



Rialtas na hÉireann
Government of Ireland

NTA
Údarás Náisiúnta Iompair
National Transport Authority



Traffic Signs Manual & Legislative Amendments RSTG Conference Presentation May 2025



Agenda

1

Introduction

2

TSM & Regulations
Process

3

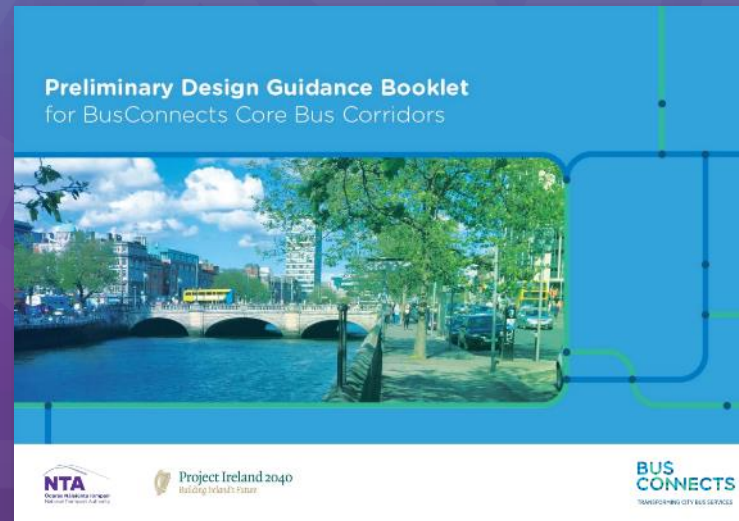
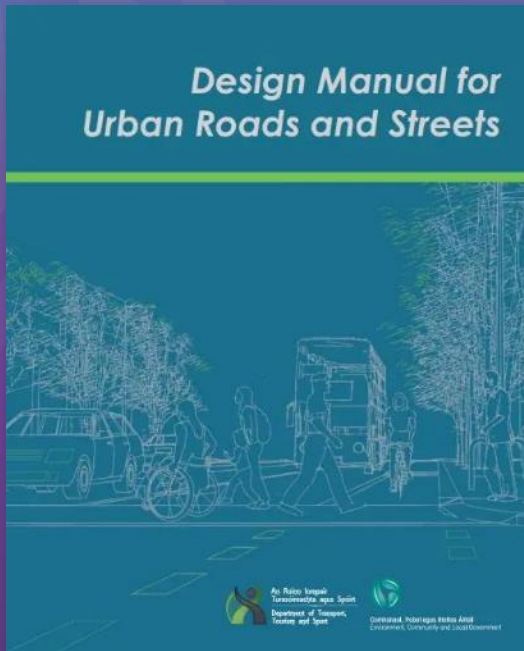
Traffic Signs Manual
Interim Version 3

4

Traffic Signs Manual
Final Version 3

Introduction

Why such a significant update?



Introduction: Cycle Design Manual - TSM & Legislation

It is noted that some newer features will require amendments to legislation which is underway. Designers should check with the NTA prior to installing any of the new features as it is expected to take 18 to 24 months from release date to have all legislative changes in place.



Traffic Signs Manual (TSM)

1.1.17 The Regulations, which are made under Section 95 of the Road Traffic Act 1961¹, define the regulatory signs and road markings to be used and the significance to be attached to them. They also set out the mandatory requirements for regulatory signs. This Manual provides guidance on the use of regulatory signs, but nothing in the Manual can override the Regulations.

1.1.18 The traffic sign Regulations refer only to regulatory signs and not to other categories such as information or warning signs. Those signs are subject of directions by the Minister under Section 95 of the Road Traffic Act 1961. Accordingly, this Traffic Signs Manual together with the corresponding Circular Letter constitute such a direction for the design, provision and use of all traffic signs referred to in the Manual other than regulatory signs.

1.1.19 Only traffic signs which are in accordance with this Manual or associated Regulations shall be provided on public roads.



1.1.9 To help achieve these goals, a combination of consistent message, distinctive shape and colour is used. The message may be a legend, a symbol or both. Standardisation of design, colour, shape, size and location helps to ensure that drivers will recognise the various classes of sign.

1.1.10 Signs should only be erected where there is a demonstrable need, because unnecessary, incorrect or inconsistent signs detract from the effectiveness of those that are required and tend to lead to disrespect for all signs.

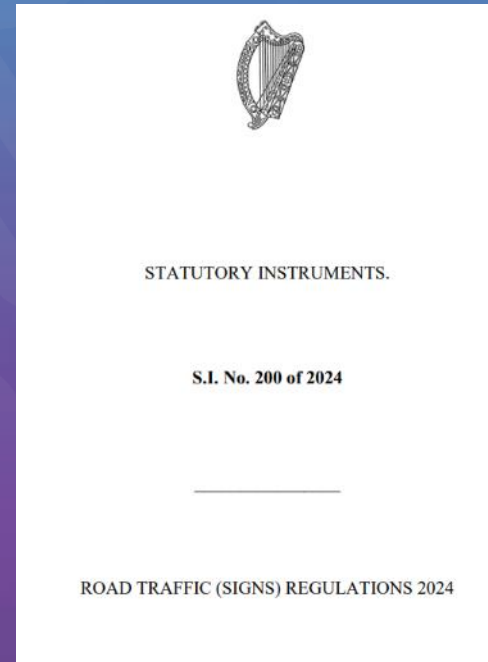
5.1.7 Regulatory signs are prescribed by the Minister for Transport, Tourism and Sport. The principal regulations are the Road Traffic (Signs) Regulations 1997 and the Road Traffic (Traffic and Parking) Regulations 1997. A range of new and amending regulations have been made since then; a listing is given on www.dttas.gov.ie and www.trafficsigns.ie. The regulations specify the types of sign which must be used by Road Authorities when providing road traffic regulatory signs. There must be strict compliance with the form and content of these signs. Details are given on the website of the commencement date for the provision of each regulatory sign and this information should be consulted before any regulatory sign is used.

This Manual, published by the Department of Transport, constitutes a Direction given by the Minister of Transport to Road Authorities under Section 95(16) of the Road Traffic Act 1961 in relation to the provision of traffic signs.

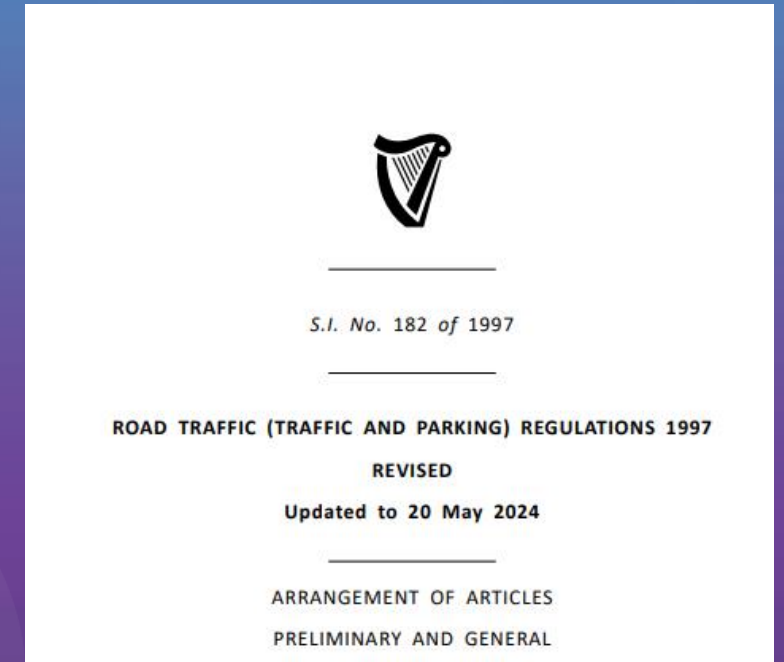
TSM and Regulations



'Signs' Regulations



'Traffic and Parking' Regulations



TSM & Regulations Update Process



Introduction: Subject Areas and Prioritisation

Subject Areas

Traffic Signals

Bus Signs & Markings

Cycle Signs & Markings

Crossings

Grouping by Priority

Group 1: Non-Legislative Changes (TSM only)

