



**STAGE 3**

# **CYCLING IN COMPLEX ROAD ENVIRONMENTS**

## **Positioning**

Positioning refers to where a road user is on the road, relative to other users. In the context of safety for cyclists, it is critical, and correct positioning will allow a cyclist to move competently and confidently on the road network.

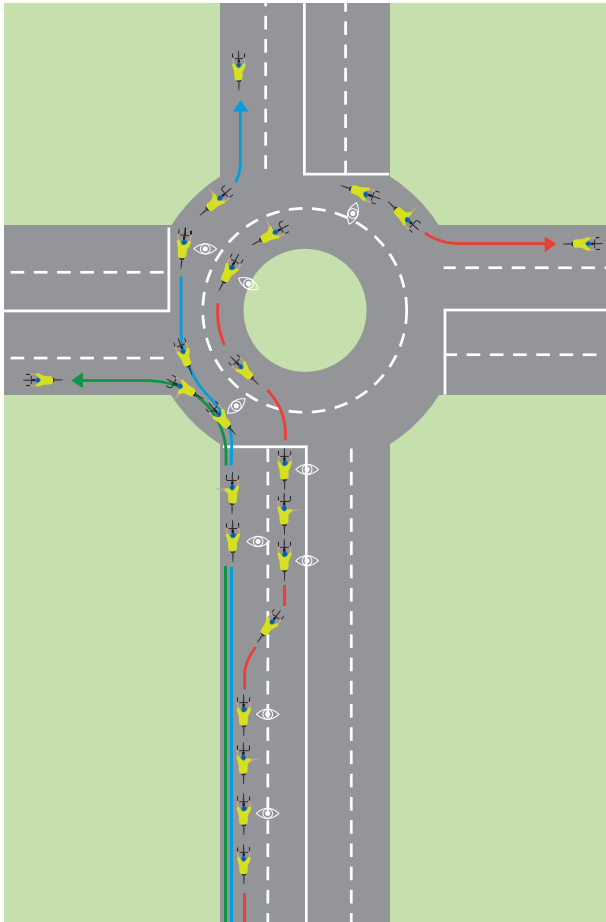
**NOTE: SAFE CYCLISTS ARE FULLY CONVERSANT WITH THE RULES OF THE ROAD AND USE THIS KNOWLEDGE TO MAXIMISE THEIR SAFETY, AND THE ROAD SAFETY OF OTHERS WHILE CYCLING**





## STAGE 3

### Complex Multi-Lane Roundabouts



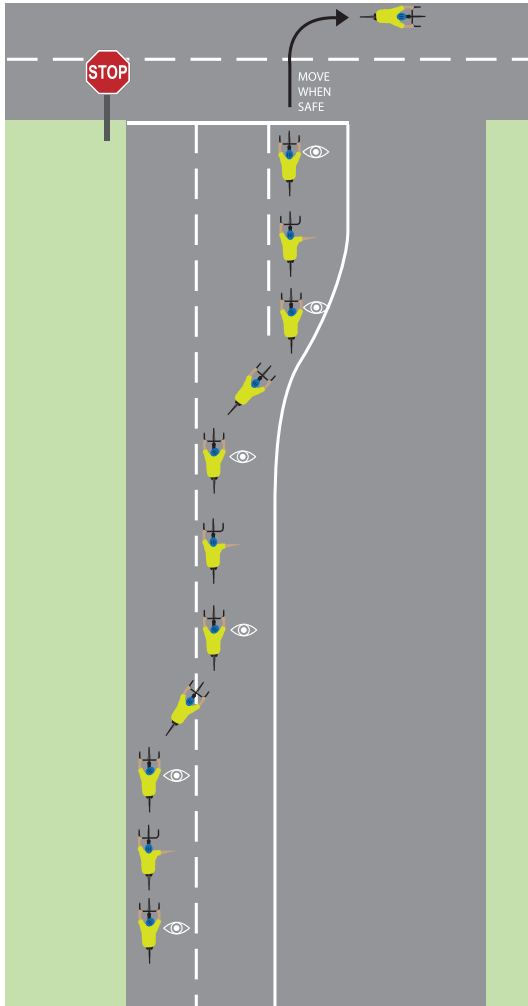
- When approaching a **complex roundabout**
  - **LOOK** at the **lane markings**
  - **POSITION** early in the centre of the appropriate approach lane
- Take the **left lane** when turning left or going **straight ahead**
  - keep **about two metres from the edge** all the way through the roundabout
- Take the **right lane** when turning right, or taking the **third or subsequent exits**
- Move over carefully **lane by lane** to get to the **target position** for negotiating the roundabout
  - **LOOK behind (SHOULDER CHECK)**
  - **SIGNAL** where necessary
  - **LOOK again**
  - **MOVE decisively and quickly** when a **safe gap** appears
  - for **each lane move** to be made
- Once on the roundabout, **move** round as **quickly and safely** as possible

