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## The new structure

- 7.1 All regulatory upright signs and road markings relating to speed limits have been brigaded together in **Table 38**. Each complete sign has been illustrated in the same tabular format established in the warning and regulatory sign Schedules. The requirements of applicable regulations and directions are contained in **Table 39** and **Table 40** respectively.
- 7.2 **Table 38** follows the same approach for speed limit signs as in respect of other regulatory roundels. The new structure for speed limit signs is set out in **Table 7.1**:

Table 7.1 Speed Limit Signs and Markings	
<b>Table 38</b>	Column 1 - Contains Table Item number.
	Column 2 - Contains sign diagram number and caption.
	Column 3 - Contains sign illustration and prescribed size ranges.
	Column 4 - Contains permitted variants.
	Column 5 - Cross refers to in <b>Table 39</b> . See below.
	Column 6 - Cross refers to <b>Table 40</b> . See below.
<b>Table 39</b>	Contains applicable itemised regulatory requirements.
<b>Table 40</b>	Sets out relevant directions.

## Changes since TSRGD 2002

- The hitherto 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 removed. 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 existing guidance in Chapter 3 of the Traffic Signs Manual. Any decision to reduce the number of existing terminal signs should be underpinned by robust risk analysis.

- 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 potential challenge to enforcement.
- 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. However, it should be born in mind that associated maintenance costs might outweigh any benefit of not placing, or removing, upright signs.
- The requirement of TSRGD 2002 direction 18 linking the road marking to diagram 1065 to the upright sign to diagram 670 has also been removed.
- The requirement to place traffic calming features at specified intervals (effectively 100 metre) has been relaxed so that a minimum of one traffic calming feature is required. Beyond that repeaters may be used at those intervals within 20 mph zones where traffic speeds are already low. This should enable local authorities to reduce the number of traffic calming features where speeds are restricted because of the nature of the road.
- Speed roundels may now be used on the carriageway as an alternative to upright repeater signs in 20 mph zones and limits. Previously, painted speed roundel road markings were only permitted to be placed on the highway with an accompanying upright sign. This will reduce the number of signs that local authorities are required to place.
- New signs have been prescribed for 40 mph zones.
- To reduce sign clutter, diagram 675 (end of a 20mph zone and notification of new speed limit) may be used as a terminal sign - instead of diagram 670 - to indicate the point where a speed limit (other than a national speed limit) begins.
- To reduce sign proliferation, the placing of diagram 675 - when the upper panel is varied to show a diagram 671 roundel against a grey background - is permitted instead of diagram 671 to indicate the commencement of a national speed limit at the terminal point of a 20 mph zone.
- Additionally, diagram 670 - when displayed on a variable message sign - is exempt from the requirement to be placed along a road (i.e. at the side of the road) when mounted directly above a traffic lane as part of the managed motorways scheme.
- Traffic authorities have the option not to directly light regulatory signs that are placed within a 20 mph zone. In such cases these signs must be reflectorised.



## The policy context

- 7.3** 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. It is hoped that the removal of the requirement for sign lighting within 20 mph zones and limits, and the relaxations in respect of traffic calming measures within 20 mph zones will incentivise traffic authorities to consider such measures.
- 7.4** With regard to speed limits in general, by removing the stringent requirements in respect the placing of terminal and repeater signs, traffic authorities have the freedom to determine the appropriate level of signing provision. In doing so, however, the obvious environmental and financial benefits of placing fewer signs should be balanced against what should reasonably be expected of the road user, and what could be deemed to be insufficient provision in the event of challenge to enforcement. It is therefore recommended that traffic authorities follow the guidance in the Traffic Signs Manual Chapter 3.

# 8. Advisory signs & markings

## The new structure

**8.1** While following the established tabular structure, Schedule 3 for advisory signs and advisory road markings differs in that complete signs and road markings have been illustrated.

**8.2** The new structure for warning signing is set out in **Table 8.1**:

Table 8.1 Advisory signs and road markings	
<b>Table 41</b>	Column 1 - Contains Table Item number.
	Column 2 - Contains sign diagram number and caption.
	Column 3 - Contains sign illustration.
	Column 4 - Cross refers to <b>Table 43</b> . See below.
	Column 5 - Cross refers to <b>Table 44</b> . See below.
<b>Table 42</b>	Column 1 - Contains Table Item number.
	Column 2 - Contains road marking illustration and caption.
	Column 3 - Cross refers to <b>Table 44</b> . See below.
	Column 4 - Cross refers to <b>Table 45</b> . See below.
<b>Table 43</b>	Contains applicable itemised permitted variants.
<b>Table 44</b>	Contains applicable itemised regulatory requirements.
<b>Table 45</b>	Sets out the relevant directions.

