

# Advanced Driver Course Logbook





### The bigger picture

Advanced drivers should be able to drive in a safe, smooth and efficient manner at all times.

Through good Observation, sensible Anticipation and accurate Planning, (OAP) combined with sound operation of their vehicle's controls, they should deliver a comfortable, progressive drive for their passengers while maintaining safety.

Modern driving aids such as satellite navigation systems, reversing cameras and auto park systems, are becoming more commonplace; used correctly, they can complement the skills of an advanced driver and enhance the overall experience. Appropriate use of such technology should therefore be encouraged.

Combining well developed skills and understanding with developments in technology should make you into a 'thinking driver' and create a safer, more enjoyable driving experience.



### IAM RoadSmart driving for your safety

This course logbook has been designed to identify a set of competency statements that an advanced driver must fulfil to be operating at the required level. Each competency statement has an expanded explanation to help you understand it and it offers a road map to the skills required. This will only ever be a two dimensional framework to allow the development of the three dimensional skill that is driving.

It is the expertise and passion of your observer that will bring the text to life and allow you to develop your driving to a standard that encourages enjoyment and allows you to promote safe sharing of road space.

The competencies will all interlink and the document does not have to be completed in order. By encouraging improved information gathering through effective Observation, Anticipation and Planning and a systematic approach to hazard management you will always have time to deal effectively with situations that present themselves on the road.

During your development the run sheets will be used to show areas that are satisfactory and others that require work to be at the level we expect. The run sheets deliberately do not mirror the test sheet, we are looking to develop a driver who is prepared for every situation not just one who is able to pass a test. Detailed explanation in the areas requiring development will be given by your observer as you progress through the course. An important part of the development process will be to practice self-reflection.

Our aim is to develop a driver who is in the correct position on the road at the right speed with an appropriate gear engaged and ready to respond to changing information. Operation of the controls should be assured and confident to keep the drive Safe, Systematic and Smooth. Restraint should be balanced with progress allowing the drive to flow.

If technology is available to make us all safer we need to understand it and use it to our advantage – but not rely on it – it should be the guardian angel that never has to step in but is always willing to watch just in case.

When you get to test we are looking to assess the range of skills that have been developed throughout the course. The drive should display the 'quiet efficiency' of an advanced driver, a successful candidate will be more aware than an average driver and will plan their drive to promote safe sharing of the road. A sound understanding of what other road users require, how vulnerable road users may need extra space and the limitations of our own vehicle and other vehicles on the road will give the confidence to interact safely.

Thank you again for choosing IAM RoadSmart and enjoy your engagement with us.

### **Group Information**

Your local IAM RoadSmart group is:		
Address:		
Your Observer is:		
Tel:	Mob:	
Email:		
Group Meetings are on:		
Your Chief Observer:		
Tel:	Mob:	
Email:		
Your Information		
Your Name:		
Address:		
Mob:		
Your Membership No:		
Eyesight Checked on:		

### Your privacy and the General Data Protection Regulation

Here at IAM RoadSmart we are committed to protecting your privacy. We comply with the principles of the General Data Protection Regulation (GDPR) and aim to maintain consistently high levels of best practice in our processing of personal data.

Details on the collection, use and sharing of the information you provide IAM RoadSmart can be found at the foot of our website homepage. Our policy also details your rights and how to contact us.

### **Contents**

#### In this document:

<b>Human Factors</b> The lifestyle influences and other factors that need to be considered in preparation for advanced driving. This is the only competency not framed by IPSGA	Page 7
An introduction to IPSGA Information, Position, Speed, Gear and Acceleration The system at the core of Advanced Driving	Page 13
The competencies framed by IPSGA	Page 19
Core Driving Skills  The skills required to operate a vehicle's controls with a degree of finesse. For example, changing gear in a smooth and timely fashion and steering accurately	Page 21
Bends The practices and techniques required to safely negotiate bends and corners. For example, correct positioning, acceleration and the use of limit points	Page 27
Junctions and Roundabouts  How to safely enter, negotiate and leave junctions and roundabouts while executing the 'planning to stop but looking for information to go' approach required of advanced drivers	Page 33
Overtaking All the necessary pointers for building awareness and good practice when overtaking; the area where drivers are most likely to come into conflict with another road user	Page 38
Motorways and Dual Carriageways  How advanced drivers should demonstrate awareness of the differences between motorways and dual carriageways, the likely hazards and how to avoid them	Page 43
Manoeuvring The markers of confidence and proficiency that an advanced driver must display when turning a car and performing parking manoeuvres at the side of the road and in car parks	Page 50
Spoken Thoughts The practice of describing aloud everything you see, think and do while driving, in order to hone advanced driving technique	Page 55
Run Sheet	Page 57
Appendix - Handouts	Page 79

### **Human Factors**

This section refers to the Associate, their vehicle, their journeys and lifestyle in relation to becoming an advanced driver.

As it relates more to the person than the act of driving, it is the only component not framed by IPSGA.

# **Competency sheet -** Human factors

This page gives an overview of the competency requirements for this section.

	Achieved
The Driver	
Puts safety first in all driving judgements	
Remains calm and considerate of others at all times	
Always maintains concentration while driving	
Manages any external influences and distractions	
Changes their plans if any factor is likely to impair their performance or decision making	
Consistently evaluates their own performance, with a view to retaining and developing their skills	
Applies new-found knowledge in order to improve their driving performance	
The Vehicle	
Conducts pre-drive checks correctly and ensures that vehicle maintenance is up to date	
Knows the performance and features of the vehicle being driven. Can conduct a cockpit drill	
Understands the purpose of and conclusions from a moving brake test	
Recognises the issues when driving an unfamiliar vehicle	
The Journey	
Understands that the purpose of their journey and time available may influence their driving and decision making	
Understands that route choice and planning will influence the way they drive	
The Wider World	
Considers the range of influences that may impact on their driving	
Understands how attitude to risk may affect driving choices	





### The Driver

There are a number of personal qualities or behaviours that any advanced driver must demonstrate