Group 2: Higher Priority Legislative and TSM changes

Group 3: Lower Priority Legislative and TSM changes

Pilot/Testing

Not Required

Trial/Pilot Testing of certain elements

Output

TSM Interim Version 3

Amended Traffic Signs Regulations

Amended T&P Regulations

Final TSM Version 3

Advice Notes for certain elements

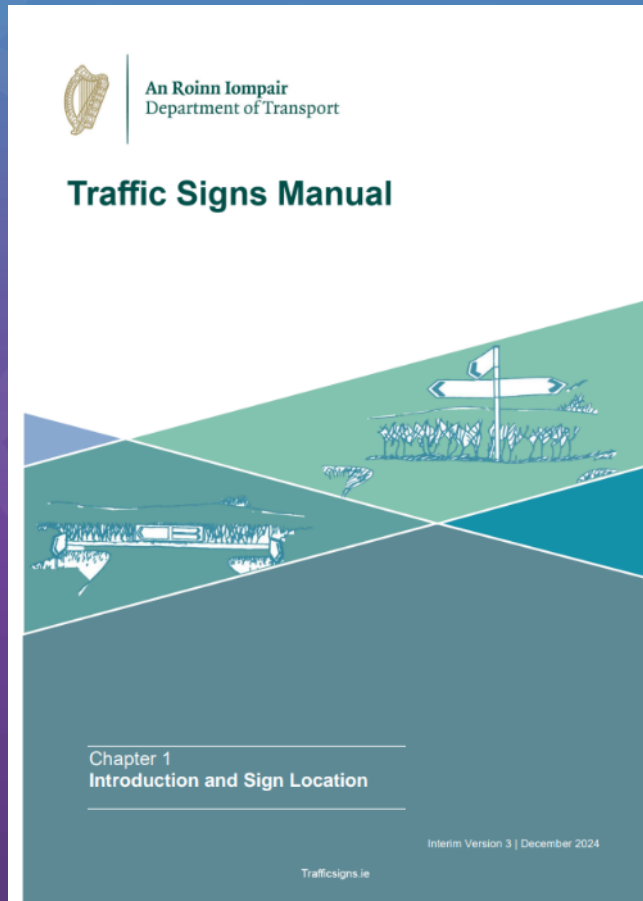



Introduction: Subject Areas and Prioritisation



Group 1: TSM Interim Version 3 – Summary

Why interim?



<div>An Roinn Iompair Department of Transport</div> <div>HomeTraffic Signs ManualTTMMoreEnglish ▾</div>			
Current Traffic Signs Manual			
Chapter No.	Chapter Title	Link	Date Published
0	Preface	https://bit.ly/41MRx0	December 2024
1	Introduction and Sign Location	https://bit.ly/3ZU5mRA	December 2024
2	Directional Information Signs	https://bit.ly/3P8gkOy	November 2021
3	Variable Message Signs	https://bit.ly/3P3tUm5	December 2024
4	Other Information Signs	https://bit.ly/3BEAwEh	December 2024
5	Regulatory Signs	https://bit.ly/4h3CCwH	December 2024
6	Warning Signs	https://bit.ly/41ETFR6	December 2024
7	Road Markings	https://bit.ly/4gLhn2l	December 2024
8	Temporary Traffic Measures and Signs for Roadworks	https://bit.ly/4c112VI	August 2019
9	Traffic Signals	https://bit.ly/4iEHH01	December 2024



Summary of TSM Interim Version 3 Key Amendments

Chapter 0

- ✓ Minor updates and presentational matters

Chapter 1

- ✓ Minor updates and presentational matters

Chapter 3

- ✓ Updates relating to VMS signage
- ✓ Relocation of text on the Warning Signs, Regulatory Signs, and Traffic Signals for display on VMS to Chapters 5, 6 and 9 respectively. (TII)

Chapter 4

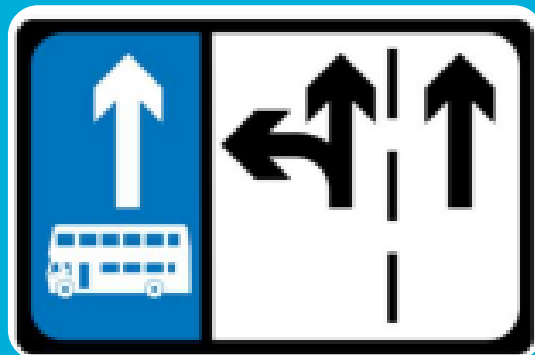
- ✓ Minor updates and presentational matters
- ✓ Updated bus lane signage F322, F323 and F324 to reflect a more universal bus symbology.
- ✓ New continuous bus lane signage requirements for F362, F363, F364 and P064.
- ✓ Updated shared space requirements following DoT Speed Limit Review.
- ✓ New speed camera signage requirements for variable speed limit zones with new signage F402b for use on motorways and the national road network. (TII)
- ✓ New two stage turn sign for cycles under sign C100



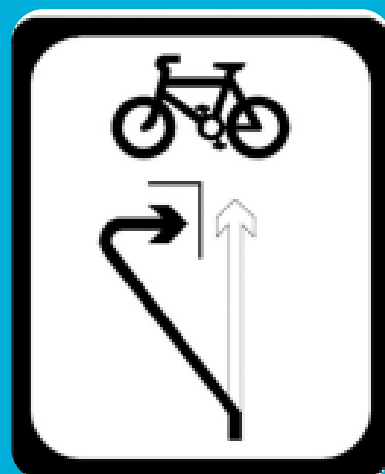
Summary of TSM Interim Version 3 Key Amendments

Chapter 4

Continuous Bus Lane Signage



Speed
Camera
Signage



Two-
stage
Right
Turn for
Cyclists

Chapter 4

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Summary of TSM Interim Version 3 Key Amendments

Chapter 5

- ✓ Updated speed requirements throughout for urban and rural roads.
- ✓ New permitted sign sizes and requirements to reflect urban roads.
- ✓ New electronic speed limit signage requirements for RVMS102 and RUS 045.
- ✓ New bollard mounted mandatory movement (RUS 001- RUS008) and cycle track (RUS 009, 058, 059) signage for cycle tracks with specific requirements to promote consistency in application and reduce street clutter.



RVMS 102



Bollard Mounted Signs

Less is More!

1.1.10 Signs should only be erected where there is a demonstrable need, because unnecessary, incorrect or inconsistent signs detract from the effectiveness of those that are required and tend to lead to disrespect for all signs.

Table 5.4: Sizes of Mandatory Movement Signs

Speed km/h	Sign Size (diameter)	
	mm	In Bollard mm
≤ 30	300	270
31 to 50	600	270 (600)
51 to 80	750 (900)	270 (600)
81 to 100	900 (750) (1200)	270 (600)
> 100	1200 (1500)	600

Notes:

1. The larger bracketed size may be used if greater prominence of the sign is considered necessary.
2. Where given, the smaller bracketed size should be used where site conditions make the provision of the recommended size impracticable or where special considerations apply.





Source: Google Streetview



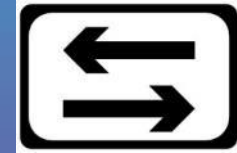
Summary of TSM Interim Version 3 Key Amendments

Chapter 6

- ✓ Updated requirements for two-way cycle track warning signage for Sign W 143.
- ✓ Updated requirements for cyclist dismount warning signage for Sign W 145.
- ✓ New pedestrian/cycle crossing warning sign W146.
- ✓ Requirements for variable message warning signs, including numbering for Warning VMS signs WVMS101, WVMS 102, WVMS 103, WVMS 104, WVMS 105 and WVMS 106 (TII).