## Changes since TSRGD 2002

- Those signs relating to census and vehicle inspections by the police or appropriate enforcement agency have been removed. Those signs remain prescribed as temporary signs by virtue provision akin to regulation 53 of TSRGD 2002.
- An indication of distance, together with an arrow, may now be added to pedestrian over bridge or subway signs in the diagram 814 series.
- A new sign to indicate the length of a tunnel has been introduced.

- All elements of diagrams 873, 874, 875 and 876 may now be varied to accord with the junction layout.
- Diagram 818.2, 818.3, 818.4 and 818.5 have been combined and now appear in Schedule 4 (Table 61).
- A new sign has been prescribed to indicate a road unsuitable for heavy goods vehicles. This is similar to diagram 820 but includes the lorry symbol with a red bar and will generally be used where there are problems with drivers becoming stuck due to over-reliance on satellite navigation systems. The lorry symbol and red bar is reversed when the sign incorporates an arrow pointing to the right. The sign comprises two permitted variants. The variant displaying the legend "Unsuitable for heavy goods vehicles" is intended to provide advance warning on the approaches to a junction with an unsuitable route; and the variant displaying the symbol above a right or left pointing arrow should be used at the junction to indicate the route which is unsuitable.
- Signs for quiet lanes, that may be placed in England only, have been introduced.
- A new version of diagram 958 (bus lane ahead) 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.
- Diagram 966 may display "CYCLISTS DISMOUNT" or "CYCLISTS REJOIN CARRIAGEWAY".
- The wheelchair symbol has been removed from diagram 2307.
- The two permitted versions of diagram 857 for "Information" and "Tourist information" are now illustrated separately.
- The sign reminding motorists of a national speed limit ahead has been introduced.
- Information signs for level crossings now appear in Schedule 3 (Advisory Signs).
- A new sign advising motorists to share space has been introduced.
- The advisory sign to diagram 611 has been removed from the regulatory signs Schedule.
- Lane markings are no longer associated with the speed limit in force.
- Diagram 1010 may be used to indicate the division between a cycle lane and the main carriageway through a junction.
- Yellow bar markings for use on the approach to a roundabout on major routes have been introduced. Guidance on the appropriate use of these markings is available in Chapter 5 of the Traffic Signs Manual.

# 9. Direction signs

## The new structure

- 9.1 The 'building block' approach is most prevalent in respect of direction signs.
- 9.2 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 the TSRGD 2002. The dimensions of these elements are specified in stroke widths 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.
- 9.3 Where signs have a specific design these are still prescribed as complete signs.
- 9.4 The new structure for regulatory roundels is set out in **Table 9.1**. The appropriate design of directional signs using the elements prescribed by the above tables is given in the Traffic Signs Manual Chapter 7. Further advice will be given in the forthcoming Traffic Signs Manual Chapter 2.

<b>Table 9.1 The new structure for Directions Signs</b>	
<b>Table 45</b>	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 is now the same as 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. Previously non primary route signs had smaller x heights.
<b>Table 46</b>	Prescribes the legends which may be included on directional signs. Many of these were previously prescribed by Schedule 16 or item 4 of the table below the diagrams in TSRGD 2002. These are no longer associated with specific signs. The flexibility of this table permits, where appropriate:- <ul style="list-style-type: none"> <li>• 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.</li> <li>• The distance to a junction ahead to be added to any sign as appropriate.</li> <li>• Junction numbers to be added to primary and non primary route signs.</li> </ul>

<p><b>Table 47</b></p>	<p>Prescribes arrows and lane marking symbols that may be incorporated into rectangular signs. This table 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 as in diagram 2020 or downward pointing arrows as in diagram 2021 previously prescribed 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. Such sign combinations have previously been authorised for road layouts referred to as “tiger tail” junctions. There are new verge mounted signs for dedicated lanes where:-</p> <ul style="list-style-type: none"> <li>• a lane is used the reach more than one exit. 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.</li> <li>• 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.</li> <li>• 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.</li> </ul>
<p><b>Table 48</b></p>	<p>Prescribes route symbols for map type advance direction signs. The main route arms now have a standard width of five stroke widths and are no longer related to route status. 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 prescribed 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.</p>
<p><b>Table 49</b></p>	<p>Prescribes panels previously prescribed in TSRGD 2002 Schedule 16 items 21 (motorway), 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 truck stop 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) of the table.</p>
<p><b>Table 50</b></p>	<p>Prescribes the various symbols, other than those for tourist destinations, which may be incorporated on the directional signs specified in column (4) of the table. The hospital “A&amp;E” symbol is now permitted on motorway signs. Experience has shown that the Park and Ride symbol is 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 new electric vehicle recharging point symbol may be used in combination with a parking place symbol.</p>
<p><b>Table 51</b></p>	<p>Prescribes the legends that may be used with the parking place symbols prescribed by Table 6 and includes the variant of the “P” symbol that indicates the total number of parking spaces.</p>
<p><b>Table 52 to Table 56</b></p>	<p>Prescribe symbols for tourist and leisure destinations. These replicate Schedule 14 to the 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.</p>

