lower than on conventional motorways. However, there were 14 fatalities on Smart Motorways in 2019, up from 11 in the previous year, and five in 2017. Several high-profile cases also pointed specifically to the lack of

hard shoulders that led to fatalities among motorists. Issues related to breakdown and recovery need to be addressed before public confidence can be established.

8. Highways England has issued a consultation on changes to the Highway Code that addresses several features of Smart Motorways. The ABI responded to this consultation in March 2021.¹
9. We hope that the Government's plans to abolish the "dynamic hard shoulder" and speed up the deployment of "stopped vehicle detection" technology, among other interventions, will greatly reduce road casualties on Smart Motorways. We want to stress the importance of a public awareness campaign. The safety advice needs to be unambiguous and disseminated to all drivers.

Public Awareness

10. We recognise that the Government is committing an extra £5m to improve public information and awareness of Smart Motorways. We recommend that the public information campaign be extended to educate foreign drivers as well, who might have no experience or prior knowledge of Smart Motorways.

Future Considerations

11. We have concerns about how certain advanced driver-assistance systems (ADAS) and, in the future, autonomous vehicles (AV) systems will interface with elements of the Smart Motorways design.
12. Currently, the Government is in the process of assessing if vehicles equipped with automated lane keeping systems (ALKS) can be considered AVs. We believe that ALKS technology is not mature enough to be considered automated and that it will underperform in several instances when compared to a competent human driver – some of these cases being on Smart Motorways.
13. For example, ALKS may be unequipped to recognise the "red x" on the overhead gantries. Even if programmed to do so, there is also concern that they could act abruptly or erratically in response to the changing speed limits or sudden lane closures as indicated by Smart Motorways.
14. ALKS also relies heavily on the clarity of road infrastructure, including clear lane markings. The system's camera and sensors are programmed to look for contrast on the road surface. Therefore, instances where dividing lines are tarred over, or temporary dividing lines are drawn during road works, are use cases that could be confusing for the system. Given the amount of roadworks that need to be undertaken as a part of the Government's Action Plan, we encourage extra care be taken to ensure that Smart Motorways will not be confusing for assisted or automated driving systems.
15. More concerning, however, is the lack of ability of ALKS to change lanes and seek safe harbour. So, while the Government is trying to reduce the distance between emergency stopping areas on Smart Motorways as a part of their Action Plan, the intervention may be nullified if the technology cannot make use of these zones. The best that ALKS can do, if the user-in-charge does not respond to a transition demand, is to stop in lane. Effectively, this would create the situation that has resulted in several deaths related to Smart Motorways.

¹ <https://www.abi.org.uk/globalassets/files/consultation-papers/member/2021/03/abi-response-to-highways-england-consultation-on-changes-to-the-highway-code.pdf>

16. We are encouraged by the steps the Government are taking to make Smart Motorways safer, but we hope further care can be taken to prevent problems in the future. We appreciate the opportunity to work with the Government to find innovative solutions to ensure a safe, effective, and inclusive transportation system.

Association of British Insurers
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