- · To put safety first in all driving judgements
  - No journey is so important that safety can be compromised; advanced drivers should never put themselves or others in harm's way
- To remain calm and considerate of others at all times
  - Advanced drivers are always aware that their decisions and actions may have an effect on other people
  - They recognise that the road-space needs to be shared and that this is most successfully achieved when everyone communicates and cooperates
  - As well as complying with legislation and the Highway Code, they should set a good example to other road users
  - Displays courtesy to other road users
- To always maintain concentration while driving

## Concentration can be defined as: 'The action of focusing all one's attention' (Oxford English Dictionary)

- Advanced drivers should be able to focus on their driving while disregarding any unrelated factors
- They should be able to manage driving related tasks, such as identifying road junctions
- To manage any external influences and distractions
  - Advanced drivers must remain in charge and not be negatively influenced or distracted by friends or passengers
  - Recognising these influences and distractions is the first step to successfully overcoming them

- As hands-free telephones have a detrimental effect on concentration, despite being legal and commonplace, use is discouraged
- Advanced drivers should always pull over somewhere safe if they need to answer a call
- To change their plans if any factor is likely to impair their performance or decision making
  - Advanced drivers must be aware of any physical influences that might impair their decision-making and ability to drive safely
    - For example, if they start to feel tired or experience physical discomfort while driving, they should consider whether they are still able to concentrate fully
  - Similarly, if they feel angry, frustrated, anxious or frightened, they should:
    - In the short term find somewhere to stop safely and try to deal with those outside influences
    - In the longer term use the experience to develop new methods for managing the influences prior to driving
- To consistently evaluate their own performance, with a view to retaining and developing their skills
  - The IAM RoadSmart approach to driver development seeks to encompass all of the components necessary to produce safe, well-rounded drivers. It encourages self-reflection as a means to develop as an advanced driver
  - A mistake can often be defused with just an apologetic wave
  - Advanced drivers should always assess their vehicle control and driving performance as if through the eyes of a third party

- Other factors to consider include the time of day, the route and any potential negatives, such as tiredness, stress, the effects of prescription medication and traffic conditions
- In terms of the bigger picture, advanced drivers should also have an understanding of how driving fits into their lifestyle and life goals
- To apply new-found knowledge in order to improve their driving performance
  - Advanced drivers are constantly learning and developing. They should always use any new-found knowledge to improve their driving performance

### The Vehicle

There are certain key actions that any advanced driver must take in relation to their vehicle

- To conduct pre-drive checks correctly and ensure that vehicle maintenance is up to date
  - Advanced drivers should have an ordered approach to checking their vehicle. They should undertake that check to a high standard, remembering that the primary concern is always safety
  - Given that many modern vehicles have extended maintenance intervals, they may clock up a lot of miles/time between services. It is therefore important to adhere to their service schedules
  - Even the most sophisticated checking systems will not detect every problem so visual inspection is still required
     If any doubts arise, advanced drivers should have their vehicle checked by a professional
- To know the performance and safety features of their vehicle – and have the ability to conduct a cockpit drill detailing them



- They must be aware of their vehicle's capabilities in order to remain safe and legal
- Maximum appropriate acceleration will vary considerably from vehicle to vehicle
- They should be aware of the safety features and aids fitted to their vehicle, and be prepared to explain them
  - For example, when starting their vehicle, they should know which warning lights should come on - and when they should go off
- They should also know when to stop and investigate if a warning light comes on during a drive, i.e.:
  - If it is red as soon as it is safe
  - If it is amber the next time they stop
- Advanced drivers should also be able to demonstrate sound knowledge of the gearbox fitted to their vehicle
- To understand the purpose of and conclusions from a moving brake test
  - While a modern vehicle may display a warning light in the event of a brake failure, the effect of an obstruction or other outside influence won't be monitored
  - Advanced drivers should be able to conduct a moving brake test at a low speed in order to safely assess that the vehicle pulls up evenly on all wheels with no adverse effect on the steering
  - They should be aware if the braking system makes any untoward noises
  - They should also know the required pressure on the pedal to slow and stop their vehicle - and be aware of the performance of their tyres in the given conditions
- To recognise the issues when driving an unfamiliar vehicle
  - Advanced drivers should always be prepared to conduct a cockpit drill to get to grips with an unfamiliar vehicle and any features which may affect the way they drive it

### The Journey

There are certain important factors that advanced drivers must be aware of in relation to their journey

- That the purpose of their journey and the time available may influence their driving and their decision-making
  - Advanced drivers must always consider the purpose of their journey – and whether it is likely to change
    - For example, an observed drive may, on conclusion, become a drive to visit friends or to pick-up children, so priorities may change
  - Similarly, they must be aware that if time is short, that may become the focus of their concentration and affect their decision-making process and attitude towards other drivers
    - For example, they should not become less willing to share space nor more aggressive in their communication
  - By recognising these changes at an early stage, an advanced driver can manage them effectively
- That route choice and planning will influence the way they drive
  - Advanced drivers should consider their knowledge of the route and the possible effects of how they choose to get there
  - For example if the bypass is closed and they have to go through the town centre unexpectedly, how might that affect the way they approach the drive? If they are relying on Sat Nav and it fails, can they deal with it?

