

DfT Circular 01/2016

# The Traffic Signs Regulations and General Directions 2016

The Department for Transport has actively considered the needs of blind and partially sighted people in accessing this document. The text will be made available in full on the Department's website. The text may be freely downloaded and translated by individuals or organisations for conversion into other accessible formats. If you have other needs in this regard please contact the Department.

Department for Transport
Great Minster House
33 Horseferry Road
London SW1P 4DR
Telephone 0300 330 3000
Website <a href="https://forms.dft.gov.uk">www.gov.uk/dft</a>
General enquiries <a href="https://forms.dft.gov.uk">https://forms.dft.gov.uk</a>

#### © Crown copyright 2016

Copyright in the typographical arrangement rests with the Crown.

You may re-use this information (not including logos or third-party material) free of charge in any format or medium, under the terms of the Open Government Licence. To view this licence, visit

www.nationalarchives.gov.uk/doc/open-government-licence or write to the Information Policy Team, The National Archives, Kew, London TW9 4DU, or e-mail: psi@nationalarchives.gsi.gov.uk.

Where we have identified any third-party copyright information you will need to obtain permission from the copyright holders concerned.

# Contents

1.	Foreword: Andrew Jones MP	6
	IntroductionReducing sign clutter	8
B P P R B P 2 T S T T T	General changes in TSRGD 2016 Proportion and form of letters, numerals and other characters Bilingual signs and use of Scottish Gaelic on directional signs Permitted expressions of days, dates, times, time periods & time limits Permitted expressions of distance Removal of directions Repeater signs Broken links between signs and markings Parking bays Pomph zones Femporary signs Sign illumination Fourist signing Fraffic orders Type approval of traffic signal approval equipment	11 12 12 14 14 15 16 16
4.	Schedule 1 – Definitions	. 21
T C T	Schedule 2 - Signs that warn of hazards and signs for bridges and er structures.  The new structure.  Changes in TSRGD 2016.  The policy context.  Vorked example.	22 23
T C T	Schedule 3 - Upright signs that indicate regulatory requirements for oving traffic The new structure Changes in TSRGD 2016 The policy context Vorked example	. 27 27 28 29
T C T	Schedule 4 - Upright signs that control waiting, loading and parking ng a road The new structure Changes in TSRGD 2016 The policy context Vorked example	.32 32 33

8. Schedule 5 - Signs to indicate parking places and areas subject to parking controls	
The new structure	37
9. Schedule 6 - Upright signs for red routes  The new structure  The policy context	39
10. Schedule 7 – Road markings and miscellaneous upright signs that indicate stopping, waiting, loading and parking controls	40 40
11. Schedule 8 - Signs indicating the entrance to and end of a pedestrian, or pedestrian and cycle zones, and signs for charging schemes	42
The new structure	42
12. Schedule 9 – Regulatory signs at junctions and miscellaneous regulatory signs	44
13. Schedule 10 - Signs for speed limits.  The new structure	47 47
14. Schedule 11 - Signs that give information, are advisory or guide to 49  The new structure	49
Changes in TSRGD 2016.  15. Schedule 12 - Directional signs The new structure	52 52
16. Schedule 13 - Signs only for use in temporary situations  The new structure	59
17. Schedule 14 – Signs for traffic control by light signals, signs for crossings, and signs for lane control	62 63
18. Schedule 15 - Matrix signs and light signals for the control of mov traffic on motorways and dual carriageway roads	ing 68

Changes in TSRGD 2016 The policy context	
19. Schedule 16 - Variable message signs The new structure Changes in TSRGD 2016 The policy context	70 70
20. Schedule 17 – Letters, numerals and other character  The new structure	
21. Schedule 18 – Permitted Expressions of Time, Distance and Park Restrictions	72
22. Annex A  Overview of the changes between TSRGD 2002 and TSRGD 2016	
23. Annex BMapping TSRGD Pre-2016 to TSRGD 2016	

# 1. Foreword: Andrew Jones MP



This Circular is aimed at traffic signs practitioners and others with responsibility for traffic management. It explains the measures we have introduced in the Traffic Signs Regulations and General Directions 2016 (TSRGD) and how these differ from the previous regulatory regime - both in terms of prescription and structure - and in the context of the Government's policy on traffic signs.

This radical overhaul of TSRGD represents a significant contribution to the Government's deregulatory programme. By removing much of the cost and red tape associated with the delivery of traffic management solutions, and by broadening the range of available information on traffic signs, road users will feel the benefit sooner in terms of reduced congestion, improved road safety and clear and succinct signing - thus benefiting the wider economy. We have also included a range of new signs to promote cycling take up and safety.

We have stripped out the rules that contributed to the proliferation of traffic signs; providing a pragmatic regulatory regime that keeps the message to the minimum necessary, without distracting road users and spoiling the environment.

Even in this technological age, traffic signs remain the only method of communicating to all road users what they need to know to complete their journey safely, efficiently and within the law.

While safety must never be compromised, having introduced these changes I expect traffic authorities to play their part.



Andrew Jones

# 2. Introduction

- 2.1 The Traffic Signs Regulations and General Directions (TSRGD) 2016 (SI 2016 No 362) came into force on 22 April 2016. It revokes the Traffic Signs Regulations and General Directions 2002 and replaces them with an updated, revised and consolidated TSRGD. The TSRGD amendments made in 2004, 2005, 2006, 2008 and 2011 have been revoked and incorporated into the new TSRGD.
- A list of statutory instruments consolidated into TSRGD 2016 is given in **Table 2.1**. TSRGD 2016 also incorporates the non-prescribed traffic signs authorised in 2011 and 2012 by the Secretary of State for use by English local authorities. Copies of TSRGD 2016 are available from TSO at £65.00 each. Also available online at <a href="http://www.legislation.gov.uk/uksi/2016/362/contents/made">http://www.legislation.gov.uk/uksi/2016/362/contents/made</a>

# Table 2.1 Statutory Instruments containing provisions consolidated into TSRGD 2016

The Zebra, Pelican and Puffin Pedestrian Crossings Regulations and General Directions 1997

The Traffic Signs (Temporary Obstructions) Regulations 1997

The Communications Act (Consequential Amendments) Order 2003

The Fire and Rescue Services Act 2004 (Consequential Amendments) (England) Order 2004

The Fire (Scotland) Act 2005 (Consequential Modifications and Amendments) (No. 2) Order 2005

The Fire and Rescue Services Act 2004 (Consequential Amendments) (Wales) Order 2005

The Wales Tourist Board (Transfer of Functions to the National Assembly for Wales and Abolition) Order 2005

The School Crossing Patrol Sign (England and Wales) Regulations 2006

The Serious Organised Crime and Police Act 2005 (Consequential and Supplementary Amendments) (Scotland) Order 2006

The Serious Organised Crime and Police Act 2005 (Consequential and Supplementary Amendments to Secondary Legislation) Order 2006

The Road Traffic Exemptions (Special Forces) (Variation and Amendment) Regulations 2011

The Postal Services Act 2011 (Consequential Modifications and Amendments) Order 2011

The Local Policing Bodies (Consequential Amendments) Regulations 2011

- 2.3 TSRGD 2016 prescribes the designs and conditions of use for traffic signs, (which include road markings, traffic signals, pedestrian, cycle and equestrian crossings), to be lawfully placed on or near roads in England, Scotland and Wales, with a limited number prescribed for use only in England or in Scotland. Traffic signs are essential for the implementation of traffic management schemes and for the enforcement of road traffic law.
- 2.4 This Circular supplements existing guidance published in the Department for Transport's Traffic Signs Manual. It should be read in conjunction with TSRGD by all those involved in designing and implementing traffic management schemes, and in road traffic regulation generally.
- 2.5 TSRGD 2016 introduces a new structure to that used in previous versions. Regulations and directions that apply to all traffic signs are set out in the overarching Regulations and General Directions Parts 1 and 2. All sign-specific requirements are now separated from the general regulations and directions and placed together with to the signs to which they relate, within a series of separate standalone schedules. Generally Part 1 to each schedule introduces the requirements specific to that schedule
- A fundamental change is a shift towards a 'menu approach' for directional and parking signs whereby, instead of prescribing complete sign designs, upright signs now mostly appear as component elements. Another feature of the new structure is the repetition of symbols, (for example the 'no waiting' symbol), which are prescribed in different sizes according to their different uses. The new structure is designed to guide the reader systematically; first through the process of building a sign through tables which, in turn, cross refer to the applicable regulations and directions contained within other parts of that schedule.
- 2.7 In line with the Government's commitment to better regulation, the level of prescription in both the regulations and directions has been reduced.
- 2.8 In restructuring TSRGD, many upright signs and markings that are commonly placed in combination now appear within the same Schedule, for example give way at junctions. Therefore the former Schedule 3 (Railway and Tramway Level Crossings) Schedule 5 (Bus, Tram and Pedal Cycle Facilities) and Schedule 6 (Road Markings) have been dispersed through the new schedules as appropriate. Each new schedule is explained in more detail in this Circular, and worked examples are provided to demonstrate the changes. An overview of the changes between TSRGD 2002 and TSRGD 2016 is provided at **Annex A** and **Annex B**. Major updates to the Traffic Signs Manual will be provided in due course.

## Reducing sign clutter

Overuse of traffic signs blights our landscape, wastes taxpayers' money and dilutes important road safety messages. Research carried out by the Department to inform the Traffic Signs Policy Review showed that the number of traffic signs has doubled in the last 20 years. This is unsustainable, and bears out the need to reduce signing whenever possible. A culture change is needed in the way signing is used.

- 2.10 In June 2015 the Secretary of State asked Sir Alan Duncan MP to lead a task force looking into all the issues surrounding sign clutter and to make recommendations as to how this can be reduced further, building on the work TSRGD has already done. Ministers will decide how to take forward Sir Alan's recommendations, including amending TSRGD 2016 if needed.
- 2.11 Reducing sign clutter was a key aim of the revision of the Traffic Signs Regulations and General Directions. TSRGD 2016 contains a number of changes which will cut costs, complexity and sign clutter. It provides a modern framework that will mean far fewer signs need to be placed, and gives local authorities the right to remove many of their existing signs.
- 2.12 The Department sets the legislation governing what traffic signs look like and mean, but decisions about which traffic signs to place and where to place them is a matter for local authorities. TSRGD 2016 gives authorities more tools than ever before to tackle the scourge of too many signs.
- 2.13 The Department expects authorities to be proactive in making use of these tools to get rid of unwanted and unnecessary signs, and design signing schemes to minimise visual clutter from the outset.

#### How will the new TSRGD help deliver less clutter?

- **2.14** TSRGD 2016 relaxes many previous requirements on the use and placing of signs:
  - Where previously two terminal signs were needed to show the start of a traffic restriction, only one is now required, regardless of the width of the road, to be compliant.
  - Fewer signs now have a statutory requirement that they be lit. For those
    where direct lighting is not mandatory and an authority judges that lighting is
    no longer needed, signs will be less intrusive, as well as reducing energy
    usage and light pollution.
  - The requirement for a sign and marking to be used together has been removed in some cases. For example a mandatory cycle lane or a 'permit holders only' parking bay only need to be shown by a road marking where they operate at all times.
  - The requirement to place repeater signs has been removed. It is for local authorities to make sure that restrictions such as speed limits are signed so that drivers know, and are regularly reminded of, the restriction in place.
  - To help minimise visual intrusion, smaller sizes are now available for signs such as those aimed only at walkers and cyclists.
- 2.15 Authorities must remove any outdated temporary signs of the type shown in Figure 2.1 (including its permitted variants). By law, these must only be in place for a maximum of 3 months following completion of the works, but are routinely left in place for far longer, in some cases years. TSRGD now requires a 'remove by' date to be placed on the back of the sign, a measure aimed at helping authorities keep track of when signs should be removed, and enabling local residents to request removal if a sign is left in place too long.



- 2.16 Temporary signs are often not necessary at all. Authorities should consider their use carefully rather than routinely placing them as part of implementing traffic management schemes. These signs are often of only limited use to someone using a stretch of road for the first time. Local drivers are likely to have seen the scheme being implemented and will therefore be aware of the changes to the road layout already.
- 2.17 Similarly, black-on-yellow temporary signs for new housing developments must by law be removed within 6 months of completion of the development.

# 3. General changes in TSRGD 2016

#### Proportion and form of letters, numerals and other characters

Schedule 17 Parts 1 to 8

- 3.1 A new Schedule 17 replaces the previous Schedule 13 as follows:
  - Part 1 'transport medium' alphabet; for use on a sign, or parts of a sign, with a black, blue, brown, dark green, green or red background
  - Part 2 'transport heavy' alphabet; for use on a sign, or parts of a sign, with an orange, white or yellow background
  - Part 3 'motorway' alphabet; for route numbers on permanent motorway signs with a blue background
  - Part 4 'motorway' alphabet; for route numbers on temporary motorway signs with a yellow background
  - Part 5 alphabet for use on variable message signs where the characters shown in Parts 1 - 4 cannot be used because of the method of construction or operation of the sign
  - **Part 6** alphabet for use in road markings where the character height is in the range 280 millimetres to 700 millimetres
  - Part 7 alphabet for use in road markings where the character height is 1600 millimetres or where varied proportionally to a height of either 705 millimetres or 1035 millimetres in accordance with regulation 5(15)
  - Part 8 alphabet for use in road markings where the character height is 2800 millimetres

# Bilingual signs and use of Scottish Gaelic on directional signs

Schedule 17 Parts 9 and 10

- 3.2 A Scottish Gaelic alphabet is now provided for use in Scotland only, on certain directional signs prescribed by Schedule 12. The appropriate provisions are regulation 5(16), paragraph 4 in Part 3 of Schedule 12, paragraph 5 in Part 8 of Schedule 12, paragraph 2 in Part 25 of Schedule 12 and paragraph 3 in Part 27 of Schedule 12.
- 3.3 Place names may also be shown in Scottish Gaelic on boundary signs prescribed by Schedule 11 together with the following phrases preceding the place name:
  - "Welcome to"
  - "County of"
  - "Welcome to the County of", or similar phrase

- "City of"
- "Welcome to City of"
- **3.4** Guidance on the use of Scottish Gaelic is available from Transport Scotland.
- 3.5 All traffic signs in Wales, that display text, will continue to be bilingual with the Welsh language displayed as to be seen first. Further guidance regarding bilingual signs in Wales is available from the Welsh Government. Examples of bilingual traffic signs and standard Welsh and English terms are available to down load from the Traffic Wales website.

# Permitted expressions of days, dates, times, time periods & time limits

#### Schedule 18 Parts 1 and 2

- 3.6 As explained in paragraph 2.6, the new structure of TSRGD sees a shift away from the illustration of complete signs in favour of a menu approach, with directional and parking signs derived from component parts. As a result, the permitted formats for days, times, time periods and time limits are no longer illustrated.
- 3.7 To ensure national consistency, Regulation 6 requires that all expressions of days, dates, times and time periods must be displayed as specified in Parts 1 and 2 of Schedule 18.
- 3.8 Part 1 contains permitted expressions of year, month, day, time of day, bank and public holidays, as well as "at any time". The following legends are now prescribed: "at all times", "at other times" and "additional times". In addition, "market day", "event day" and "match day" waiting restrictions are now prescribed each may be preceded by "next" as appropriate. Pluralisation and capitalisation are allowed for as appropriate.
- 3.9 Part 2 provides other expressions of time limit appropriate for use on parking signs only. "No return to" (together with the name of a zone or parking place), and "No return to this zone" are also prescribed.

# Permitted expressions of distance

#### Schedule 18 Part 3

3.10 Permitted expressions of distance, previously prescribed in Schedule 16 items 4 to 8, have been simplified. More flexibility has been introduced, and the appropriate use of distances is set out in **Table 3.1**.

Table 3.1 Permitted expressions of distance			
Description	≥ 3 miles	≥ ½ mile & < 3 miles	< ½ mile
Supplementary plates to warning and regulatory signs	Whole numbers to the nearest mile followed by "miles"  Used mainly when preceded by "For" or "for"	Distance to the nearest 1/4 mile (using 1/4, 1/2, 3/4 as appropriate) followed by "miles" or "mile"	Distance to the nearest 10 yards followed by "yards" or "yds"  Distance to the nearest 1/4 mile (using "1/4 mile" or "1/2 mile" as appropriate)
Schedules 8 and 11 where a distance may be added or varied	Whole numbers to the nearest mile followed by "miles"	Distance to the nearest 1/4 mile (using 1/4, 1/2, 3/4 as appropriate) followed by "miles" or "mile"	Distance to the nearest 10 yards followed by "yards" or "yds"  Distance to the nearest 1/4 mile (using "1/4 mile" or "1/2 mile" as appropriate)
Distance to junction on map-type, dedicated lane and overhead advance direction signs, and to an exit leading to services	Not applicable	"2", "1 <sup>3</sup> / <sub>4</sub> ", "1 <sup>2</sup> / <sub>3</sub> ", "1 <sup>1</sup> / <sub>2</sub> ", "1 <sup>1</sup> / <sub>3</sub> ", "1 <sup>1</sup> / <sub>4</sub> ", "1", "3 <sup>4</sup> / <sub>4</sub> ", "2 <sup>2</sup> / <sub>3</sub> " or "1 <sup>1</sup> / <sub>2</sub> " followed by "m"	"⅓ m"
Distance alongside a place name destination (other than advance direction signs on motorways)	Whole numbers to the nearest mile  Note: On a pedestrian sign "m" follows the distance where the sign also includes a distance in yards	Distance to the nearest ½ mile (using ½, ½, ¾ as appropriate)  Note: On a pedestrian sign "m" follows the distance where the sign also includes a distance in yards	Distance to the nearest ½ mile (using ¼ or ½ as appropriate)  Additionally on pedestrian signs:  Distance to the nearest 10 yards followed by "yards" or "yds"; where "¼" or "½" is used on a sign that also includes a distance in yards it is followed by "m"
Distance below a place name destination (other than advance direction signs on motorways)	Whole numbers to the nearest mile followed by "miles"	Distance to the nearest ½ mile (using ½, ½, ¾ as appropriate) followed by "miles" or "mile"	Distance to the nearest 10 yards followed by "yards" or "yds"  Distance to the nearest 1/4 mile (using "1/4 mile" or "1/2 mile" as appropriate)
Local facility, car park, leisure facility and tourist destination signs	Whole numbers to the nearest mile followed by "miles"  Note: "m" may be used where the sign also includes a distance in yards	Distance to the nearest ½ mile (using ½, ½, ¾ as appropriate) followed by "miles" or "mile"  Note: "m" may be used where the sign also includes a distance in yards	Distance to the nearest 10 yards followed by "yards" or "yds"  Distance to the nearest 1/4 mile (using "1/4 mile" or "1/2 mile" as appropriate)

#### Removal of directions

One terminal sign or two

- 3.11 For regulatory signs indicating the beginning of a restriction, requirement, prohibition or speed limit, direction 8(3) of TSRGD 2002 required the placing of one terminal sign on each side of a single-carriageway road, and the placing of one terminal sign on each side of the appropriate carriageway of a dual-carriageway road (i.e. on the near side and on the central reservation).
- 3.12 In 2011 this requirement was set aside in England for signs other than speed limits by way of an area-wide special direction issued to every English traffic authority. This allowed the placing of only one terminal sign on either side of the road as appropriate, thereby reducing their environmental impact.
- 3.13 This relaxation has now been included in TSRGD 2016 and extended to speed limit signs. In deciding whether to reduce terminal signing provision, the following factors could be taken into account:
  - turning angles
  - junction layouts
  - one way traffic conditions
  - sign mounting height
- 3.14 This relaxation has been made to reduce environmental impact. However, care should be taken to ensure that a single sign is clearly visible to road users and does not give rise to issues relating to enforcement or road safety. This might require the sign in some instances to be placed on the off side of the road. There will be some situations where two signs will still be preferable. Drivers should not be placed in the situation where they might not see the sign before starting to turn at a road junction.

