



# 4

## Bends

Gain as much information as possible by looking across the bend, watching other traffic and responding to the signage on approach.

Position to prioritise safety, the stability of your vehicle and where possible an extended view into the bend. Allow time for accurate system application on the approach.

Make position changes smoothly, fully engage the required gear and endeavour to have a positive throttle application when entering the bend. Be mindful that changes in information may require the system to be revisited.

The use of the limit point technique will help adopt a pace through the bend that allows progress where possible but that prioritises restraint where required. When you hone your technique, you will not only enhance your driving confidence but reduce wear on your vehicle and improve fuel efficiency.

**4a** Negotiating bends

**4b** Limit point – right-hand bend

**4c** Limit point – left-hand bend

**4d** Information

**4e** Position

**4f** Speed

**4g** Gear

**4h** Acceleration

# Competency sheet

## Bends



To be an advanced driver, these are the competencies that you should be able to demonstrate. Consider how confident you feel with each. Read on to learn more about each competency.

	Progress		
<p><b>Information</b></p> <p>Actively scan the road to the limit point in the distance and back</p> <p>Build awareness of other road users' position and activity</p>			
<p><b>Position</b></p> <p>Position correctly on the approach to a bend: In a right-hand bend – towards the nearside bend In a left-hand bend – towards the offside</p> <p>Position correctly throughout the bend without compromising safety</p>			
<p><b>Speed</b></p> <p>Use the limit point correctly and be able to stop within the distance seen to be clear on your own side of the road</p> <p>Use appropriate speed to negotiate the bend safely</p>			
<p><b>Gear</b></p> <p>Select and engage the appropriate gear for the speed and circumstances</p> <p>Engage gear before steering in a manual vehicle</p>			
<p><b>Acceleration</b></p> <p>Maintain appropriate accelerator application to retain stability</p> <p>Accelerate to an appropriate speed in relation to hazards</p>			
<p><b>Achieved all competencies</b></p>	<p>Date <input type="text"/></p>		