W 143



W 145



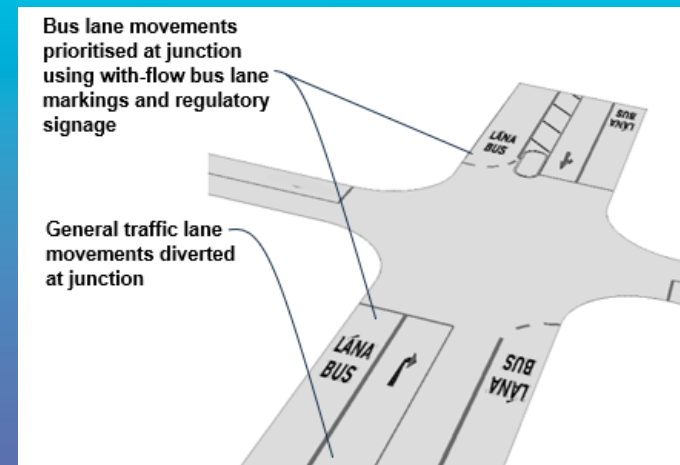
W 146



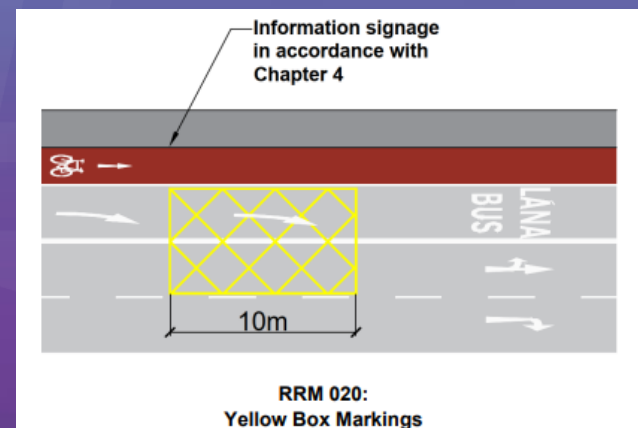
Summary of TSM Interim Version 3 Key Amendments

Chapter 7

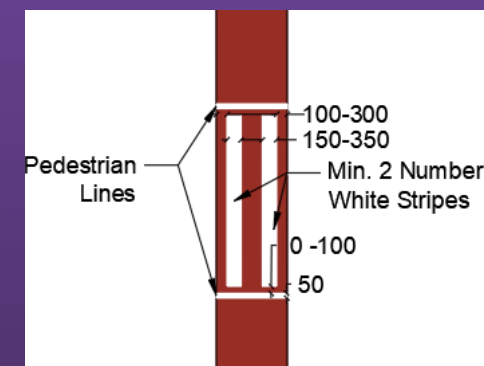
- ✓ New pavement markings for speed roundels.
- ✓ New general context in relation to bus gates and virtual bus lanes.
- ✓ New cycle track markings including: M106C (SLOW) and smaller variants of cycle track direction arrows M 117 (Left), M 118 (Straight Ahead) & M 119 (Right).
- ✓ Updated general context in relation to yellow box markings to promote improved consistency in their application, and updated use case scenario for RRM 020 Yellow Box Markings for no left turn from the bus lane.
- ✓ New zebra crossing markings for use on cycle tracks (RPC 001B) to align with the regulations.



Continuous Bus Lane Layout



Yellow Box for No Left Turn from Bus Lane

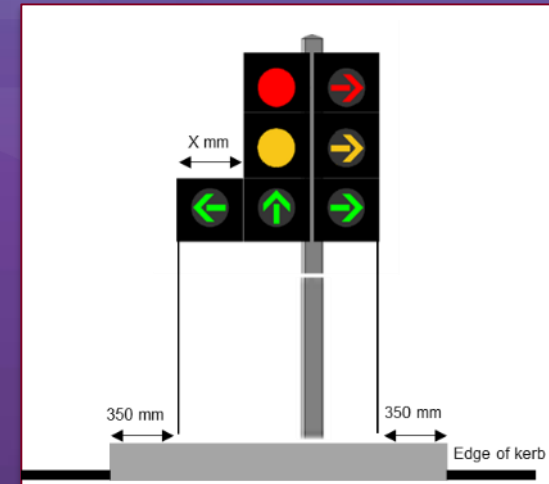
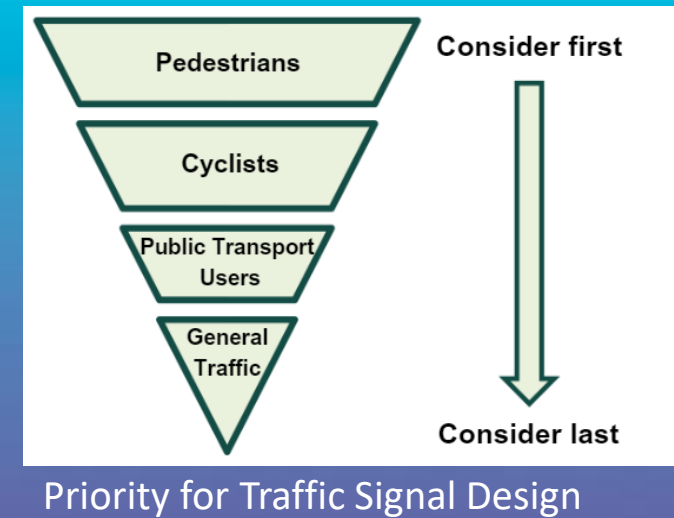


Zebra Crossing on Cycle Track



Chapter 9

- ✓ Updated general context in relation to the use of cycle signals on cycle tracks to align with the approach in the Cycle Design Manual.
- ✓ Updated requirements for mast arm signals, sighting of traffic signal poles.
- ✓ Updated context in relation to signalised bus gates and virtual bus lanes through the use of signal-controlled priority.
- ✓ Updated context in relation to number of signal heads for use in bus lane applications.
- ✓ New figure and updated requirements in relation to minimum island widths and set back requirements for multiple signal head arrangements.
- ✓ Amendments to example traffic signal layouts in appendices to rationalise signal layouts.



Minimum Island Widths & Setback



Low-Level Cycle Signals



Group 2: TSM Final Version 3 & Legislative Updates



Summary of TSM Final V3 & Legislative Updates

Chapter 5

- New guidelines for 4-Way Stop Junctions with Signage.
- Updated guidance for cycle signage.
- New smaller sizes available for illuminated Box Signs.
- Additional guidelines on implementation of Pedestrian Streets.
- Additional guidelines for signage for Car Share Vehicle Parking Bays and Car Share Electric Vehicle Recharging .
- New allowance to provide non-illuminated bollard mounted signs on segregated cycle facilities.