- **Turning left**
  - **LOOK behind.**
  - **Signal to the left.**
  - **LOOK for traffic on the roundabout**, especially approaching from the right.
  - **GIVE WAY** to traffic from the **right.**
  - **LOOK again.**
  - **ENTER** to the **left.**
  - **LOOK behind before exit.**
  - **SIGNAL to the left again.**
  - **Stay left** when exiting the roundabout.
- **Going straight**
  - **LOOK behind.**
  - Ensure you are in the **correct lane**, ideally in the **primary position** which will be **safest.**
  - **GIVE WAY** to traffic from the **right.**
  - **LOOK again.**
  - Enter the roundabout travelling at a **controlled speed** to allow for anything unexpected such as a slippery surface.
  - **LOOK behind** when just past the exit before the intended exit.
  - **SIGNAL to the left**
  - **Stay left** when exiting the roundabout.
- **Turning right**
  - **LOOK behind.**
  - Ensure you are in the **correct lane**, ideally in the **primary position** which will be **safest.**
  - **SIGNAL** to the right and wait for a safe gap.
  - **CHECK BEHIND again.**
  - **GIVE WAY** to traffic approaching from the **right.**
  - **LOOK again**
  - **Stay in the primary position moving round** the roundabout.
  - **LOOK again, SIGNAL to the left and move** to the secondary position.
  - **LOOK again and stay left** when exiting the roundabout.
- Many roundabouts revert to a **single lane** at each exit
  - can act as a **pinch point** with drivers converging
  - position in the **primary position** in the centre of the lane for maximum visibility and safety
- If possible, make **eye contact** with drivers **waiting to join the roundabout** when passing
- **LOOK behind (SHOULDER CHECK)** for following traffic where lanes merge, or if changing lanes
- Avoid moving to the **centre island** of a busy roundabout
  - a cyclist can be **invisible** to other vehicles in that position
  - a cyclist can get stuck there, **trapped by fast moving traffic**



## STAGE 3

### Multi-Lane Turns



- Move over carefully **lane by lane** to get to the target turning position for
  - a **dedicated turn lane**
  - **multiple turn lanes**
    - ~ **LOOK** behind (**SHOULDER CHECK**)
    - ~ **SIGNAL** where necessary
    - ~ **LOOK** again
    - ~ **MOVE** decisively and quickly when a **safe gap** appears
    - ~ for **each lane move** to be made
- For a turn to the **right**
  - move to the **PRIMARY POSITION** towards the **middle of the correct lane**
  - **align with the destination lane** in the target road
  - If there are **traffic lights**, keep watch when turning with the lights for any vehicle breaking them from another direction
  - For a **filter light** position on the left side of the lane turning right, so traffic does not cut across, and the rider is then left **closest to the left edge of the road after turning** when the traffic is clear
  - For an **Advanced Stop Line**
    - ~ move forward and take up the **same position**, if it is **safe** to do so
    - ~ **otherwise stay** with the traffic
- Complete a turn into the **equivalent lane in the target road**
- Once the turn is made, if necessary, use the same **lane-changing skills** to move over **lane by lane to the left-hand edge** again