# Repeater signs

- 3.15 TSRGD 2016 removes the requirement for a minimum of one repeater sign to be placed, which was first introduced in the amendments made in 2011.
- 3.16 Traffic authorities are best placed to decide how many repeater signs are needed and where they are placed, having regard to legislation and guidance in Chapter 3 of the Traffic Signs Manual.

## Broken links between signs and markings

- 3.17 In order to minimise sign clutter, and allow greater flexibility, the mandatory links tying together upright signs and road markings have been removed. The exceptions are mainly those requirements linking signs, signals and road markings at signalised junctions and crossings.
- 3.18 An example of where it might be appropriate to place only an upright sign or a road marking could be a 'loading only' restriction that operates at all times. Traffic authorities might consider that a bay marking on its own is sufficiently clear to the motorist, without an upright sign. The same principle could be applied to any restriction that operates at all times and with no exceptions. The

reverse could also apply and upright signs could be placed without a road marking, although in the case of the above 'loading only' restriction, some physical characteristics, for example build outs or planters, would be needed to be provided to clearly show the extent of the signed restriction.

# Parking bays

- **3.19** TSRGD 2002 prescribed a series of white bay markings to delineate areas of carriageway reserved for specified classes of vehicle or specified uses.
- 3.20 The dimensions for bay markings have been relaxed, apart from those for disabled badge holders. Whilst a minimum width of 1.8 m is specified, there is no longer a maximum width, nor a minimum or maximum length. The intention is to allow traffic authorities flexibility in determining the bay or parking space size appropriate both for the intended vehicle type and the surrounding street environment.
- 3.21 Bay markings and parking spaces should be of sufficient length and width to fully accommodate the vehicles for which they are intended. In cases where larger vehicles, for example 4x4 type vehicles, cannot fit fully within the marking, it is recommended that traffic authorities use discretion over enforcement.
- In addition to relaxing the permitted dimensions, traffic authorities now have the freedom to use alternative methods to create bays and spaces on the carriageway. This may include either colour-contrasting surfacing, or paving in a different pattern or appearance, to distinguish parking areas from the surrounding carriageway. No legend is included in these markings. The markings may be used in conjunction with upright signs as currently prescribed.
- 3.23 In light of advice received from the Disabled Persons Transport Advisory Committee, minimum dimensions are still prescribed for bays reserved for disabled badge holders. These must be a minimum of 6.6 m long, 2.7 m wide, or 3 m wide where placed in the centre of the carriageway. There is an exception for cases where, on account of the nature of traffic using the road, the overall width of the carriageway is insufficient to accommodate a bay of that width.

# 20 mph zones

- 3.24 Schedule 10 retains the requirement that no point within a 20 mph zone, the boundary of which is indicated by signs to diagram 674, shall be more than 50 metres from a prescribed traffic calming feature. In practice, this means that features can be up to 100 metres apart. (The exception to this is in a cul-de-sac less than 80 metres long, within which no such feature is required.)
- 3.25 Schedule 10, General Directions 2(3)(f) and 2(3)(g) add (respectively) upright speed limit repeater signs to diagram 670 and the road marking to 1065 to the prescribed list of traffic calming features. These may now be used in addition to the self-enforcing features within 20 mph zones indicated by the boundary sign to diagram 674. This will enable local authorities to reduce the number of traffic calming features where vehicle speed is are already around 20 mph due to the nature of the road.
- 3.26 It should be noted that upright signs and road markings may not be dispensed with completely. Schedule 10 General Direction 2(4) requires at least one

physical traffic calming feature within a 20 mph zone. Beyond that traffic authorities may, at their discretion, place any combination of the following at 100 metre (maximum) intervals:

- additional physical traffic calming features;
- upright signs to diagram 670;
- 20 mph roundel markings to diagram 1065

But in doing so they will need to carefully consider the implications for the self-enforcing nature of a 20mph zone.

# Temporary signs

- 3.27 All signs for use in temporary situations now appear together in a new Schedule 13. More detailed guidance is contained in section 16.
- 3.28 Warning triangles for use only in temporary situations have been removed from the Schedule 2 permanent warning signs and now appear in a dedicated Schedule 13 Part 2, together with their associated supplementary plate legends. (Diagram 562 "Other danger ahead" appears in both Schedules 2 and 13 with separate sub-plate legends.)
- 3.29 The number of sign illustrations has been significantly reduced in respect of lane closures and contra flow works at road works, previously prescribed in Schedule 12 Part III. Permitted variants associated with those remaining illustrations have been expanded to cover all signs similar to those prescribed in TSRGD 2002.
- 3.30 Signs for temporary parking and loading suspension are included in Schedule 13 rather than with the permanent parking signs in Schedule 4.
- 3.31 The 'lollipop' type signs to diagrams 633 and 7031 have been brought together in schedule 13, and a new 'lollipop' sign, diagram 633.1, prescribed for use on routes along which cycle road trials are taking place.
- 3.32 Those signs prescribed in The Traffic Signs Temporary Obstructions Regulations 1997 are now included in Schedule 13.

## Sign illumination

- 3.33 Previously, many traffic signs were required to be directly illuminated at night when placed within a street-lit area, either by internal or external means. These requirements have been significantly relaxed in TSRGD 2016.
- 3.34 A new overarching regulation 8 introduces a default lighting requirement equivalent to the previous Schedule 17 item 4. The default position requires upright signs to be reflectorised, while allowing direct lighting if so desired. This applies to all traffic signs unless other conditions are specified elsewhere in the Schedules. Therefore, when assessing the applicable regulations and directions for any given sign, if illumination requirements are not specified, the default position applies.

- **3.35** From now, only those signs listed below must be directly illuminated during the hours of darkness when placed within a street lit area.
  - warning and regulatory signs at level crossings
  - headroom restrictions at low bridges or structures
  - warning of requirement to 'Stop' or 'Give Way' ahead (diagram 501)
  - speed limit terminal signs on trunk or principal roads
  - regulatory terminal signs including give way, no entry, vehicle restrictions (including for low and narrow bridges) and banned manoeuvres
  - motorway entry, exit and gantry-mounted signs.
- 3.36 Those signs no longer needing direct illumination must be reflectorised as a minimum.
- 3.37 It should be noted that traffic authorities may still apply direct lighting as before, should they wish to. Notwithstanding the obvious financial and environmental benefits of removing direct lighting, it is recommended that robust risk analysis should underpin any decision to do so on a case by case basis. In deciding whether to rely on reflectorisation alone, the following factors could be taken into account:
  - turning angles
  - junction layouts
  - one way traffic conditions
  - sign mounting height
  - signs mounted on the off side of the carriageway
  - proportion of heavy goods vehicles and the relevance of the sign to them
- 3.38 The default position also applies to any traffic sign placed within a 20 mph limit or a 20 mph zone. These need not be directly illuminated, but must be reflectorised. For clarity, this relaxation does not apply to speed limit terminal signs placed at the boundary between a 20 mph speed limit and another speed limit on trunk or principal roads, which must be lit as stated above.
- 3.39 Where a sign needs to be directly lit, but street lighting is turned off during part of the hours of darkness, the sign must also be reflectorised unless sign remains directly lit when the street lights are turned off.

# **Tourist signing**

- 3.40 Previously, a disparity existed between England, and Scotland and Wales around a destination's eligibility for tourist signing, how the system was administered and the responsibilities of the various agencies.
- 3.41 For Scotland and Wales, VisitScotland and Visit Wales recognised individual tourist attractions and facilities as qualifying for a brown sign under TSRGD. However, VisitEngland did not carry out a similar function, thereby exposing English traffic authorities to pressure from private enterprises, such as retail parks, to represent their business as tourist destinations on traffic signs. This inevitably contributed to sign clutter.

- **3.42** TSRGD 2016 includes similar provision for England as for Scotland and Wales. A "tourist destination" is now defined as:
  - a permanently established attraction or facility (other than a leisure facility) which—
  - (a) attracts or is used by visitors to an area;
  - (b) is open to the public without prior booking during its normal opening hours; and
  - (c) is recognised as a tourist attraction or facility by the appropriate national promoter of tourism
- 3.43 Leisure facilities, which may have a brown sign, are indicated in the TSRGD description of the relevant symbol in Schedule 12 Parts 14, 15, 16 and 18. Unlike tourist destinations, they do not require recognition by the appropriate national promoter of tourism.
- **3.44** The "national promoter of tourism" is defined as:
  - (a) in relation to England, the British Tourist Authority;
  - (b) in relation to Scotland, VisitScotland; and
  - (c) in relation to Wales, Welsh Ministers

The Authority that currently promotes tourism in England uses the trading name "VisitEngland". Welsh Ministers currently promote tourism in Wales using the branding "Visit Wales".

- 3.45 Greater flexibility on the design of boundary signs has been introduced to enable authorities to foster a sense of place, and the historic and geographic qualities often associated with particular areas. The permitted variants for boundary signs to diagram 2403.1 have been expanded to allow signs to show the boundary of a National Park, Area of Outstanding Natural Beauty (in England and Wales) or a National Scenic Area (in Scotland).
- 3.46 Boundary signs may now incorporate photographic or other images showing an item of local interest. Whenever such signing is proposed, careful consideration should be given to what can be instantly recognisable from a moving vehicle. Consideration should also be given to how the image performs in all lighting conditions. More effective images are likely to be those depicting landmarks, buildings or structures that are synonymous with the area, city or town. Photographs showing generic features such as natural scenery or historic buildings are less likely to create an instant association with a particular place. Subliminal advertising must be avoided. An example of a successful pilot in Plymouth is shown in Figure 3.1.



3.47 The new TSRGD also allows the signing of historic county boundaries, although these may not be placed as a substitute for administrative boundaries, which remain prescribed. It should be noted that photographs are not permitted to mark the boundary of an historic or ceremonial county.

#### **Traffic orders**

3.48 In order to reduce cost and bureaucracy associated with placing bus stop clearways, TSRGD 2002 removed the requirement to make an underpinning traffic order in respect of these markings. TSRGD 2016 extends this by removing the need for a traffic order for mandatory with-flow cycle lanes and stopping restrictions on school entrance markings.

## Type approval of traffic signal approval equipment

- 3.49 Under direction 56 of TSRGD 2002, traffic control equipment (e.g. equipment used to control traffic lights and variable message signs) could only be used having first obtained type approval from the Secretary of State. Over time this mechanism failed to keep pace with developments in the industry, and was in need of reform.
- 3.50 While recognising that for some form of approval or registration process was still needed, the decision was taken to remove the statutory type approval requirement. Certain safety critical elements previously set out in technical specifications are now prescribed in TSRGD 2016, such as the amber time and safety classes for controllers by reference to the relevant BS EN Standard.

- 3.51 The Traffic Technology Forum, a partnership of the Association for Road Traffic Safety and Management (ARTSM) and the Traffic Systems Group of the Association of Directors of Environment, Economy, Planning & Transport (ADEPT), has developed a voluntary alternative to type approval for traffic control equipment. Traffic Open Products & Standards Limited (TOPAS) is a new body formed to oversee the promotion, maintenance and use of technical procurement standards, and a voluntary process for registering products to these standards. The aim is to minimise procurement costs and encourage standardisation.
- 3.52 The TR series of technical specifications previously managed by the Highways Agency/Highways England now become TOPAS procurement standards. Manufacturers will provide a Specification Compliance File to demonstrate compliance with the relevant technical specification, to be checked by an independent body, with an entry included on the TOPAS product register to that effect.

## Variable message signs

3.53 The requirements for legends for use on variable message signs are unchanged from TSRGD 2002 and are shown in a new Schedule 16. With the removal of equipment type approval, performance requirements for the equipment are specified in schedule 16 Part 7 by reference to the relevant parts of BS EN 12966:2014.

# 4. Schedule 1 – Definitions

**4.1** Definitions used within TSRGD 2016 are set out in Schedule 1, replacing regulation 4 of TSRGD 2002.

# Schedule 2 - Signs that warn of hazards and signs for bridges and other structures

#### The new structure

- The new structure in Schedule 2 introduces a blank template for warning sign combinations, together with the permitted size range for triangles and supplementary plate x-heights. This provides the starting point from which warning signs are created from component elements.
- The subsequent Parts contain the component elements, with each having its own Table item reference. By navigating along an itemised row, the reader is guided through the applicable permitted variants and regulatory requirements to arrive at the complete signing combination.
- 5.3 The new structure for warning signing is set out in **Table 5.1**.

Table 5.1 structure	Signs that warn of hazards and signs for bridges and other
Part 1	Introduces the tabular structure in Part 2 which prescribes all permanent warning signs and sub-plates.
	The use of the tabular structure is set out, whereby each itemised row contains the component parts that may be used in combination as appropriate. These are arrived at by working along any given row following the permitted variants and cross references both to other optional supplementary signs (where appropriate) and the applicable sign specific provisions and directions.
	It is specified that component signing elements may only be derived from a single itemised row - a 'mix and match' of component elements from multiple rows is not permitted.
Part 2	Provides the starting point for warning sign and sub-plate assembly with a 'blank canvas' that prescribes the triangle size range and plate x-heights, The desired sign and associated sub-plate legends are shown in itemised rows, as set out below, with cross references to the applicable sign specific provisions and directions.
	Cross references are provided to optional supplementary signs that may be placed in combination with either a triangle alone, or a triangle and plate.
	Column 1 - Table Item number.
	Column 2 - Sign diagram number and sign description.
	Column 3 - Illustration of permitted triangular sign variations
	Column 4 - Permitted plate legends (unless specified by a reference in column 7 to the Schedule 2 General Directions, the plate is optional)

Table 5.1 Signs that warn of hazards and signs for bridges and other structures		
	Column 5 - Cross refers to supplementary plates in Part 3. See below.	
	Column 6 - Cross refers to sign specific provisions. See Part 7.	
	Column 7 - Cross refers to sign specific directions. See Schedule 2 General Directions.	
Part 3	Related supplementary associated plates for signs in Part 2.	
Part 4 & 5	Signs, sub-plates and markings for bridges and other structures.	
Part 6	Illustrates other warning signs - again, referring to the sign specific provisions and directions.	
Part 7	All provisions specific to permanent warning signs.	
Part 8 Schedule 2 General Directions	All sign specific directions for permanent warning signs.  The directions specify signs that must be placed in combination, including those triangles that must be placed with a sub-plate. Provision is made for optional signing combinations in respect of other signs.  Specific provision is made for the placing of 'edge of carriageway' signs.	

# Changes in TSRGD 2016

- 5.4 Until now, the size of warning triangles and associated sub-plate legends have been individually specified. This has been dispensed with and TSRGD 2016 prescribes the full size range for all warning signs. The appropriate sign size and sub plate x-heights for use in specific situations are set out in Chapter 4 of the Traffic Signs Manual.
- TSRGD 2016 withdraws the sign to diagram 530 in TSRGD 2002 which showed the dimensions in imperial units of measurement only. All new and replacement signs must now be to diagram 530A. This combined warning sign for low bridges or structures showing dimensions in both imperial and metric units of measurement was prescribed in 2011.
- A lifetime saving has been applied to existing warning signs and sub-plates displaying imperial only units of measurement, and there is no requirement on local authorities to replace or remove such signs until such time as they reach the end of their life.
- 5.7 The permitted variant (TSRGD 2002 Schedule 16 Item 17) allowing the route arm thickness to be varied to represent priority through a junction has been removed. Instead, each variant is now illustrated.
- 5.8 All signs relating to low bridges and structures for which a traffic regulation order is not required are brought together in **Parts 4 and 5** i.e. on a road which passes under a bridge, tunnel or other structure, or on or under any such bridge or structure.
- 5.9 Schedule 2 now prescribes only permanent warning signs. Those for use only in temporary situations are prescribed in **Schedule 13**.

- 5.10 The TSRGD 2002 General Directions linking signs to sub-plates and other signs are replaced by sign-specific directions referenced in the Schedules.
- 5.11 The requirement to apply direct illumination at night to warning signs when placed within a street-lit area has been removed. Instead the default requirement applies whereby warning signs must be reflectorised as a minimum, while the option to light signs directly remains. The relaxations do not apply to height limit warning signs at low bridges or other structures, "GIVE WAY" and "STOP" ahead signs, and signs for level crossings.

# The policy context

5.12 Although warning sign dimensions are no longer individually prescribed, it remains the case that traffic signs must be easily seen and assimilated by road users. This reduction in prescription should not be seen as an opportunity to place smaller signs for environmental or economic reasons. Traffic authorities are strongly advised to follow the existing warning sign sizes set out in the Traffic Signs Manual Chapter 4.

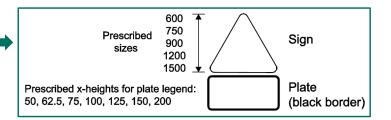
## Worked example

**5.13** The following example illustrate how the new TSRGD works.

Permanent signing is needed to warn drivers of a steep hill downwards ahead and the location of an escape lane or arrester bed.

#### STEP 1

- See guidance in Traffic Signs Manual Chapter 4.
- Go to Schedule 2, Parts 1 and 2. Blank canvas.
- Select sign size and plate x-height.



#### STEP 2

- Select the desired sign.
- Schedule 2, Part 2, Item 18 Columns 2 & 3.



#### STEP 3

- Select the desired plate legend. Schedule 2, Part 2, Item 18 Column 4.
- "Low gear now"



#### STEP 4

- Select the desired supplementary associated plate. Schedule 2, Part 2, Item 18 Column 5.
- This column indicates the item number of the signs in Schedule 2, Part 3 which can be associated with this combination of warning sign and plate.

- Go to Schedule 2. Part 3. Items 1 and 3.
- Choose your supplementary associated plate and associated x-height.
- See Column 4 for variants of the chosen associated plate.