### The Wider World

Driving doesn't happen in a vacuum; it is part of life. Advanced drivers should therefore be aware of the possible impact other lifestyle factors may have on their driving. In particular, they should:

- Consider the range of influences that may impact on their driving
  - For example, whether their peer group's view of how to behave on the road differs from that of a careful and competent driver
  - How peer group pressure might influence their attitudes and behaviour when driving

- Similarly, what is their focus if they are a commercial salesperson on route to their next meeting? Or a delivery driver under pressure to complete their round?
- Understand how attitude to risk may affect driving choices
- A thrill-seeking, try-anything-once approach to life can easily translate into risk-taking behaviour on the road; something which is unacceptable in an advanced driver
- To counter this risk, advanced drivers should:
  - Pause to consider the negative consequences of any risk-taking behaviour
  - Effectively manage any behaviour that may lead to inappropriate risk-taking



### **IPSGA**

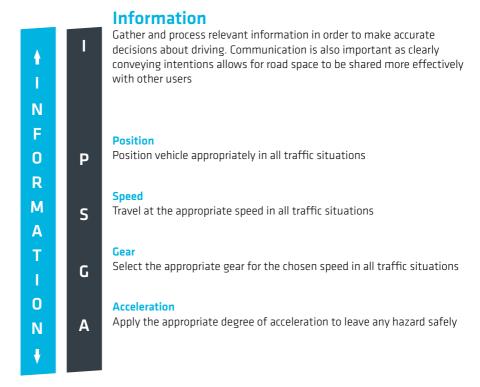
Information, Position, Speed, Gear and Acceleration - the system at the core of Advanced Driving

The purpose of IPSGA is to promote safety and prevent collisions by encouraging drivers to adopt a systematic approach to any hazard. In this case, a hazard is "anything which contains an element of actual or potential danger"

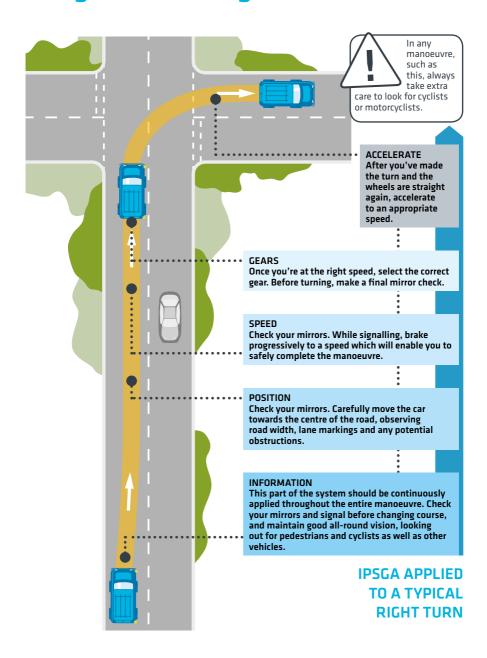
With the exception of 'Human Factors', IPSGA runs like a spine through the entire Advanced Driving Course. It promotes careful Observation, sensible Anticipation and accurate Planning (OAP), good communication with other road users and the smooth application of a vehicle's controls. A driving plan is made on a combination of what can be seen, what cannot be seen and the circumstances that can reasonably be expected to develop. These are qualities that any advanced driver should be able to demonstrate. More detail on each stage follows

#### In summary:

On approach to any hazard, each stage of IPSGA should be considered in sequence. As circumstances change and new information becomes available, the system can be revisited at the appropriate stage



### Using IPSGA on a right hand turn



### **Information**

There are three aspects to effectively gathering information and communicating well with other road users:

TAKE information USE information GIVE information

#### **TAKE information**

Advanced drivers should:

- Look all around, scanning to the front and sides of their vehicle
  - The further they project their vision, the more information they will gather
- Consistently use their mirrors and check into potential blind spots
  - Mirrors should be used throughout the IPSGA stages. Checks should also be used to eliminate blind spots
- Look for information given by other road users
  - Where possible, make eye contact with other drivers to assist in communication, as well as looking at the position of other vehicles
- Gather visual information from a number of sources
  - For example, manure on the road may give early warning of horses in the area, and fresh mud on the road may indicate a tractor ahead
- · Make good use of other senses
  - For example, the smell of diesel may identify a slippery road surface
  - The sound of a car horn may give warning of an as yet unseen hazard just as a siren will signal the presence of an emergency vehicle

#### **USE** information

Advanced drivers should:

- Use the information gathered to plan how to deal with identified hazards
- · Prioritise hazards to stay safe
  - Which hazard is closest, which presents the greatest risk. Deal with the most important first
- Use observation links to anticipate how their driving may be affected
- By identifying seemingly normal items such as bins at the roadside or a church steeple in the distance we can adjust our driving plan for possible problems
  - For example, 'The bins are out = I'm expecting to see the collection lorry = I am planning to deal with that'
  - 'Church steeple in view = I'm approaching a village = I should limit my speed'

#### **GIVE** information

Advanced drivers should:

- Reinforce the information given by their vehicle's position and speed with accurate signalling
  - If any other road user may benefit from a signal, it should always be given - clearly and in good time
- While a signal alone may not convey a driver's intention, it can prove useful alongside other factors, such as a change in road position and/or speed
  - It's also important to remember that signals can be misinterpreted, for example, a flash of headlamps could be interpreted as a warning or an invitation
- It is important to check mirrors before signalling and recognise that giving a signal does not also give the right to carry out the intended manoeuvre
  - Certain road users fall into the vulnerable category. Be particularly mindful of

cyclists, horse riders and pedestrians and keep them safe with timely accurate communication

- Be aware that following traffic will not always share their level of awareness
  - It may be necessary to show brake lights to other vehicles even when slowing down using acceleration sense.
     This is an excellent example of how through observation, anticipation and communication, advanced drivers can help to keep other road users safe
- Make eye contact with other drivers to assist in communicating their intentions
   this is also a good way to TAKE information
- Use other communication methods, such as sounding their horn or flashing their lights only when it's appropriate to let other drivers know they are there

### **Position**

Positioning a vehicle accurately on the road reduces the risk of a collision. However, the ideal position will vary according to specific circumstances, such as road layout, surface and traffic conditions

#### Advanced drivers should:

- · Always consider safety first
  - Do not relinquish safety for any other perceived advantage
  - Position to see and be seen
- Be aware of potential hazards on both sides of their vehicle
  - To the nearside cyclists, pedestrians, parked vehicles and their occupants are all examples of who and what might present a hazard, as are other drivers pulling out of junctions
  - To the offside there is potential conflict with oncoming traffic

- Assess their speed when moving to the nearside or the offside
  - For example, when it isn't possible to allow a door-width of room when passing a parked car, drivers should slow down so they have time to react if a door were to open
- Be particularly aware of cyclists and motorcyclists when adopting their position
  - For example, they may be unseen to the nearside or filtering past on the offside



