EXPLANATORY MEMORANDUM TO

THE M3 MOTORWAY (JUNCTIONS 2 TO 4A) (VARIABLE SPEED LIMITS) REGULATIONS 2015

2015 No. 241

1. This explanatory memorandum has been prepared by the Department for Transport and is laid before Parliament by Command of Her Majesty.

2. Purpose of the instrument

2.1 The Regulations enable the operation of variable speed limits between junctions 2 and 4A on the M3 motorway.

3. Matters of special interest to the Joint Committee on Statutory Instruments

3.1 None.

4. Legislative Context

4.1 These Regulations have been made under Sections 17(2) and (3) of the Road Traffic Regulation Act 1984, which empowers the Secretary of State to make regulations with respect to the use of special roads generally and, as in this case, with respect to particular lengths of motorway. These Regulations allow for the operation and enforcement of variable mandatory speed limits in relation to the specified roads set out in the Schedule to the Regulations.

4.2 Section 134(2) of the Road Traffic Regulation Act 1984 requires the Secretary of State to consult with representative organisations as he sees fit prior to making regulations under the Act.

4.3 The Motorways Traffic (England and Wales) Regulations 1982 (S.I 1982/1163) will shortly be permanently amended (by another statutory instrument) to permit the hard shoulder to be used as a carriageway where a speed limit sign is displayed and to make provision for emergency refuge areas.

4.4 The Traffic Signs Regulations and General Directions 2002 (S.I. 2002/3113), as amended, enable certain traffic signs to be used to convey information about variable mandatory speed limits on motorways.

4.5 In addition, traffic signs authorised by the Secretary of State, under section 64 of the Road Traffic Regulation Act 1984, will be placed on, or near, the specified roads set out in the Schedule to these Regulations to indicate to drivers that vehicles are entering, have entered or are exiting a road covered by these Regulations.

5. Territorial Extent and Application

5.1 These Regulations apply to England. Only those sections of motorway specified in the Schedule to these Regulations will be affected, all of which are located in England.

6. European Convention on Human Rights

6.1 As these Regulations are subject to the negative resolution procedure and do not amend primary legislation, no statement is required.

7. Policy background

What is being done and why

7.1 The strategic case for providing additional capacity on the M3 was examined in the Thames Valley Multi-Modal Study which recommended against widening the motorway prior to 2016 in favour of demand management measures. The Secretary of State endorsed these recommendations in 2003. However the March 2008 "Advanced motorway signalling and traffic management feasibility study"' identified this motorway link as a priority for the provision of additional capacity and Ministers agreed that smart motorways, as an alternative to widening, should be investigated.

In the November 2011 Autumn Statement, the Chancellor announced that the M3 junctions 2 to 4a smart motorway scheme would be prepared for construction before 2015. Following this, the 2012 Budget confirmed the start of work for this scheme to be in financial year 2013/14, subject to the outcome of statutory processes.

Since then, the Prime Minister announced that this scheme would be one of four schemes to be included in a pilot to significantly reduce the delivery time of road schemes.

7.2 Smart motorways use the latest technology to improve journeys by sensing traffic flow and setting speed limits accordingly to keep traffic moving smoothly, instead of continually stopping and starting. The smart motorway proposals on the M3 between junctions 2 to 4a involve converting the hard shoulder permanently to a traffic lane to create much needed extra capacity to support economic growth. Information about road conditions and speed limits will be given to drivers on electronic road signs. Variable speed limits will also be introduced on the M3 between junctions 2 and 4a to ensure consistency and congestion management on this corridor. The smart motorway schemes will enable proactive management of the motorway network through the Surrey and Hampshire areas. The speed limits displayed on the motorway will take account of prevailing traffic conditions with the aim of ensuring the smooth flow of traffic.

7.3 The Highways Agency is committed to building upon the success of the M42 junctions 3A to 7 (which opened to traffic in 2006) and have improved upon the original design specification by running traffic permanently on the hard shoulder as opposed to during peak times or periods of congestion. It is expected that the smart motorway schemes will:

- Increase motorway capacity and reduce congestion;
- Smooth traffic flows;
- Provide more reliable journey times;
- Increase and improve the quality of information for the driver.