#### STEP 5

- The warning sign, plate and associated plate is now complete.
- Go to Schedule 2, Part 2, Item 18 Column 6. This column indicates the applicable provisions in Schedule 2, Part 7 that relate to this warning sign (i.e. paragraph 12 in Part 7).
- Go to Schedule 2, Part 7, paragraph 12. It reads "12. The sign may have different numerals to those shown in the diagram."







#### STEP 6

Go to Schedule 2, Part 2, Item 18 - Column 7. This column indicates the Schedule 2 General Directions. if any, applicable to this warning sign.

TOP TIP – work left to right and complete each column for your chosen sign. Where a variant of the sign is not shown in column 3, check first in column 6 to see if the desired variant is permitted.

Diagram 523.1 Steep hill downwards ahead



- 1. A distance with or without an arrow pointing to the left or to the right;
- 2. "For" and a distance:
- 3. An arrow pointing to the left or to the right;
- 4. "Low gear now":

or (when used with a first plate containing legend 4 or 5): 3, or both 1 and 3,



12



# 6. Schedule 3 - Upright signs that indicate regulatory requirements for moving traffic

#### The new structure

**Schedule 3** prescribes regulatory roundels and follows a similar format to Schedule 2. However, unlike warning triangles, roundel sizes remain individually prescribed. The full size range for sub-plate x-heights applies in all instances. Advice on appropriate uses of x-heights is given in Chapter 3 of the Traffic Signs Manual. The new structure for regulatory roundels is set out in **Table 6.1**:

Table 6.1 Uprigh	t signs that indicate regulatory requirements for moving traffic
Part 1	Introduces the tabular structure in Part 2 which prescribes all regulatory roundels and associated sub-plates. The use of the tabular structure is set out, whereby each itemised row contains the component parts that may be used in combination as appropriate. It is specified that component signing elements may only be derived from a single itemised row - a 'mix and match' of component elements from multiple rows is not permitted.
Part 2	Provides the starting point for regulatory roundels and sub-plates with a 'blank canvas' that prescribes roundel and sub-plate x-heights, The desired sign and associated sub-plate legends (by reference to Part 3) are shown in itemised rows, as set out below, with cross references to the applicable provisions and directions. These are arrived at by working along any given row taking account of the cross references to associated plate legends and the applicable sign specific provisions and directions.
	Column 1 - Table Item number.
	Column 2 - Sign diagram number and sign description.
	Column 3 - Sign illustration.
	Column 4 - Contains prescribed roundel sizes.
	Column 5 - Cross refers to associated plate legends in Part 3. See below.
	Column 6 - Cross refers to sign specific provisions in Part 4. See below.
	Column 7 - Cross refers to Schedule 3 General Directions. See below.
Part 3	Sets out applicable itemised supplementary plate legends.
Part 4	Sets out sign specific provisions.
Part 5 Schedule 3 General Directions	Sets out sign specific directions.

#### Changes in TSRGD 2016

- 6.2 Those roundels that may be mounted within traffic signal heads and the associated sign specific provisions and directions have been included in Schedule 14 which covers traffic signals.
- 6.3 Those directions previously prescribing the placing of two signs indicating the beginning and end of a prohibition, restriction or requirement have been removed. Only one sign is now required although authorities will need to consider if this is appropriate in individual cases. There is still a requirement to place a terminal sign as close as possible to the point where the restriction begins and ends.
- The No Entry sign to diagram 616 and the road marking to diagram 1046 when used at safety-critical locations approved by the Secretary of State, previously did not need a traffic order. The option to seek this approval has been removed, so the sign and road marking will now always require a traffic order. Existing site approvals will remain valid, unless written notice of withdrawal has been made.
- The "Only" plate to former diagram 953.2 has been withdrawn, as this legend is no longer used under 'bus gate' and 'tram gate' signs to diagrams 953 and 953.1. This series of signs has been extended to include all permutations of exemptions for cycles, motorcycles and taxis.
- The permitted supplementary plate exception legends for use in combination with the 'No entry' (diagram 616) are now one of "trams", "buses", "local buses", "cycles", "buses and cycles" or "local buses and cycles" where "and" may be varied to "&".
- 6.7 The "no right turn" and "no left turn" signs (diagrams 612 and 613) may now have time plates. The use of these is likely to be appropriate where the prohibition on turning applies during peak hours and where there are no dedicated traffic lanes for turning traffic. The use of double-headed arrows (diagram 1038) in traffic lanes should be avoided.
- Where the road marking to diagram 1044.2 (now a permitted variant of diagram 1043) is placed on the carriageway at a road narrowing, the requirement to also place diagrams 615 and 811 has been removed. However, it is strongly recommended that where the road marking is provided, the upright signs are also used.
- 6.9 The requirement to apply direct illumination during the hours of darkness to regulatory roundels, where placed on retroreflective self-righting bollards within a street-lit area, has been removed. Instead these signs must now be reflectorised as a minimum. It remains that those signs mounted on internally illuminated bollards must be directly lit.
- **6.10** Signs for speed limits are prescribed in Schedule 10.
- 6.11 A new roundel diagram 956.1 has been added for routes for use by pedal cycles, horses and pedestrians only. A second new roundel, diagram 956.2, is prescribed for routes that may be used only by pedal cycles, horses, horse-drawn vehicles and pedestrians.
- 6.12 The regulatory signs to diagrams 629 and 629.2 showing height and width restrictions in imperial units of measurement only have been withdrawn. All new

and replacement signs must now display the measurement in both metric and imperial measurements as shown in diagrams 629.2A and 629A. The diagram to 629.1 now consists of two roundels showing length restrictions in both metric and imperial units and both roundels must be placed together. A lifetime saving has been applied to existing signs displaying imperial only units of measurement, and there is no requirement on authorities to replace or remove such signs until such time as they reach the end of their life.

## The policy context

- 6.13 Since 2002, Government policy has shifted towards a general reduction in regulation, and TSRGD is no exception. The removal of the requirements governing the number of terminal signs required should not be taken to mean that such signs are no longer needed. There is still a requirement to place terminal signs, and to place them as close as possible to the point at which the restriction begins or ends. It remains the case that the road user must be notified as to the conditions of any traffic order in place. The placing of such signs either on one side, or both sides of the road is a matter for local judgement on a case by case basis, having regard to factors such as visibility and road layout.
- 6.14 Any reduction in the level of sign provision should be underpinned by robust risk based analysis to ensure any possible safety impacts are considered.

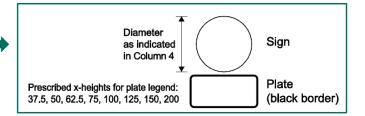
# Worked example

**6.15** The following example illustrate how the new TSRGD works.

Regulatory sign prohibiting all vehicles during certain times of the day except non-mechanically propelled vehicles.

#### STEP 1

- See guidance in Traffic Signs Manual Chapter 3.
- Go to Schedule 3, Parts 1 and 2. Blank canvas.



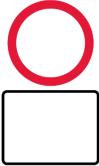
#### STEP 2

- Select the desired sign.
- Schedule 3, Part 2, Item 11 Columns 2 and 3.
- Select sign size: Column 4.



#### STEP 3

• Select the plate legend. Schedule 3, Part 2, Item 11 - Column 5. This column indicates the paragraph number of the legends in Schedule 3, Part 3 which can be used for the plate.



#### STEP 4

- Go to Schedule 3, Part 3, paragraphs 8, 12, 13, 14 and 15.
- Select the legends 14 "No vehicles", 8 "A time period" and 15 "except for access".
- Permitted expressions of time periods are found in Schedule 18.
- Go to Schedule 3, Part 2 and choose the x-height for the plate legend appropriate for the size of roundel (for guidance see Traffic Signs Manual Chapter 3).

No vehicles 10 am - 4 pm except for access

#### STEP 5

- The sign and associated plate is now complete.
- Go to Schedule 3, Part 2, Item 11 Column 6. This column indicates the applicable provisions in Schedule 3, Part 4 that relate to this sign combination. As we have used legend 14, the provision in Schedule 3, Part 4 is paragraph 4.
- Go to Schedule 3, Part 4, paragraph 4 which lists the illumination requirements for the sign.



No vehicles 10 am - 4 pm except for access

#### STEP 6

- Go to Schedule 3, Part 2, Item 11 Column 7.
- This column indicates the Schedule 3 General Directions if any applicable to this sign.
- Go to Schedule 3 Part 5 for the General Directions.
- Paragraphs 1 and 3 state the following:
  - 1.— (1) The sign must only be placed to indicate the effect of an Act, order, regulation, bylaw, resolution or notice which prohibits or restricts the use of the road by traffic.
    - (2) When the sign is placed to indicate the point at which a restriction, requirement or prohibition begins or ends, it must be placed as near as practicable to that point.
  - 3. The sign must not be placed unless accompanied by its associated plate.



No vehicles 10 am - 4 pm except for access

# Schedule 4 - Upright signs that control waiting, loading and parking along a road

#### The new structure

- 7.1 The 'building block' theme continues with the design of signs for waiting, loading and parking controls. As with warning signs and regulatory roundels, the design process begins with the blank canvas which provides the starting point from which to create the desired signing.
- 7.2 Where particular signs cannot be designed by this method, a complete sign is prescribed. These appear in Schedules 5, 6 and 7.

Table 7.1	Upright signs that control waiting, loading and parking along a road
Part 1	This is the blank panel diagram and shows two separate panels, one yellow and one white.
Part 2	This Part specifies the permitted arrangements of the panels as well as the other regulations that apply to the signs.
	The design now permits two adjacent signs to be combined into a single sign, with a vertical panel divider. These appear as a double column for use at transition points where a restriction or type of parking bay changes. Any panel indicating a change in restriction must contain a left or right pointing arrow to indicate the direction in which the restriction or parking control applies. The arrows are prescribed in Schedule 17.
	Single column arrangements are also permitted which may include arrows if appropriate. A single panel not indicating a change in restriction may be placed above or below a double column, in which case the single panel must be centre aligned either above or below the double panels as appropriate. Because such a panel applies in both directions, no arrow is used. A single panel may also appear adjacent to a single column. In such configurations, it is recommended that panels are aligned at either the top or the bottom as appropriate.
	Panels need not be combined into a single sign but may still be placed as separate signs.
	Individual panels must not be elongated in order to create an overall rectangular combination; as to do so increases the intrusiveness of the sign. Instead the signs should either be cut around the outer border, or placed on grey backing board.
	Any permutation can be created by adding or omitting panels as appropriate for the restrictions. However, the prescribed vertical order must be:
	(a) Waiting / stopping restrictions - always above (b) or (c) if displayed
	(b) Loading prohibitions - always below (a) or above (c) if displayed
	(c) Parking provision - always below (a) or (b) if displayed

Table 7.1	Upright signs that control waiting, loading and parking along a road
Part 3	Prescribes the symbols and associated legends to indicate waiting and stopping restrictions, signed within the yellow panels prescribed in Part 1. The x-heights for the legend are shown in column (5).
	The signs which can be created from this Part were previously prescribed in TSRGD 2002 as diagrams 637.1, 637.2, 637.2A, 637.3, 639, 640.2A, 640.3, 640.4, 642.2A, 642.3, 650.1, 650.2, 650.3, 974 and 975.
Part 4	Prescribes the symbols and associated legends which are placed on the white panels prescribed by Part 1 to indicate loading prohibitions (Table item 1 only) and parking controls. In each case the x-height for the legend is in the range 15 mm to 40 mm as shown in column (6).
	The signs that can be created from this Part were previously prescribed in TSRGD 2002 as diagrams 638, 638.1, 660, 660.3, 660.4, 660.5, 660.6, 660.7, 660.8, 660.9, 661A, 661.1, 661.2A, 661.3A, 661.4 and 662.
	Diagrams 637.2, 637.2A, 639.1B and 640, comprising yellow and white panels, can also be created from this Part in combination with a yellow panel prescribed in Part 3.
	There are new symbols for footway or verge parking (used as an alternative to the "P" symbol). The size of the legend "Disc Zone" in the sign previously prescribed in diagram 662 is now the same as the other legend and not 50% larger. Also the sign may now be used on a road which is not part of a zone by varying the word "Zone" to "parking".
	Supplementary symbols, including a new symbol indicating a parking place for the recharging of electric solo motor cycles, that may be used with the symbols in this Part are in Part 5 and referred to in column (7) in the Part 4 table. It should be noted that some of the symbols in Part 5 have legends that must always be used.

7.3 Advice on the design and use of all types of signs and markings prescribed for parking, waiting and stopping restrictions is given in the Traffic Signs Manual.

# Changes in TSRGD 2016

- 7.4 The placing of upright parking signs in combination with bay markings is no longer required. Instead, it is for traffic authorities to determine the appropriate signing and marking combination needed to convey to drivers any waiting, loading and parking controls contained in an underpinning traffic order.
- 7.5 The omission of upright signs to reduce sign clutter might be appropriate in cases when a bay marking indicates a single restriction operating at all times, for example 'LOADING ONLY'. It should be noted, however, that the absence of upright signs places greater emphasis on maintenance of any road marking. The reverse scenario, with reliance only on upright signs, is likely to be less common; although physical features such as build-outs or planters might be sufficient to indicate the extent of the restriction.
- **7.6** Contrasting bays previously authorised in England only are now prescribed and may be used as an alternative to road markings.
- 7.7 **Schedule 4** enables various single and multi panel signs to be created and provides more flexibility than the TSRGD 2002. For example, the shared use signs previously prescribed as diagrams 660.6 and 660.7 may now indicate various types of parking place, including loading bays. Also the previously prescribed sign to diagram 639.1B may now have the top panel varied to a "no stopping" taxi rank in addition to the "no waiting" taxi rank.

- 7.8 For situations where parking is reserved for 24 hour use only by disabled badge holders, even where limited with a no return time period for part of the day the legend "Disabled badge holders only at all times" has been prescribed and may be used to clarify that parking is not available to other motorists, for example in a restricted parking zone that is not in operation for the whole day.
- 7.9 The sign indicating a prohibition on stopping near school entrances on yellow zig-zag markings may now be placed without a traffic order.

## The policy context

7.10 TSRGD 2016 sees the removal of the directions that required the placing of specific upright signs in conjunction with specific bay markings. Traffic authorities have the option to omit either upright signs or bay markings at locations where the restriction applies at all times; for example a 'LOADING ONLY' bay marking alone might be sufficient. Before deciding whether to reduce signing provision, authorities need to be satisfied that the restriction is clear to road users. Except for bays reserved for disabled badge holders, the greater flexibility in the size and appearance of bay markings recognises that traffic authorities should decide what is appropriate, having regard to both for the class of vehicle for which the bays are intended and the surrounding streetscape. Traffic authorities are encouraged to take a pragmatic approach to enforcement in cases where larger vehicles could not be fully accommodated within a parking bay or space.

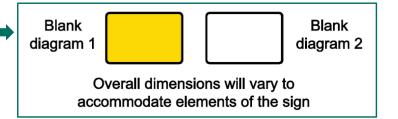
## Worked example

**7.11** The following example illustrate how the new TSRGD works.

Waiting prohibited during the periods indicated with a prohibition of loading and "pay and display" parking during the period indicated.

#### STEP 1

- See guidance in Traffic Signs Manual Chapter 3.
- Go to Schedule 4, Parts 1 and 2. Blank canvas.
- Top Tip read Schedule 4 Part 2 before you start building your sign.



#### STEP 2

- Go to Schedule 4, Part 3, Item 1 Columns 2 and 3. This give us a yellow panel with the no waiting symbol and symbol dimensions.
- Column 4 requires a time period to be added. Permitted expressions of time periods are found in Schedule 18.
- Column 5 shows the various legends that may be added.
- Column 6 shows the x-height range for the legend.



#### STEP 3

- Schedule 4, Part 2, paragraph 23 advises of the panel arrangement i.e. yellow above white with the loading panel above any parking panel.
- Panels may be placed in any vertical or horizontal combination (Schedule 4, Part 2, paragraph 23).
- Go to Schedule 4, Part 4, Item 1 Columns 2 and 4. This gives us a white panel with the legend "No loading" and a time period. Permitted expressions of time periods are found in Schedule 18.
- Column 6 shows the x-height range for the legend. The x-height for the legend must be the same as that in step 1 (Schedule 4, Part 2, paragraph 24).



Mon - Sat 7.30 - 9.30 am 4.30 - 6.30 pm

No loading Mon - Sat 7.30 - 9.30 am 4.30 - 6.30 pm

#### STEP 4

- Go to Schedule 4, Part 4, Item 7 Columns 2 and 3. This give us a white panel with the parking symbol and symbol dimensions.
- Column 4 requires the legend "Pay at machine" which may be varied in accordance with Column 5.
- Column 5 entry 1 allows us to add a time period. Permitted expressions of time periods are found in Schedule 18.
- Column 5 entry 2 allows us to vary the legend to "Pay at green machine".
- Column 5 entry 4 allows us to add an arrow symbol.
- Column 6 shows the x-height range for the legend. The x-height for the legend must be the same as that in step 1 (Schedule 4, Part 2, paragraph 24).
- Column 7 points us to the symbols in Part 5 that may be added here (e.g. disabled badge).



Mon - Sat 7.30 - 9.30 am 4.30 - 6.30 pm

No loading Mon - Sat 7.30 - 9.30 am 4.30 - 6.30 pm



Mon - Sat 9.30 am -4.30 pm

Pay at green machine



Display ticket

### Schedule 5 - Signs to indicate parking places and areas subject to parking controls

#### The new structure

8.1 Signs for parking places and parking zones are now designed on the 'building block' principle. The design process begins with the blank canvas which provides the starting point from which to begin to create the desired signing.

Table 8.1 Signs t	o indicate parking places and areas subject to parking controls
Part 1	Prescribes the parking place sign and supplementary plates previously prescribed in TSRGD 2002 as diagrams 801, 804.1, 804.2, 804.3, 804.4 and 969.
	It should be noted that the "P" sign does not include the larger sizes used for laybys on rural roads. The sign is prescribed in Schedule 11 Part 2 Item 56 for use in this situation.
Part 2	Prescribes the basic sign indicating the entrance to a parking zone. This Part covers:
	controlled parking zones
	restricted parking zones
	commercial vehicle controlled parking zones
	voucher parking zones
	permit parking areas
	"loading only" areas
	footway or verge parking prohibitions
Part 3	Prescribes the individual elements forming the upper panel.
Part 4	Prescribes the individual elements forming the lower panel
Part 5 Schedule 5 General Directions	Sets out sign specific directions.

#### Changes in TSRGD 2016

8.2 A new sign has been prescribed to indicate the entrance to a road or area where an order has been made to prohibit parking on the verge and/or footway except where permitted by the provision of parking bays. A repeater sign to remind drivers of the footway or verge parking prohibition is prescribed in Schedule 7 Part 2, together with other signs indicating the end of a zone.