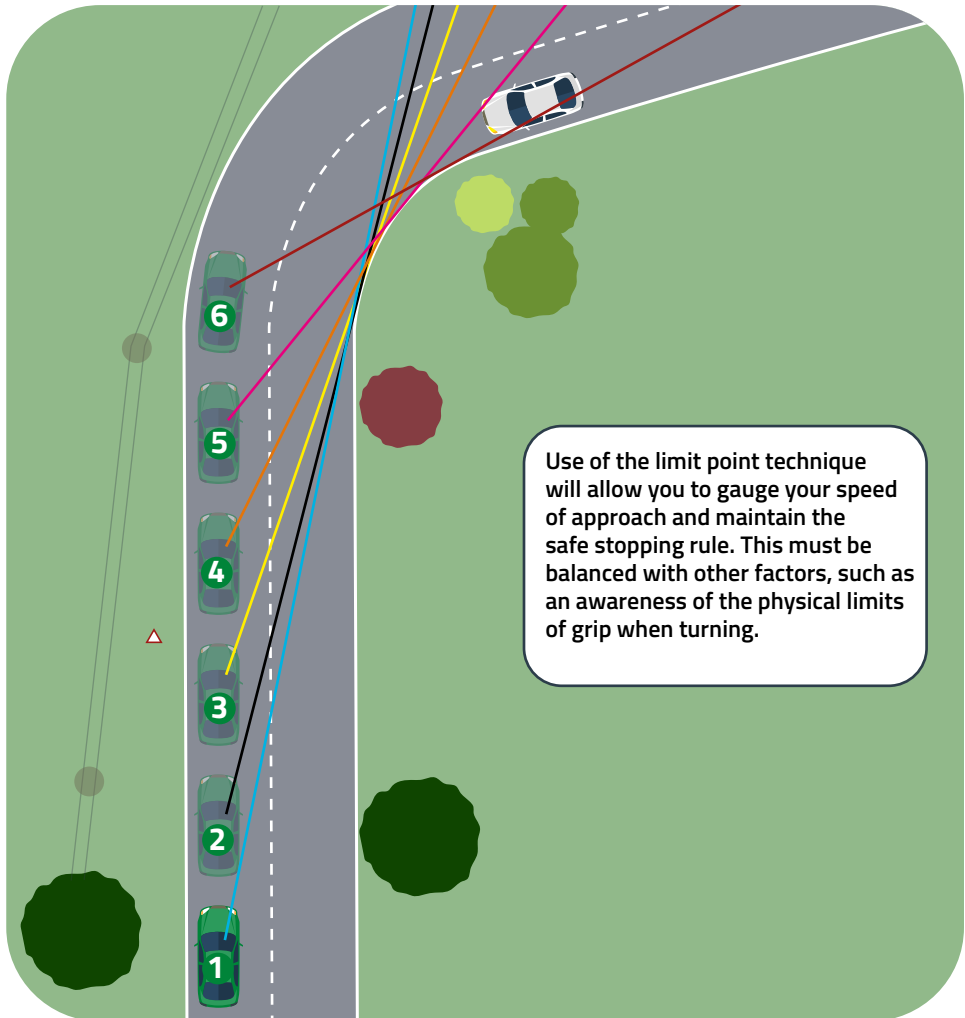
## 4a Negotiating bends

Safely negotiating bends requires an awareness of the road ahead, for example, to ensure there is sufficient space to stop within the distance that is seen to be clear on your own side of the road

You must prioritise Safety, Stability and Vision throughout the bend

There are five key principles of cornering:

- Use the correct position on approach
- Travel at the correct speed
- Have the correct gear for that speed
- Be able to stop in the distance you can see to be clear on your own side of the road
- Apply positive acceleration to maintain speed and balance through the bend

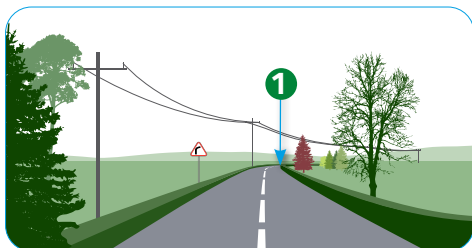


## 4b Limit point – right-hand bend

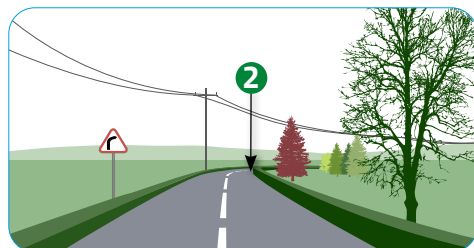
It is the point where the two edges of the road appear to meet. On a left-hand bend, you should treat this as where the left-hand verge appears to meet the centre line

The Limit Point of Vision is the furthest point to which you have an uninterrupted view of the road surface

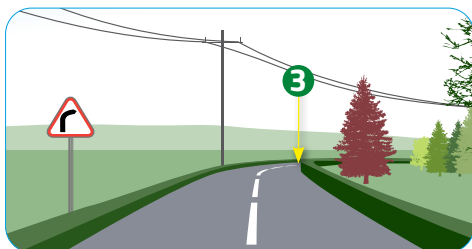
You can also use the limit point technique on a brow or crest where the road surface slowly comes back into view



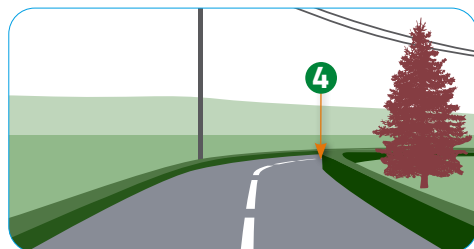
At 150 metres, the limit point appears to be getting closer, the distance available to stop is reducing; slow down your approach.