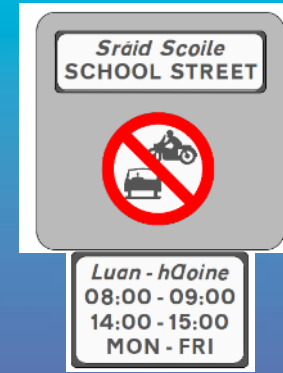




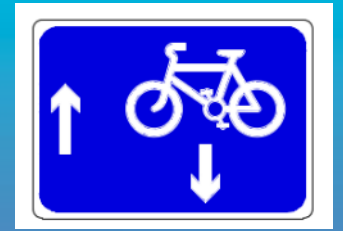
Summary of TSM Final V3 & Legislative Updates

Chapter 5

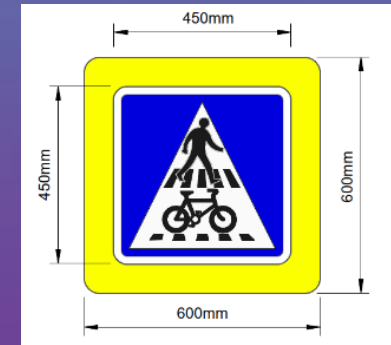
- Bus Stop Sign RUS 031 updated to match TFI signage
- New signs added:
 - RUS 032A School Street
 - RUS 059a Contra-Flow Cycle Lane
 - RUS 059b Contra-Flow Cycle Lane
 - RUS 067 Parallel/ Combined Zebra Crossing
 - RUS 068 Cycle Street
 - RUS 068A End of Cycle Street
 - RUS 070 Shared Zone
 - RUS 070A End of Shared Zone



RUS 032A



RUS 059a



RUS 067



RUS 068



RUS 070



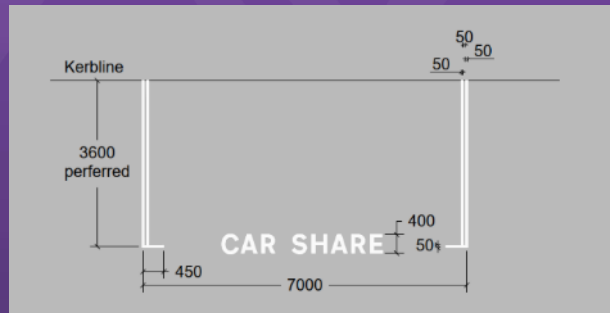
RUS 031



Summary of TSM Final V3 & Legislative Updates

Chapter 7

- New parameters and diagrams for Car Share Vehicle Parking Bays
- Dimensions added for Bus Stop Bays
- Updates to Pedestrian Crossing Layouts to include Parallel and Combined Zebra Crossings



RRM 034:
Car Share Parking Bay



Variety of new/updated cycle markings

New Regulatory Cycle Markings:

- RRM 036 Regulatory Cycle track Symbol
- RRM 038 Elephant's Footprint Markings
- RRM 017C Cycle Stop Line
- Cycle Track Direction Arrows RRM 004C/005C/006C/039C/040C/041C
- RRM 037 Non-segregated Shared Track Symbol

New Non-Regulatory Cycle Markings:

- M 133 Shared Street Symbol
- M 116 Carriageway Cycle Symbol
- M 115 C-1.8 1800mm Cycle Track Yield Marking
- M 106 C Cycle Track SLOW Marking
- M 114 C Cycle Track STOP Marking
- M 115 C-1.2 1200mm Cycle Track Yield Marking
- M 117 1200mm Cycle Track Hazard Marking
- M112C Traffic Calming Triangle

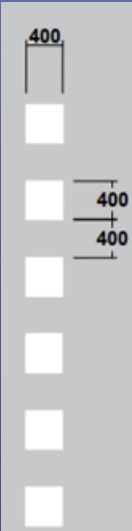




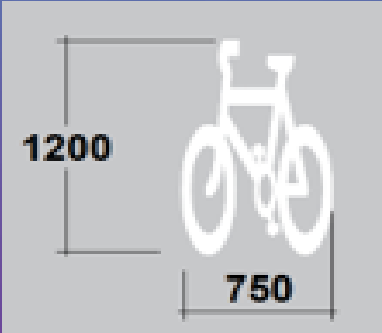


Summary of TSM Final V3 & Legislative Updates

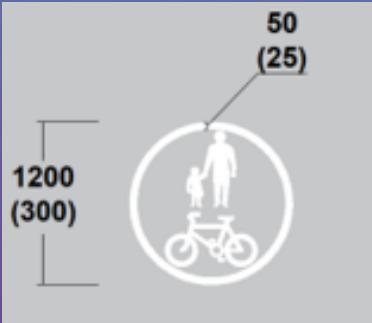
Chapter 7 – New Markings



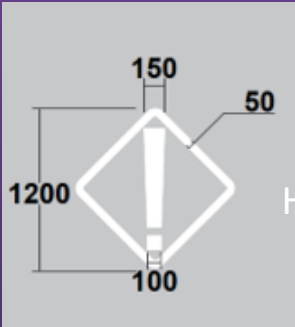
RRM 038
Elephant's
Footprint
Marking



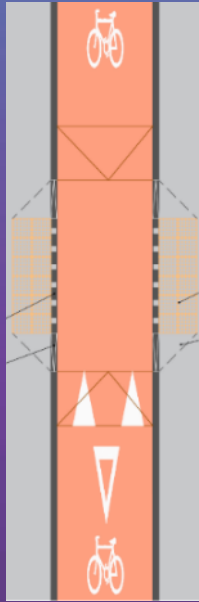
RRM 036
Regulatory Cycle
Track Symbol



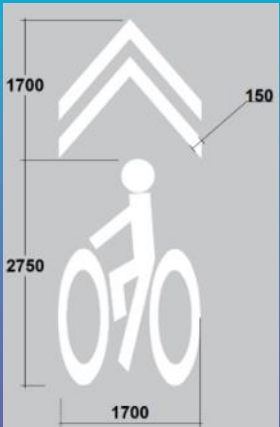
RRM 037
Non-Segregated
Shared Cycle Track
Symbol



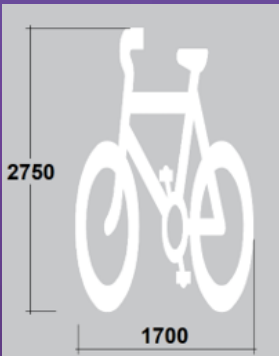
M 117 C
Cycle Track
Hazard Marking



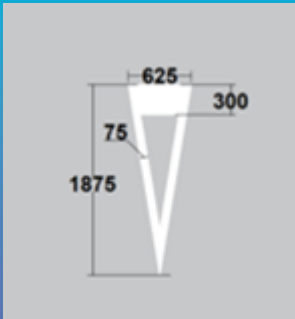
M 112C
Traffic Calming
Triangle for Cycle
Tracks



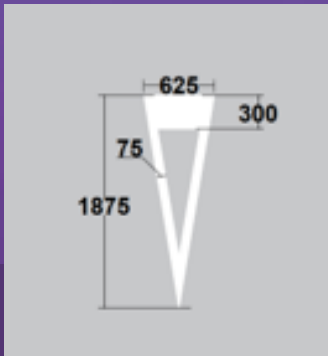
M 133
Shared Street
Symbol



M 116
Carriageway Cycle
Symbol



M115 C
Cycle Track
Yield
Marking



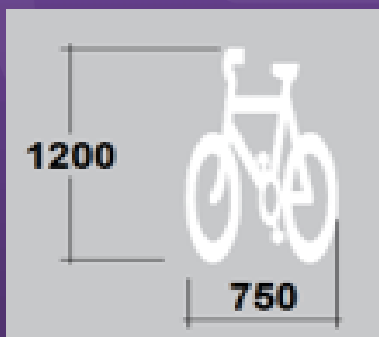
M 115 C
1875mm Cycle
Track
Yield Line



Summary of TSM Final V3 & Legislative Updates

Regulatory Cycle Symbol

- Previously only M 116 Non-Regulatory Cycle Symbol available for use
- New symbol RRM 036**
- Same size as previous cycle symbol M 116 - larger non-regulatory symbol also available