<b>Table 57</b>	Prescribes warning and regulatory signs 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 stroke widths, is taken from Appendix D in Chapter 7 of the Traffic signs Manual. Because symbol size is now prescribed, a permitted variant ensures that two symbols side by side are the same height as referred to in Note 1 to Appendix D of Chapter 7.
<b>Table 58</b>	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 truck stops on motorways and all-purpose road. Truck stop 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).
<b>Table 59</b>	Prescribes the symbols that may be incorporated on advance signs for services. Service area and truck stop 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.
<b>Table 60</b>	Prescribes complete services signs that cannot be produced using the sign elements in Tables 58 and 59. 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 truck stops, using the white lorry symbol. Table 60 also prescribes the local facilities signs previously prescribed by diagrams 2308.1 and 2309.1 in TSRGD 2002.
<b>Table 61</b>	Prescribes complete signs that cannot be produced using any of the other tables in the directional signs 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, for example, 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 signs previously prescribed as diagrams 2010.1, 2010.2, 2025, 2121, 2123 and 2124 are now prescribed with a route arm width of five stroke widths. 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. A new sign is prescribed to indicate a junction on a cycle quietway. Other signs in Table 61 were previously prescribed in TSRGD 2002.

## Changes since TSRGD 2002

- The green and white panels denoting a primary route and a non-primary route respectively, introduced in TSRGD 1994, will no longer be used. Primary routes will be indicated by yellow on green route number patches only.
- On map-type advance directional signs the route arm width has been standardised at five stroke widths irrespective of route status
- New designs for dedicated lane signs have been introduced and include signs where a particular lane serves more than one exit from a junction.
- On overhead lane-drop signs for motorways, the downward pointing arrows are no longer shown separately, but are incorporated into the main sign in a similar manner to signs on all-purpose roads.
- Supplementary plates used with circular regulatory symbols may now include more information relating to the prohibition than previously; e.g. exceptions.
- Signs indicating motorway and all-purpose road services which are for lorries only are replaced by new truck stop signs with white legend on a black background.
- Motorway service area and truck stop signs may include placeholders that contain the corporate logo of a franchise operating on the site.
- Logos or symbols indicating cycle route branding are now permitted.

## The policy context

- 9.5** The Department considered options to simplify the complex design rules for direction signs in TSRGD 2015. By removing what had become known as 'the Guildford Rules' (which were introduced in TSRGD 1994), map-type and stack type direction signs will not only be reduced in size, but will appear less cluttered and visually intrusive. In addition, by standardising the route arm thickness, much of the design complexity has been removed.
- 9.6** A lifetime saving has been applied to existing signs, so the transition is expected to be slow.

# 10. Temporary signs

## The new structure

**10.1** 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.

**10.2** The new structure for temporary signing is set out in **Table 10.1**:

Table 10.1 Temporary Traffic Signs, Cones and Barriers	
<b>Table 62</b>	Contains the detail whereby the desired signing combination, and the applicable requirements, are arrived at by working along any given itemised row containing the following information:
	Column 1 - Contains Table Item number.
	Column 2 - Contains sign diagram number and caption.
	Column 3 - Contains sign illustration.
	Column 4 - Contains Plate legends, (omitting the Plate where appropriate).
	Column 5 - Cross refers to <b>Table 63</b> . See below.
	Column 6 - Cross refers to <b>Table 64</b> . See below.
	Column 7 - Cross refers to <b>Table 65</b> . See below.
<b>Table 63</b>	Contains optional related signs that do not fit the Table 63 structure. Where so referenced in Table 63, these signs may be placed in combination with those signs.
<b>Table 64</b>	Contains regulatory requirements specific to temporary warning signs.
<b>Table 65</b>	Contains directions specific to temporary warning signs.
<b>Table 66</b>	Contains complete illustrations for signs, barriers and traffic cones.
<b>Table 67</b>	Contains applicable itemised regulatory requirements for signs prescribed in <b>Table 66</b> .
<b>Table 68</b>	Contains applicable itemised direction requirements for signs prescribed in <b>Table 66</b> .



## Changes since TSRGD 2002

- For clarity, warning signs for use in temporary situations have been separated from their permanent equivalent, and are now prescribed in **Table 62**. These follow the same format as established for permanent warning signs.
- Miscellaneous sign illustrations indicating road works have been removed. These signs will remain prescribed in the TSRGD 2015 by virtue of updated wording in the successor to current regulation 53.
- A limited number of sign illustrations for lane closures and contra-flow working at road works remain illustrated. Sufficient flexibility is contained in the permitted variants to create all sign designs hitherto prescribed.

## The policy context

- 10.3** We are providing provision in the successor to Regulation 53 to allow the use of specific road studs when used to indicate lane markings in certain temporary situations.

