Smart Motorways Programme

M27 Junction 4 to 11 Smart Motorway

Response to Statutory Instrument Consultation

The introduction of variable mandatory speed limits

July 2018

Contents

Executive Summary

The M27 is located in central southern England. It is a key part of the strategic road network providing a vital transport link for local, regional and international traffic. The route plays a major role as an inter-urban regional route connecting Portsmouth, Southampton and Bournemouth, as well as a link to the M3 motorway and routes to the Midlands and London.

The scheme stretches from junction 4 (M3 Interchange) to junction 11 (Fareham), and will directly connect to the proposed M3 junction 9 (Winchester / A34 Interchange) to junction 14 (M3) Smart Motorway Scheme.

The scheme is 23.5km (approx. 15 miles) long, and all links on the M27 between junctions 4 to 11 will be upgraded to smart motorway, with four lanes in either direction, except as follows:

- Junction 5 three lane running westbound plus a hard shoulder
- Junctions 7 to 8, which is currently a four lane plus hard shoulder link will become a controlled motorway link
- Junction 9, three lane running east and westbound plus a hard shoulder

In 2013, the Highways Agency commissioned a number of route based strategies to clearly identify operational issues on the network. Considerations for the M27 can be found within the Solent to Midlands Route Strategy Evidence Report, which was published in April 2014.

In March 2015, the scheme was announced in the Road Investment Strategy: 2015 to 2020.

The Highways Agency became a government company in April 2015 and was renamed as ‘Highways England’. Highways England is charged with operating, maintaining and improving England’s motorways and major A roads, and are responsible for the delivery of the M27 Junctions 4 to 11 Smart Motorway Scheme.

The scheme requires the implementation of variable mandatory speed limits (VMSL) between junctions 4 to 11. Regulations will need to be made under section 17(2) and (3) of the Road Traffic Regulation Act 1984 (“the 1984 Act”) for the implementation of VMSL for the M27 junctions 4 to 11 smart motorway scheme.

Highways England undertook a 4 week consultation from 12 March 2018 to 10 April 2018. This consultation provided an opportunity for interested parties to comment on the proposal to introduce VMSL throughout the length of the scheme. The consultation was carried out in accordance with the Government’s Consultation Principles.

A total of 79 responses were received, which included 78 questionnaire responses and 1 letter regarding the planned Garden Village of Welbourne. This report provides a full account of Highways England’s approach to the consultation, responses received, and demonstrates how Highways England has taken feedback into account.

Highways England has had regard for all responses received, and recommends that the Secretary of the State proceed with making the Regulations necessary to allow for the implementation of VMSL on the M27 between junctions 4 and 11.

1. Introduction

1.1. Document structure

Section 1 provides background information about the M27 junctions 4 to 11 smart motorway scheme and the proposed changes to legislation.

Section 2 details how the consultation on the proposed changes was carried out.

Section 3 provides a summary of the responses to the consultation that were received, as well as Highways England's responses to the issues raised.

Section 4 summarises the outcome of the consultation and makes recommendations for next steps.

1.2. Purpose of this report

This document is intended to provide a summary of the responses received to the consultation on the introduction of variable mandatory speed limits (VMSL) on the M27 between junctions 4 and 11. The consultation, which was undertaken between 12 March 2018 and 10 April 2018, provided an opportunity for stakeholders, such as road user groups and other interested parties, to comment on the proposals. Highways England has considered the comments raised by consultees and this document summarises the responses to those comments.

1.3. Background to the consultation

The M27 is located in central southern England. It is a key part of the strategic road network providing a vital transport link for local, regional and international traffic. The route plays a major role as an inter-urban regional route connecting Portsmouth, Southampton and Bournemouth, as well as a link to the M3 motorway and routes to the Midlands and London.

The scheme stretches from junction 4 (M3 Interchange) to junction 11 (Fareham), and will directly connect to the proposed M3 junction 9 (Winchester / A34 Interchange) to junction 14 (M3) Smart Motorway Scheme.