RRM 036
Regulatory Cycle
Track Symbol

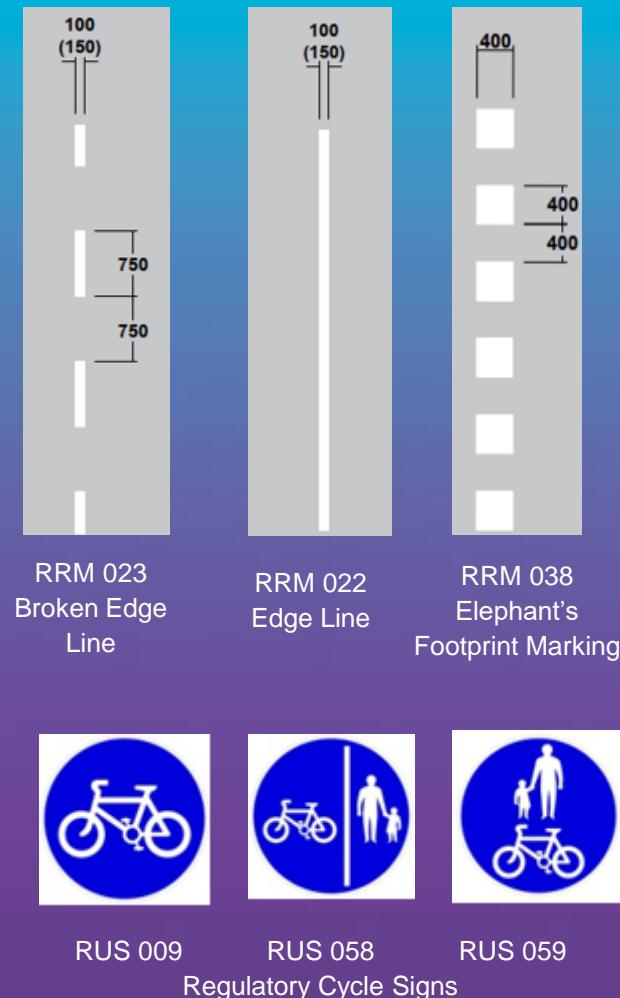
Cycle Track Definition

New update provides more flexible parameters of a regulatory cycle track:

- Upright Sign RUS 009/058/059
AND
- At least one regulatory road marking (*Cycle Symbol RRM 036 or Cycle Track Edge Lines RRM 022 / RRM 023 or Elephant's Footprint Markings RRM 038*)

This update means

- Cycle tracks can be marked only with Regulatory Cycle Symbol and no edge line markings e.g. on segregated raised cycle tracks
- RRM 023 broken edge line is not longer used at junctions – replaced with elephant footprints (next slide)





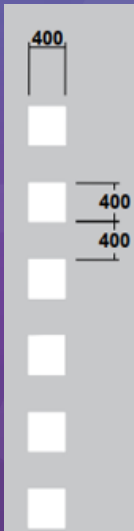
Summary of TSM Final V3 & Legislative Updates

Elephant Footprints

New line RRM 038

Use cases:

- To delineate a cycle track through a junction
- To delineate the part of the crossing for cyclists in a **Parallel Crossing**
- To delineate a **Combined Zebra Crossing**

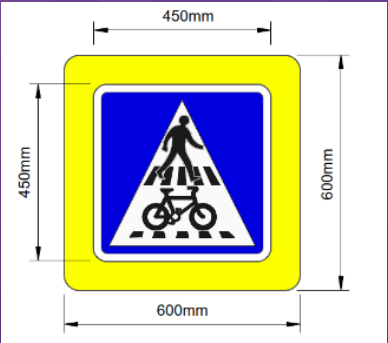


Elephant Footprint Marking

Parallel/Combined Crossing

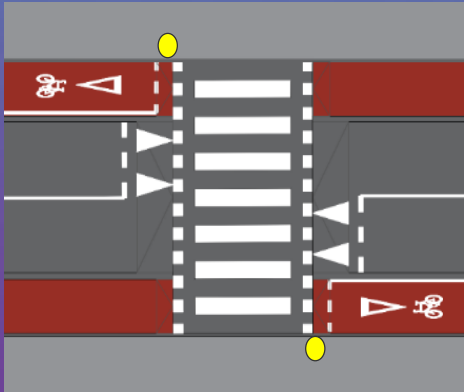
Parallel/Combined Crossings can be used to allow pedestrians and cyclists to cross a junction adjacent to each other.

They can be accompanied either by Pedestrian Crossing Beacons or by RUS 067

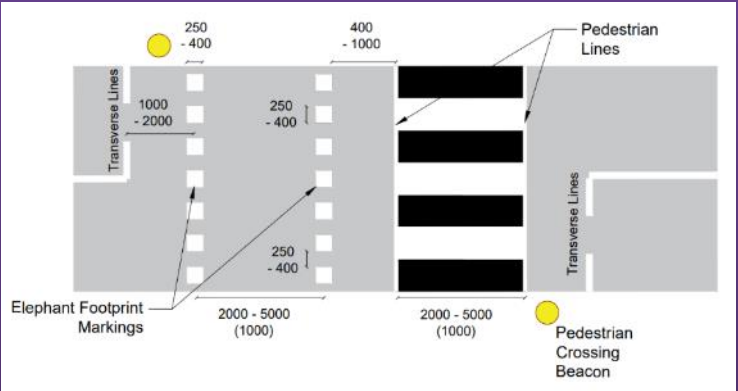


RUS 067
Parallel/
Combined
Crossing Sign

Combined Zebra Crossing RPC 006



Parallel Zebra Crossing RPC 005







Summary of TSM Final V3 & Legislative Updates

Shared Street Symbol

New Non-Regulatory Symbol:
M 133 Shared Street Symbol

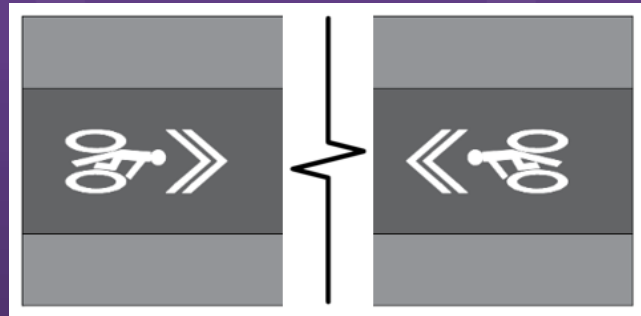
- Available for use on Cycle Streets or Shared Street facilities
- Speed limit on these streets should not be more than 30 kph



M 133

Cycle Streets

- Vehicular traffic shares a street with cyclists
- Cycle streets are typically:
 - Narrow streets
 - No centre-line carriageway markings
 - “Access only” for vehicular traffic
- They are marked with the shared street markings M 133 and regulatory Cycle Street Sign RUS 068
- Shared Streets are also available, provide lower level of priority for cyclists