# 11. Pedestrian crossings and light signals for the control of traffic

## The new structure

- 11.1** Traffic signals and their applicable regulations and directions have also been tabulated for consistency with other Schedules.
- 11.2** Road markings and other signs used with traffic signals have been moved from the old Schedules 3 and 6 and are now contained within the same table as the signals.
- 11.3** The new structure for traffic signals is set out in **Table 9.1**:

Table 11.1 Traffic Signs & Light Signals for the Control of Traffic	
<b>Table 69</b>	Column 1 - Contains Table Item number.
	Column 2 - Contains signal diagram number and caption.
	Column 3 - Contains signal illustrations and prescribed size ranges.
	Column 4 - Contains permitted variants.
	Column 5 - Cross refers to in <b>Table 71</b> . See below.
	Column 6 - Cross refers to <b>Table 72</b> . See below.
<b>Table 70</b>	Column 1 - Contains Table Item number.
	Column 2 - Contains signal diagram number and caption.
	Column 3 - Contains signal illustrations and prescribed size ranges.
	Column 4 - Contains permitted variants.
	Column 5 - Cross refers to Table 71. See below.
	Column 6 - Cross refers to Table 72. See below.
<b>Table 71</b>	Contains applicable itemised regulatory requirements.
<b>Table 72</b>	Contains applicable itemised directions.

## Changes since TSRGD 2002

### Pedestrian crossings

- Portable pedestrian crossings have been prescribed, to provide a pedestrian crossing place at road works or where a short term need is identified. Advice on the use of these is given in [Traffic Advisory Leaflet 3/11: Signal controlled pedestrian facilities at portable traffic signals](#).
- 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 ("the 1997 Regulations") have been consolidated in TSRGD 2015.
- The 1997 Regulations have been revoked but any existing crossing can remain and is considered lawful as if those regulations were still in force.
- Pelican crossings have not been included in TSRGD. This means that new pelican crossings can no longer be placed. Authorities wishing to provide a crossing with farside pedestrian signals can use a signal controlled pedestrian facility, which uses the same sequence as a junction facility but in a stand-alone setting.
- Pedestrian countdown signals are now 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.
- 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.
- 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.
- At crowded pedestrian, equestrian and toucan crossings where the lower signal might be obscured by others waiting to cross, supplementary near-side signals may be mounted on the same post above the existing prescribed one. An additional smaller push button device - without the red and green signals may also be placed on an additional post for ease of use in crowded situations in addition to, but not instead of, existing equipment. For consistency with the existing near-side signals, the back of a container enclosing the above supplementary signals may be coloured yellow.

- 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 Tables 71 and 72. The complete illustrations will be set out in the forthcoming Traffic Signs Manual Chapter 6.
- 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 existing flexibility to reduce this to 2 where traffic authorities consider the layout or character of the road justifies it.
- 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 control of pedal cycles only may now be used in combination with the toucan push-button demand unit.

### **Facilities for cyclists**

- Cycle safety mirrors are now prescribed for use with traffic signals. This is a circular convex mirror measuring between 300-500 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.
- The mirror may only be placed in combination with light signals prescribed by TSRGD 2015; in practice, this will involve co-locating on the same signal post either immediately below, or to the side of, the signal head.
- New low level signals for cyclists are prescribed. These have 100mm diameter aspects, and must meet similar performance requirements to standard signals. They can be used with full-size signals either as repeater signals, or (subject to trial results) to provide an early start.
- The existing full-size cycle signal head may now be varied to use a red cycle aspect rather than a full red.
- A new cycle 'early start' signal is also 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.
- A new marking is prescribed as an alternative to the existing sign for a cycle advanced stop-line (diagram 1001.2). This is intended for use at sites where, owing to space constraints, it is not possible to provide a lead-in lane. Instead, this new marking includes a narrow diagonal broken line which cyclists may cross in order to enter the priority reservoir. This is defined in TSRGD 2015 as a "cycle entry".

- In addition, the definition of an advanced stop line has been changed to make it an option to omit the lead-in lane or gate completely, and allow cyclists to cross the first stop line at any point along its length.
- A new type of crossing is prescribed for use by both pedestrians and cyclists. This shared-use crossing uses the familiar zebra crossing layout for pedestrians with a parallel cycle route indicated by 'elephant's footprint' markings, zig-zags and yellow globes. Drivers must give way to cyclists and pedestrians at the give-way line.
- 'Elephant's footprint' markings are now prescribed for use to indicate a route for cyclists through a signal-controlled junction. A new size range has been prescribed - the markings may be between 250mm and 400mm square.

