1. INTRODUCTION

In anticipation of the need to strategically manage the network a new generation of Variable Message Signs is being introduced. These signs designated MS3 will replace the current generation (MS2). The new signs are more flexible than the MS2 and the MS3 is able to display tactical and strategic messages in combination with an Enhanced Matrix Indicator (EMI).

1. TYPES OF NEW SIGN – refer to attached pictures.

1.1. Message Sign - 2 lines of 12 characters

These signs are mounted on portal gantries, they can display text only and are functionally compatible with the present 2x12 signs (note 2.1.5 below).

1.2 Motorway Signal MK3 (MS3) - Text and combined EMI

There are two variants of this sign:

a. MS3 (2x16) - capable of displaying either 2x16 characters in text only mode or 2x12 characters + EMI in combined mode.

b. MS3(3x18) – capable of displaying either 3x18 characters in text only mode or 3x12 characters + EMI in combined mode.

2. MAIN ADVANTAGES OF THE NEW SIGNS

2.1 Quality and durability:

2.1.1 Fully welded Aluminium enclosure reduces water penetration risk

2.1.2 Stainless steel brackets prevent galvanic corrosion

2.1.3 Sealed and evacuated cantilever column prevents internal corrosion

2.1.4 Optical design free of mechanical devices

2.1.5 Control electronics mounted within sign enclosure.

2.2 Optical performance
2.2.3 Improved luminance control

2.3 Flexibility

2.3.1 MS3 can show text only or combination of text and signal.

2.3.2 Longer text messages than MS2 available

2.3.3 MS3 (3x18) variant available for strategic messages

2.3.4 Common cantilever column and holding down arrangement allows signs for tactical (2x16) and strategic (3x18) use to be interchanged at a location without the need for infrastructure upgrade

2.3.5 Backwards compatibility allows MS3 2X16 to be mounted on MS2 type cantilever and MS3 (3X18) to be mounted on MDIS cantilever

3. THE NEW SPECIFICATIONS:

The following specifications replace TR2140 and TR2141:

1. TR2195 - Message signs and motorway signals MK3 (MS3) Requirements for Signal equipment (Display and communications Electronics)

2. TR2196 - Message signs and motorway signals MK3 (MS3) Requirements for Enclosures and Mounting Brackets

3. TR2197 - Message signs and motorway signals MK3 (MS3) Requirements for Cantilever Gantry Structures

4. TR2198 - Message signs and motorway signals MK3 (MS3) Requirements for Portal Gantry Interface Frames

4. THE UPDATED MCX DRAWINGS

The following are updated to show MS/MS3 alignment and other infrastructure design details. They all refer to MS3 in the title:

MCX 0069 Shts. 3-7 inc.
MCX 0151 Shts. 1-8 inc.
MCX 0156 Shts. 5 and 6.
MCX 0170 Shts. 1-5 inc. Shts 7,8 and 10.
MCX 0337 Shts. 6-8 inc.
MCX 0339 Shts. 1-4 inc.
MCX 0582 Sht. 1
5. TRH 1642C - Infrastructure Design Guide

This document is updated and the title is now:

MESSAGE SIGNS
AND MOTORWAY SIGNALS MK3

INFRASTRUCTURE DESIGN GUIDE
Message Sign
2 x 12

LONG DELAYS
AFTER J10
Motorway Signal MK3 (MS3) 2 x 16

- 2 lines of 16 characters of text
- Text positioned centrally
Motorway Signal MK3 (MS3) 2 x 16

- 2 lines of 12 characters of text + signal aspect

LONG DELAYS 50
AFTER J10
Motorway Signal MK3 (MS3) 3 x 18

- M1 CLOSED AT J10
- FOR BIRMINGHAM
- USE M25 AND M40

- 3 lines of 18 characters of text
- Text positioned centrally
Motorway Signal MK3 (MS3) 3 x 18

- 3 lines of 12 characters + signal aspect
Nominal Dimensions

MS3 (3x18):

- M1 CLOSED AT J10
- FOR BIRMINGHAM
- USE M25 AND M40

MS3 (2x16):

- HGVs FOLLOW
- LEAVE AT J10

Message sign 2x12:

- LONG DELAYS
- AFTER J10

Dimensions:
- 9360mm
- 8190mm
- 4656mm
- 1697mm
- 2535mm
- 3315mm
- 104mm