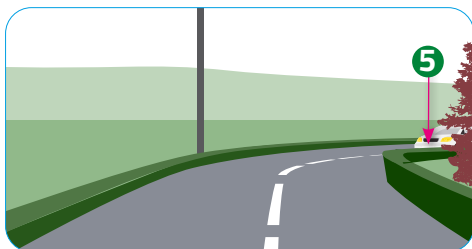
At 80 metres, the limit point is moving but not as fast as we are approaching; continue to slow, we still need more space to apply the safe stopping rule.



At 40 metres, the limit point appears to be moving at the same pace as we are approaching. We could stop, but need a margin for error; slow slightly more.



At 30 metres, the limit point is now matched; we can safely stop in the distance we can see to be clear on our side of the road.

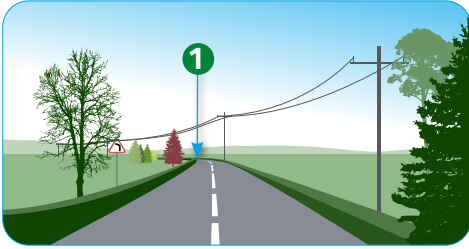


At 20 metres, the limit point is moving away constantly, we can continue safely at this speed with a flexible gear engaged.

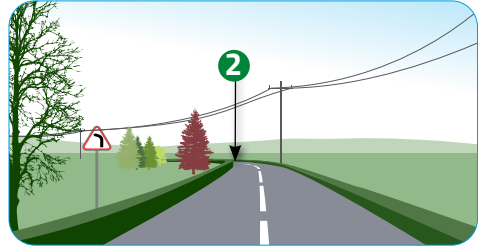


The limit point appears to move away; we can consider improving our speed as the road straightens up.

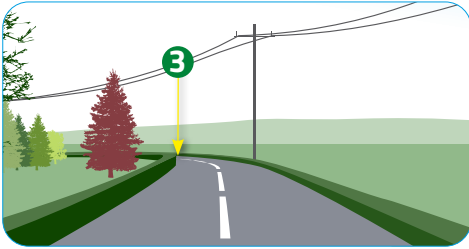
## 4c Limit point – left-hand bend



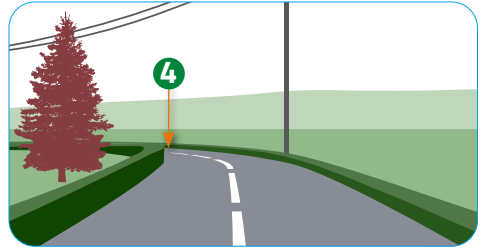
At 150 metres, the limit point is getting closer, the distance available to stop is reducing; slow down your approach. Remember, the limit point is the centre of the road.



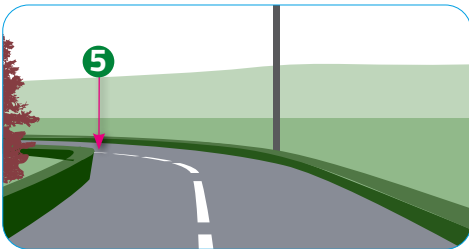
At 80 metres, the limit point is moving but not as fast as we are approaching; continue to slow, you still need more space to apply the safe stopping rule.



At 40 metres, the limit point appears to be moving at the same pace as we are approaching; we could stop, but need a margin for error. Slow slightly more.



At 30 metres, the limit point is now matched; we can safely stop in the distance we can see to be clear on our side of the road.



At 20 metres, the limit point is moving away constantly, we can continue safely at this speed with a flexible gear engaged.



The limit point appears to move away; we can consider improving our speed as the road straightens up.

