



Policy Paper
**SMART Motorways
Needed Improvements**

Road Haulage Association

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“SMART” Motorways **Needed Improvements**

1. The RHA has supported the creation of smart motorways as a means of adding capacity to the network and maintaining traffic flow.
2. The RHA believes that smart motorways done well improve road safety, provide more reliable journey times and will be more comfortable, less fatiguing for all road users.
3. Like many, we have had serious concerns over the implementation so far. Issues raised by the RHA in the past have included too small refuge areas, too few refuges that are too far apart, insufficient signs for Red “X” on inside lanes and a range of other practical issues.
4. We welcome the recognition by Highways England that there are safety issues that need to be tackled and the announcement by the Secretary of State that operation smart motorways is to be reviewed. It is time to re-look at the standards used and the implementation of the “smart” motorway programme.
5. Our members are heavy users of the network and see the issues every day. We have several comments and suggestions to share as this review starts. We hope to be formally involved when the review commences.
6. The first step is to create clarity for all road users. There is confusion for many users, despite Highways England efforts, about how these roads operate.
7. The roads themselves are referred to by Highways England as Smart, All Lane Running, Managed, Digital and other terms. The Highway Code refers to Smart, Dynamic and Controlled motorways. It is sometimes the case that they mean slightly different things, but the range terms and the slightly different operation and standards generates confusion. Simple and consistent terminology must be used when referring to these roads.
8. This paper will refer to the roads by widely accepted term of smart motorways.
9. Below we make suggestions on how smart motorways can become and be seen as the safest most comfortable roads in the country.

RHA suggestions for improvement

A single standard for all smart motorways

10. A single operating standard is required for all smart motorways.
11. It is impossible for all the roads to be the same in every respect. But currently roads can look and operate in very different ways for users. Road managers may understand the differences, but for road users inconsistency undermines confidence, slows reactions and makes it easier to make mistakes.

Automatic detection and rapid response

12. Smart motorways need automated detection of stationary vehicles to be active at all times when operating without a hard shoulder. Systems using MIDAS Loops / Radar detection systems are required, with automated sign activation using Artificial Intelligence supported by staff who can take immediate action to close or open lanes as required.
13. Being in a stationary, broken down, or damaged vehicles in a live lane would be a concern to any road user regardless of whether they are driving a car, van, bus or HGV. Advice to stay in a vehicle and dial 999 appears inadequate given the serious nature of the problem and the knowledge that not every road user is equipped with a mobile phone.
14. There also needs to be better guidance that every effort needs to be made by the driver to use a refuge area if at all possible.

Hours of non-operation

15. Smart motorways should not use hard shoulder running from 23:00 to 05:00 except in exceptional circumstances (such as managed roadworks and emergencies).
16. The timing should be consistent on all roads every day of the year.
17. The rationale for this is simple. There is greater fatigue and visibility at night and there is less need for the extra capacity on the network.

Refuge area standards

18. Refuge Areas are too small, they need to be longer to easily accommodate the largest vehicles that need to use them, to make the areas more visible for road users and to make entry and exit easier.
19. While very rare, the need to accommodate more than 1 broken down vehicle plus a recovery vehicle is a predictable requirement and is further justification for increasing refuge area length.
20. The refuge area spacing needs to be broadly consistent across the network and should every 500 – 800 metres as a matter of standard practice. This will build user confidence when help user decision making in a crisis.
21. Refuge Areas should also be disabled friendly. A gap is required in the refuge crash barrier to allow disabled people to get behind these barriers.

Visibility

22. In bad weather, when visibility falls, hard shoulder running should be stopped. Fog, heavy rain and high winds can all be reasons to restore the hard shoulder.



Green Arrows

23. Consider the use of green arrows as clear lane open signs. Red “X” signs clearly indicate that a lane is closed. A green arrow to support the existing use of a speed limit signs to denote a lane can be re-entered will be clear and intuitive for all road users.

Red X signage spacing

24. Consider the use of frequent dedicated Red X repeater signs over the hard shoulder lanes. Closing the hard shoulder with frequent repeater Red X signs, where even multiple signs can be seen at a time, will help ensure that road users understand clearly that the hard shoulder is closed to active running.
25. This will generate greater public awareness of how smart motorways work so risks can be reduced further. The improved understanding will support better enforcement for those motorists that ignore Red X signs.

Emergency Service Access

26. Emergency service access when all lanes are stationary is currently a problem. Highway England should investigate adopting the Dutch method for creating space on motorways by having two lanes separate to create space for emergency vehicles.

Summary

27. The RHA continues to support smart motorways, the capacity provided is essential for the competitiveness and productivity of the economy. Safer, more reliable and less stressful journeys are good for all road users.
28. We believe that smart motorways can provide us with safer roads at the same time as increasing capacity where it is most urgently needed.
29. A clear focus on consistency and on putting the safety of all road users through enhanced infrastructure and working practices should be at the heart of Highways England and Government thinking.

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Author: Tom Cotton. Policy – England and Wales.

Email: t.cotton@rha.uk.net