The scheme is 23.5km (approx. 15 miles) long, and all links on the M27 between junctions 4 to 11 will be upgraded to smart motorway, with four lanes in either direction, except as follows:

- Junction 5 three lane running westbound plus a hard shoulder
- Junctions 7 to 8, which is currently a four lane plus hard shoulder link will become a controlled motorway link
- Junction 9, three lane running east and westbound plus a hard shoulder

1.4. Legislative changes

Regulations have been proposed to be made under section 17(2) and (3) of the Road Traffic Regulation Act 1984 (“the 1984 Act”) for the implementation of VMSL for the M27 junction 4 to 11 smart motorway scheme. The proposed Regulations will restrict drivers from driving within the area of the smart motorway scheme at a speed exceeding that displayed on the speed limit signs, or the national speed limit where no other speed limit sign is displayed.

The relevant legislative power in the 1984 Act permits the making of Regulations that regulate the manner in which, and the conditions subject to which, motorways may be used by traffic authorised to use such motorways.

Within the M27 Junction 4 to 11 Smart Motorway Scheme, it will be an offence to use a motorway in contravention of Regulations applying to the scheme, made under section 17(2) of the 1984 Act.

2. Conducting the consultation

2.1. What the consultation was about?

The consultation provided the opportunity for interested parties to comment on the proposal to introduce a statutory instrument to implement variable mandatory speed limits, on the M27 between junctions 4 and 11.

2.2. Consultation approach

The Statutory Instrument Consultation Document for the scheme was sent to 48 consultees.

The consultation was also open to public participation through the following websites:

- Highways England consultation hub: https://highwaysengland.citizenspace.com/he/m27-junction-4-to-11-smart-motorway/
- Highway England scheme webpage: https://highwaysengland.co.uk/projects/m27-junctions-4-to-11-smart-motorway/

We encouraged representative organisations, businesses and the general public to register their views. The 4 week consultation period commenced on 12 March 2018 and closed on 10 April 2018.

In addition to the online survey, respondents were also able to send their responses via email or post to the Highways England project manager as follows:

Deborah Makinde
Project Manager
Highways England
5 St. Phillips Place
Birmingham
B3 2PW
Email: M27J4-11SmartMotorway@highwaysengland.co.uk

2.3. Government consultation principles

The consultation was carried out in accordance with the Government's Consultation Principles, which are available at:

https://www.gov.uk/government/publications/consultation-principles-guidance

If you have reason to believe this consultation did not comply with the Consultation Principles, please write to our consultation co-ordinator at the address below, setting out the areas where you believe this consultation did not meet the principles:

Andy Johnson
Highways England
The Cube
199 Wharfside Street
Birmingham
B1 1RN
Email: andy.johnson@highwaysengland.co.uk

3. Responses to the consultation and Highways England's response

3.1. Summary of responses

During the consultation period, a total of 79 responses were received, 78 of which were completed questionnaires, alongside a single written response directed to Highways England.

The questionnaire asked respondents to answer three questions, with space provided for additional comments. The questions and an analysis of the responses are provided below.

Of the 78 completed questionnaires, 54 respondents were members of the public, two were from local government, one was a Member of Parliament, and two were from police/representative organisations. In addition, 13 questionnaires were received from companies or enterprises, while five did not identify their organisation type.

The key themes identified from the completed questionnaires include:

- the distance between and the provision of sufficient emergency areas (EAs), especially in relation to the amount of freight and holiday traffic for Portsmouth and Southampton's naval/military, commercial, and ferry ports
- the effect of speed enforcement cameras in relation to sudden braking
- the need to educate users about smart motorways so they understand how they operate
- the assurance that messages and signs will be accurate and timely during and following the end of construction
- concerns about noise and air quality
- the impacts on local roads and businesses
- concerns about the well-known bottlenecks currently on the motorway
- the scheme ending at junction 11 and not extending to junction 12

3.2. Question 1: Improvements to travelling conditions

Q1. Do you consider that the proposal to introduce variable mandatory speed limits on the M27 motorway between junctions 4 and 11 will lead to an improvement in travelling conditions on this section of motorway?

All online responses to the survey answered this question, while 52 responses also included a reason for the answer provided.