8. Consultation outcome

8.1 Consultation relevant to the proposal to install variable mandatory speed limits on this section of the M3 was held as follows:

- M3 J2 to 4a variable speed limits: 4 March 2013 and closed on 24 May 2013

The development of the smart motorway schemes included a detailed assessment of environmental effects, including any impact the schemes may have on local and regional air quality. These

assessments indicated that for operation at the national speed limit, the much needed extra capacity and the increased traffic flows that these schemes provide will also have some adverse impacts on local air quality at Air Quality Management Areas (AQMAs) and sensitive receptors.

A second consultation was held from 13 February 2014 and closed on 11 April 2014 regarding the proposal to implement a maximum mandatory speed limit of 60mph on the M3 between junctions 2 and 4a, which would have applied between 07:00 and 19:00 seven days a week. The Transport Secretary has not accepted this approach as the Government's preferred option for managing local air quality on the M3 scheme and has tasked the Highways Agency to identify other measures which achieved the necessary reduction. Speed restriction is to be used only to the extent that is absolutely necessary.

These consultations all involved sending a consultation document to a wide range of stakeholders including representative organisations at both national and local levels and including local councils, emergency services (police, fire and rescue and ambulance services), the recovery industry and road user groups. In addition, the consultation documents were placed on the Highways Agency and the Gov.uk web sites and contain a list of all consultees.

8.2 Responses to the smart motorway and variable speed limit consultation were as follows.

In total 129 responses were received with 11 being made by organisations and 55 being made by the public; a further 63 responses were also received however these did not relate to the Variable Mandatory Speed Limit Statutory Instrument (SI) actually being consulted on. 20 responses made were in favour of the scheme while a further 6 responses objected to the scheme.

The organisations that responded in detail were: Chobham Common Preservation Committee, Chobham Parish Council, Road Haulage Association, Surrey County Council, Surrey Police, Surrey Wildlife Trust, The Automobile Association, The Chobham Society, The Spowers Charitable Trust, The Windlesham Society.

8.3 Organisations including Chobham Parish Council, Road Haulage Association, Surrey County Council, Surrey Police, and The Automobile Association wrote in support of the principle of reducing congestion by providing additional capacity through implementing smart motorways, although most also noted that this should not be at the expense of safety. Some comments of support included:

The Road Haulage Association: "…in principle we support the current proposal that may lead to congestion being tackled, journey time reliability being improved, and to a reduction in traffic accidents at the same time as improving the air quality and reducing noise pollution."

Surrey County Council: "We support the proposal in principle, but have a number of concerns." (these concerns are highlighted below and relate to design and not the introduction of variable speed limits).

Cobham Parish Council: "The Council supports measures that will improve the traffic flow of this stretch of the motorway and reduce congestion on surrounding roads, provided that any such measures can be adequately mitigated and will cause little or no negative side effects."

The Automobile Association: "The AA welcomes the significant improvement to journey times/congestion reduction the MM scheme will bring to M3 between J4A to J2."

8.4 Detailed responses raising a number of concerns were received from a range of stakeholders including local residents. Responses from the emergency services and the AA focussed on the Highways Agency's smart motorways – all lane running design standard. Particular concerns included the following:

Design issues (including impact concerns)

1) Concerns about the spacing of emergency refuge areas and ability of vehicles to reach them in times of emergency.

The Highways Agency response noted that the provision of emergency refuge areas has been designed to provide the best positions for these features that will enable the majority of road users to reach a safer location away from live traffic rather than stopping on the hard shoulder. It is not possible to predict if these locations are correct for every eventuality and there may well be cases where vehicles cannot reach a refuge area and will have to stop in a live lane. If this eventuality should occur, the Highways Agency's control centre operatives can react quickly to these incidents, move traffic to other lanes and create access for the stricken vehicle to be recovered quickly, making resolution of the incident more efficient and minimising disruption and delay.

Subsequent safety information has been prepared and made available by the central communications team which identified that the majority of stops on the current hard shoulder are none essential. More information on this can be found by following this link –

www.highways.gov.uk/publications/managed-motorways-fact-sheets

2) Concern about the ability of emergency services to effectively respond to incidents on the M3 Motorway.