Contra-flow cycling on cycle streets may be permitted

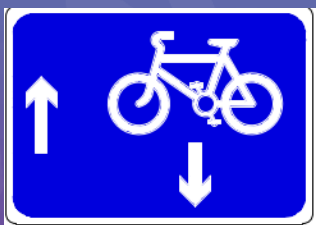


RUS 068

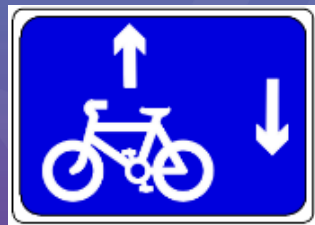


Summary of TSM Final V3 & Legislative Updates

Contra-Flow Cycling

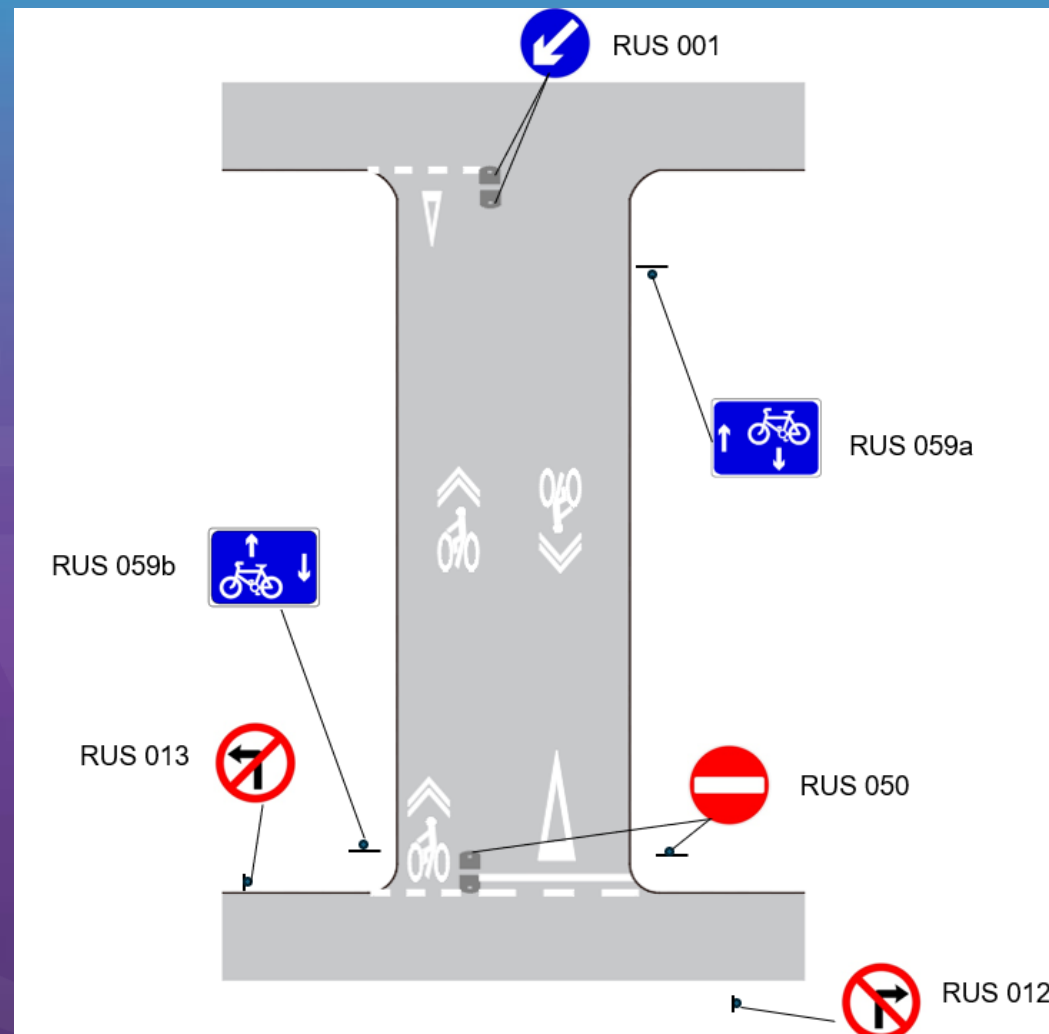


RUS 059a



RUS 059b

- New version of Regulatory Sign RUS 059 used with M 133 Shared Street Symbol
- For contra-flow cycling not delineated from general traffic – sample road layout shown
- Only suitable where speeds are very low and vehicle flows is less than 1000 vehicles per day



Layout of street with Contra-Flow Cycling permitted

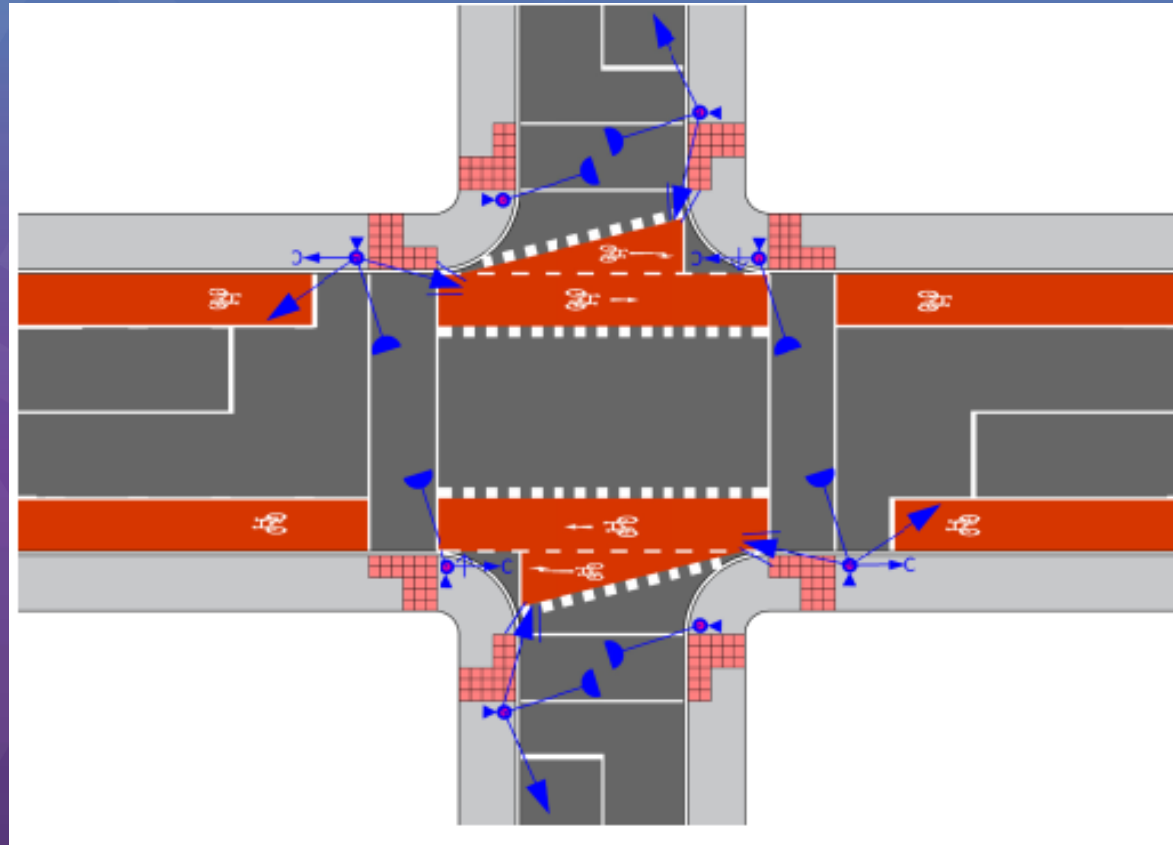


Summary of TSM Final V3 & Legislative Updates

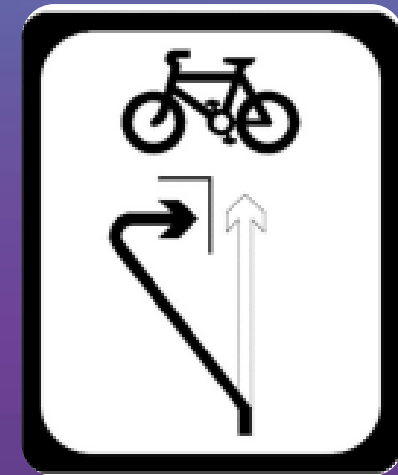
Two-Stage Right Turn for Cyclists

Utilises:

- Elephant Footprints RRM 038
- Regulatory Cycle Symbol RRM 036
- Cyclist Right Turn Directional Arrow RRM 004C/RRM 006C
- Directional Cycle Signals RTS 007R/RTS 007S
- Two-Stage Right-Turn for Cyclists Sign C 100