Table 1 Response to Question 1

Consultee	Yes	No
Members of the Public (54)	34	20
Local Government	3	0
Central Government	1	0
Police/Representative Organisations	2	0
Large Company	5	2
Small/Medium Enterprises	4	2
Consultee Type not answered	4	1
Total	**53**	**25**

The key themes identified in the comments for Question 1 include:

- Speed cameras can adversely affect safety due to them influencing drivers braking suddenly when approaching the cameras, and then accelerating when passed them - 5
- Lack of emergency areas and safety for the regular breakdowns and collisions that occur on the M27 - 4
- Variable speed limits are often activated inappropriately or require better management - 4
- The scheme should be extended to junction 12 - 2
- The scheme will add to the congestion – 2
- Little or no impact anticipated on known bottlenecks at certain junctions which, more importantly, require improvements - 13

Highways England Response

The theme of drivers braking and accelerating through camera positions was raised five times. One of the key aspects of smart motorways, and the reason for their success in other parts of the country, is the introduction of variable mandatory speed limits (VMSL), which helps traffic flow freely. There is currently no evidence to suggest that drivers brake and accelerate through camera positions.

The gantries displaying the mandatory speed limits are also sited with clear visibility, giving drivers enough time to lower their speed in a controlled and safe manner between seeing the sign and passing beneath it.

The variable speed limits used on smart motorways are usually set automatically in response to conditions on the road; this allows us to adapt to traffic conditions ahead which may not be visible to motorists. If the problem is successfully cleared, drivers may not see what the cause of the restriction was, although where possible we use the electronic signing to explain this. The system is designed to ensure that any restrictions are lifted as soon as they are no longer needed.

The VMSLs only come into operation when traffic volumes increase and sensors activate lower speeds. The reduction of speed during peak demand decreases stop-start conditions and allows traffic to move smoothly, preventing the build-up of bottlenecks.

At a slightly lower speed, the traffic flows more smoothly, giving minor congestion a chance to clear before a traffic jam can form, and helping to prevent the ‘stop-start’ conditions which can occur at busy times. Reduced speed limits are also used to protect slow-moving or stationary vehicles by slowing down the traffic which is approaching them.

Since the speed limits are set in real time, they will sometimes vary between signals; a difference of 10 – 20 mph will usually have been caused by a temporary build-up of traffic. The maximum difference in speed limit between two consecutive signals is 20 mph, and this is used when it is necessary to slow the traffic down within a certain distance.

There is growing evidence that ALR (all lane running) is quickly, and efficiently providing much needed capacity on our roads. The data from the first year of the M25 all lane running smart motorway schemes show a 17% reduction in accidents, and casualty rates are down by 21% - while journeys at the busiest times have been almost halved. This is a real boost for the road user and businesses that rely on the M25. The recently published M25 two year ALR report show that there is a significant increase in traffic flows and a slight improvement in journey time reliability. It is also noted that average journey times are close to pre-scheme levels, but would have been worse if the schemes had not been built.

Early findings from the newer all lane running smart motorways on the M1 in Derbyshire and Yorkshire, and the M6 in the Midlands are positive too – and we continue to monitor performance as we do on all schemes.

Traffic has been observed to flow well through M1 Junction 28 to Junction 31 smart motorway scheme providing, in the main, a congestion free environment with good uptake of lane 1. Whilst the data is not statistically significant at this point, it suggests that the scheme is performing well and is likely to meet its safety and operational outcomes.

The M25 Junction 5 to 7 and M25 Junction 23 to 27 smart motorway schemes have published 12 month evaluation reports, which can be viewed by using the following links:

• http://assets.highways.gov.uk/specialist-information/knowledge-compendium/2014-2015/M25+J5-7+SM+ALR+Monitoring+12+Month+Evaluation+Report_v2.0_Final.pdf

• http://assets.highways.gov.uk/specialist-information/knowledge-compendium/2014-2015/M25+J23-27+SM-ALR+Monitoring+12+Month+Evaluation+Report.pdf

A number of respondents were concerned about the number of Emergency Areas (EAs) and the safety of drivers who have broken down on a smart motorway. The locations of the scheme's 13 high visibility EAs have been decided following considerations that include their proximity to nearby junctions, the width of available verge to place them, and the topography of the area.