### **General traffic signal issues**

- To improve the visibility of traffic signals and reduce the risk of driver distraction, the mounting of traffic signs on traffic signal posts at junctions and signal controlled pedestrian crossings has been restricted to the following circumstances relating to the signals themselves, and the permitted movement through a junction.
- 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.
- One of each of the signs in respect of mandatory turns, no right (or left) turn, no U-turn, no entry and existing prescribed 'exception' plates, crossing not in use and light signals not in use may also be mounted directly on the signal post, but only if no sign duplicates any other sign mounted within the signal head facing in the same direction. The 'Part time signals' plate may be mounted on a traffic signal post without being illuminated, but it must be reflectorised.
- 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.
- The situations (previously in TSRGD 2002 regulation 33) in which traffic signals may be used have been clarified to include bus gates and tunnels. Tunnels are removed from the list of situations in (previously in TSRGD 2002 regulation 39) in which wig-wag signals must be used.
- TSRGD 2015 now prescribes the duration of the starting red-with-amber and stopping amber signal periods, as 2s and 3s respectively. Similar requirements are included for the amber times to be used with wig-wag signals, as 3s for use at level crossings and 5s for all other wig-wag sites. Tolerances of +/- 0.25s are permitted.
- The mounting of signal heads at heights up to 6100mm to the centre of the amber aspect is now prescribed, where the layout or character of the road means visibility of signal heads mounted below this would be compromised.

- The safety classes for controllers are now included in the directions, by reference to BS EN 50556:2011.
- Cattle crossing signals must now incorporate ES compliant signal heads, meeting the requirements of BS EN 12368:2006 set out previously in TSRGD 2002.

### **Type approval of traffic control equipment**

- 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.
- There is still a need for some form of approval or 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, the Traffic Open Products and Standards (TOPAS) will oversee the promotion, maintenance and use of a number of procurement standards, and a process for registering products to these standards. The aim is to minimise procurement costs and encourage standardisation. Contact details for TOPAS will be made available in due course.

## **The policy context**

- 11.4** Traffic signals are critical to help reduce conflicts between road users, manage traffic flow, and provide safe places to cross the road.
- 11.5** The major change in this area is the removal of statutory type approval. In recent years it had become clear that the previous 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.
- 11.6** New pelican crossings cannot be installed. 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 pelicans from legislation.
- 11.7** It is important to note that this does not affect existing pelican crossings, which can stay in place until the equipment becomes life-expired.

# 12. Matrix signs and light signals (motorways and all-purpose dual carriageway roads)

## The new structure

**12.1** Matrix signs and traffic signals for motorways and all-purpose dual carriageway roads, and their applicable regulations and directions have been tabulated for consistency with other Schedules.

**12.2** The new structure for matrix signs and light signals is set out in **Table 12.1**:

Table 12.1 Matrix Signs and Light Signals	
<b>Table 73</b>	Column 1 - Contains Table Item number.
	Column 2 - Contains sign and signal diagram number and caption.
	Column 3 - Contains sign and signal illustration and prescribed size ranges.
	Column 4 - Contains permitted variants.
	Column 5 - Cross refers to in <b>Table 74</b> . See below.
	Column 6 - Cross refers to <b>Table 75</b> . See below.
<b>Table 74</b>	Contains applicable itemised regulatory requirements.
<b>Table 75</b>	Contains applicable itemised directions.

## Changes since TSRGD 2002

- New equivalent carriageway side mounted matrix signs have been prescribed in respect of diagrams 6002, 6008, 6031.1.
- The multiple closure of lane permutations are no longer individually illustrated. Instead representative examples are shown while the permitted variants allow for all scenarios.

## The policy context

**12.3** Near-side matrix signs have been prescribed to enable delivery of Smart Motorways. The term “Smart Motorway” refers to two types of motorway:

- Dynamic use of the Hard Shoulder (DHS), i.e. part time use of the hard shoulder as a running lane.
- All Lane Running (ALR), i.e. where the motorway does not have a hard shoulder, all lanes are used as running lanes.



# Annex A

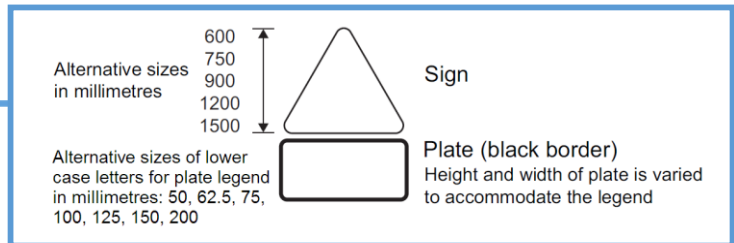
## Worked examples

A.1 The following examples illustrate how the new TSRGD will work. These examples should be worked through by using the draft Schedules.

**Signing is needed to warn drivers of a crossroads 100 yards ahead, and to reduce their speed now.**

### Step 1

- Schedule 1
- Blank canvas
- The sign size and plate x-height are selected at this stage
- (See Traffic Signs Manual)



### Step 2

- Select the desired sign:
- Table 1 Item 1 - Columns 2 & 3



### Step 3

- Select the desired sub plate legend:
- Table 1 Item 1 - Column 4
- "... Numerals indicating distance and yards or yds..."