- 8.3 A permit parking area may include parking or loading bays for non-permit holders. TSRGD 2016 allows for the entrance sign to include an additional panel at the bottom with a legend such as "Except in signed bays".
- 8.4 The "loading only" area sign was previously authorised in England and is now prescribed. It is used where a road is designated for loading only and is likely to be close to premises where loading and/or unloading takes place on a regular basis such as in a retail area. The road may be designated for general loading or for loading by goods vehicles only. The times during which the road is reserved for loading only are shown on the sign.

### 9. Schedule 6 - Upright signs for red routes

#### The new structure

9.1 Signs for red routes, where there is a prohibition on stopping, are prescribed for the first time in TSRGD 2016. Design of these signs is based on the 'building block' principle. Red routes are intended to be used strategically to deal with traffic problems assessed on a whole-route basis, not to deal with issues on relatively short lengths of road.

Table 9.1 Upright signs for red routes	
Part 1	Prescribes the basic sign for red routes which comprises either two or three panels with red borders. The signs are used along the length of a red route to remind drivers of the prohibition on stopping and include the times the prohibition applies. The signs are also used to indicate parking places, loading bays and bus stops on a red route. They are used in conjunction with the red route road markings prescribed in Schedule 7 Part 4
	Red route clearways are similar to 24 hour clearways, except that the prohibition on stopping applies to any footway and verge in addition to the main carriageway. Stopping is permitted only in designated laybys. The no stopping prohibition on a red route clearway is not indicated by road markings. Any bus stop clearway is indicated by the normal yellow road marking.
Part 2	Prescribes the individual elements forming the lower panel.
Part 3 Schedule 6 General Direction	Sets out the sign specific direction.

#### The policy context

- 9.2 Schedule 6 prescribes signs for red routes that are indicated by double or single red lines. The signs that may be used are essentially those described in Chapter 3 of the Traffic Signs Manual, except that more flexibility has been provided for parking bays.
- 9.3 Signs for parking bays are similar to those prescribed in Schedule 4. However, the signs for payment parking have been simplified as drivers need to know quickly whether or not they can stop in the bay without contravening the red route prohibition on stopping. These signs should be placed at the beginning of the bay facing oncoming traffic. Signs prescribed in Schedule 4 for parking payment may be placed within the bay, parallel to the kerb. These will not indicate the stopping prohibition.

### 10. Schedule 7 – Road markings and miscellaneous upright signs that indicate stopping, waiting, loading and parking controls

#### The new structure

10.1 Those signs that do not fit within the menu structure prescribed in Schedules 4 and 5 are prescribed as complete sign illustrations in this Schedule. In addition, road markings indicating stopping, waiting and loading restrictions, and parking bays are prescribed in this Schedule.

Table 10.1 Road markings and miscellaneous upright signs that indicate stopping, waiting, loading and parking controls	
Part 1	Sets out the provisions applying to the complete signs in Part 2.
Part 2	Prescribes complete signs and permitted variants for waiting restrictions and parking controls that cannot be created from the elements prescribed in the Schedules 4 & 5. In addition, new signs indicating the end of a "loading only" area, a red route clearway, and a reminder and end of a prohibition on parking on a verge or footway are prescribed. This Part includes signs previously prescribed in TSRGD 2002 as diagrams 640.5, 646, 647, 664, 664.1, 666, 667, 667.1, 667.2, 668, 668.1 and 668.2.
Part 3	Sets out the provisions applying to the road markings prescribed in Part 4.
Part 4	Prescribes the road markings for stopping, waiting, loading and parking controls. It includes markings previously prescribed in TSRGD 2002 as diagrams 1017, 1018.1, 1019, 1020.1, 1025.1, 1025.3 (now a variant of 1025.1), 1025.4 (now a variant of 1025.1), 1027.1, 1028.2, 1028.3 (now a variant of 1028.4) and 1028.4. Variants of diagram 1028.4 replace diagrams 1032 and 1033.
Part 5	Prescribes the required or permitted variants in respect of road markings prescribed in Part 4. Upright sign permitted variants are in the sign table at Part 2 (see Part 2 above).
Part 6	Sets out the significance of the road markings shown in diagrams 1025.1 and 1027.1, prescribed in Part 4. The significance of diagram 1025.1 was previously prescribed in Schedule 19 Part 1 in TSRGD 2002. The marking to diagram 1027.1 can now be enforced, when placed in conjunction with an upright sign, without the need to promote a traffic order.
Part 7 Schedule 7 General Directions	Sets out sign specific directions.

- 10.2 To avoid any doubt about the enforcement of yellow "no waiting" lines that do not include a transverse termination bar, a new permitted variant now allows for this part of the marking to be omitted. The double yellow line (diagram 1018.1) is now to be used only where the prohibition of waiting applies at all times throughout the year. Where the prohibition "no waiting at any time" is seasonal (previously a continuous prohibition of at least 4 consecutive months), a single yellow line (diagram 1017) is now appropriate. Double yellow lines indicating an existing seasonal prohibition may remain until they need to be replaced.
- 10.3 The parking bays previously prescribed as diagrams 1028.3, 1028.4, 1032 and 1033 are replaced by a new marking with permitted variants that allow freedom in the design of the bay. The length of individual marks and gaps making up the broken line which forms the edge of the bay may be varied or replaced by a continuous line. The bay may be parallel to the kerb or in echelon form (previously diagram 1033). The bay may be divided into individual spaces (previously diagram 1032). Various legends may be used to indicate the type of bay, including "DISABLED" with a permit number.
- 10.4 As an alternative to using road markings to delineate a bay, authorities may now use colour-contrasting surfacing or paving of a different appearance to distinguish such areas from the surrounding carriageway.
- 10.5 The taxi rank where stopping by other vehicles is prohibited is now prescribed separately as diagram 1028.5. This has a continuous yellow line 200 millimetres wide. This was previously prescribed as a permitted variant of diagram 1028.2. The alternative 300 millimetre wide yellow line is no longer prescribed as it has no appropriate use. This applies also to the wide yellow line forming part of the bus stop clearway marking.
- 10.6 A new shared taxi rank and parking bay is prescribed. This is the same as the new parking bay described above, but without any legend and with a continuous yellow line 200 millimetres wide. Permitted variants allow appropriate parts of the markings for bus stop clearways, taxi ranks and parking bays to be coloured red when placed on a red route. There are two types of bus stop clearway markings for use on a red route, one where taxis are prohibited from stopping (continuous wide red line parallel to the kerb) and one where taxis may stop to pick up and set down passengers (double or single red line parallel to the kerb).
- 10.7 New double and single red line markings are prescribed to indicate a red route as diagrams 1018.2 and 1017.1 respectively. A permitted variant allows for the transverse termination bar part of the marking to be omitted. As noted in section 9, red routes are to be used strategically to deal with traffic problems assessed on a whole-route basis, not to deal with issues on relatively short lengths of road.

# 11. Schedule 8 - Signs indicating the entrance to and end of a pedestrian, or pedestrian and cycle zones, and signs for charging schemes

#### The new structure

11.1 Complete sign illustrations are provided indicating pedestrian zones, new pedestrian & cycle zones and zonal charging schemes, together with associated charging scheme road markings.

Table 11.1 Signs indicating the entrance to and end of a pedestrian, or pedestrian and cycle zones, and signs for charging schemes	
Part 1	Sets out the provisions applying to the signs in Part 2.
Part 2	Prescribes complete signs for the entry and end of pedestrian zones and pedestrian & cycle zones. These are the signs previously prescribed in TSRGD 2002 as diagrams 618.2, 618. 3, 618.3A and 618.4.
Part 3	Sets out the provisions applying to the signs and road markings in Part 4.
Part 4	Prescribes the upright signs and road markings indicating a congestion charging zone.
Part 5 Schedule 8 General Directions	Sets out sign specific directions.

#### Changes in TSRGD 2016

#### **Pedestrian Zones**

11.2 Road markings indicating a prohibition of waiting and loading within a pedestrian zone may be dispensed with, whether or not the zone has separately defined carriageways and footways. A pedestrian zone may be signed in a similar manner to a restricted zone. Where the period during which waiting restrictions apply is greater than the operational period of the pedestrian zone, there is no need to provide conventional signs and road markings within the zone. The bottom yellow panel on the entry sign will indicate the period that waiting is prohibited, with pedestrian zone "no waiting / no loading" signs placed at strategic intervals within the zone. For example, where entry into a pedestrian zone is prohibited on Monday to Saturday from 10am to 4pm, and the waiting restrictions apply from 8am to 6pm on the same days, these times will be shown in the top and bottom panels of the entry sign respectively.

- 11.3 Where pedestrian zone signs include the "no motor vehicles" roundel, the zone is now referred to as a "Pedestrian and cycle zone" to help improve understanding of the difference between the "no vehicles" and "no motor vehicles" roundels. This applies to both the zone entry and end signs. It does not apply to any waiting restriction signs within the zone. Former diagram 618.2 is no longer prescribed as a separate sign, but is now a permitted variant of the zone entry sign where the bottom yellow panel is omitted. Permitted variants for the middle panel now apply equally whether or not the bottom panel is omitted. Previously, the sign to former diagram 618.2 had fewer exceptions than the sign to diagram 618.3 and was intended for zones that did not have any waiting restrictions. The legend "Except for access" prescribed by the TSRGD 2002 for a variable message sign (VMS) only (diagram 618.3A) may now be used whether or not it is a VMS.
- **11.4** Guidance on the signing of pedestrian zones is given in Chapter 3 of the Traffic Signs Manual.

#### **Charging Zones**

- 11.5 Signs for congestion charging zones are prescribed for the first time. These are based on signs and road markings previously authorised.
- 11.6 New signs to diagram 818.6 and 818.7 are placed on the approach, with diagram 818.6 being the first advance sign and diagram 818.7 being the second sign. Where a particular traffic lane at a junction leads directly to the entrance to a charging zone, the advance warning road marking to diagram 1069 may be placed.
- 11.7 The point at which the zonal restriction commences is signed by diagram 677 or 678, and may also be placed in conjunction with the road marking to diagram 1068.
- 11.8 Reminder signs to diagram 894 may be placed within the zone.
- 11.9 The exit from the zone is indicated by the sign to diagram 679.

# 12. Schedule 9 – Regulatory signs at junctions and miscellaneous regulatory signs

#### The new structure

**12.1** Complete signs are prescribed along with road markings. There are two tables for upright signs and one for road markings.

Table 12.1 Regulatory signs at junctions and miscellaneous regulatory signs	
Part 1	Sets out the general provisions applying to the signs and sub-plates in Part 2.
Part 2	Prescribes upright signs for use at a junction.
Part 3	Sets out the general provisions applying to the signs in Part 4.
Part 4	Prescribes miscellaneous regulatory signs.
Part 5	Sets out the general provisions applying to the road markings in Part 6.
Part 6	Prescribes regulatory road markings.
Part 7	Sets out the significance of particular signs and road markings in Schedule 9.
Part 8	Sets out the specific provisions for signs and road markings in Parts 2, 4 and 6
Part 9 Schedule 9 General Directions	Sets out sign specific directions.

#### Changes in TSRGD 2016

- **12.2** A new sign to diagram 622.10 is prescribed indicating tunnel restriction codes prescribed in the Carriage of Dangerous Goods Regulations 2009, as amended.
- 12.3 The marking to diagram 1048.1 has been removed and diagram 1048 must now be used for all contra flow bus lanes, whether or not cycles are permitted.
- **12.4** Diagram 1048.2 is replaced with diagram 1048.2A, and is for use on a road used only by tramcars.
- 12.5 Diagrams 1048.3 and 1048.4 have been replaced by a new diagram 1048.5 "BUS GATE". This is for use on roads used by buses only (formerly diagram 1048.3), roads used by buses and tramcars only (previously diagram 1048.2) or roads used by buses and any other vehicles indicated on the upright signs, for example taxis. This road marking is for use in conjunction with the signs shown in Schedule 3 Part 2 Items 10, 33 to 35 and 37 to 40. It may also be used with

- traffic signals to those in Schedule 14 Part 2 Item 1 where bus priority is provided by means of traffic signals.
- 12.6 A new version of diagram 959 (bus lane diagram 959B) is illustrated to show all permitted symbols, which may be omitted as appropriate. The bottom panel previously prescribed in diagram 961 is now shown, and may be omitted. (Diagram 961 is therefore removed.) The elements representing the road markings may now be varied to match the actual road markings placed; thereby allowing for the placing of near side, centre or off side bus lanes.
- 12.7 Diagrams 1044, 1044.1 and 1044.2 have all been combined into a revised diagram 1043. The design rules for box junction road markings have been relaxed to allow for markings to be designed to cover all situations at junctions without the need for authorisation. As previously, where box junctions are used at a roundabout they must be used only on those parts of the roundabout that are signal controlled at all times.
- 12.8 TSRGD 2016 introduces new exemptions from the restriction imposed by a box junction, for vehicles used by Special Forces personnel and the National Crime Agency. A new exemption was also introduced by the Deregulation Act 2015 for vehicles being used 'for ambulance purposes or for the purpose of providing a response to an emergency at the request of an NHS ambulance.' This allows paramedics on motorcycles, for example, to be exempt from this restriction.
- 12.9 TSRGD 2016 allows full flexibility for box junction markings in terms of shape, outline and hatching angles and cut-outs for kerb line encroachment. The maximum overall dimension has been removed. Where the marking is placed on a road with priority for traffic in one direction, the maximum width of carriageway of 4.5 metres at its narrowest point still applies.
- **12.10** Although a 90-degree angle is no longer prescribed in respect of hatching, this should be the aim as far as possible in order to maximise visibility.
- 12.11 The road marking to diagram 1045 for a yellow box to be used at level crossings is now shown with connected unbroken hatching minus the double white line centre marking to diagram 1013.1 (version A), shown in Schedule 9 Part 6 Item 23. The marking without the double white line is likely to be used where carriageway widths would otherwise be so narrow as to force vehicles to straddle and unavoidably contravene the double white line.
- 12.12 Parts of the yellow marking may be omitted to accommodate the double white line road marking shown in Schedule 9 Part 6 Item 23 diagram A or broken white hazard warning centre line in Schedule 11 Part 4 Item 2 or 3 as appropriate, to allow any centre line markings placed on the approach and beyond the level crossing to continue through the box marking.
- **12.13** A new road marking (diagram 1045.1) has also been prescribed for use at railway level crossings where one-way traffic operates, or on each carriageway of a dual carriageway road (although this is likely to be less common).
- **12.14** Diagrams 1013.3 and diagram 1013.4 are now created by a permitted variant of diagram 1040 (in Part 4 of Schedule 11), which allows the boundary line of that marking to be omitted and replaced by the marking shown in type A of 1013.1.
- **12.15** On some rural wide single carriageway roads it might be desirable to create overtaking sections by providing two lanes in one direction and a single lane in

the other. The division between the opposing traffic lanes is marked by double white lines to diagram 1013.1 version B. A new road marking to diagram 1013.5 is used in the centre of the road where the overtaking lane changes from one direction of travel to the other. Upright signs used to indicate the number of traffic lanes available and where a particular overtaking lane comes to an end are prescribed as diagrams 888 to 891 in Part 2 of Schedule 11. Guidance on the use of these signs and markings and details, including design principles and road layouts, can be found in Departmental Standard TD 70 "Design of Wide Single 2+1 Roads".

**12.16** The marking to diagram 1049B to indicate a mandatory cycle lane may now be varied up to 250mm in width.

### 13. Schedule 10 - Signs for speed limits

#### The new structure

13.1 All regulatory upright signs and road markings relating to speed limits have been brought together in Schedule 10. Each complete sign has been illustrated following the same approach as for warning and regulatory signs. The requirements of applicable regulations and directions are contained in Part 3 and the Schedule 10 General Directions respectively. The new structure for speed limit signs is set out in **Table 13.1**:

Table 13.1 Signs for speed limits	
Part 1	Sets out the general provisions applying to the signs and road markings in Part 2
Part 2	Column 1 - Contains Part Item number.
	Column 2 - Contains sign diagram number and description.
	Column 3 - Contains sign illustration and prescribed size ranges.
	Column 4 - Contains permitted variants.
	Column 5 - Cross refers to sign specific provisions in Part 3. See below.
	Column 6 - Cross refers to the Schedule 10 General Directions.
Part 3	Sets out the sign specific provisions applying to the signs in Part 2.
Part 4 Schedule 10 General Directions	Sets out sign specific directions.

#### Changes in TSRGD 2016

- The requirements of TSRGD 2002 directions 8, 9 and 10 relating to the siting of speed limit terminal signs at the beginning and end of the restriction have been relaxed. A minimum of one terminal sign must still be placed as close as practicable to the point where a limit begins and ends, but the onus is now on traffic authorities to determine the appropriate level of signing provision on a case by case basis. It is strongly recommended that the siting of speed limit signs should be determined having regard to guidance in Chapter 3 of the Traffic Signs Manual. Any decision to reduce the number of terminal signs should be underpinned by robust risk analysis.
- 13.3 Similarly, the requirement to place at least one repeater sign along a speed limit has been removed. The onus is on the traffic authority to determine the appropriate provision of speed limit repeaters having regard to existing guidance. In deciding this, it is strongly recommended that consideration is given to the potential for challenge to the enforcement of the speed limit.

- 13.4 The road marking to diagram 1065 may now be used as a repeater sign as an alternative to upright signing where a speed limit other than 30 mph is in force. It may also be used as a repeater sign on a road subject to a 30 mph speed limit where there is no system of carriageway lighting. However, it should be born in mind that associated maintenance costs might outweigh any benefit of not placing, or removing, upright signs.
- 13.5 In 20 mph zones the requirement to place traffic calming features at specified intervals (effectively 100 m) has been relaxed so that a minimum of one physical traffic calming feature is required. In addition to this, TSRGD 2016 requires any combination of physical features, upright repeater signs or road markings to be used at 100 m intervals. This should enable local authorities to reduce the number of physical traffic calming features where speed is already restricted because of the nature of the road.
- 13.6 New signs have been prescribed for 40 mph zones. There is no end sign signs to diagram 670 or 671 are used to indicate a change in speed limit.
- 13.7 Diagram 675 and its permitted variant showing the roundel to diagram 671 (end of a 20 mph zone and notification of new speed limit) are now prescribed as two new signs, diagrams 675A and 675B.