The public information events taking place throughout the summer are intended to assist in educating road users on the features of smart motorways and the use of EAs. Additional local educational campaigns will be implemented throughout the scheme's construction.

Another issue raised was why the smart motorway was not extending to include junction 12 of the M27. In 2008, the Highways Agency considered including the junctions 11 to 12 section in the smart motorway scheme.

However, due to the proposed implementation of a climbing lane between junctions 11 and 12, the decision was taken to progress with that scheme. The section has therefore already benefitted from enhanced capacity for nearly 10 years.

3.3. Question 2: Concerns about the introduction of variable mandatory speed limits

Q2. Are there any aspects of the proposal to introduce variable mandatory speed limits on the M27 motorway between junction 4 and 11 which give you concerns?

77 respondents answered this question, while 52 gave additional reasons for their answer.

Table 2 Response to Question 2

Consultee	Yes	No
Members of the Public[1]	34	19
Local Government	2	1
Central Government	1	0
Police/Representative Organisations	2	0
Large Company	4	3
Small/Medium Enterprises	6	0
Consultee Type not answered	3	2
Total	**52**	**25**

1 One question not answered

The key themes identified in the comments for Question 1 include:

- concerns about disruption with traffic jams, delays and access during construction - 4
- safety concerns regarding the loss of the hard shoulder for breakdowns and for emergency services when attending collisions that occur on the M27 - 13
- variable speed limits or other signs often activated inappropriately or requiring better management – 4
- the scheme being extended to junction 12 due to safety requirements - 6
- the need to reduce traffic noise for properties close to the motorway and near to the concrete sections – 3
- that little or no improvement is anticipated, especially at the junctions between 5 and 11 that require development – 6

In addition, 1 respondent asked for the works to be completed in 1 to 2 mile sections, while others questioned the length of time it would take to complete the works.

Highways England Response

Our customers are very important to us. The contractor charged with the construction of the scheme is applying the best practical means to reduce the impact on customers and the surrounding local community, during construction. The contractor is aware of the sensitive nature of their work and has thus developed detailed plans for construction and traffic management for this scheme.

Construction is due to commence in winter 2018/19, starting at junction 4 and progressing east. Due to the scheme being 24km (15 miles) in length, construction will finish in spring 2021.

A contraflow system will be in place during construction, which will allow working areas to be focused on one carriageway at a time, providing three open lanes, east and westbound during the day. In addition, temporary lane closures will be installed as certain activities often require an increased footprint to ensure the safety of our workforce; this will also aid in minimising the overall construction duration. Full overnight closures of the motorway will only be used when necessary, primarily for traffic management switches and installation of gantries.

Roads are by nature long linear workplaces. To a road user travelling along coned off stretches of road, it may appear that work is only taking place on a small section of the road, or at only one end. This may be because as vehicles pass, workers may be moving steadily along the coned off lane. It may also be because, some staff are on breaks, as when staff work close to machinery and live traffic it is essential that they have appropriate rest periods, for their own safety and that of road users.

Reduced speed limits are put in place for the safety of all road users, and not solely to protect road workers. Even during breaks between works, roadwork sites can be dangerous places. The driving environment around roadworks is likely to be very different from normal. There may be changes to the normal standard of carriageway, such as lane restrictions or contra-flow running, as well as works vehicles entering or leaving the site. Additionally, excavations, works vehicles and equipment can pose additional risks, and the safety of road users is always our primary consideration.

Closures during the works will be available on the scheme website: https://highwaysengland.co.uk/projects/m27-junctions-4-to-11-smart-motorway/

Please note that closures are subject to change due to weather or unforeseen circumstances, so interested parties are advised to check our scheme website regularly. For real time traffic information, please visit Traffic England at: http://www.trafficengland.com.