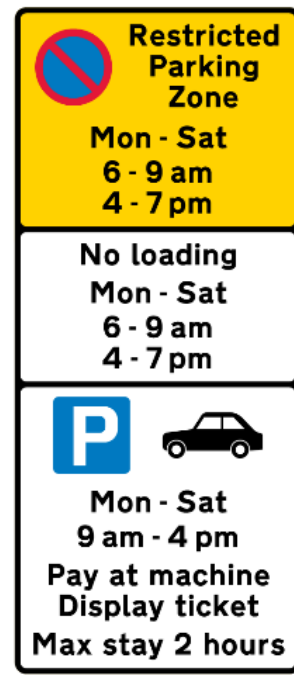
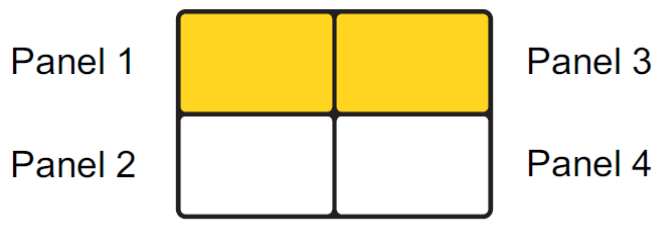
### Step 4

- Select the supplementary sign:
- Table 1 Item 1 - Column 5 = Table 2 item 1



### Step 5

- Find the regulatory requirements:
- Table 1 Item 1 - Column 6 refers to Table 5 item 8 - sub plate lighting requirements
- Table 2 Item 1 - Column 6 refers to Table 5 item 8 - supplementary sign lighting requirements



A parking place for motor cars is provided within a restricted parking zone. The zone operates Monday to Saturday from 6 am until 9 am and from 4 pm to 7 pm with a loading ban on Monday to Saturday from 6 am to 9 am and from 4 pm to 7 pm. The parking place operates on Monday to Saturday from 9 am to 4 pm and is pay and display with a maximum stay of 2 hours. There are no restrictions on Sunday.

**Step 1**

(a) Starting Point: Schedule 2, Table 10

(b) Create the three panel arrangement from Table 10, permitted variant 2

Both panels 3 and 4 may be omitted; additional yellow panels may be added above panel 1 and additional white panels may be added below panel 2. Panels forming a single column shall be of the same width.



## Step 2

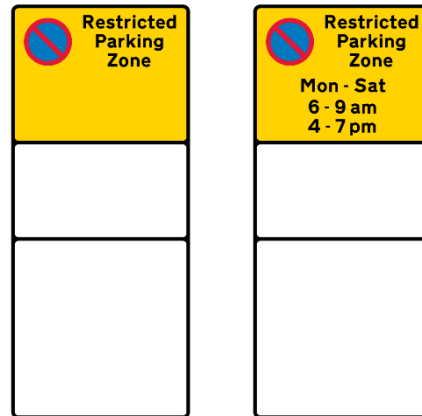
(c) Top panel symbol and legend from Table 11, item 6. This gives the no waiting roundel (125 mm diameter)

From column (4) choose the following legend:

Legend (2) "Restricted Parking Zone"

From Schedule 8 Item (1) choose the following times:

"Mon- Sat" "6 - 9 am" and "4 -7 pm"



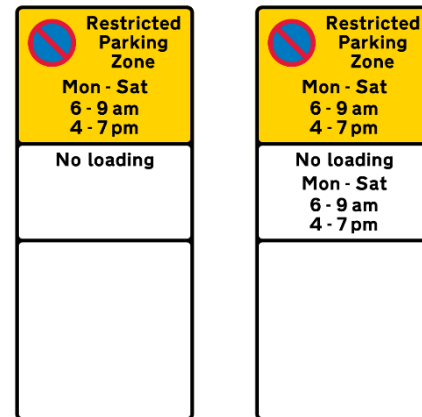
## Step 3

(d) Middle panel legend from Table 12, item 1

From column (4) choose the following legends:

Legend (1) "No loading"

Schedule 8 Item (1) "Mon - Sat", "6 -9 am" and "4 -7 pm"



## Step 4

(e) Bottom panel symbols and legend from Table 12, items 2 and 6, and Table 12, item 15

Table 12, items 2 and 6 give the "P" parking symbol and the motor car symbol respectively

Schedule 8 Item 1 choose the following legends relating to time periods:

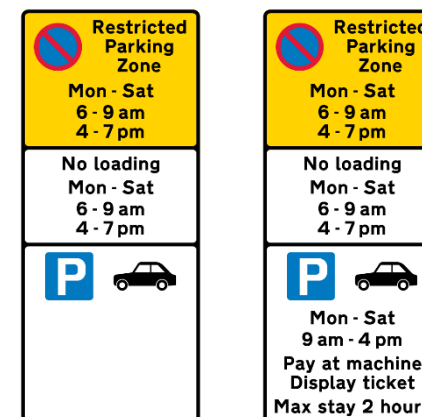
"Mon - Sat", "9 am - 4 pm"