#### The policy context

- 13.8 The Government recognises that 20 mph zones and 20 mph limits can be useful in the right locations, but that these are local decisions which should be made in consultation with local communities. The relaxations in respect of physical traffic calming features within 20 mph zones will enable traffic authorities to further consider introducing 20 limits and zones to improve road safety.
- 13.9 Traffic authorities have a duty to place traffic signs to indicate the effect of a traffic order, including speed limit orders. Road users should not be placed in the situation where they do not know what restrictions are in place. For speed limits this means erecting signs, prescribed in TSRGD 2016, at the start of a restriction (terminal signs) and for reminding road users of the restriction in place along the length of road to which it applies (repeater signs).
- 13.10 TSRGD 2016 has relaxed the previous requirements for terminal signs to allow only one terminal sign to be placed where traffic authorities think appropriate. They can still place two signs where necessary. TSRGD 2016 removes the requirement to place speed limit repeater signs. This does not mean that they will be removed altogether, as they are still permitted by the regulations.
- 13.11 Traffic authorities are best placed to decide how many speed limit repeater signs are needed and where they are placed, having regard to legislation and guidance in Chapter 3 of the Traffic Signs Manual. It is therefore for them to justify the decisions they make on the roads that they are responsible for.

## 14. Schedule 11 - Signs that give information, are advisory or guide traffic

#### The new structure

14.1 The new structure for signs that give information, are advisory or guide traffic is set out in Table 14.1. Signs in this schedule are shown as complete signs and road markings.

Table 14.1 Sign	ns that give information, are advisory or guide traffic
Part 1	Sets out the provisions applying to the signs in Part 2
Part 2	Column 1 - Contains Part Item number.
	Column 2 - Contains sign diagram number and description.
	Column 3 - Contains sign illustration and prescribed size range and illustrates some permitted variants.
	Column 4 - Cross refers to permitted variants in Part 5.
	Column 5 - Cross refers to sign specific provisions in Part 6.
	Column 6 - Cross refers to the Schedule 11 General Directions.
Part 3	Sets out the provisions applying to the road markings in Part 4.
Part 4	Column 1 - Contains Part Item number.
	Column 2 - Contains road marking description, illustration and prescribed sizes.
	Column 3 - Cross refers to permitted variants in Part 5.
	Column 4 - Cross refers to road marking specific provisions in Part 6.
Part 5	Contains permitted variants of the signs and road markings in Parts 2 and 4.
Part 6	Sets out the specific provisions for signs and road markings in Parts 2 and 4.
Part 7 Schedule 11 General Directions	Sets out directions applying to specific signs in Part 2.

- 14.2 An indication of distance, together with an arrow, may now be added to pedestrian overbridge or subway signs in the diagram 814 series.
- **14.3** New signs to diagram 892 and 893 to indicate the length of a tunnel have been introduced.
- **14.4** Diagram 818 is now a permitted variant of diagram 818.1.
- 14.5 All elements of diagrams 873, 874, 875 and 876 may now be varied to accord with the junction layout. Diagram 868 is now a permitted variant of diagram 873, diagrams 868.1 and 875 are permitted variants of diagram 874, and diagram 876 is now shown as part of diagrams 873 and 874.
- 14.6 New signs to diagrams 887 to 891 have been prescribed for use where overtaking lanes are provided on a single carriageway. These signs are used in conjunction with the road markings to diagram 1013.1 version B and new diagram 1013.5 (see paragraph 12.15 above). Guidance on the use of these signs and markings and details, including design principles and road layouts, can be found in Departmental Standard TD 70 "Design of Wide Single 2+1 Roads".
- 14.7 A new permitted variant allows the legend in diagram 877 to be varied to "Except cycles" or "Except buses & cycles". The use of the chevron marking symbol is no longer a permitted variant.
- **14.8** A new sign to diagram 886 advising motorists to share space has been introduced.
- 14.9 A new version of diagram 958 (bus lane ahead) is illustrated to show all permitted symbols. The bottom panel previously prescribed in diagram 961 is now shown, and may be omitted. (Diagram 961 is therefore removed.) The elements representing the road markings may now be varied to match the actual road markings placed; thereby allowing for the placing of near side, centre or off side bus lanes.
- **14.10** The two permitted versions of diagram 857 for "Tourist information" and "Information" are now prescribed separately as diagrams 857A and 857B respectively.
- **14.11** The sign shown on working drawing NP 426 is now prescribed as diagram 2718 (route number and location reference).
- **14.12** Diagram 611 (pass either side) is included in Schedule 11 and not Schedule 3 as it is an informatory sign rather than a regulatory sign.
- **14.13** The boundary sign referred to in paragraph 3.46 above and shown in Figure 3.1 is prescribed as diagram 2404. See also paragraphs 3.45 and 3.47 in respect of boundary signs.
- **14.14** Diagrams 818.2, 818.3 are now permitted variants of diagram 818.4 in Part 28 of Schedule 12.
- **14.15** Diagram 1010 may now be used to indicate the division between a cycle route and the main carriageway through a junction.

- **14.16** A new road marking is prescribed as diagram 1057.1 to indicate a cycle route number on the carriageway. This may comprise a combination of letters and numerals and must use the alphabet prescribed in Part 7 of Schedule 17.
- **14.17** Yellow bar markings for use on the approach to a roundabout on major routes are now prescribed and no longer need to be authorised. Guidance on the appropriate use of these markings is available in Chapter 5 of the Traffic Signs Manual.

### 15. Schedule 12 - Directional signs

#### The new structure

- 15.1 The 'building block' approach is used for most directional signs.
- The majority of signs are now prescribed as sign elements rather than complete signs with individual diagram numbers. This introduces greater design flexibility and reduces the need for permitted variants previously set out in Schedule 16 to TSRGD 2002. The dimensions of these elements are specified in stroke widths (sw) rather than millimetres, in line with the design details shown on working drawings and Chapter 7 of the Traffic Signs Manual. This ensures that the signs have the correct proportions.
- 15.3 Where signs have a specific design these are still prescribed as complete signs.
- 15.4 The new structure for directional signs is set out in **Table 15.1**. The appropriate design of the signs using the elements prescribed in the Schedules is given in the Traffic Signs Manual Chapter 7.

Table 15.1 Di	rectional Signs
Part 1	Sets out the provisions applying to Parts 2 to 20.
Part 2	Prescribes the background colour and the range of x-heights for each type of sign and includes both rectangular and flag type signs. Rectangular signs may be combined to create the overhead signs comprising more than one sign (e.g. diagram 2020 prescribed in TSRGD 2002). The sign with a white background showing only parking place destinations may be placed on a motorway. In this case, the main use of this sign would be to indicate Park and Ride facilities, but there might be other uses such as indicating car parks reached from an urban motorway. The smallest size of primary route sign has been reduced so that it is the same as that for the non primary route sign. The x-height is determined by the nature of the road and speed of traffic, not the status of the route. Permitted variants allow cycle route signs to be brown when indicating tourist destinations and that pedestrian signs may be of any colour. For pedestrian signs, the border and chevron may be varied. The pointed end of the pedestrian flag type sign may be of any shape.
Part 3	Prescribes the legends which may be included on directional signs in Part 2. Many of these were previously prescribed by Schedule 16 or item 4 of the table below the diagrams in TSRGD 2002. Most of these are no longer associated with specific signs. The flexibility of this Part permits, where appropriate:-  • The phrase "historic market town" or its variant, at 80% x-height, to be added to any place name on a tourist destination sign or panel.  • The distance to a junction ahead to be added to any sign as appropriate.  • Junction numbers to be added to primary and non primary route signs.
Part 4	Sets out the provisions applicable to Part 5.

<b>Table 15.1 D</b>	irectional Signs
Part 5	Prescribes arrows and lane marking symbols that may be incorporated into rectangular signs. This Part covers stack type signs, dedicated lane signs and overhead signs. Verge mounted dedicated lane signs may now be used, where appropriate, for tourist destination, lorry route and MOD signs. Overhead signs may comprise upward pointing arrows for use where there is no lane drop, or downward pointing arrows to indicate specific lanes. These were previously prescribed in diagram 2020 and 2021 respectively in TSRGD 2002. Overhead signs with downward pointing arrows may be mounted one above the other, and overlap where a particular lane may be used to reach more than one route. There are new verge mounted signs for dedicated lanes where:-
	• a lane is used to reach more than one route. These are referred to as "shared lanes" and may be used on the approach to a junction or on a large roundabout or gyratory system where there are dedicated lanes.
	• separate traffic lanes diverge to the left and to the right. This layout might be used on an exit slip road or connecting road that leads to two separate routes.
	• a lane divides into two indicated by a "Y" arrow. This layout might be used on an exit slip road or connecting road that leads to two separate routes. It might also be used on the approach to an exit from a gyratory system.
Part 6	Sets out the provisions applicable to Part 7.
Part 7	Prescribes route symbols for map type advance direction signs. The symbol which indicates a junction in the form of a crossroads may be varied to indicate the actual junction layout such as a staggered crossroads on a dual carriageway as shown in diagram 2008 in TSRGD 2002. There are special symbols for roundabouts, grade separated junctions, and "no through roads". Map type signs may now be used, where appropriate, for lorry route and MOD signs. Either 4sw or 2.5sw may be used for non primary routes, whether or not the road has a route number (i.e. 4sw may now be used for local roads if it produces a more balanced design).
Part 8	Sets out the provisions applicable to Part 9.
Part 9	Prescribes panels previously prescribed in TSRGD 2002 Schedule 16 items 21 (motorway), 22 (primary route), 23 (non primary route), 24 (tourist attraction), 25 (lorry route), 26 (MOD establishment), 27 (route for cyclists) and 35 (services). The lorry route panel may be varied to indicate a truckstop and used in a similar manner to the "services" panel. The character sizes are now prescribed in stroke widths rather than millimetres to ensure the overall sign has the correct proportions. The type of sign on which the panels may be incorporated are specified in column (4). All types of panel (as appropriate) may now be used on overhead signs. For example a tourist panel might be used where there is no space for a verge mounted tourist sign. The restriction on using panels on motorway signs (other than on slip roads and at the termination of the main carriageway) still applies.
Part 10	Sets out the provisions applying to Parts 11 and 12.
Part 11	Prescribes the various symbols, other than those for tourist destinations, which may be incorporated on the directional signs specified in column (4). The hospital "A&E" symbol is now permitted on motorway signs. Experience has shown that the Park and Ride symbol was too large, particularly when incorporated on signs other than those previously prescribed in TSRGD 2002 diagrams 2503 and 2504. The size of this symbol has now been reduced so that the "P" is the same size as that for the parking place symbol. New symbols that have been prescribed are the congestion charging zone symbol and the police station symbol. The electric vehicle recharging point symbol may be used in combination with a parking place symbol.

Table 15.1 D	irectional Signs
Part 12	Prescribes the legends that may be used with the parking place symbols and includes the variant of the "P" symbol that indicates the total number of parking spaces.
Part 13	Sets out the provisions applying to Parts 14 to 18.
Part 14 to Part 18	Prescribe symbols for tourist and leisure destinations. These replicate Schedule 14 in TSRGD 2002. New symbols include previously "approved" symbols shown on the "AT" series of working drawings and a symbol indicating a sports centre in Wales. Symbols indicating tourist destinations in England now require the approval of VisitEngland. For this reason, leisure facilities that do not require this approval have been defined separately and this is indicated in the descriptions in column 2 of the tables where appropriate
Part 19	Sets out the provisions applying to Part 20.
Part 20	Prescribes warning and regulatory symbols that may be incorporated on directional signs. Included for the first time are "time" and "exception" supplementary plates. An exception plate, for example, could be used with a "no entry" sign to indicate a bus only route. The height of each symbol, in stoke widths, is taken from Chapter 7 of the Traffic signs Manual. Because the symbol size is now prescribed, a permitted variant ensures that two symbols side by side are the same height as referred to in Chapter 7.
Part 21	Sets out the provisions applying to Part 22.
Part 22	Prescribes the background colour and the range of x-heights for each type of services sign and includes both rectangular and flag type signs. Prescribed for the first time are signs for motorway rest areas and for truckstops on motorways and all-purpose roads. Truckstop signs have a black background with legend in white and, on all-purpose roads, replace the "lorries only" signs with a white background. A permitted variant of the rectangular motorway sign allows the legend "Services" or "Rest area" to be added to the direction sign on the nose of an exit slip road (previously diagrams 2910 and 2910.1 in TSRGD 2002).
Part 23	Sets out the provisions applying to Part 24.
Part 24	Prescribes the symbols that may be incorporated on advance signs for services. Service area and truckstop signs on motorways may now include corporate logos of franchisees operating on the site, in which case any panel showing the site operator's name shall be incorporated within the main sign rather than placed on top of the sign.
Part 25	Sets out the provisions applying to Part 26.
Part 26	Prescribes complete services signs that cannot be produced using the sign elements in Parts 22 and 24. The sign indicating the availability of services on a motorway and previously prescribed by diagram 2917 in TSRGD 2002 has been retained. There is a now a new version of this sign which replaces the service area operators' names with geographical names. This new sign may also indicate truckstops, using the white lorry symbol. Part 26 also prescribes the local facilities signs previously prescribed by diagrams 2308.1 and 2309.1 in TSRGD 2002.
Part 27	Sets out the provisions applying to Part 28.

Table 15.1 Directional Signs	
Part 28	Prescribes complete signs that cannot be produced using any of the other Parts in the Schedule. These include new signs previously authorised for "tiger tail" junctions, where the left hand lane at a grade separated junction leads directly to the exit slip road and the adjacent lane may be used either to exit the junction or continue along the main line. There are versions of these signs for motorways and primary routes. A permitted variant allows these signs to indicate two diverging lanes separated by the hatched road marking, rather than a lane drop and a diverging lane. Another new sign is a dedicated lane sign to indicate a road layout where a single lane divides into two separate lanes. This sign would be used on the approach to a junction or on a large roundabout or gyratory system in advance of the point where the number of lanes increase. The map type sign previously prescribed as diagram 2601.2 in TSRGD 2002 may now be varied for use at any road/cycle route layout. For safety reasons it is recommended that this sign is not used to indicate a cycle crossing on an exit slip road close to the main carriageway of a high speed dual carriageway road. Other signs in Part 28 were previously prescribed in TSRGD 2002.
Part 29 Schedule 12 General Directions	Sets out sign specific directions.

- 15.5 Logos or symbols indicating cycle route branding are now permitted. This is found at entry 8 at Item 4 in Part 3.
- 15.6 New designs for dedicated lane signs have been introduced and include signs where a particular lane serves more than one exit from a junction.
- 15.7 The downward pointing arrow as a separate sign (as prescribed for motorway signs in the TSRGD 2002) may now be used on all-purpose road signs, and the horizontal bar plus downward pointing arrow (as prescribed for all-purpose road signs in the TSRGD 2002) may now be used on motorway signs.
- 15.8 The ridden horse symbol, indicating a bridleway, may now include a route number on a patch, similar to a cycle route number. The number and patch may be in any contrasting colours.
- 15.9 Supplementary plates used with circular regulatory symbols may now include more information relating to the prohibition than previously; e.g. exceptions.
- 15.10 Signs indicating motorway and all-purpose road services which are for lorries only are replaced by new truckstop signs with white legend on a black background.
- **15.11** Motorway service area and truckstop signs may include placeholders that contain the corporate logo of a franchise operating on the site.
- The 'waymark' directional sign to diagram 2610.2 for use on a footpath or other Right of Way may now show the background, border and any arrow, chevron, legend, symbol or logo in any contrasting colours. We strongly recommend local authorities follow the advice on recommended colours for different types of Right of Way in Natural England's Waymarking Guidance. This is available at <a href="https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/414626/waymarking-rights-of-way.pdf">www.gov.uk/government/uploads/system/uploads/attachment\_data/file/414626/waymarking-rights-of-way.pdf</a>

#### Worked example

**15.13** The following example illustrates how the new TSRGD works.

Staggered junctions ahead between a primary route leading to a car ferry, a primary route which is the recommended route for goods vehicles to take to the docks, a non-primary route and a road to which entry is prohibited, in the village, town or suburb whose name is indicated at the top of the sign.

#### STEP 1

- See guidance in Traffic Signs Manual Chapter 7.
- Go to Schedule 12, Parts 1 and 2. Blank canvas.
- Select Item 2 (primary route) and choose your x-height.

#### STEP 2

- Go to Schedule 12, Part 7.
- Add a route symbol. This is a variant of Item 1 i.e. "Vary shape, colour and route arm widths".



#### STEP 3

- Go to Schedule 12, Part 3 to add primary route destinations.
- The main Regulations and Schedule 17 specify the form and colour of the letters. The colour of route numbers is specified in Schedule 12, Part 3.



#### STEP 4

- Go to Schedule 12, Part 9.
- White non-primary route panel is Item 3 in the table varied as appropriate.
- Lorry route panel is Item 5 in the table varied as appropriate



#### STEP 5

- Go to Schedule 12, Parts 11 and 20. Add symbols.
- Ferry symbol is Item 11 in Part 11 table varied as appropriate.
- "No entry" symbol is Item 21 in Part 20 table.



#### STEP 6

- Go to Schedule 12, Part 3, Item 7.
- Add junction name / place name.



## 16. Schedule 13 - Signs only for use in temporary situations

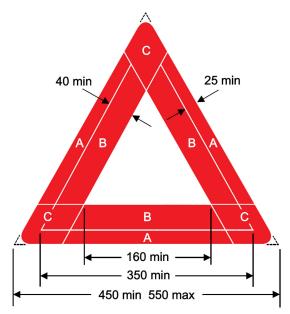
#### The new structure

- 16.1 The new structure sees a significant reduction in the number of individually prescribed temporary signs. Instead, a limited number have been illustrated, to which the new regulations and permitted variants allow a greater degree of flexibility to be applied.
- **16.2** The new structure for temporary signing is set out in **Table 16.1**:

Table 16.1 Signs on	ly for use in temporary situations
Part 1	Sets out the provisions applying to Part 2.
Part 2	Prescribes temporary triangular warning signs and supplementary plates.
	Column 1 - Table Item number.
	Column 2 - Sign diagram number and description.
	Column 3 - Sign illustration.
	Column 4 - Permitted plate legends.
	Column 5 - Cross refers to optional supplementary plates in Part 4.
	Column 6 - Cross refers to the Schedule 13 General Directions.
Part 3	Sets out the provisions applying to Part 4.
Part 4	Related supplementary associated plates for signs in Part 2.
Part 5	Sets out the provisions applying to Part 6.
Part 6	Prescribes complete signs, barriers and traffic cones.
	Column 1 - Table Item number.
	Column 2 - Sign diagram number and description.
	Column 3 - Sign illustration.
	Column 4 - Permitted variants.
	Column 5 - Cross refers to sign specific provisions in Part 7.
	Column 6 - Cross refers to the Schedule 13 General Directions.
Part 7	Sets out sign specific provisions for signs in Part 6.