## STAGE 3

### Bus Lanes

- **Cyclists** are generally permitted to **use bus lanes**, even if there is an adjacent bike lane
- **Contra-flow** bus lanes are for the **exclusive use of buses**
- Some bus lanes are wide enough to accommodate both a **cyclist and a bus side-by-side** and some are not
- **For safety, keep the primary position in high volume traffic in high volume traffic**
- **Expect buses to stop and start off suddenly**
  - look out for **passengers starting to stand** and move around
- Watch out for the **last passenger entering or leaving** a bus
  - it might be **about to restart**
  - **someone may step out without checking for traffic** on the road
- Be sure a stationary bus won't **pull away as you pass**
  - if in doubt, it is better to stop and **wait** until the vehicle starts to move again
- Give **priority to buses when they signal to pull away** from stops
  - **wait** before passing a bus that is indicating to pull out
- Buses have **blind zones**
  - a driver will be unlikely to see a cyclist moving **along the side**, especially **on the left**
  - **behind the vehicle**
  - **directly in front of the vehicle**
  - a **driver won't see a cyclist** if the **cyclist can't see the driver's mirror**
- **At night**, remember that the only way a bus driver will see a cyclist is if they have **strong, clear lights**
  - red to the rear, so the driver is aware they are approaching the cyclist from behind
  - white to the front, to identify the cyclist is approaching
- At night, safety will also be greatly enhanced by the wearing of hi-visibility, reflective items of clothing
- Watch out for **taxis using bus lanes stopping** suddenly to **pick up a passenger**

### Rural Cycling

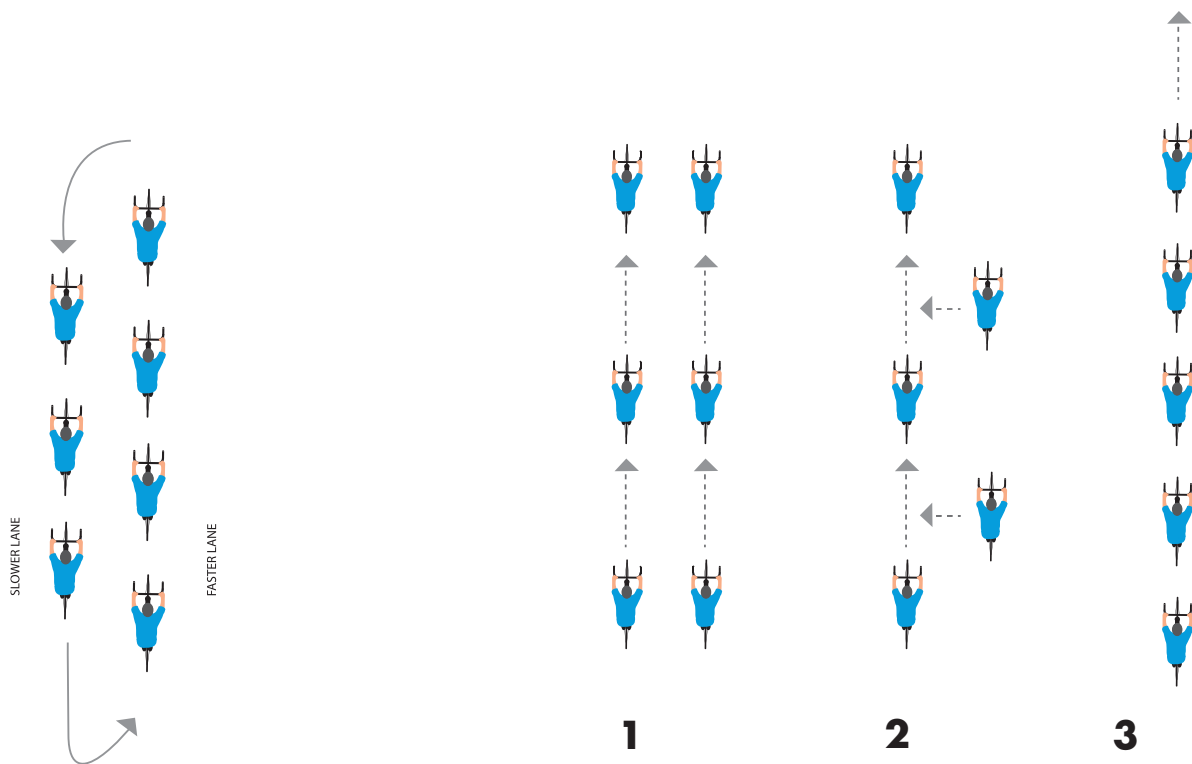
- Wear **high-visibility clothing**, as lighting may be very poor
- Watch out for **motorists** driving at unsuitably **high speeds**
- On a **narrow country road**, with a car behind on approach to a **bend**
  - **Look behind (SHOULDER CHECK)**
  - make **eye contact** if possible
  - move out to the **PRIMARY POSITION** to give **maximum visibility of the cyclist to traffic behind and approaching**
- On **reaching the corner**, take up the **SECONDARY POSITION** to the left
  - motorists travelling in the **opposite direction may be too far over**, especially if the **road is very narrow**
  - don't get too close to the **edge**, as a **broken or gravelled, stony margin** can cause a fall
- **Hearing** is hugely important
  - a cyclist will often be able to hear **approaching traffic** before seeing it
- **Watch out for**
  - **potholes**
  - **momentary blindness** on a sunny day moving from brightness into the dark shade of a tree canopy overhead