From Table 12, item 15 column (3) choose the following legends relating to conditions of use:

Legend (1) "Pay at machine"

Legend (2) "Display ticket"

Schedule 8 item 1 "Max stay 2 hours"



## Annex B

### From 2002 to 2015

Table 12.2 The following indicates what has happened between TSRGD 2002 and TSRGD 2015.	
TSRGD 2002	TSRGD 2015
<b>SECTION 1 Preliminary</b>	
1 Citation and commencement	Retained with updated references
2 Revocations	Retained with updated references
3 Savings	Retained with updated references
4 Interpretation—general	Retained with updated references
5 Interpretation of speed limit	Retained with updated references
6 Interpretation of references	Retained with updated references
7 Interpretation of Schedules 1 to 12	Retained with updated references
<b>SECTION 2 General provisions</b>	
8 Authorisations	Retained
9 Temporary obstructions	Retained
10 Application of section 36 of the Road Traffic Act 1988 to signs and disqualification for offences	Table 5 items 1 & 2, Table 8 items 1 & 2, Table 10 Col 2, Table 26 item 1, Table 36 items 1 & 2, Table 67 item 5, Table 71 items 1 & 2, Table 75 item 4
11 Signs, markings and signals to be of the size, colour and type shown in the diagrams	Retained with updated references
12 Variations of dimensions	Retained with updated references
13 Proportions and form of letters, numerals, symbols and other characters	Retained with updated references
14 Signs attached to vehicles	See consolation questions

<b>SECTION 3 Warning, regulatory and informatory traffic signs</b>	
15 Sign shown in diagram 610 and its significance	Table 8 item 4
16 Signs shown in diagrams 601.1, 602, 611.1, 778, 778.1 and 784.1 and their significance	Table 36
17 Permitted variants of upright signs	Retained with updated references
18 Illumination of signs	Default regulation to be as per current Schedule 17 item 4 unless stated otherwise
19 Illumination of signs—further provisions	As above
20 Illumination of plates	Table 5 item 8. Table 36 item 20
21 Illumination of signs shown in diagrams 560 and 561	Table 5 item 4
22 Buses	Retained with updated references
23 Bus lanes	Retained with updated references
24 Bus symbols	Retained with updated references
<b>SECTION 4 Road markings</b>	
25 Road marking shown in diagram 1003: give way	Table 36 items 5, 6, 7 and 9
26 Road markings shown in diagrams 1013.1, 1013.3 and 1013.4: double white lines	Retained with updated references
27 Road marking shown in diagram 1001.3: zig-zag lines—no stopping	Table 71 item 5
28 Road marking shown in diagram 1001.3: zig-zag lines—no overtaking	Table 71 item 6
29 Road markings shown in diagrams 1025.1, 1025.3, 1025.4, 1043 and 1044: bus stop and bus stand clearways and box junctions	Table 26 item 3
30 Permitted variants of road markings	Retained
31 Illumination of road markings	Table 5 item 12, Table 36 item 21, Table 39 item 6
32 Height of road markings and size of studs	Table 44

<b>SECTION 5 Light signals and warning lights</b>	
33 Light signals for the control of vehicular traffic—standard form	Table 71 item 8
34 Green arrow light signals for the control of vehicular traffic	Table 71 item 9
35 Portable light signals for the control of vehicular traffic	Table 71 item 10
36 Significance of light signals prescribed by regulations 33 to 35	Table 71 item 11
37 Light signals for the control of vehicular traffic on motorways and all-purpose dual carriageway roads	Table 75 item 5
38 Significance of light signals prescribed by regulation 37(1)	Table 75 item 6
39 Light signals to control traffic at level crossings etc.	Table 71 item 12
40 Significance of light signals prescribed by regulation 39	Table 71 item 13
41 Light signals for the control of tramcars	Table 71 item 14
42 Significance of light signals prescribed by regulation 41	Table 71 item 15
43 Meaning of stop line and references to light signals	Table 71 item 16
44 Light signals for lane control of vehicular traffic	Table 71 item 17
45 Warning signal for motorways and all-purpose dual carriageway roads	Table 75 item 3
46 Matrix signs for motorways and all-purpose dual carriageway roads	Table 75 item 1
47 Light signals at signal-controlled pedestrian facilities	Table 71 item 18
48 Light signals at equestrian crossings	Table 71 item 20
49 Light signals at Toucan crossings	Table 71 item 21
50 Warning lights at school crossing places	Table 71 item 22
51 Cattle crossing signs and warning lights	Table 71 item 23
52 Light signals for pedestrian traffic at level crossings	Table 71 item 24
<b>SECTION 6 Miscellaneous traffic signs</b>	
53 Temporary signs	Retained with updated references
54 Flashing beacons	Table 71 item 25
55 Road danger lamps	Retained with updated references
56 Cones, delineators and cylinders	Retained with updated references
57 Refuge indicator lamps	Retained with updated references
58 Variable message signs	Retained with updated references