Good advanced drivers observe, anticipate and plan ahead, effectively creating a safe working space or flexible "safety bubble" around their car the size and the shape of the 'bubble' needs to be varied to prioritise hazards

- Position themselves at least two seconds behind any vehicle they are following
  - This allows enough time to respond if the vehicle ahead slows down. It gives them better vision beyond it, and enables them to develop an overtake, if appropriate
- Take up the appropriate position for turning, depending on the size of their vehicle, the road width and layout, and other traffic
  - To turn left advanced drivers should usually position themselves in the centre of the left-hand lane on the approach to a junction
  - To turn right advanced drivers should usually position themselves towards the centre of the road, paying particular attention to oncoming traffic. If in any doubt, they should stay away from the centre white line
  - When stopping behind other traffic advanced drivers should use the 'tyres on tarmac' guide

- Drivers should stop far enough back that they can move around the vehicle in front without reversing
  - As a guide, this is a point where they can see the wheels of that vehicle meet the road (hence 'tyres on tarmac'). This will also prove safer if they are struck from behind

Optimum positioning for bends and corners, and when overtaking, is dependent on a number of factors. These are discussed in detail in later sections of this logbook

### Speed

For the purpose of IPSGA, the correct speed is 'the speed required to negotiate the hazard safely'. As with all stages, this is influenced by the information gathered plus other factors such as the vehicle type, the road, weather and traffic conditions

#### Advanced drivers should:

- Recognise that the speed phase of IPSGA is not about making progress but adjusting to a safe entry speed for the hazard
- Continually assess the speed requirement and adjust it accordingly in relation to the changing information and priorities identified
  - For example, a damaged road surface or mud on the road demand a slower speed for safe entry to a bend than is normally required
  - Similarly, if there are vulnerable road users close to a hazard, drivers may need to further reduce their speed
- Be aware that the smooth operation of the accelerator and brakes are essential qualities in an advanced driver

 Understand how smooth and accurate progressive braking covered under core driving skills is desirable as it allows for safe speed reduction

#### Gear

Accurate use of the gears allows an engine to deliver the required performance in all situations

#### Advanced drivers should:

- Develop sound knowledge of the performance of their vehicle in each gear
  - So it becomes easier to choose an appropriate gear and to know when a gear change will be needed
- Engage the correct gear for the speed they are driving now, while taking account of what may be required in the immediate future
  - i.e. to select a gear with sufficient flexibility to allow for speeding up and slowing down
  - Consider other factors, such as fuel economy, vehicle sympathy (not overrevving or allowing the engine to labour) and the amount of acceleration required
- Conduct gear changes in a smooth steady manner
  - In a manual vehicle, advanced drivers should be capable of changing to their chosen gear without using an intermediate gear. This is termed 'block changing'
  - Operate an automatic gearbox appropriately
- When required they should match engine revolutions to road speed
- Know when to select neutral if stationary for a period of time.

#### **Acceleration**

For the purposes of IPSGA, acceleration is mainly concerned with the driver's ability to leave any hazard safely

#### Advanced drivers should:

- Assess a number of factors when deciding on the correct amount of acceleration they need to apply
- The correct degree of acceleration will allow for safe unobtrusive progress
- To achieve this, it's important to take all of the limiting factors into account
  - For example, the speed limit, the condition of the road surface, grip and weather conditions
  - The proximity of the next hazard
- Understand that advanced driving isn't about making maximum progress; it's about making the level of progress required for the particular journey safely in the given conditions

The correct timing of IPSGA is paramount in achieving a safe smooth drive.



# Competency sheet - IPSGA and timing of IPSGA

	Achieved
Applies IPSGA appropriately	
Times IPSGA correctly	



# The six competencies framed by IPSGA

This section looks in detail at what's required of an advanced driver in each of the following six areas:

- Core Driving Skills
- Bends
- Junctions and Roundabouts
- Overtaking
- Motorways and Dual Carriageways
- Manoeuvring

# Competency sheet - Core Driving Skills

This page gives an overview of the competency requirements for this section.

Information	Achieved
Demonstrates early and accurate identification and anticipation of hazards by raising and expanding vision	
Checks the appropriate mirrors before altering their position or speed	
Through observation, is aware of how other road users may affect decisions	
Uses all appropriate signals to communicate with other road users	
Position	
Holds the steering wheel in a way that allows for a full and accurate range of movement	
Demonstrates a smooth steering action which allows for easy use of the other controls	
Steers the vehicle accurately to maintain a stable, safe and appropriate course with the capacity to change direction, if required	
Speed	
Demonstrates smooth acceleration, deceleration and accurate use of 'acceleration sense'	
Demonstrates smooth and accurate braking	
Holds the steering wheel with both hands during braking/accelerating	
Gear	
Demonstrates an ability to select the correct gear on every occasion	
Makes all gear-changes smoothly, matching engine revolutions where appropriate	
Position the steering for the required course when a gear change needs to be made whilst negotiating a hazard	
Manual vehicles - selects the correct gear straightaway	
Automatic vehicles - uses the vehicle's gear selector to best advantage	
Acceleration	
Accelerates smoothly when vision and speed limits permit	

### **Core Driving Skills**

Core driving skills are those required to operate a vehicle's controls with a degree of finesse. For example, the ability to change gear in a smooth and timely fashion, to steer accurately and to accelerate with due consideration.

The overall impression should be of a careful and competent driver who is relaxed and in control.