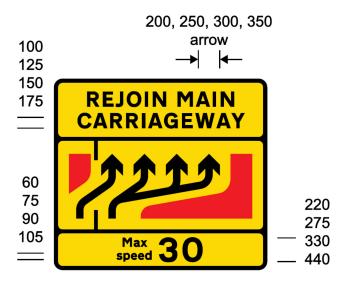
Part 8	Sets out the requirements applying to cones, cylinders and delineators.
Part 9	Prescribes temporary signs not included in Parts 2, 4 and 6 and is the equivalent of TSRGD 2002 regulation 53.
Part 10	Sets out the requirements for amber and blue light beacons.
Part 11	Sets out the requirements for warning lights.
Part 12 Schedule 13 General Directions	Sets out sign specific directions.

- 16.3 For clarity, triangular warning signs for use in temporary situations have been separated from their permanent equivalents, and are now prescribed in Part 2. These follow the same format as established for permanent warning signs.
- 16.4 There is no longer a restriction on when the sign to diagram 551.1 (migratory toad crossing ahead) may be placed on or near a road. Previously, the sign could only be used during the months of January to May each year.
- 16.5 A number of signs that are used in temporary situations, previously prescribed in Schedules 2, 4 and 12 in TSRGD 2002, have been brought together in Parts 6 and 9 of this Schedule. This includes white on blue police and census signs, black on yellow diversion and housing development signs and temporary hazard warning triangles and pyramids brought in from the revoked Traffic Signs (Temporary Obstructions) Regulations 1997.



Miscellaneous sign illustrations indicating road works have been removed. These signs remain prescribed in TSRGD 2016 by virtue of updated wording in Part 9 (the successor to regulation 53 in TSRGD 2002). Where diagrams in the TSRGD 2002 are now prescribed in Part 9, it is strongly recommended that the designs shown on working drawings are used.

16.7 A limited number of sign illustrations for lane closures and contra-flow working at road works are illustrated at items 13 to 16 in Part 6. The central reservation symbol, previously shown on these signs as a broad black round nosed line, is no longer used. Sufficient flexibility is contained in the permitted variants to create all other sign designs hitherto prescribed, including the signs previously prescribed as diagrams 7250 to 7256 (lane drop, lane gain and lane merge).



- 16.8 The sign to diagram 640.1, previously prescribed as a parking meter cover, may now be used in other places where a parking place has been suspended. It may have more than one side and may be placed over a ticket machine.
- 16.9 TSRGD 2016 includes a requirement for temporary signs to diagrams 7032, 7014.1 and 7014 and their variants, to have a date on their reverse by which they should be removed. This is to enable any person to report to the local authority any signs that have remained in place beyond the three-month limit specified in TSRGD.



#### Permitted variants:

"NEW ROUNDABOUT" may be varied to—

- (a) "CHANGED PRIORITIES";
- (b) "GAP CLOSED":
- (c) "NEW ONE WAY SYSTEM";
- (d) "NEW ROAD LAYOUT";
- (e) "NEW TRAFFIC ISLANDS";
- (f) "NEW TRAFFIC SIGNALS";
- (g) "NEW ZEBRA CROSSING";
- (h) "SIGNAL PRIORITIES CHANGED"; or
- (i) "SIGNAL TIMING CHANGED".

# 17. Schedule 14 – Signs for traffic control by light signals, signs for crossings, and signs for lane control

#### The new structure

- 17.1 Traffic signals and their applicable regulations and directions have been tabulated for consistency with other Schedules.
- 17.2 Road markings and other signs used with traffic signals previously prescribed in TSRGD 2002 Schedules 1, 2, 3, 5, 6 and 12 are now contained within the same schedule as the signals. This Schedule also includes the lane control signals and signs previously in TSRGD 2002 Schedule 10. The signs, signals and road markings previously prescribed in the Zebra, Pelican and Puffin Pedestrian Crossings Regulations and General Directions 1997 are also included in this schedule.
- 17.3 The new structure for traffic signals is set out in Table 17.1:

Table 17.1 Signs for traffic control by light signals, signs for crossings, and signs for lane control		
Part 1	Sets out the provisions applying to the signs in Parts 2 and 3.	
Part 2	Prescribes light signals, signs and road markings for the control of traffic.	
	Column 1 - Contains the Table Item number.	
	Column 2 - Contains the sign/road marking diagram number and description.	
	Column 3 - Contains sign/road marking illustrations and prescribed size ranges.	
	Column 4 - Contains permitted variants.	
	Column 5 - Cross refers to the requirements in Part 4.	
	Column 6 - Cross refers to the Schedule 14 General Directions.	
Part 3	Prescribes the green arrow, tram and cycle signals.	

	Column 1 - Contains the Table Item number.
	Column 2 - Contains sign diagram number and description.
	Column 3 - Contains sign illustrations and prescribed size ranges.
	Column 4 - Sets out the permitted sign location and permitted variants.
Part 4	Sets out the requirements applying to signs and road markings in Parts 2 and 3.
Part 5	Sets out requirements in relation to movement at a Zebra Crossing or a Puffin Crossing
Part 6 Schedule 14 General Directions	Sets out sign specific directions.

#### **Pedestrian crossings**

- 17.4 The traffic signals and road markings prescribed to indicate Zebra and Puffin crossings in the Zebra, Pelican and Puffin Pedestrian Crossings Regulations and General Directions 1997 have been consolidated in TSRGD 2016.
- 17.5 The 1997 Regulations have been revoked but any existing crossing can remain and is considered lawful as if those regulations were still in force.
- 17.6 Pelican crossings are no longer prescribed. New Pelican crossings can no longer be placed from 22 October 2016 there is a 6-month saving allowing for equipment in the process of being procured or for sites already under construction.
- 17.7 When Puffin crossings were first developed in the 1990s, the Department's position was that in time, they would come to be seen as the default signal controlled crossing type. Guidance written at the time included the view that Puffin crossings were expected to become the most common form of crossing and that in time crossings with pedestrian signals on the far side of the road would be withdrawn.
- 17.8 However, in recent years this view has shifted. Whilst near-side crossings have become the main form of crossing in most authorities, with the number of Pelican crossings steadily declining, it is recognised that there will remain some sites where near-side facilities are unsuitable. Accordingly a far-side option is still available in TSRGD.
- 17.9 Sometimes known as Pedex, POTS or 'one-can' crossings, this uses the same sequence as at a junction. The sequence includes a steady amber period for traffic and a blackout period for pedestrians, and it can be provided with oncrossing detection or with countdown. However, the two cannot be used

- together as countdown requires a fixed blackout period. As at all other crossings, zig-zag markings must be provided.
- 17.10 Consistency and safety are key factors when considering what type of crossing facilities to provide. Near-side crossings provide a wide range of benefits to road users, and it is important that users encounter a consistent experience within an area.
- 17.11 Many authorities have adopted a policy of moving to near-side facilities for new and upgraded installations. The Department is supportive of these decisions, and is of the view that where this policy has been adopted, it is logical for it to remain in place. It does not expect such decisions to be reconsidered as a result of the inclusion of pedestrian countdown in TSRGD.
- 17.12 Pedestrian countdown signals are prescribed. The pedestrian countdown system counts down the blackout period that forms part of the pedestrian phase at traffic signal junctions. The blackout period is the period immediately after the steady green figure (known as the 'invitation to cross') when neither the red nor green figure shows. They may not be illuminated during any other part of the signal sequence, and the Department will not consider authorising such uses. It is not a requirement to provide countdown signals at crossings, but is an option available for local authorities to consider.
- 17.13 Pedestrian countdown may be used at junctions and stand-alone pedestrian facilities that have a blackout period. It may not be used with stand-alone Pelican or Puffin crossings. The units may be mounted in the same way as the cycle symbol aspect at Toucan crossings, either to the left or right of the green figure. They may also be used at far-side Toucan crossings.
- **17.14** Existing signal timings do not need to change. The countdown units can be retrofitted to existing junctions and work with the timings already set. The red and green figures have the same meanings as they always have.
- 17.15 Pedestrian crossing road markings are now illustrated as component elements. The prescribed placing of these elements in relation to one another and the regulatory requirements are specified in Parts 4, 5 and 6. The complete illustrations will be set out in the forthcoming Traffic Signs Manual Chapter 6.
- 17.16 The zig-zag layouts from the 1997 Regulations have been streamlined so that all crossings have the same requirements. Some of the requirements in Schedules 1 and 4 to the 1997 Regulations have been moved to guidance and will be found in the forthcoming Traffic Signs Manual Chapter 6. The requirement for a controlled area to consist of 8 zig-zags remains, along with the flexibility to reduce this to 2 where traffic authorities consider the layout or character of the road justifies it.
- 17.17 Where a cycle lane is placed on the approach to a crossing, TSRGD 2016 allows for the zig-zag markings to be placed up to 2 m from the edge of the carriageway. The cycle lane marking may not be carried through the zig-zag area.
- 17.18 The cut down push button, already in use at Puffin crossings as an additional signal, is prescribed for use as an alternative to the full-size push buttons. Traffic signals for the control of pedal cycles only, both full-size and low-level, may now be used in combination with the Toucan push-button demand unit.

#### **Facilities for cyclists**

- 17.19 Cycle safety mirrors are prescribed for use with traffic signals. Also known as a 'Trixi' mirror, this is a circular convex mirror measuring between 300 and 500 millimetres in diameter used to alert drivers of large vehicles to the presence of cyclists entering their blind spot at signalised junctions. This will most commonly occur on the near-side.
- 17.20 The mirror may only be placed in combination with light signals prescribed by TSRGD 2016; in practice, this will involve co-locating a mirror on the same signal post either immediately below, or to the side of, the signal head.
- 17.21 New low level signals for cyclists are prescribed. These have 95-110mm diameter aspects, and must meet similar performance requirements to standard signals. They can be used with full-size signals either as repeater signals, or to provide an early start.
- 17.22 Miniature 'box signs' are also prescribed, showing no left turn, no right turn, no U-turn, and the white arrow indicating traffic must travel in the direction shown. These can be mounted in line with the low-level signals to show that a banned or required movement at a junction also applies to cyclists.
- 17.23 The existing full-size cycle signal head may now be varied to use a red cycle aspect rather than a full red.
- 17.24 A new cycle 'early start' signal is prescribed, consisting of a green cycle aspect to be placed with standard signals. This operates in a similar way to a left turn filter arrow, illuminating a few seconds in advance of the main signals to give cyclists time to move off in front of other traffic. The specific timings and layouts will be for local authorities to determine, but advice will be provided in the Traffic Signs Manual.
- 17.25 The definition of an advanced stop line has been changed to allow cyclists to cross the first stop line at any point along its length. A new variant is also prescribed in diagram 1001.2B that omits the lead-in lane or gate completely. Advanced stop lines can also be provided at signalised stand-alone crossings.
- 17.26 A new type of crossing is prescribed for use by both pedestrians and cyclists. The Parallel crossing uses the familiar Zebra crossing layout for pedestrians, with a cycle route marked alongside indicated by 'elephant's footprint' markings. The crossing must also have zig-zag markings and yellow globes. Drivers must give way to cyclists and pedestrians at the give-way line.
- 17.27 'Elephant's footprint' markings are prescribed for use to indicate a route for cyclists through a signal-controlled junction. A size range has been prescribed the markings may be between 250 mm and 400 mm square. They have not been prescribed for use in any other circumstances apart from the parallel crossing. DfT will not authorise their use to indicate cycle routes at priority junctions or across side roads.
- 17.28 Where a crossing is placed across a cycle track, the regulations permit the yellow globes (for zebra crossings) and zig-zag markings to be omitted for the part of the crossing placed on the cycle track, if desired. Zig-zag markings may not be omitted for any part of a crossing placed on general traffic lanes.

#### General traffic signal issues

- 17.29 The following may be placed within the traffic signal head at junctions, but only if those signs face the stream of traffic to which they are intended: mandatory turns, no right or left turn, no U-turn, no entry and existing prescribed 'exception' plates.
- 17.30 One of each of the signs in respect of crossing not in use and light signals not in use may also be mounted directly on the signal post. The 'Part time signals' plate may be mounted on a traffic signal post without being illuminated, but it must be reflectorised. 'Part time signals' may be varied to 'Peak hour signals'.
- 17.31 None of the above prevents push button devices for pedestrian, cycle and equestrian crossings and the associated near or far side signal being mounted on traffic signal posts.
- 17.32 The situations previously listed in TSRGD 2002 regulation 33 in which traffic signals may be used have been clarified to include bus gates, by reference to the 'BUS GATE' marking shown in diagram 1048.5. Tunnels are removed from the list of situations previously listed in TSRGD 2002 regulation 39 in which wigwag signals must be used, and included in the situations in which traffic signals may be used.
- 17.33 TSRGD 2016 prescribes the duration of the starting red-with-amber and stopping amber signal periods, as 2 s and 3 s respectively. Similar requirements are included for the amber times to be used with wig-wag signals, as 3 s at level crossings and 5 s at all other wig-wag sites. Tolerances of +/- 0.25 s are permitted.
- **17.34** The safety classes and failure modes for controllers are included in the directions, by reference to BS EN 50556:2011 and BS EN 12675:2015.

#### Type approval of traffic control equipment

- 17.35 The statutory function in direction 56 of TSRGD 2002 has been removed. Therefore, there is no longer a requirement for traffic control equipment to be of a type approved in writing by the Secretary of State. Existing type approvals remain in force.
- 17.36 The Department recognises that there is still a need for a body to oversee equipment standards and administer a product registration process, to help maintain the consistent operation of traffic signals that contributes to the UK's good road safety record. To this end, a new body, Traffic Open Products and Specifications Limited (TOPAS) has been set up to oversee the promotion, maintenance and use of a number of procurement specifications, and a voluntary process for registering products to these specifications. The aim is to minimise procurement costs and encourage standardisation. TOPAS can be contacted through their website: www.topasgroup.org.uk.

#### The policy context

17.37 Traffic signals are critical to help reduce conflicts between road users, manage traffic flow, and provide safe places to cross the road.

- 17.38 The major change in this area is the removal of statutory type approval. In recent years it had become clear that the existing self-certification system had not kept pace with developments in the industry, and was in need of reform. Following the recommendations of the Traffic Signs Policy Review, the Government decided to remove the statutory type approval requirement from TSRGD.
- 17.39 New Pelican crossings cannot be installed after October 2016. Their numbers have been in decline as authorities choose to install more modern crossings instead. With improvements in detector technology, and the development of countdown signals, the Department felt it had become appropriate to remove the Pelican crossing from legislation.
- 17.40 It is important to note that this does not affect existing Pelican crossings, which can stay in place until the equipment becomes life-expired.

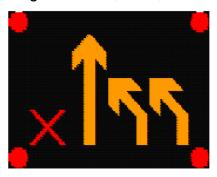
# 18. Schedule 15 - Matrix signs and light signals for the control of moving traffic on motorways and dual carriageway roads

#### The new structure

- 18.1 Matrix signs and traffic signals for motorways and dual carriageway roads, and their applicable regulations and directions have been tabulated for consistency with other Schedules.
- 18.2 The new structure for matrix signs and light signals is set out in **Table 18.1**:

Table 18.1 Matrix signs and light signals for the control of moving traffic on motorways and dual carriageway roads		
Part 1	Sets out provisions that apply to the signs and light signals in Part 2.	
Part 2	Prescribes matrix signs and light signals for motorways and all-purpose dual carriageway roads.	
	Column 1 - Part Item number.	
	Column 2 - Sign and signal diagram number and description.	
	Column 3 - Sign and signal illustration and prescribed size ranges.	
	Column 4 – Cross refers to permitted variants in Part 3.	
	Column 5 – Cross refers to sign specific provisions in Part 4.	
	Column 6 – Cross refers to Schedule 15 General Directions.	
Part 3	Sets out the permitted variants for the signs in Part 2.	
Part 4	Sets out the provisions applying to the signs in Part 2.	
Part 5 Schedule 15 General Directions	Sets out sign specific directions.	

18.3 New carriageway side mounted matrix signs have been prescribed in respect of diagrams 6002, 6008, 6031.1 which can be combined to form one sign.



- 18.4 The multiple lane closure permutations are no longer individually illustrated. Instead representative examples are shown while the permitted variants allow for all scenarios.
- 18.5 Red X signals are prescribed to indicate lane closure at and beyond the signals, rather than at the signal position only.
- 18.6 Maximum speed limit, national speed limit or 'END' when displayed on a matrix sign are prescribed to indicate the end of the lane closure.

#### The policy context

- 18.7 Near-side matrix signs have been prescribed to enable delivery of Smart Motorways. The term "Smart Motorway" refers to two types of motorway:
  - a) Dynamic use of the Hard Shoulder (DHS), i.e. part time use of the hard shoulder as a running lane.
  - b) All Lane Running (ALR), i.e. where the motorway does not have a hard shoulder, all lanes are used as running lanes.
- 18.8 Non-compliance with red X signals has been identified on all parts of the Strategic Road Network where appropriate signalling equipment exists. It is predominantly found on sections of Smart Motorway where the number of incidents and road works in 'live' lanes is higher than on other sections with a permanent hard shoulder.
- 18.9 The change supports Highways England mitigations to address the safety risks and operational impacts posed by current levels of non-compliance with red X light signals on the motorway and trunk road network.

## 19. Schedule 16 - Variable message signs

#### The new structure

- 19.1 Variable message signs, and their applicable regulations have been retained in much the same structure as TSRGD 2002 (Schedule 15). VMS performance classes are now included.
- **19.2** The new structure for variable message signs is set out in Table 19.1:

Table 19.1 Variable message signs		
Part 1	Gives preliminary information and sets out provisions that apply to VMS in Parts 1 to 7.	
Part 2	Prescribes legends for variable message signs that are automatically activated by vehicles.	
Part 3	Prescribes VMS legends giving warnings of adverse weather or other temporary hazards or incidents.	
Part 4	Prescribes VMS legends indicating location of temporary hazard or incident.	
Part 5	Prescribes legends that give additional information.	
Part 6	Sets out other miscellaneous legends.	
Part 7	Sets out performance requirements for VMS	

#### Changes in TSRGD 2016

- 19.3 The relevant parts of regulation 58 in the TSRGD 2002 are now in Part 1.
- **19.4** Performance classes required for variable message signs are now specified in Part 7.

#### The policy context

19.5 Performance classes are now included because the previous requirement for Type Approval of VMS has been replaced by the Traffic Open Products and Specifications Limited (TOPAS) process for registering products to the prescribed specifications (see 17.36, 17.37 and 17.39).

### 20. Schedule 17 – Letters, numerals and other character

#### The new structure

- 20.1 This follows the same format as Schedule 13 in TSRGD 2002 except for symbols indicating diversion routes. These are prescribed in Part 11 of Schedule 12 and include a new "black cross" symbol.
- 20.2 Schedule 17 additionally includes the new Scottish Gaelic alphabets. Letters, numerals and other characters for use on brown (tourist sign) and dark green (primary route sign) backgrounds are yellow and prescribed in Part 9. Those for use on a white (non primary route sign) background are dark green and prescribed in Part 10.
- 20.3 As the dimensions of the elements of directional signs prescribed in Schedule 12 are specified in stroke widths, regulation 5(17) ensures that the correct size of letters is used. This regulation states that in Schedule 17, in Parts 1 to 4, 9 and 10, the height of the rectangular area on which the letters, numerals and other characters are placed is eight stroke widths.