## STAGE 3

### Cycling in Large Groups

- Break into **smaller groups**
  - about **four to six** per group
  - about **one hundred metres** between
  - **allow traffic to pass**, subgroup by subgroup
- If the **road is narrow** or twisted, it may be appropriate to
  - Ride in the **PRIMARY POSITION** to **give maximum visibility** of the cyclist to traffic behind and **approaching**
- Riding **two abreast** may also help motorists by **shortening the length of a group**, facilitating overtaking where safe





## STAGE 3

### Cycling at Night

- **Low light** conditions
  - **move more cautiously**
  - **allow more time** for other road users to see and realise what a cyclist is about to do
  - have **strong lights** which will clearly show the road directly ahead and also any obstacles in time for the rider to take safe avoiding action
  - a **white light to the front** to see with and to be seen by approaching traffic
  - a **red light and a reflector to the rear** so that other road users are aware of a cyclist from behind
  - as **flashing** lights attract attention, but can make it hard to judge distance and speed, at night, a good compromise is two lights, **one steady and one flashing**, to allow maximum visibility and attention-grabbing impact.
  - **branches**
  - **parked vehicles**
- Be **as visible as possible** on the bike at night
  - **high-visibility clothing**
  - **high-visibility accessories**
  - **strong lights**
- **Cycle more slowly** as all-round awareness will be limited
  - the chances of **something unexpected occurring** will be greater
    - a **pedestrian** stepping out
    - an **animal** running across the road
    - **other road user** not seeing a cyclist
    - **environment**
- **Don't look straight at a vehicle** coming in the **opposite** direction on an unlit road
  - **risk of being dazzled** by its lights
    - **stay aware** of the vehicle's movements
    - **focus on the road ahead**, keeping a **safe distance from the edge**

### Route Planning

- Use **electronic journey planners (GPS)**
- Use **conventional maps**
- **Local knowledge**
  - **schools times** in an area
  - **rush hour** start time on Friday evenings
  - **upcoming events** which might affect traffic volumes
  - **weather conditions**
    - can affect cycling and the **choice of clothing/equipment**





## STAGE 3

### Carrying Young Children on a Bike

- Mount devices for carrying children **correctly** according to the **manufacturer's instructions**
- A **seat mounted on the crossbar** is the safest way to carry **young children** (pre-walking age)
- A **seat mounted behind the bicycle seat** is suitable for **toddlers**
  - alters the centre of gravity of the rider
  - can increase the risk of losing balance
- **Place and remove children** from seating **carefully**
- **Never** leave a child **unattended in the carrier**
- Carry older children in a **child bicycle trailer** towed behind the bike
  - **stable**
  - **won't tip**
- Carry children who are **almost ready to cycle** independently on a **tag-along** bike attachment
  - **tandem arrangement** to the adult bike

### Cycling with children on the road

- Make sure the bike is the **right size** for the child
  - be sure to always complete the **pre-cycle checks**
- Keep the **child**
  - **closer to the side** than the accompanying adult
  - **in front** of the adult
  - keep distance **from the edge** of the road to avoid falls (one metre)
- Start with a **route**
  - with **little or no traffic** to give a child the chance to get used to the physical environment of the road
    - ~ road signage and right of way
- Use **clear, calm, early instructions**
  - asking a child to turn just before a corner can cause a rush and will affect confidence
- It is always recommended to carefully pull in, get off and **walk for difficult manoeuvres** with young or novice cyclists
  - **right-hand turns**
  - **roundabouts**

### Basic Maintenance

- Carry a stocked, **well-maintained kit** with suitable **tools** and backup **parts** for basic bike repairs in an on-road environment
- Be able to **repair a puncture** at the roadside
  - by the **traditional method**
  - with use of **aerosol sealant**
  - move to a **safe off-road position**
  - **stay path side** of the bike at all times, turn the bike if necessary to ensure this
- Be able to **adjust bike** dimensions (saddle, handlebars) as needed to facilitate **optimal riding position**