### Information

Advanced drivers must be able to:

#### **TAKE information**

- Demonstrate early and accurate anticipation and identification of hazards by raising and expanding vision
  - Lift vision and look in all directions for early signs of potential problems
  - On identifying a hazard, plan to deal with the situation
  - Use their mirrors to link information on the hazard to what's happening behind
  - Always check both ways at junctions
  - At roundabouts be aware of danger to the right, and of other traffic entering the roundabout at speed
  - Be aware of responding emergency vehicles
- Check the appropriate mirrors before altering their position or speed
  - Before slowing check appropriate mirror
  - To move out, check offside mirror
  - To move in. check nearside mirror
  - Use blind spot checks, whenever needed

The overall aim is to maintain a safe operating space or "safety bubble"

#### **USE** information

- Through observation, be aware of how other road users may affect their decisions
- Give extra space to vulnerable road users such as pedestrians, cyclists motorcyclists and horse riders
- Advanced drivers should always be prepared to share or give up space for safety
- Remember, planning for the worst scenario can help a driver to deal with it safely

#### **GIVE** information

Use all appropriate signals to communicate with other road users

- Be aware that vehicle position assists communication
- Give signals in a timely fashion to communicate intentions
- Use indicators, brake lights and even arm signals if required
- Look at the other drivers not just at the vehicles to communicate
- Only use headlamps or horn to alert another road user to your presence never as a rebuke



### **Position**

Additional points on positioning for specific hazards such as bends and roundabouts can be found in the relevant sections of this logbook

Advanced drivers must be able to:

- Hold the steering wheel in a way that allows for a full and accurate range of movement
  - Maintain a light grip, ready to exert a tighter grip if required
  - Keep arms slightly bent to prevent accidental movement of the steering wheel
- Demonstrate a smooth steering action which allows for easy use of the other controls
  - Use a steering method that is comfortable and allows for a full range of movement with little physical effort
  - Pull-Push steering enables safe and efficient use of other controls
  - Fixed grip steering is an option for smaller movements of the wheel as long as the arms don't cross
  - Advanced drivers should also be aware that a comfortable seating position is important for accurate steering
- Steer the vehicle accurately to maintain a stable, safe and appropriate course with the capacity to change direction, if required
  - Advanced drivers should be aware that the type of vehicle, any power assistance and the mechanical set up may influence their steering method
  - A straight course should require little or no steering input
  - Positive inputs will be required to substantially alter their position or turn their vehicle
  - Accurate and consistent outcomes are the most important factor



### **Speed**

Acceleration sense is the ability to vary vehicle speed in response to changing road and traffic conditions by accurate use of the accelerator, so that you use the brakes less or not at all. It requires active OAP to be implemented correctly

Advanced drivers must be able to:

- Demonstrate smooth deceleration and accurate use of 'acceleration sense'
  - A vehicle begins to slow as soon as the accelerator is released. If this is done in a controlled fashion, it will help to maintain stability
  - In lower gears, the effect is more noticeable; similarly regenerative braking systems in hybrid vehicles will further increase the retarding effect
  - In addition to using acceleration sense, advanced drivers should also be aware that their brake lights may be needed to communicate in certain circumstances
- Demonstrate smooth and accurate progressive braking
  - Gentle pressure on the pedal to settle the vehicle onto its front suspension
  - Firmer braking to lose speed, as required
  - A gentle release of pressure to allow the suspension to resettle

- Although described in three stages, care should be taken to ensure a smooth, progressive and seamless transition
- Hold the steering wheel with both hands during braking/accelerating
  - Hold the wheel with two hands whilst accelerating or braking to retain stability.
     This will help prevent accidental changes in course
  - In the later stages, at very slow speed, it is acceptable to release the wheel to engage a suitable gear, e.g. "a rolling first gear"



#### Gear

Advanced drivers must be able to:

- Demonstrate an ability to select the correct gear on every occasion
  - Gear changes need to be smooth and accurate at all times
- Make all gear changes smoothly, matching engine revolutions where appropriate
  - Employ a rev on the down change or sustained accelerator pressure to match engine revs to road speed, if necessary, to achieve a smooth gear changes
  - Recognise when this isn't required, for example when selecting a rolling first gear or when road speed is very low
  - Understand when a planned overlap is appropriate
    - At slow speeds for simple junctions it will be safe to overlap brakes and gears.
       The gear change needs to be finished and the clutch engaged before steering
- Position the steering for the required course when a gear change needs to be made in a hazard
  - For example, select a gear with the steering set for the required course on a roundabout, the steering position should be held constant while gear is selected

#### **Manual Vehicles**

- · Select the correct gear straightaway
  - Advanced drivers should know the approximate performance of their vehicle in each gear
  - Preferably they should be able to select any gear without engaging an intermediate gear (block changing)
     This is an option, rather than an ongoing requirement, in certain high compression modern vehicles the manufacturer may recommend an intermediate gear to prevent the vehicle stalling. Be guided by your vehicle handbook.

#### **Automatic Vehicles**

- Know how to use an automatic gearbox
  - Be aware how to correctly select gears using either paddles or gear selector
  - Be aware of additional functions and modes
  - Be able to describe circumstances in which a manual selection of a gear may assist
- Be able to operate the gearbox correctly to maintain stop/start function (the vehicle handbook will detail whether neutral or park needs to be selected when stationary for any period of time)
- Be aware of additional driver selectable modes that may affect the performance of the vehicle not necessarily only the gearbox.





### **Acceleration**

Advanced drivers must be able to:

- Accelerate smoothly when vision and limits permit
  - Apply the correct degree of acceleration to leave the hazard safely
  - Acceleration should be brisk and business-like, with due regard to speed limits, weather and traffic conditions
  - Allow sufficient time to gather information for the next hazard requiring IPSGA application
  - Consider the requirements for Eco driving, is it necessary to gain speed quickly? Is a higher gear more appropriate?



# Competency sheet - Bends

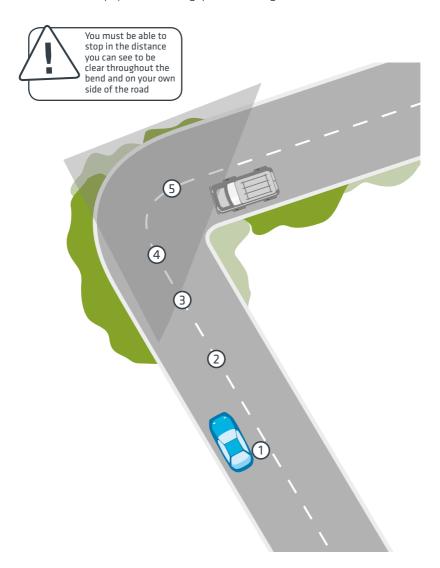
This page gives an overview of the competency requirements for this section.