The Highways Agency's reply noted that the Regional Control Centres (RCC) and Traffic Office Service have specific procedures in place to ensure access routes are made available wherever possible by closing the appropriate lanes. If lane closures are not possible there are other options available such as;

- Easing traffic through queues, as on any other road without hard shoulders
- Reverse flow (enabling emergency vehicles to travel the wrong way along the carriageway to access incidents)
- Attending from opposite carriageway, in both these cases the carriageway would be closed by RCC operators and emergency vehicles advised accordingly.

It is felt that with the new controls available to the RCC operatives and with the inclusion of 100% CCTV coverage, identification of, and access to, incidents should be quicker and easier.

3) Bottle necks at Junction 3 joining the M25

The response noted that at Junction 2, the Highways Agency is proposing to realign the slip roads to reduce the bottle neck at the junction and provide two dedicated lanes joining the M25 clockwise.

4) Junction 3 already suffers from significant congestion at peak times and vehicles are regularly held in queues northbound on the A322.

The Agency responded that they have an extensive traffic model which covers in reasonable detail the broad area from Reading to Heathrow and the M3 corridor between M25 and Fleet, plus the area in between. So we can predict traffic flows, with and without the scheme in this area.

Work done to date indicates that the M3 scheme offers some relief to the A30, with little change on the A331. However, analysis shows a slight increase to traffic flows on the A322 northbound approach to J3, particularly in the AM peak.

The proposed Smart Motorway scheme should not have an effect on the existing tactical diversion routes in Surrey during normal incident management situations. Should the Smart Motorway be shut for an increased maintenance programme (night closures) then the frequency of use of the diversion routes in Surrey may increase with the associated increased traffic volumes.

5) The volume of vehicles that will be able to travel at speed along the managed motorway would increase by up to 30%, which will result in the noise level increasing.

In answer to this concern the Agency responded that the aims of the project include increasing capacity on this busy stretch of road to ease the existing congestion. Whilst it is likely that this will attract more traffic to the M3 because of increased journey time reliability, it is not necessarily 30%. To mitigate the effects of noise on local residents, the design proposal will provide noise attenuation barriers.

6) Concerns about whether the Design Manual for Roads and Bridges (DMRB) and the Noise Policy Statement for England (NPSE) was taken into account when developing the scheme.

The Highways Agency noted that a fundamental part of the work undertaken in the development of this scheme is assessing the impact of the proposals on the local and wider environment. This Environmental Assessment (EA) is being carried out in accordance with the Highway's Agency's Design Manual for Roads and Bridges (DMRB) and statutory requirements.

Environmental concerns

The responses from Chobham Common Preservation Committee, Chobham Parish Council, Surrey Wildlife Trust, The Chobham Society, The Spowers Charitable and The Windlesham Society covered environmental issues, including noise mitigation, environmental pollution, visual intrusion and local air quality. There was also a recurrent concern with regards to the carriageway dressing and a desire for a new lower noise surface to be used. The Highways Agency has since brought forward maintenance plans to resurface all four lanes of the carriageway, for the length of the scheme, with a thin wearing course, also referred to as low noise surfacing, to address these concerns. The other main issue raised related to Chobham Common to which the Agency responded noting:

"We are aware of the special protected nature of Chobham Common and will be taking appropriate measures to limit the impact of the scheme. We have been in discussion with Natural England, and they are content with our approach. There will be no lighting through Chobham Common, nor will there be any additional infrastructure. We will only be upgrading the existing electronic message sign that is in the central reserve.

There are also no plans to install acoustic fencing through the common; it is agency policy to not provide noise fencing for non-residential locations. Environmental assessments and design work is ongoing and noise mitigation will be provided at residential locations where our assessments show that it is required."

8.5 A far larger number of responses were received to the maximum mandatory speed limit consultation. In total 267 response were received, with 178 responses made via an online survey and a further 89 responses were made via written correspondence.

As the proposed maximum speed of 60mph is below the national speed limit and would be set for a specific period, it is a variable speed limit, though if it were to be imposed it would, within the relevant time period, be the default speed limit rather than the national speed limit, unless variable speed limits of 40mph or 50mph were automatically set to reduce congestion.