# 21. Schedule 18 – Permitted Expressions of Time, Distance and Parking Restrictions

#### The new structure

21.1 Schedule 18 prescribes legends that might otherwise have been repeated throughout the TSRGD. See paragraphs 3.6 to 3.10 and Table 3.1.

## 22. Annex A

### Overview of the changes between TSRGD 2002 and TSRGD 2016

Part 22.1 The following indicates what has happened between TSRGD 2002 and TSRGD 2016.				
TSRGD 2002	TSRGD 2016			
SECTION 1 Preliminary				
1 Citation and commencement	Regulation 1			
2 Revocations	Regulation 13 & Schedule 19			
3 Savings	Regulation 14			
4 Interpretation—general	Regulation 2 & Schedule 1			
5 Interpretation of speed limit	Regulation 2 & Schedule 1			
6 Interpretation of references	Removed			
7 Interpretation of Schedules 1 to 12	Regulation 7 in respect of dimensions –			
7 interpretation of Schedules 1 to 12	other regulations removed			
SECTION 2 General provisions				
8 Authorisations	Regulation 4			
9 Temporary obstructions	Schedule 13			
10 Application of section 36 of the Road Traffic Act 1988 to signs and disqualification	Schedules 2, 3, 7, 9, 13, 14 & 15			
for offences	Octreduces 2, 3, 7, 9, 13, 14 & 13			
11 Signs, markings and signals to be of the size, colour and type shown in the	Regulation 3 & individual Schedules			
diagrams	regulation o & marvidual ochedules			
12 Variations of dimensions	Regulation 7			
13 Proportions and form of letters, numerals, symbols and other characters	Regulation 5			

Part 22.1 The following indicates what has happened between TSRGD 2002 and TSRGD 2016.				
TSRGD 2002	TSRGD 2016			
14 Signs attached to vehicles	Schedule 13, including Schedule 13 General Directions			
SECTION 3 Warning, regulatory and informatory traffic signs				
15 Sign shown in diagram 610 and its significance	Schedule 3, Part 4, para 3			
16 Signs shown in diagrams 601.1, 602, 611.1, 778, 778.1 and 784.1 and their significance	Schedule 9, Part 7			
17 Permitted variants of upright signs	In individual Schedules			
18 Illumination of signs	Regulation 8 & individual Schedules			
19 Illumination of signs—further provisions	Regulation 8 & individual Schedules			
20 Illumination of plates	Regulation 8			
21 Illumination of signs shown in diagrams 560 and 561	Schedule 2, Part 7, para 4			
22 Buses	Schedule 1			
23 Bus lanes	Schedule 1			
24 Bus symbols	Removed			
SECTION 4 Road markings				
25 Road marking shown in diagram 1003: give way	Schedule 9, Part 7, paras 7 & 8			
26 Road markings shown in diagrams 1013.1, 1013.3 and 1013.4: double white lines	Schedule 9, Part 7, paras 9 & 10			
27 Road marking shown in diagram 1001.3: zig-zag lines—no stopping	Schedule 14 Part 1 para 14			
28 Road marking shown in diagram 1001.3: zig-zag lines—no overtaking	Schedule 14 Part 1 para 15			
29 Road markings shown in diagrams 1025.1, 1025.3, 1025.4, 1043, 1044, 1044.1 and 1044.2: bus stop and bus stand clearways and box junctions	Schedule 7, Part 6, paras 1 & 4 (bus stop clearways) Schedule 9, Part 7, para 11 (box junctions			
30 Permitted variants of road markings	In individual Schedules			
31 Illumination of road markings	Regulation 9 & individual Schedules			
32 Height of road markings and size of studs	Regulation 10 & individual Schedules			

TSRGD 2002	TSRGD 2016
SECTION 5 Light signals and warning lights	
33 Light signals for the control of vehicular traffic—standard form	Schedule 14 Part 1 para 3, 4
34 Green arrow light signals for the control of vehicular traffic	Schedule 14 Part 1 para 2
35 Portable light signals for the control of vehicular traffic	Schedule 14 Part 1 para 3
36 Significance of light signals prescribed by regulations 33 to 35	Schedule 14 Part 1 para 5
37 Light signals for the control of vehicular traffic on motorways and all-purpose dual	Schedule 15 Part 1 para 14, 15 & 16 & Part
carriageway roads	4, para 6
38 Significance of light signals prescribed by regulation 37(1)	Schedule 15 Part 4, para 6
39 Light signals to control traffic at level crossings etc.	Schedule 14 Part 1 para 8
40 Significance of light signals prescribed by regulation 39	Schedule 14 Part 1 para 8
41 Light signals for the control of tramcars	Schedule 14 Part 1 para 6
42 Significance of light signals prescribed by regulation 41	schedule 14 Part 1 para 7
43 Meaning of stop line and references to light signals	Schedule 14 Part 1 para 30, 31
44 Light signals for lane control of vehicular traffic	Schedule 14 Part 1 para 16
45 Warning signal for motorways and all-purpose dual carriageway roads	Schedule 15, Part 1 para 2 & Part 4, para 2,3,4 & 5
46 Matrix signs for motorways and all-purpose dual carriageway roads	Schedule 15
47 Light signals at signal-controlled pedestrian facilities	Schedule 14 Part 1 para 9, 10
47A Light signals at portable signal-controlled pedestrian facilities	Schedule 14 Part 1 para 9, 10
48 Light signals at equestrian crossings	Schedule 14 Part 1 para 9, 10
49 Light signals at Toucan crossings	Schedule 14 Part 1 para 9, 10
50 Warning lights at school crossing places	Schedule 14 Part 1 para 11
51 Cattle crossing signs and warning lights	Schedule 14 Part 1 para 12
52 Light signals for pedestrian traffic at level crossings	Schedule 14 Part 1 para 13
SECTION 6 Miscellaneous traffic signs	
53 Temporary signs	Schedule 13, Part 9

Part 22.1 The following indicates what has happened between TSRGD 2002 and TSRGD 2016.					
TSRGD 2002	TSRGD 2016				
54 Flashing beacons	Schedule 13, Part 10				
55 Warning lights	Schedule 13, Part 11				
56 Cones, delineators and cylinders	Schedule 13, Part 8				
57 Refuge indicator lamps	Schedule 14 Part 1 para 29				
58 Variable message signs	Schedule 16 & other individual Schedules				
SCHEDULES TO THE REGULATIONS					
Schedules 1 to 12	See Tables 23.1 to 23.12				
13. Proportions and form of letters, numerals and other characters	Schedule 17.				
14. Proportions and form of symbols indicating types of tourist destination—	Schedule 12, Parts 14 to 18				
15. Legends for use on variable message signs	Schedule 16				
16. Permitted variants	In individual Schedules				
17. Illumination of signs	Regulation 8 & individual Schedules				
18. Interpretation of "Unladen Vehicle"	Removed				
19. Bus stop and bus stand clearways and box junctions	Schedule 7, Part 6, paras 1 & 4 (bus stop clearways) Schedule 9, Part 7, para 11 (box junctions)				
PART II—THE TRAFFIC SIGNS GENERAL DIRECTIONS 2002					
1 Citation and commencement	Direction 1				
2 Revocations	Direction 12				
3 Interpretation—general	Direction 2				
4 Interpretation of references	Removed				
5 Savings	Direction 13				
6 Signs to be placed only at sites approved by the Secretary of State (Applies only to stop signs to diagram 601.1)	Removed.				

Part 22.1 The following indicates what has happened between TSRGD 2002 and TSRGD 2016.				
TSRGD 2002	TSRGD 2016			
7 Signs to be placed only to indicate the effect of a statutory prohibition	In General Directions to individual Schedules			
8 The placing of certain signs to indicate the beginning of a restriction, requirement, prohibition or speed limit	In General Directions to individual Schedules			
9 Beginning of a speed limit—further provisions	Removed.			
10 The placing of certain signs to indicate the end of a restriction, requirement, prohibition or speed limit	In General Directions to individual Schedules			
11 Repeater signs	Schedule 10 General Directions 2 & 3 (in respect of speed limit signs)			
12 to 15 Signs to be placed only on specified types of road	In individual Schedules (generally descriptions of signs and permitted variants) Direction 13A removed			
16 Speed limits of 20 mph	Schedule 10 General Direction1 Part 40 item 1			
17 Signs to be placed only in conjunction with specified road markings (except signs for prohibitions and restrictions on waiting etc.)	Mostly removed – some retained in General Directions to individual Schedules			
18 Road markings to be placed only in conjunction with other road markings or specified signs (except road markings for prohibitions and restrictions on waiting etc.)	Mostly removed. Direction 18(1) Table 1 items 1-4 retained and moved to Schedule 14 General Directions 31 to 35			
19 The placing of the signs shown in diagrams 615 and 811	Removed.			
20 Signs to be placed only in combination with specified plates or other signs	In individual Schedules			
21 Plates to be placed only in combination with specified signs	In individual Schedules			
22 to 26 Placing of road markings and signs to indicate prohibitions and restrictions on waiting, loading and unloading and parking	Removed, except for bus stop clearways (Schedule 7 General Direction 3)			
27 to 35 Signs to be placed only at specified sites or for specified purposes	Mostly removed – some retained in General Directions to individual Schedules			

Part 22.1 The following indicates what has happened between TSRGD 2002 and TSRGD 2016.				
TSRGD 2002	TSRGD 2016			
36 to 39 Restrictions on the placing of temporary signs	Either removed or retained in Direction 6 and Schedule 13 & 14 General Directions			
40 Placing of signs varied to show metric units	Removed			
41, 42 Mounting and backing of signs	Direction 8 & 9 and individual Schedules in respect of upright signs Schedule 14 &15 General Directions			
43 Mounting of the sign shown in diagram 781	Schedule 2, Part 6, item 5 (shown in diagram)			
44 Mounting of the signs shown in diagrams 560 and 561	Schedule 2 General Direction 5			
44A Mounting of signs with light signals	Schedule 14 General Direction 3			
45 Mounting of refuge indicator lamps	Schedule 14 General Direction 45			
46 Mounting and backing of light signals, matrix signs and warning lights	Schedule 14 General Direction 5 & 15 General Directions			
47 Placing of road marking shown in diagram 1001 or 1001.2 in conjunction with light signals	Schedule 14 General Direction 2			
48 Placing of road marking shown in diagram 1014 in conjunction with the road marking shown in diagram 1013.1 or 1013.3	Removed.			
49 Placing of road marking shown in diagram 1001.3 (zig-zag lines)	Schedule 14 General Direction 41			
50 to 52 Placing of signs and light signals shown in Schedule 11	Mostly removed – some retained in Schedule 15 General Direction 1			
53 Placing of portable light signals prescribed by regulation 35	Schedule 14 General Direction 6			
53A Placing of portable signal controlled pedestrian facilities	Schedule 14 General Direction 42			
54 Placing of signals and other signs at crossings	Removed			
54A Placing of signals and other signs at portable signal controlled pedestrian facilities	Schedule 14 General Direction 43			
55, 55A Placing of various light signals	Schedule 14 General Directions 7 to 30			
56 Approval of types of sign and signals by the Secretary of State	Schedule 14 General Direction 46			

Part 22.1 The following indicates what has happened between TSRGD 2002 and TSRGD 2016.					
TSRGD 2002	TSRGD 2016				
57 Studs	Direction 7				
58 Approval of types of stud by the Secretary of State	Direction 7				
59 Special Directions	Direction 11				
SCHEDULE TO THE DIRECTIONS (Schedules 1 and 2)					
Placing of signals and other signs at signal controlled crossing facilities. See directions 54 and 54A.	Schedule 14 General Direction 43				

## 23. Annex B

### Mapping TSRGD Pre-2016 to TSRGD 2016

Table 23	.1 TSRGD 20	02 Sche	edule 1 - R	ead <i>i</i>	Across to	TSRGD 2016	
Pre-2016	2016				Pre-2016	2016	
Diagram No.	Schedule(s)	Part(s)	Item(s)		Diagram No.	Schedule(s)	
501	2	6	1		515.1A	2	
502	2	6	1		515.2	Removed	
503	2	6	1		516	2	
504.1	2	2	1		517	2	
505.1	2	2	2		518	2	
506.1	2	2	3		519	2	:
507.1	2	2	4		520	2	:
508.1	2	2	5		521	2	
509.1	2	2	6		522	2	
510	2	2	7		523.1	2	
511	2	3	1		524.1	2	
512	2	2	8		525	2	
512.1	2	2	9		526	2	:
512.2	2	2	10				
513	2	2	12		527	2	
513.1	2	2	7, 8, 9, 10, 11, 12		528	2	
513.2	2	3	2		528.1	2	,
010.2	13	4	2	_	529	2	
515	2	6	3		529.1	2	
515.1	2	6	3		530	Removed	
J 10. I		U	J		530A	2	

Pre-2016	2016			
Diagram No.	Schedule(s)	Part(s)	Item(s)	
515.1A	2	6	3	
515.2	Removed			
516	2	2	13	
517	2	2	14	
518	2	2	13, 14, 15	
519	2	2	13, 14	
520	2	2	15	
521	2	2	16	
522	2	2	17	
523.1	2	2	18	
524.1	2	2	19	
525	2	2	18, 19	
526	2	2	8, 9, 10, 11, 12, 18, 19, 39	
527	2	2	18, 19	
528	2	2	20	
528.1	2	4	1	
529	2	2	21	
529.1	2	2	22	
530	Removed			
530A	2	4	2	

Pre-2016	2016		
Diagram No.	Schedule(s)	Part(s)	Item(s)
530.1	2	5	1
530.2	2	5	4
531.1A	2	4	3
531.2	2	5	2
532.2 Removed	2	5	3
532.2A	2	5	3
532.3 Removed	2	5	3
532.3A	2	5	3
543	14	2	28
543.1	14	2	29
544	14	2	30
544.1	2	2	23
544.2	2	2	24
545	2	2	25
546	2	2	25
547.1	2	2	25
547.2	2	2	25
547.3	2	2	23, 25
547.4	2	2	24
547.7	2	2	25
547.8	14	2	31
548	14	2	41
548 & 548.1	14	2	41
549	2	2	28
550	2	2	29

Pre-2016	2016		
Diagram No.	Schedule(s) Part(s)		Item(s)
550.1	2	2	30
550.2	2	2	31
551	2	2	32
551.1	13	2	1
551.2	2	2	33
552	2	2	35
553	2	2	35
553.1	2	2	34
553.2	2	2	34
554	2	2	36, 37, 38
	13	2	2
554.1	2	2	39
554.2	13	2	4
554.3	13	2	4
555	2	2	40
555.1	2	2	41
556	13	2	5
556.1	2	2	42
556.2	2	2	42
557	13	2	6
557.1	2	2	43
557.2	2	2	43
557.3	2	2	43
557.4	2	2	43
558	2	2	46
558.1	2	2	47

Pre-2016	2016		
Diagram No.	Schedule(s)	Part(s)	Item(s)
558.2	2	2	46
559	2	2	44
560	2	6	2
561	2	6	2
562	2	2	56
	13	2	7
563	2	2	56
	13	2	7
563.1	14	2	7
570	18	3	"For" is with individual sign legends
572	18	3	-
	2	5	5
573	18	3	-
	2	5	5
574	Removed		
575	2	2	8 to 14, 20, 22
581	2	2	45
582	2	2	48
583	2	2	49
583.1	2	2	49
584	2	2	50
584.1	2	2	50

Table 23	3.2 TSRGD 2	2002 Scl	nedule 2 - Re	ead A	Across to	TSRGD 20	16
Pre- 2016	2016				Pre- 2016	2016	
Diagram No.	Schedule(s)	Part(s)	Item(s)		Diagram No.	Schedule(s)	Pa
601.1	9	2	1		618.2	8	2
602	9	2	2		618.3	8	2
606	3	2	1		618.3A	8	2
	14	2	42		618.4	8	2
607	3	3	1		619	3	2
608	3	3	2		619.1	3	2
	9	2	3		619.2	3	2
609	3	2	2		620	3	3
610	3	2	3		620.1	3	3
	13	6	11		622.1A	3	2
611	11	2	73		622.2	3	2
611.1	9	2	6		622.4	3	2
612	3	2	7		622.5	3	2
	14	2	43		622.6	3	2
613	3	2	8		622.7	3	2
	14	2	43		622.8	3	2
614	3	2	6		622.9	3	3
	14	2	43		625.1	3	2
615	3	2	9		626.2A	9	4
615.1	3	3	9, 10		627.1	9	4
616	3	2	10		629	Removed	
	14	2	44		629A	3	2
617	3	2	11		629.1	3	2
618	3	3	12, 13		629.1	Removed	
618.1	3	3	14	1			
	1	1	I	_	629.2A	3	2

Pre- 2016	2016		
Diagram No.	Schedule(s)	Part(s)	Item(s)
618.2	8	2	2
618.3	8	2	2
618.3A	8	2	2
618.4	8	2	4
619	3	2	12
619.1	3	2	18
619.2	3	2	20
620	3	3	15
620.1	3	3	15
622.1A	3	2	13
622.2	3	2	14
622.4	3	2	15
622.5	3	2	23
622.6	3	2	24
622.7	3	2	19
622.8	3	2	16
622.9	3	3	16
625.1	3	2	22
626.2A	9	4	2
627.1	9	4	2
629	Removed		
629A	3	2	26
629.1	3	2	25
629.2	Removed	ı	
629.2A	3	2	27

Pre- 2016	2016		
Diagram No.	Schedule(s)	Part(s)	Item(s)
	2	4	5
632	3	2	5
633	13	6	17
636	13	6	19
636.1	13	6	20
636.2	13	6	21
637.1	4	3	5, 6
637.2	4	3	4
637.2A	4	3	4
637.3	4	3	1
638	4	4	1
638.1	4	4	1
639	4	3	1
639.1B	4	3 & 4	Various
640	4	3 & 4	Various
640.1	13	6	22
640.2A	4	3	3
640.3	4	3	7
640.4	4	3	8
640.5	7	2	5
642	3	2	4
642.2A	4	3	10
642.3	4	3	9

Pre- 2016	2016		
Diagram No.	Schedule(s)	Part(s)	Item(s)
645	3	3	5
	11	2	1
	13	2	9
646	7	2	6
647	7	2	7
650.1	4	3	2
650.2	4	3	1
650.3	4	3	1
651	9	4	1
652	9	4	5
660	4	4	2
660.3	4	4	2
660.4	4	4	5
660.5	4	5	8
660.6	4	4	2
660.7	4	4	7
660.8	4	5	5
660.9	4	5	7
661A	4	5	4
661.1	4	4	2
661.2A	4	4	7
661.3A	4	4	7
661.4	4	4	8
662	4	4	7
663	5	3	1