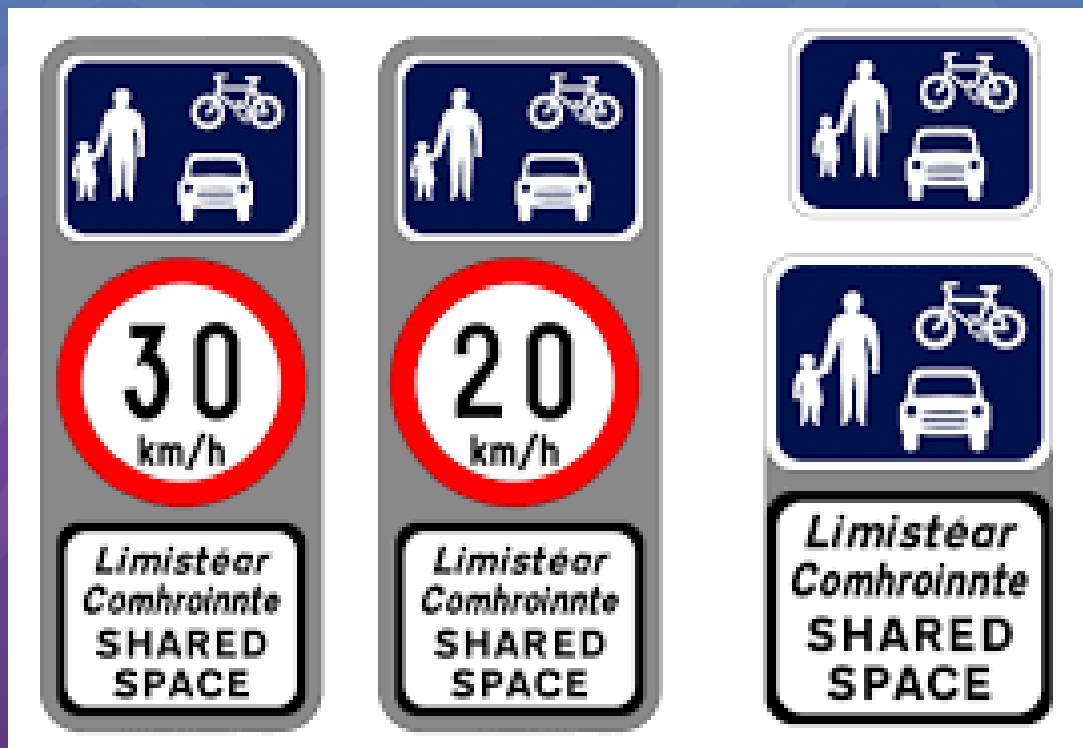
Layout of Two-Stage Right Turn for Cyclists



*C 100
Two-Stage Right-Turn for
Cyclists Sign*



Summary of TSM Final V3 & Legislative Updates



Shared Zone



RUS 070

- Shared Zones allow pedestrians, cyclists and vehicles to share the road
- Shared Zones are only suitable in low-speed areas and allow pedestrians, cyclists and vehicles to share the road
- Speed limit roundel serves as regulatory speed limit sign
- End of Shared Zone sign displayed at termination point



Summary of TSM Final V3 & Legislative Updates



*Previous attempt at
signage for School
Street*

School Street



School Streets:

- No motor vehicles
- Cyclists allowed
- Time restricted to school hours

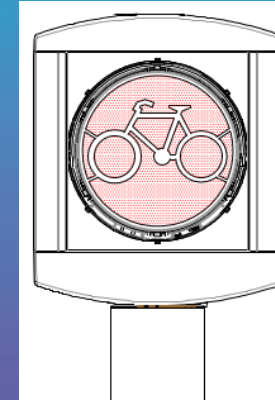
New School Street Sign RUS 032A is a consolidated iteration of example on left



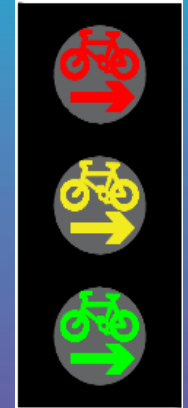
Summary of TSM Final V3 & Legislative Updates

Chapter 9

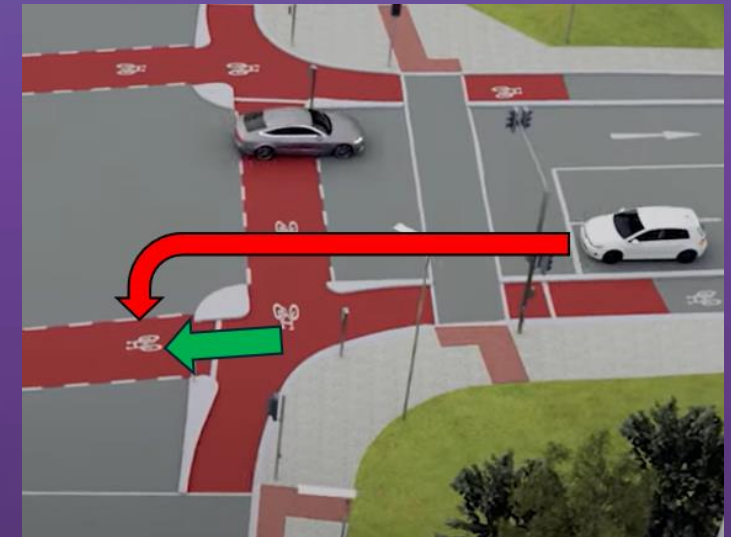
- Flashing Amber Signal Updates
- Separate staging for turning motor traffic and cyclists
- Additional paragraph with design guidance for pedestrian signals in areas of high pedestrian priority
- Zebra Crossing Pedestrian Signs for use instead of Beacons
- Directional Cycle Symbols
- Mobility Enhancement Signal on Cycle Track (RTS 014 Cycle Signal)



RTS014 Cycle Signal



Directional Cycle Signals



Separate Signal Phasing for Cyclists & Vehicles





Summary of TSM Final V3 & Legislative Updates

Flashing Amber Signal

Flashing amber signal is permitted for use in both RTS 003 (4-head configuration) and RTS 004 (3-head configuration).

Flashing amber signals may be used at junctions with cycle tracks (where separate signal phasing is not possible) to make left turning vehicles aware of straight-through cyclists.

The flashing amber imposes a requirement for traffic to yield to all other traffic (including cycles) and vehicles may only proceed in the direction of the flashing amber arrow provided no other road user is endangered.



Flashing Amber RTS
004



Flashing Amber RTS
003





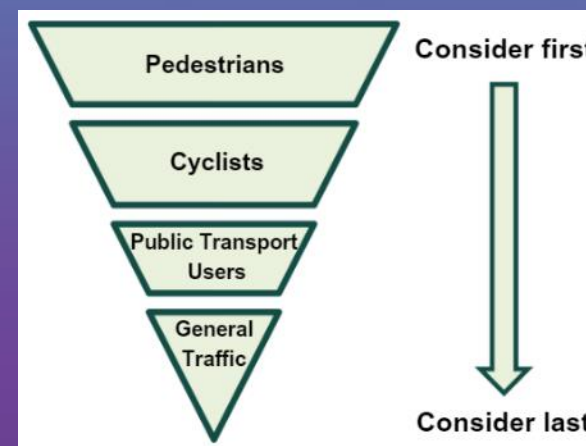


Summary of TSM Final V3 & Legislative Updates

Design Guidance for Pedestrian Signals in Areas of High Pedestrian Priority

Design guidance has been updated to provide strategies to minimise pedestrian delay in urban centres:

- Minimise the overall duration of the cycle time at the junction or crossing;
- Include the pedestrian phase twice in the cycle time (e.g. through double cycling or demand dependant/time dependent floating phase);
- Implement vehicle 'Gap Out' signal control measures through the use of vehicle actuated detectors such as Microwave Vehicle Detectors (MVDs) – this is particularly useful at mid-block crossings and for off-peak pedestrian priority;