Information	Achieved
Actively scans the road to the limit point in the distance and back	
Builds awareness of other road users' position and activity	
Position	
Positions correctly on the approach to a corner:	
In a right hand bend – towards the nearside bend	
In a left hand bend – towards the offside	
Positions correctly throughout the bend without compromising safety	
Speed	
Uses the limit point correctly and is able to stop within the distance seen to be clear on their own side of the road	
Uses appropriate speed to negotiate the bend safely	
Gear	
Selects and engages the appropriate gear for the speed and circumstances	
Engages gear before steering in a manual vehicle	
Acceleration	
Maintains appropriate accelerator application to retain stability	
Accelerates to an appropriate speed in relation to hazards	

### **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.

By using the limit point technique and looking across the bend for hazards, advanced drivers can enhance their vision. Whilst crucial, this must be balanced with other factors such as an awareness of the physical limits of grip when turning.





150 metres from the bend in the road and the Limit Point of Vision is getting closer the distance available to stop reducing. Slow down.



You're 50 metres from the bend, when the LPOV appears static, continue to slow until it starts to move away. You need to be able to stop in that distance.



40 metres from the bend. The LPOV is just starting to move away from you as the bend opens up. You can maintain or your speed if you have enough room to stop.



You're right on the bend now. The LPOV is moving away from you, so you can consider accelerating.



Exiting the bend, the LPOV moves away from you. Accelerate to match the improving vision.

The limit point is the furthest point to which you have an uninterrupted view of the road surface as it disappears around a bend or over a brow. 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

### Information

Advanced drivers must be able to:

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

- By looking ahead and scanning back, advanced drivers give themselves more time to respond to the situation ahead
- This scanning or visual sweeping should be a continuous process
- By looking across a bend, advanced drivers can better plan how to deal with it
- They may see other vehicles and/or further hazards
- Similarly, hedge or tree lines and lamp posts, etc. may give an indication of the severity of the bend

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

- Be aware of signs and signals
- The more side profile they see of other road users appearing or disappearing through a bend, the sharper it is
- The speed of other road users may also indicate the severity of a bend
- If the vehicle in front is showing its brake lights, this may indicate a problem through the bend
- They may need to change position or speed, or indicate to traffic behind that there may be a problem
- The position of approaching road users may also indicate that a change of speed or position is required

### **Position**

Advanced drivers must be able to:

### Position correctly on the approach to a corner

- Safety must not be compromised when positioning for a corner
- Advanced drivers must be able to achieve the correct position smoothly, without destabilising the vehicle, generally:
  - In a right-hand bend a position towards the nearside will usually afford a better view, but be aware of nearside hazards
  - 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
- The presence of other road users may affect the 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
- Advanced drivers must have an unhindered view of the road surface and both edges, to be certain there are no unseen hazards
- Mirrors and appropriate blind spot checks must be utilised before straightening a bend

If in doubt, do not straighten

### **Speed**

Advanced drivers must be able to:

- Use limit point correctly and be able to stop within the distance seen to be clear on their own side of the road
  - Utilising IPSGA correctly and matching the limit point of vision to your speed of approach will give you a safe speed at which to negotiate a bend
  - Adjusting speed in good time allows for the appropriate gear to be selected
  - Speed should be matched to the rate at which the limit point appears to move
  - 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
  - It is important to maintain vehicle stability and to be aware of any hazards when negotiating a bend
  - It is necessary to continually reassess the limit point by scanning ahead, back and across the bend and to adjust speed as necessary



### Gear

Advanced drivers must be able to:

- Select and engage the appropriate gear for the speed and circumstances
  - Advanced drivers must 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
  - Selecting the appropriate gear before steering helps to balance the vehicle through a bend
  - By looking ahead and planning, advanced drivers will be able 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)

### **Acceleration**

Advanced drivers must be able to:

- Maintain appropriate accelerator application to retain stability
  - Gentle accelerator application allows a vehicle to maintain speed and stability through the corner
  - This may need to be varied, depending 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
  - All acceleration needs to be made smoothly, without coarse adjustments



# **Competency sheet -**Junctions and Roundabouts

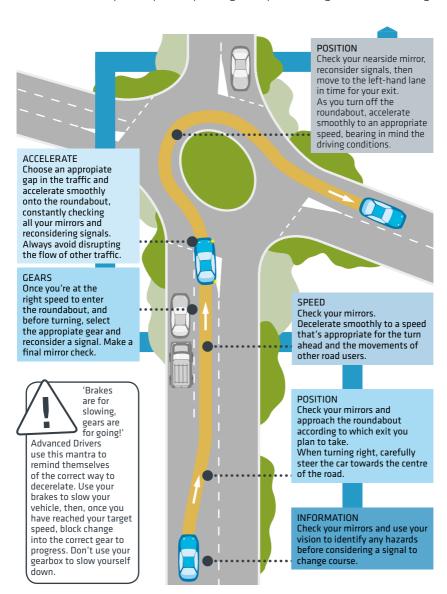
This page gives an overview of the competency requirements for this section.

Information	Achieved
Identifies type of junction system they are dealing with	
Monitors their speed and distance on approach	
Assesses the speed and position of other road users	
Identifies hazards and prepares for situations that may arise	
Identifies the best position to enter, negotiate and leave the junction	
Checks mirrors and blind spots before deciding on their actions	
Considers their signals prior to changing position	
Accurately identifies the first entry gap that it is safe to use	
Identifies the correct exit and looks for an early view into the exit road	
Position	
Adopts the appropriate position without causing others to alter course or speed unnecessarily	
Speed	
Accurately adjusts speed in relation to the physical features of the junction and traffic flow	
Gear	
Selects and engages the appropriate gear for the speed and circumstances	
Acceleration	
Maintains correct acceleration application on entering, negotiating and leaving the junction	

### Roundabouts

Roundabouts are generally a complicated form of a junction. The principles for dealing with both are generally the same. Early vision and accurate information are what allow you to make your plan to stop or proceed with safety (for a simple right turn junction refer to page 14).