Other respondents enquired about the safety of removing the hard shoulder, and asked what actions would be taken in the event of a breakdown. In response, there will be 13 new EAs, while the scheme will feature 100% CCTV coverage from junctions 4 to 11. In the event of a vehicle not being able to reach an EA, the operator monitoring the area will close the effected lane, utilising VMSLs to create a safe area around the vehicle, and the emergency services will be dispatched.

Regarding the questions relating to traffic noise impacting residents who live in close proximity to the M27, surveys have shown that the noise pollution impact of the scheme is small in magnitude. The installation of mitigation measures such as acoustic barriers will mean that when the scheme is completed, noise levels will be quieter, or no worse than they are currently.

3.4. Question 3: Any other comments

Q3. Are there any additional comments you would like to make about the proposal to introduce variable mandatory speed limits on the M27 motorway between junction 4 and 11?

35 respondents provided an answer, while 5 respondents stated they had already provided additional comments in questions 1 and 2.

Table 3 Response to Question 3

Consultee	Yes Comment	No Comment
Members of the Public	21	33
Local Government	3	0
Central Government		1
Police/Representative Organisations	1	1
Large Company	3	4
Small/Medium Enterprises	3	3
Consultee Type not answered	4	1
Total	**35**	**43**

The main themes raised in question 3 include:

- concerns about disruption - 2
- safety concerns about the loss of the hard shoulder for breakdowns and for emergency services attending collisions that occur on the M27 - 3
- driver education requiring improvement – 3
- the scheme should be extended to junction 12, especially for safety reasons - 4
- the need to reduce traffic noise for properties near to the concrete sections, and the possible increase of noise pollution due to the additional volume of traffic – 3
- comments regarding the need to improve local roads and junction layouts – 7

Highways England Response

Respondents suggested that driver education needs to be improved, and that there is a need to improve local road and junction layouts.

One of the objectives of the exhibitions being held in this area throughout the summer and the materials produced is to help educate the public about smart motorways. In addition the following link has been placed on the scheme website, providing guidance on how to drive on a smart motorway - https://www.gov.uk/guidance/how-to-drive-on-a-smart-motorway .

In terms of improving local roads and junctions, we should reiterate that the scheme focuses on the M27 between junctions 4 to 11. However, we are liaising with project teams on neighbouring schemes, such as the M3 junction 9 to 14 smart motorway scheme, and the M27 junction 8 and 9 improvement scheme.

4. Summary and recommendations

4.1. Summary

4.1.1 The consultation was publicised on Highways England's website, and was also sent directly to 48 consultees. 79 responses were received in total, including one response which was received direct correspondence which was in relation to the planned Garden Village of Welbourne, to the north of M27 Junction 10.

4.1.2 There were a number of supportive responses, many of which were caveated with comments for greater supervision and safety. Other supportive responses stated that the scheme will improve congestion and reduce vehicle emissions.

4.1.3 The most frequently raised concerns were:

- the impact on the already congested sections of the motorway and the need to redesign junctions
- the removal of the hard shoulder and the infrequency and location of Emergency Areas
- the strong likelihood of vehicles braking suddenly for cameras
- the extent of the scheme not continuing to junction 12
- the reliability and accuracy of VMSL signs, and when VMSL should be implemented

4.1.4 The percentage results of the replies to the questions are as follows:

- **Question 1 – Do you consider that the proposal to introduce variable mandatory speed limits on the M27 motorway between junctions 4 and 11 will lead to an improvement in travelling conditions on this section of motorway?**
    - **68%** answered 'Yes', **32%** answered 'No'
- **Question 2 – Are there any aspects of the proposal to introduce variable mandatory speed limits on the M27 motorway between junction 4 and 11 which give you concerns?**
    - **67%** of respondents had additional concerns (as detailed in section 3.3)
- **Question 3 – Are there any additional comments you would like to make about the proposal to introduce variable mandatory speed limits on the M27 motorway between junction 4 and 11?**
    - **45%** of respondents provided additional comments (as detailed in section 3.4)

4.2. Recommendations

Following this consultation, Highways England recommends proceeding with making the necessary legislative changes by way of regulations to allow the implementation of VMSL for the M27 Junctions 4 to 11 Smart Motorway Scheme.