Signal Phasing Priority



Summary of TSM Final V3 & Legislative Updates

Zebra Crossings

Zebra Crossing RPC 001

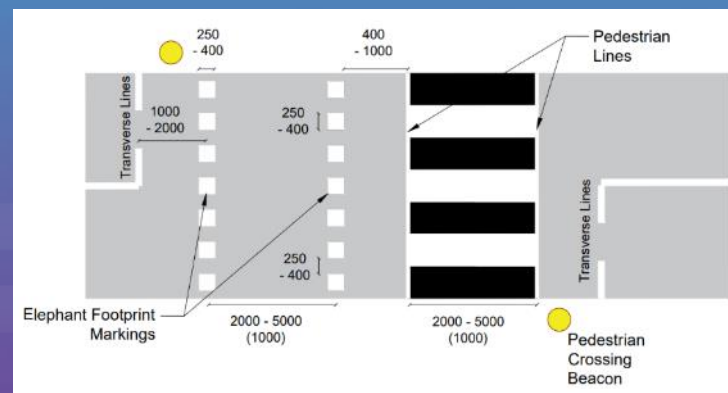
Parallel Zebra Crossing RPC 005 (NEW)

Combined Zebra Crossing RPC 006 (NEW)

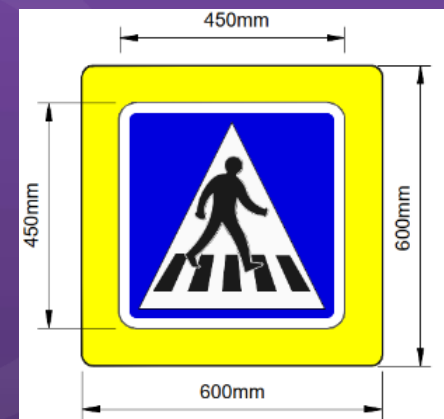
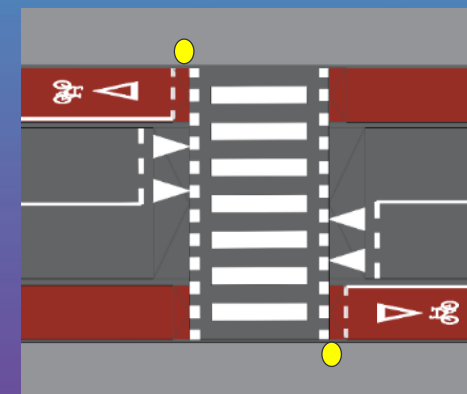
RPC 005 & RPC 006 covered under Ch 7 Updates

All Zebra crossings can replace the Pedestrian Crossing Beacon with Zebra Crossing Signs RUS 066 or RUS 067 - allowing for wider implementation of zebra crossings

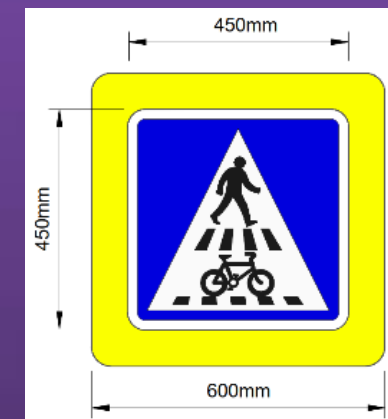
*Parallel Zebra Crossing
RPC 005*



Combined Zebra Crossing RPC 006



*Zebra Crossing Sign
RUS 066*



*Combined/Parallel Zebra
Crossing Sign
RUS 066*



Summary of TSM Final V3 & Legislative Updates

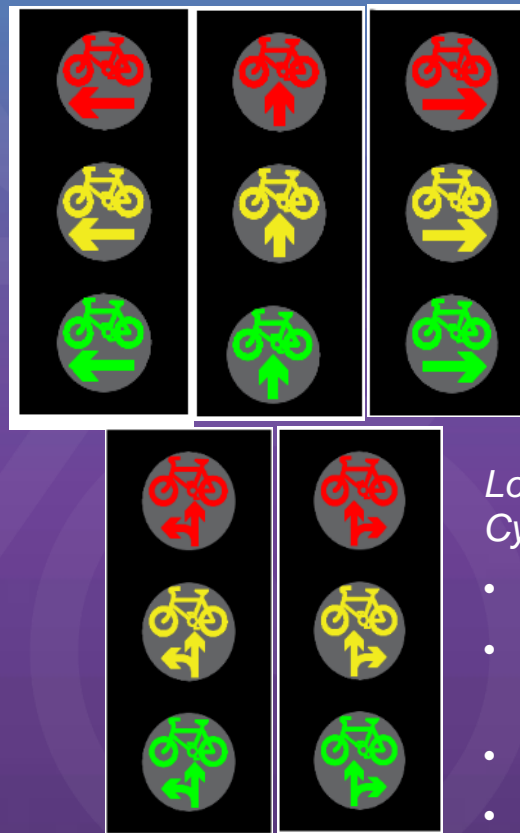
Cycle Signals

Diagram provided for layout of Low-Level Cycle Signals

Directional Cycle Signals provided – directional arrow under cycle symbol within the signal aspect

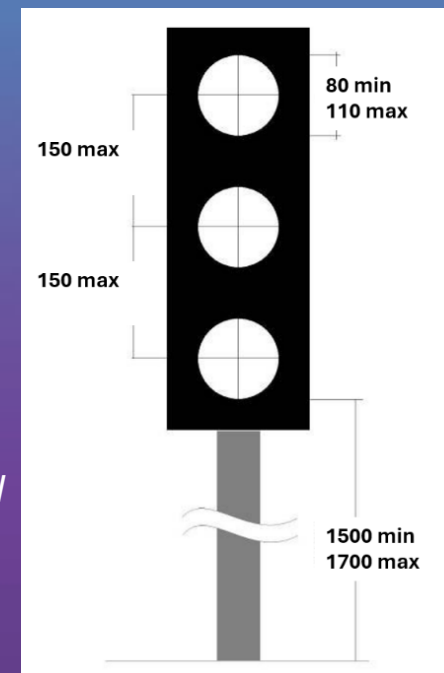
For use in scenarios such as:

- At mid-block crossings for right turn movements from a cycle track across the roadway.
- At signalised junctions to optimise journey times for straight and left turning cycle movements by separately signalling right turn cycle movements.
- At signalised junctions with two-stage right turn movements.



Low Level Directional Cycle Signals:

- *RTS 007(L) Left*
- *RTS 007(S) Straight*
- *RTS 007(R) Right*
- *RTS 007(SL) Straight + Left*
- *RTS 007(SR) Straight + Right*



Dimensions of Low Level Cycle Signal Head



Summary of TSM Final V3 & Legislative Updates

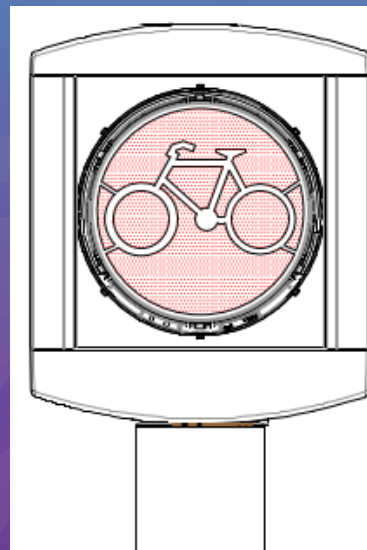
Mobility Enhancement Signals on Cycle Tracks

Cycle signal available for use on cycle tracks to allow pedestrians to cross safely

Sample use case:
Floating island bus stops

Operation:

- Intermittent (flashing) amber display of a pedal cycle
- Upon activation by a pedestrian the display changes to constant amber then solid red
- Pedestrians crosses the cycle track
- Display reverts to the intermittent amber



*RTS 014
Cycle Signal*



*TL201 of Cycle Design Manual – Floating
Island Bus Stop with RTS 014*



Summary of TSM Final V3 & Legislative Updates

Mobility Enhancement Signals on Cycle Tracks





Pilot Location:



Summary



The current update of the TSM and Regulations gives designers tools to implement modern solutions for safer and more effective cycle and pedestrian infrastructure, as well as improving bus priority measures for better public transport.

And Finally!



Source: Foil Arms and Hog on Instagram

Thank You