When approaching a roundabout, the aim is to keep the car moving as long as it is safe to do so; an aim summed up in the phrase "planning to stop but looking for information to go".



### Information

Information is crucial to safely negotiating a roundabout. There are therefore a number of skills and behaviours that advanced drivers should demonstrate

In summary, they must be able to:

- Identify the type of junction they are approaching
  - Signs on approach to a roundabout detail its size, the location and often the angle of the exits
  - On a large roundabout give priority to traffic from the right
  - On a mini roundabout drivers should give way to traffic from the right, also giving priority to traffic closely approaching the roundabout
- A series of mini roundabouts should be assessed individually
- Monitor their speed and distance on approach
- Advanced drivers must monitor their speed on approach to a roundabout, especially if it is located at the end of a motorway or dual carriageway slip-road, or on a road where the national speed limit applies

- Allow time to gather the relevant information and make a suitable plan on approach
- Make appropriate decisions about whether to give way or take precedence.
   If in doubt, stop
- Planning to stop sometimes allows sufficient time for an advanced driver to gather information and proceed safely without stopping
- Take care to signal correctly so as not to mislead other road users
- Remain vigilant, never assuming that other road users' signals are accurate
- Assess the speed and position of other road users
  - Scan all road users' movements to anticipate intentions and make appropriate decisions on whether to give way or take precedence
  - Having entered the roundabout, remain aware of traffic joining from other entry points
  - If a junction has approaches with limited vision in any direction, be prepared to slow down or stop in order to gain information before entering the roundabout





- Identify hazards and prepare for situations that may arise
  - Use visual clues to predict possible hazards and prepare for situations that may arise
  - Prioritise response to any hazard in a safe, controlled manner
- Identify the best position to enter, negotiate and leave the roundabout
  - Use the information gathered to make the right plan to deal with entry to the roundabout, route around it, and exit
- Check mirrors and/or blind spots before deciding on other actions
  - Make effective use of mirrors and check blind spots before taking actions, such as:
    - Changing speed, lane or direction
    - Choosing whether or not to use signals
- Consider their signals prior to changing position
  - Apply signals in good time, taking care not to mislead or confuse other road users
- Accurately identify the first entry gap that is safe to use
  - By timing arrival correctly, it may be possible for advanced drivers to keep moving onto the roundabout
  - If it is necessary to rush into a gap, waiting may have been a better option
- Identify the correct exit and look for an early view into the exit road

- Look to exit by using road signs, counting other exits or using sat-nav instructions and position appropriately being aware of other road users around you
- Look for an early view into the exit route to put a plan in place to deal with any hazard

### **Position**

Advanced drivers must be able to:

- Adopt the appropriate position without causing others to alter course or speed
  - On identifying the type of roundabout, advanced drivers must decide what position to take for the chosen route
  - Within reason an early adoption of the correct position will be beneficial
  - A straight line may be taken through the roundabout if it is safe and no other road users are present
  - Check mirrors and/or blind spots prior to taking such a line
  - If there is any doubt as to whether safety will be compromised or confusion caused stay in lane
  - If traffic is queuing on entry to a roundabout advanced drivers must consider using the lane of least resistance. Be aware of any prohibiting road markings and don't cause confusion to other road users

### **Speed**

Advanced drivers must be able to:

- Accurately adjust speed in relation to the physical features of the roundabout and traffic flow
  - Understand how the tightness of a turn, any positive or negative camber, and the

- physical size and offset of a roundabout will influence speed
- Speed will also be influenced by other road users on, or likely to join, the roundabout
- Rushing into a gap but then having to slow down may cause problems for other road users

# Gear

Advanced drivers 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

- Try to engage a gear suitable for the whole roundabout
- If a gear change is needed it should be done whilst the vehicle direction is fixed

## **Acceleration**

- Maintain correct acceleration application on entering, negotiating and leaving the roundabout
  - Once the correct entry speed for the roundabout is achieved use the accelerator to maintain or adjust it
  - If conditions allow, increase speed and accelerate away from the roundabout



# Competency sheet - Overtaking

This page gives an overview of the competency requirements for this section.

Information	Achieved
Identifies a safe imminent opportunity to overtake	
Identifies a safe return gap	
Accurately judges the difference between their own speed and that of the vehicle[s] they plan to overtake	
Position	
Adopts the overtaking position - Stage 1	
Moves out towards the offside - Stage 2	
Allows a safe gap between vehicles - Stage 2	
Moves into the chosen return gap - Stage 3	
Speed	
Controls speed to safely complete the overtake	
Adjusts speed to safely return to the nearside of the road	
Gear	
Selects and engages the correct gear for their chosen speed and the prevailing circumstances	
Acceleration	
Applies the correct acceleration to complete the overtake	

# **Overtaking**

At times, even a perfectly executed overtake within the speed limit can be seen as "dangerous" by another party. In fact, overtaking is the area where drivers are most likely to come into conflict with another road user; either the driver of the vehicle being overtaken or the driver of another vehicle that witnesses the manoeuvre. Ask yourself whether any overtake you are about to attempt is really necessary and worthwhile. What's the point in exposing yourself to unnecessary danger to jump one or two places in a queue of traffic?

Advanced drivers must therefore be keenly aware of their actions - and how others perceive them



## 1) The following position

The following position is a position that allows you plenty of time to react should the driver in front brake suddenly. Apply the two second rule.

Adopt this position if you have no intention of overtaking, cannot do so imminently due to other hazards, or when prevented from doing so by solid white lines or no overtaking signs. In the absence of any other hazards, and if it is safe to do so, you can move directly to (3), the overtake stage (this would be a momentum overtake).

## 2) The overtaking position

If you anticipate an opportunity to overtake, close in on the vehicle in front until you're in the "overtaking position". This is normally closer than the "following position" and towards the centre line, increasing your view ahead.

Match your speed to the vehicle in front and consider taking a lower gear to pass it.