- 92% of the 178 people or organisations who responded via the online survey were opposed to the concept of a reduced speed limit to tackle poor air quality.

- 53% of the 89 responses who responded via written correspondence, were opposed to the scheme.

In a press release issued on 8 July 2014 announcing the start of work on the smart motorway schemes, it was noted that the Transport Secretary did not accept the proposed approach as the government's preferred option for managing the problem of poor air quality and instead asked the Highways Agency to rigorously investigate alternatives as work progressed on the scheme in the next 12 to 18 months. If proposals continued the need to impose a maximum speed limit, they must only apply when absolutely necessary. In particular, the Agency must look for alternatives that maintain the 70mph limit wherever possible, particularly when traffic tends to be lighter, such as at weekends and outside of peak commuting hours.

8.6 The Highways Agency has considered all the responses to the consultations and carried out an analysis of those responses. The Highways Agency continues to work closely with the emergency services and local authorities on these schemes to address the safety and environmental concerns raised. Using variable mandatory speed limits is now established practice in many parts of the country, including the southern end of the M1, the M25, the M4/M5 near Bristol and the M42 and M6 in the West Midlands, and respondents to the consultations were generally not opposed to the implementation of variable mandatory speed limits. Accordingly, the Department for Transport has decided that variable mandatory speed limits should be implemented on the M3 between Junctions 2 to 4a which will include all lane running at the relevant locations. Whether it is necessary to impose a maximum speed limit of 60mph to mitigate air quality impacts between set times will depend on the outcome of the work carried out by the Highways Agency over the coming months. The Government is committed to bringing forward the improvement that smart motorway schemes will bring at these locations and therefore would only impose a maximum speed limit if absolutely necessary. That maximum speed limit would as stated above act as a default maximum speed limit unless other variable speed limits (40mph, 50mph) are set for congestion purposes.

8.7 The Highways Agency full response to consultation can be found by following this link:

http://assets.highways.gov.uk/roads/road-projects/m3-junctions-2-4a-managed-motorway/M3%20J2-4a%20MM%20SI%20Consultation%20Report%20Final%20Web%20Friendly.pdf

9. Guidance

9.1 The consultation packs issued by the Highways Agency to stakeholders contained information on the operation of variable mandatory speed limits. These consultation packs were also published on the Highways Agency or the Gov.uk websites. Stakeholders included local authorities, members of the emergency services, road user groups and vehicle recovery operators. Stakeholders have received, and will continue to receive, updates and news on the scheme implementation, with particular consideration given to the effects of the scheme on local residents, the travelling public and businesses. Prior to the commencement of the scheme operation road users will be made aware of it through the media and press releases.

10. Impact

10.1 The impact on businesses, charities or voluntary bodies, and the public sector is that smart motorways, through the introduction of variable mandatory speed limits, will benefit the motorist by helping to reduce congestion, be informative and improve journey times. It aims to reduce the impact of accidents and reduce driver stress.

11. Regulating small business

11.1 The legislation applies to small businesses.

11.2 To minimise the impact of the requirements on firms employing up to 20 people, the approach taken is to ensure that Stakeholders receive updates and news on the scheme implementation and operation. Results of the scheme will also be made available to stakeholders.

11.3 The basis for the final decision on what action to take to assist small business will be undertaken through consultation with stakeholders. It is however expected that the proposed measures will not impose any new or increased burden upon small businesses.

12. Monitoring & review

12.1 The operation of the smart motorway schemes between M3 Junctions 2 and 4a will be monitored and assessed to establish the effectiveness of the scheme on traffic flows, accidents and environmental factors. There will be a Post Opening Project Evaluation of the schemes 1 year and 5 years after it has opened. The purpose of the Post Opening Project Evaluation is to measure the business case aims and benefits of the scheme against what it is actually delivering 1 and 5 years after opening.

13. Contact

13.1 If you have any queries regarding the Regulations please contact Pranav Devale at Highways Agency Tel: +44 (0)1306 878479 or e-mail: Pranav.devale@highways.gsi.gov.uk.