## 4d Information

**As an advanced driver, you must be able to:**

**Actively scan the road to the limit point in the distance and back**

- Remember: by looking ahead and scanning back, you give yourself more time to respond to the situation ahead. This scanning, or visual sweeping, should be a continuous process
- Look across a bend so you can better plan how to deal with it; you may see other vehicles and/or further hazards
- Similarly, look for hedge or tree lines and lamp posts, etc. which may give you an indication of the severity of the bend

**Build awareness of other road users' position and activity**

- Be aware of signs and signals
- Remember: the more you can see of the side profile of other vehicles appearing or disappearing through a bend, the sharper it is
- Notice the speed of other road users – this may also indicate the severity of a bend
- Remember: if the vehicle in front is showing its brake lights, this may indicate a problem through the bend. You may need to change position or speed, or indicate to traffic behind that there may be a problem
- Look at the position of approaching road users – this may also indicate that a change of speed or position is required

## 4e Position

**As an advanced driver, you must be able to:**

**Position correctly on the approach to a bend**

- Remember: safety must not be compromised when positioning for a bend (**Safety**)
- You must be able to achieve the correct position smoothly without destabilising the vehicle, generally: (**Stability**)

In a right-hand bend – a position towards the nearside will usually afford a better view, but be aware of nearside hazards (**View**)

In a left-hand bend – a position towards the offside of your lane will usually afford a better view. Be particularly aware of hazards from the offside and on coming traffic (**View**)

- The presence of other road users may affect your position, either on the approach or through the bend
- Physical features, such as junctions or changes to road surface, may also require a change of position
- In areas with lower speed limits, a more central position within the approach lane may be preferable, as extreme positioning may cause confusion to other road users

**Position correctly throughout the bend without compromising safety**

- Where view permits, it may be safe to take a straighter line through a bend
- It may be possible to do this within the confines of one lane with no effect on other road users
- You must have an unobstructed view of the road surface and both edges, to be certain there are no unseen hazards
- Always check mirrors and appropriate blind spot before straightening a bend
- If in doubt, do not straighten

## 4f Speed

**As an advanced driver, you must be able to:**

**Use limit points correctly and be able to stop within the distance seen to be clear on your own side of the road**

- Use IPSGA correctly and match the limit point of vision to your speed of approach to give you a safe speed at which to negotiate a bend
- Adjust speed in good time to allow time to select the appropriate gear

- Match speed to the rate at which the limit point appears to move
- Remember: the limit point will appear to be static, moving or matched relative to your approach. Your Observer will explain and/or demonstrate this in action. They will demonstrate how to adjust your speed of approach in order that you will always be able to stop within the distance you can see to be clear on your own side of the road
- On a left-hand bend, the limit point is on the far side of the road. In these circumstances your safe stopping distance is marked by the centre line of the road, so speed needs to be adjusted accordingly

#### Use the appropriate speed to negotiate the bend safely

- Remember to maintain vehicle stability and to be aware of any hazards when negotiating a bend
- You must continually reassess the limit point by scanning ahead, back and across the bend and adjust speed as necessary

## 4g Gear

#### As an advanced driver, you must be able to: Select and engage the appropriate gear for the speed and circumstances

- Consider which gear will be both flexible and responsive without causing the engine to labour or over-rev

#### Engage gear before steering in a manual vehicle

- Select the appropriate gear before steering to help to balance the vehicle through a bend
- Look ahead and plan – this will enable you to maintain the appropriate gear for future hazards
- In an automatic, allow time for the vehicle to engage the correct gear, or manually select it if appropriate (it may be advantageous to select the gear manually and hold it throughout the bend)
- If driving an EV, you will not need a physical gear change but at this point in the system, give it consideration to allow the vehicle to balance after the speed phase

## 4h Acceleration

#### As an advanced driver, you must be able to: Maintain appropriate accelerator application to retain stability

- Apply the accelerator gently to allow a vehicle to maintain speed and stability through the corner. You may need to vary this depending on the severity of the corner and in light of changing circumstances

#### Accelerate to an appropriate speed in relation to hazards

- Accelerate when improving vision and prevailing speed limits allow, taking into account any future hazards
- Make all acceleration smoothly, without coarse adjustments. This is best described as 'brisk and businesslike'.