Pre- 2016	2016		
Diagram No.	Schedule(s)	Part(s)	Item(s)
663.1	5	3	3
663.2	5	3	2
663.3	5	3	5
664	7	2	1
664.1	7	2	3
665	5	3	4
666	7	2	2
667.1	7	2	14
667.2	7	2	16
668	7	2	13
668.1	7	2	15
668.2	7	2	17
670	10	2	1
671	10	2	2
672	10	2	3
673	10	2	4
674	10	2	5
675	10	2	7

Table 23.3 TSRGD 2002 Schedule 3 - Read Across to TSRGD 2016

Pre-	2016		
2016 Diagram No.	Schedule(s)	Part(s)	Item(s)
770	2	2	51
771	2	2	52
772	2	2	53
773	14	2	6
774	2	6	4
775	11	2	67
776	14	2	8
777	14	2	8
778	9	2	4
778.1	9	2	5
779	2	2	54
780A	2	2	54
780.1A	2	2	54
780.2A	2	2	54
781	2	6	5
782	2	2	55
783	11	2	68
784.1	9	4	4
785.1	11	2	69
786	11	2	70
787	11	2	71
788	11	2	72
789	2	6	6
789.1	2	6	6
789.2	2	6	6
790	14	2	67

_						
_		терег	7 7007 6-6-		d Across to TS	
	D / 5 /	1 I SR(-1	I ZIIIZ Sche	MAIIII	1 Arrage ta 1 S	RUID ZUID
			J EUUE UUIK	,uuic T - i\cu\	<i>1</i> AUIU33 IU IU	

Pre- 2016	2016		
Diagram No.	Schedule(s)	Part(s)	Item(s)
801	5	1	1
	11	2	56
804.1	5	1	5
804.2	5	1	3
804.3	5	1	4
804.4	5	1	2
810	11	2	2
811	11	2	1
811.1	11	2	1
814.1	11	2	4
814.2	11	2	3
814.3	11	2	4
814.4	11	2	3
816	11	2	5
816.1	11	2	6
817	11	2	7
817.2	2	3	3
818	11	2	11
818.1	11	2	11
818.1A	11	2	12
818.2	12	28	22
818.3	12	28	22
818.4	12	28	22
818.5	12	28	23
820	11	2	23

Pre- 2016	2016		
Diagram No.	Schedule(s)	Part(s)	Item(s)
820A	11	2	24
820.1	11	2	13
821	11	2	8
822	11	2	9
823	11	2	21
824	11	2	21
825	11	2	21
826	Removed		
826.1	Removed		
827.1	11	2	66
827.2	11	2	66
827.3	11	2	66
829.1	13	6	23
829.2	13	6	24
829.3	13	6	25
829.4	13	6	26
829.5	11	2	25
829.6	11	2	26
830	13	6	46
830.1	13	6	46
830.2	13	6	47
830.3	13	6	48
831	13	6	46
831.2	13	6	49
832	13	6	46

Pre- 2016	2016		
Diagram No.	Schedule(s)	Part(s)	Item(s)
832.1B	13	6	50
832.2B	13	6	50
832.3	13	6	51
832.4	13	6	51
832.5	13	6	51
832.6	13	6	27
832.7	13	6	27
832.8	13	9	-
832.9	13	9	-
832.10A	13	9	-
833	11	2	74
834	11	2	74
835	11	2	74
836	11	2	74
857	11	2	53, 54
857.1	11	2	48
864.1	11	2	85
865	11	2	86
868	11	2	14
868.1	11	2	14
872.1	11	2	15
873	11	2	14
874	11	2	14
875	11	2	14
876	11	2	14
877	11	2	22

Pre- 2016	2016				
Diagram No.	Schedule(s)	Part(s)	Item(s)		
878	11	2	63		
879	11	2	63		
880	11	2	64		
880.1	11	2	65		
881	11	2	27		
882	11	2	28		
883	11	2	32		
884	11	2	30		
885	11	2	31		

Table 2	3.5 TSRGD 2	2002 Sc	hedule 5 - R	ead <i>I</i>	Across to	TSRGD 20	16
Pre-	2016				Pre-	2016	
2016 Diagram No.	Schedule(s)	Part(s)	Item(s)		2016 Diagram No.	Schedule(s)	Ра
950	2	2	26		959A	9	4
	13	2	8		959.1	9	4
950.1	2	2	26		960	9	4
	13	2	8		960.1	9	4
951	3	2	21		960.2	9	4
952	3	2	17		961	9	4
953	3	2	33			11	2
953.1	3	2	36, 37		962	11	2
953.2	Removed				962.1	11	2
953.3	11	2	33		962.2	11	2
954	3	3	3, 11, 15		963	11	2
954.2	3	3	3, 11, 15		963.1	11	2
954.3	3	3	3		963.2	11	2
954.4	3	3	3		963.3	11	2
	11	2	5		964	9	4
954.5	14	2	45		965	11	2
954.6	14	2	45		966	11	2
954.7	14	2	45		967	11	2
955	3	2	28		968	11	2
956	3	2	29		968.1	11	2
957	3	2	32		969	5	1
958	11	2	37		970	11	2
958A	11	2	37		971	11	2
958.1	11	2	38		972	11	2
959	9	4	10		973.2	11	2

Pre- 2016	2016			
Diagram No.	Schedule(s)	Part(s)	Item(s)	
959A	9	4	10	
959.1	9	4	9	
960	9	4	8	
960.1	9	4	6	
960.2	9	4	7	
961	9	4	9, 10	
	11	2	37, 38	
962	11	2	34	
962.1	11	2	35	
962.2	11	2	36	
963	11	2	40	
963.1	11	2	41	
963.2	11	2	42	
963.3	11	2	43	
964	9	4	11	
965	11	2	45	
966	11	2	46	
967	11	2	44	
968	11	2	47	
968.1	11	2	47	
969	5	1	6	
970	11	2	76	
971	11	2	78	
972	11	2	52	
973.2	11	2	77	

Pre- 2016	2016			
Diagram No.	Schedule(s)	Part(s)	Item(s)	
973.3	11	2	77	
974	4	3	2	
975	4	3	2	
976	11	2	84	

Table 23	3.6 TSRGD 2	2002 Scl	hedule 6 - R	lead A	Across to	TSRGD 20	16
Pre- 2016	2016				Pre- 2016	2016	
Diagram No.	Schedule(s)	Part(s)	Item(s)		Diagram No.	Schedule(s)	Ра
1001	14	2	46		1013.1	9	6
1001.1	14	2	47		1013.3	11	4
1001.2	14	2	48			9	6
1001.2A	14	2	50		1013.4	11	4
						9	6
1001.3	14	2	51		1014	2	4
1002.1	9	6	1			11	4
1003	9	6	3, 9		1017	7	4
1003.1	11	4	1		1018.1	7	4
					1019	7	4
1003.2	14	2	68		1020.1	7	4
1003.3	9	6	6		1022	9	6
1003.4	9	6	5				
1004	11	4	2		1023	9	6
1004.1	11	4	3		1024	11	4
					1024.1	2	4
1005	11	4	4		1025.1	7	4
1005.1	11	4	5			7	4
1008	11	4	6		1025.3	7	
1008.1	11	4	7		1025.4	7	4
					1026	11	4
1009	11	4	8, 9		1026.1	11	4
1010	11	4	10		1027.1	7	4
1012.1	11	4	11				
1012.2	11	4	12		1028.2	7	4
1012.3	11	4	13		1028.3	7	4

Pre- 2016	2016		
Diagram No.	Schedule(s)	Part(s)	Item(s)
1013.1	9	6	23
1013.3	11	4	23
	9	6	3
1013.4	11	4	23
	9	6	23
1014	2	4	4
	11	4	14
1017	7	4	2
1018.1	7	4	1
1019	7	4	4
1020.1	7	4	3
1022	9	6	2
1023	9	6	4, 10
1024	11	4	15
1024.1	2	4	4
1025.1	7	4	9
1025.3	7	4	9
1025.4	7	4	9
1026	11	4	16
1026.1	11	4	17
1027.1	7	4	10
1028.2	7	4	7
1028.3	7	4	6

Pre-	2016		
2016 Diagram No.	Schedule(s)	Part(s)	Item(s)
1028.4	7	4	6
1029	11	4	18
1032	7	4	6
1033	7	4	6
1035	11	4	19
1036.1	9	6	19
1036.2	9	6	20
1037.1	9	6	21
1038	11	4	20
1038.1	11	4	21
1039	11	4	22
1040	11	4	23
1040.2	11	4	23
1040.3	11	4	24
1040.4	11	4	25
1040.5	11	4	26
1041	11	4	27
1041.1	11	4	27
1042	9	6	22
1042.1	9	6	22
1043	9	6	25
1044	9	6	25
1044.1	9	6	25
1044.2	9	6	25
1045	9	6	26
1046	9	6	17, 18

Pre- 2016	2016			
Diagram No.	Schedule(s)	Part(s)	Item(s)	
1048	9	6	14	
1048.1	Removed	I		
1048.2 (TRAM ONLY)	9	6	16	
1048.3 or (BUS GATE)	9	6	15	
1048.4	Removed			
1049	9	6	7, 11	
1049.1	9	6	8	
1050	9	6	12	
1055.1	14	2	55	
1055.2	14	2	56	
1057	11	4	28	
1058	11	4	30	
1058.1	11	4	31	
1059	11	4	32	
1062	11	4	33	
1063	Removed			
1064	11	4	34	
1065	10	2	9	
1066	11	4	36	

# Table 23.7 TSRGD 2002 Schedule 7 - Read Across to TSRGD 2016 (excludes signs prescribed by Parts 1 to 20, Schedule 12, TSRGD 2016)

Pre- 2016	2016		
Diagram No.	Schedule	Part	Item
2010.1	12	28	5
2010.2	12	28	5
2032	11	2	51
2123	12	28	6
2124	12	28	6
2130	11	2	51
2141	12	28	7
2205	12	28	9
2215	12	28	8
2301 (caravan site only)	12	28	11
2301 (camp site only)	12	28	12
2303	12	28	13
2305	12	28	14
2307	12	28	10
2308.1	12	26	6
2309.1	12	26	7
2310.2	12	22 & 24	-
2311.1	12	22	1
2311.2	12	22	1
2313.1	12	22 & 24	-
2313.2	12	22 & 24	-
2313.3	12	22 & 24	-
2313.4	12	22 & 24	-

Pre- 2016			
Diagram No.	Schedule	Part	Item
2313.5	12	22 & 24	-
2313.6	12	22 & 24	-
2314.1	12	22	2, 3
2314.2	12	22	2, 3
2330	12	26	5
2401	11	2	80
2402.1	11	2	81
2403.1	11	2	82
2501	11	2	55
2502	12	28	24
2601.2	12	28	20
2602.2	11	2	39
2602.3	9	4	12
2610.2	12	28	21
2701	13	6	28
2701.1	13	6	28
2702	13	9	-
2703	12	28	15
	13	9	-
2704	12	28	15
	13	9	-
2705	13	9	-
2706	13	9	-
2707	13	9	-

Pre-	2016		
2016 Diagram No.	Schedule	Part	Item
2708	13	6	45
2709	12	28	16
2710	12	28	16
2711	12	28	17
2711.1	12	28	17
2712	11	2	62
2713	11	2	58
2713.1	11	2	57
2714	11	2	59
2715	11	2	60
2716	13	9	-
2717	Removed		
2801	12	28	19
2802	12	28	19
2901	9	4	13
2910 (variant)	12	22	1
2910.1 (variant)	12	22	1
2912	12	28	4
2917	12	26	2
2918	12	26	3
2918.1	12	26	4
2919.2	12	22 & 24	-
2920.1	12	22 & 24	-
2921	12	22	1
2921.1	12	22	1
2922	12	28	18

Pre- 2016	2016			
Diagram No.	Schedule	Part	Item	
2927	12	28	8	
2928	11	2	79	
2930	9	4	14	
2931	9	4	15	
2932	9	4	16	
2933	11	2	50	
2934	11	2	49	

Table 23.8 TSRGD 2002 Schedule 8 - Read Across to TSRGD 2016

Pre- 2016	2016		
Diagram No.	Schedule	Part	Item
3000	14	2	1
3000.1	14	2	2
3000.2	14	2	3
3000.7	14	3	Header diagram A
3000.8	14	3	Header diagram C
3000.9	14	3	Header diagram B
3000.10	14	3	Header diagram D
3001.2	14	3	1
3001.3	14	3	1
3013	14	3	2
3013.1	14	3	3
3013.2	14	3	4
3013.3	14	3	5
3013.4	14	3	6
3013.5	14	3	7
3014	14	2	5

Table 23.9 TSRGD 2002 Schedule 9 - Read Across to TSRGD 2016

Pre- 2016	2016		
Diagram No.	Schedule	Part	Item
4002.1	14	2	9
4003	14	2	11
4003.1	14	2	13
4003.1A	14	2	14
4003.2	14	2	15
4003.3	14	2	16
4003.4	14	2	17
4003.4A	14	2	18
4003.5	14	2	19
4003.6	14	2	20
4003.7	14	2	21
4003.7A	14	2	22
4004	14	2	23
4005	14	2	25
4006	14	2	26

Table 23.10 TSRGD 2002 Schedule 10 - Read Across to TSRGD 2016

Pre- 2016	2016			
Diagram No.	Schedule	Part	Item	
5001.1	14	2	32	
5001.2	14	2	32	
5003	14	2	33	
5003.1	14	2	33	
5005	14	2	34	
5005.1	14	2	34	
5010	14	2	35	
5011	14	2	36	
5012	14	2	37	
5013	14	2	38	
5014	14	2	39	
5015	14	2	40	

Table 23.11 TSRGD 2002 Schedule 11 - Read Across to TSRGD 2016

Pre- 2016 Diagram No.	2016				
	Schedule	Part	Item		
6001	15	2	1		
6002	15	2	2		
6003	15	2	4		
6006	15	2	5		
6006.1	15	2	5		
6006.2	15	2	7		
6008	15	2	5		
6008.1	15	2	7		
6009	15	2	5		
6009.1	15	2	5		
6009.2	15	2	5		
6009.3	15	2	7		
6011	15	2	8		
6011.1	15	2	9		
6012	15	2	10		
6021	15	2	11		
6022	15	2	12		
6023	15	2	13		
6031.1	15	2	14		
6032.1	15	2	16		

Table 23	3.12 TSRGE	2002 S	chedule 12	- Rea	d Across	to TSRGD	2016
Pre-	2016				Pre- 2016	2016	
2016 Diagram No.	Schedule	Part	Item		Diagram No.	Schedule	Part
7001	13	2	9		7016	13	9
7001.1	13	2	9		7017	13	9
7001.2	13	2	9		7018	13	9
7001.3	13	9	-		7018.1	13	9
7002A	13	9	-	-	7019	14	2
7002B	13	9	-		7020	13	6
7002.1	13	9	-		7021	14	2
7003.1	13	6	42	-	7022	14	2
7004	13	6	43	-	7023	14	2
7005	13	6	43		7024	14	2
7006	13	6	44	-	7025	13	6
7006.1	13	6	1	-	7026	13	6
7007.1	13	6	2	-	7027	14	2
7008	13	6	3	-	7028	14	2
7009	13	2	10	-	7029	13	6
7009.1	13	4	3	-	7030	14	2
7010.1	13	9	-	-	7031	14	2
7011	14	2	58	-	7032	13	6
7011.1	14	2	59	-	7101.1	13	6
7011.2	14	2	60	-	7102	13	6
7012	13	9	-		7103	13	6
7013	13	9	-	=	7104	13	6
7014	13	6	37	-	7105	13	6
7014.1	13	6	39	=	7201	13	6
7015	13	9	-		7201.1	13	6

Pre- 2016	2016		
Diagram No.	Schedule	Part	Item
7016	13	9	-
7017	13	9	-
7018	13	9	-
7018.1	13	9	-
7019	14	2	61
7020	13	6	52
7021	14	2	62
7022	14	2	63
7023	14	2	64
7024	14	2	65
7025	13	6	34
7026	13	6	35
7027	14	2	58
7028	14	2	58
7029	13	6	36
7030	14	2	29
7031	14	2	66
7032	13	6	38
7101.1	13	6	4
7102	13	6	5
7103	13	6	6
7104	13	6	7
7105	13	6	8
7201	13	6	14
7201.1	13	6	14

Pre-	2016				
2016 Diagram No.	Schedule	Part	Item		
7202	13	6	13		
7203	13	6	14		
7203.1	13	6	14		
7204	13	6	14		
7205	13	6	14		
7206	13	6	13		
7207	13	6	14		
7208	13	6	13, 14, 15		
7209	13	6	14		
7210	13	6	14		
7211.1	13	6	14		
7212	13	6	14		
7213	13	6	14		
7214	13	6	14		
7215	13	6	14		
7216	13	6	14		
7217	13	6	14		
7218	13	6	14		
7220	13	6	16		
7221	13	6	14		
7230 (variant)	13	6	14		
7231	13	6	14		
7232	13	6	16		
7233 (variant)	13	6	16		
7234	13	6	14		
7235	13	6	14		

Pre- 2016	2016		
Diagram No.	Schedule	Part	Item
7236	13	6	14
7237	13	6	14
7238 (variant)	13	6	14
7239	13	6	14
7240	13	6	16
7241	13	9	-
7242	13	9	-
7250	13	6	16
7251	13	6	16
7252	13	6	16
7253	13	6	16
7254	13	6	16
7255	13	6	16
7256	13	6	16
7260	13	6	14, 15, 16
7261	13 6 14, 1		14, 15, 16
7262	Removed		
7263	Removed		
7264	13	6	14, 15, 16
7270	13	6	14, 15, 16
7271	13	6	14, 15, 16
7272	Removed		
7274	Removed		
7275	13	6	14, 16
7280	13	6	14, 15, 16
7281	Removed		

Pre-	2016				
2016 Diagram No.	Schedule	Part	Item		
7282	13	6	14, 15		
7283	13	6	14, 15		
7283.1	13	6	14, 15		
7284	13	6	14, 15		
7284.1	13	6	14, 15		
7285	13	6	14, 15, 16		
7286	13	6	14, 15, 16		
7287	13	6	15		
7288	13	6	14, 15, 16		
7290	Removed				
7291	13	6	40		
7292	13	9	-		
7293	13	9	-		
7294	13	6	41		
7301	13	9	-		
7302	13	9	-		
7303	13	9	-		
7304	13	9	-		
7305	13	9	-		
7306	13	9	-		
7307	13	9	-		
7402	13	6	9		
7403	13	6	10		
7404	13	6	12		