<b>SCHEDULES TO THE REGULATIONS</b>	
1. Warning signs (other than those for railway and tramway level crossings, bus and pedal cycle facilities, and road works)	Retained as Schedule 1 for permanent warning signs only. Temporary warning signs now appear in Schedule 5 'Temporary Signs'
2. Regulatory signs (other than those for railway and tramway level crossings, bus and pedal cycle facilities, and road works)	Retained as Schedule 2. Now includes all regulatory signs and markings.
3. Signs for railway and tramway level crossings	Removed. Signs dispersed within new Schedule 1, Schedule 3 and Schedule 6.
4. Miscellaneous informatory signs	Retained as new Schedule 3. Now includes advisory markings.
5. Signs for bus, tram and pedal cycle facilities	Removed. Signs dispersed within Schedule 2 and Schedule 3
6. Road markings	Removed Dispersed with Schedule 1, Schedule 2 and Schedule 3.
7. Directional signs	Retained as Schedule 4.
8. Light signals for the control of vehicular traffic	Retained as Schedule 6.
9. Light signals for pedestrians and animal crossings	Retained as Schedule 6.
10. Lane control signals and signs	Retained as Schedule 6.
11. Matrix signs and light signals	Retained as Schedule 6.
12. Road works signs etc.	Retained as Schedule 5.
13. Proportions and form of letters, numerals and other characters	Retained as Schedule 7.
14. Proportions and form of symbols indicating types of tourist destination—	Removed. Symbols included in Schedule 4.
15. Legends for use on variable message signs	Retained as Schedule 9.
16. Permitted variants	Removed. Now addressed within tabular structure in other Schedules.
17. Illumination of signs	Removed. Default regulation to be included with exception provided from within tabular structure.
18. Interpretation of "un-laden vehicle"	Retained as Schedule 10.
19. Bus stop and bus stand clearways and box junctions	Removed. To be provided for within Schedule 2.

<b>PART II—THE TRAFFIC SIGNS GENERAL DIRECTIONS 2002</b>	
1 Citation and commencement	Retained with updated references
2 Revocations	Retained with updated references
3 Interpretation—general	Retained with updated references
4 Interpretation of references	Retained with updated references
5 Savings	Retained with updated references
6 Signs to be placed only at sites approved by the Secretary of State (Applies only to stop signs to diagram 601.1)	Removed.
7 Signs to be placed only to indicate the effect of a statutory prohibition	Provided within the tabular structure as appropriate.
8 The placing of certain signs to indicate the beginning of a restriction, requirement, prohibition or speed limit	Removed.
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	Removed.
11 Repeater signs	Removed
12–15 Signs to be placed only on specified types of road	Table 72 item 2
16 Speed limits of 20 mph	Table 40 item 1
17 Signs to be placed only in conjunction with specified road markings (except signs for prohibitions and restrictions on waiting etc.)	Removed
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.)	Table 72 item 3.
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	Table 72 item 4
21 Plates to be placed only in combination with specified signs	Table 72 item 5
22–26 Placing of road markings and signs to indicate prohibitions and restrictions on waiting, loading and unloading and parking	Removed.
27–35 Signs to be placed only at specified sites or for specified purposes	Table 72 item 7
36–39 Restrictions on the placing of temporary signs	Table 72 item 6
40 Placing of signs varied to show metric units	Removed.



41, 42 Mounting and backing of signs	Table 72 item 9
43 Mounting of the sign shown in diagram 781	Removed.
44 Mounting of the signs shown in diagrams 560 and 561	Table 72 item 10
45 Mounting of refuge indicator lamps	Removed.
46 Mounting and backing of light signals, matrix signs and warning lights	Table 72 item 11. Table 76 item 1
47 Placing of road marking shown in diagram 1001 or 1001.2 in conjunction with light signals	Table 72 item 12
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)	Table 72 item 13
50–52 Placing of signs and light signals shown in Schedule 11	Removed.
53 Placing of portable light signals prescribed by regulation 35	Table 72 items 14 and 15
54 Placing of signals and other signs at crossings	Note for consultation
55 Placing of various light signals	Table 72 item 16. Table 76 item 2
56 Approval of types of sign and signals by the Secretary of State	Removed.
57 Studs	Removed.
58 Approval of types of stud by the Secretary of State	Removed.
59 Special Directions	Table 72 item 19
<b>SCHEDULE TO THE DIRECTIONS (Schedules 1 and 2)</b>	
Placing of signals and other signs at signal-controlled crossing facilities. See directions 54 and 54A.	Retained with updated references