If the overtake doesn't develop, consider dropping back to the "following position" and then start the whole process again.

### 3) The overtake

When it's clear, move carefully to the other side of the road to increase your view. If the overtake is safe, accelerate quickly past the vehicle. If it's not, drop back behind safely and smoothly.

The final part of the manoeuvre returns you safely back to your side of the road in as straight a line as possible.

Consider using mirrors and/or a "Blind Spot Check" to make sure that you do not affect the vehicle you have just passed.

## Information

Advanced drivers must be able to:

- Identify a safe imminent opportunity to overtake
  - When preparing to overtake, advanced drivers should look as far down the road as possible to check for hazards
  - Read and respond to road signs and markings
  - Check hedges for any breaks in shadows that might signify an entrance
  - Be aware that any buildings will have entrances, and clear them as safe
  - Keep gathering information to decide if there is enough space to make the overtake safely
  - If in any doubt delay the overtake, hold back and re-assess
  - Use mirrors to link the developing potential of the overtake to the information, and to the sides, prior to committing
  - Advanced drivers must always be prepared to cancel the manoeuvre if circumstances change for the worse
- · Identify a safe return gap
  - During a multi-vehicle overtake, an advanced driver must decide how many vehicles to overtake before committing
  - Identify a safe "return gap" that will not affect other traffic
  - Bearing in mind that if the gap is likely to close, the overtake is not realistic
  - Be aware of any negative affect they may have on other vehicles
- Accurately judge the difference between their own speed and that of the vehicle[s] they plan to overtake
  - Accurately assess speed and position in relation to the speed and position of

- the vehicle[s] to be overtaken and the distance to the next hazard
- Achieving a sufficient speed difference to overtake safely in the space available within the speed limit must be realistic
- Never plan to exceed the speed limit so, if the other vehicle is travelling at close to the limit, recognise that overtaking may not be legal
- Be aware of overtaken vehicles speeding up as you pass them

## **Position**

Advanced drivers must be able to:

## Stage 1

- · Adopt the overtaking position
  - Advanced drivers should already be positioned in a safe following position in line with Highway Code advice
  - When safe and appropriate, you should move into an overtaking position, this will be closer than a regular following position but safety must always be prioritised
  - You must be prepared to drop back if the circumstances change. Remaining in the overtaking position can cause the driver ahead to be distracted and to focus on their mirrors rather than the road ahead

### Stage 2

- Move out towards the offside
  - When it is safe, advanced drivers should move out towards the offside, keeping vehicle stable and matching speed with that of the vehicle to be overtaken
  - You should continually update information and be prepared to abort if circumstances change as safety is paramount

- From this position make the overtake when safe
- · Allow a safe gap between vehicles
  - Advanced drivers must allow a safe gap between their own vehicle and the vehicle they are going to pass
  - If the road is too narrow, you should consider the likely reaction before starting the manoeuvre
  - If in any doubt, you should hold back and reassess
  - Be particularly aware of vulnerable road
  - This safe gap also applies to parked vehicles

#### Stage 3

- · Move into the chosen return gap
  - Advanced drivers must be able to move into the chosen return gap without causing other road users to alter course or speed
  - Complete the return to the nearside of the road in a controlled fashion
  - Avoid cutting in too close to the vehicle passed
  - If there are other vehicles in view, albeit some distance off, you should try to display clear intent that you are returning to your own side of the road either by positioning or by showing a signal

# **Speed**

- Control speed to safely complete the overtake
- Maintain speed with the vehicle being overtaken until ready to commence the overtake
- Adjust speed so that the overtake can be completed in the available clear road space, within the posted speed limit
- Advanced drivers do not plan to exceed the speed limit, so if the other vehicle is travelling at close to this speed, overtaking may not be legal
- Adjust speed to safely return to the nearside of the road
  - Adjust speed so as not to inconvenience other road users when returning to the nearside of the road

## Gear

#### Advanced drivers must be able to:

- Select and engage the correct gear for their chosen speed and the prevailing circumstances
  - Consider which gear will be both flexible and responsive, without causing the engine to labour or over-rev
  - Try to engage a gear that is suitable for the whole overtake
  - If a gear change is required plan to avoid making it whilst alongside the vehicle being overtaken

## **Acceleration**

- Apply the correct acceleration to complete the overtake
  - Acceleration should be smooth and progressive throughout the overtake and return to the nearside of the road
  - Advanced drivers should make a considered effort to complete the manoeuvre within the shortest possible time, but within the speed limit



# **Competency sheet -**Motorways and Dual Carriageways

This page gives an overview of the competency requirements for this section.

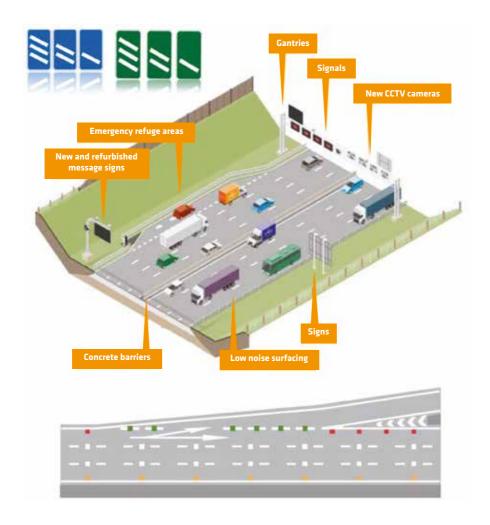
Information	Achieved
Identifies and uses signs in planning their driving	
Gathers information on traffic flow when entering a new road	
Conducts appropriate mirror and/or blind spot checks	
Communicates effectively with other road users	
Anticipates the movements of other road users	
Gathers appropriate exit information	
Position	
Adopts an appropriate entry position	
Uses the nearside lane whenever possible	
Adopts an appropriate following position	
Plans an appropriate overtaking position	
Positions to maintain a safe space and gain the best view	
Positions safely when exiting	
Exits to the appropriate lane of the slip road	
Speed	
Accurately adjusts speed to match the identified entry gap	
Balances progress with restraint	
Exits at the appropriate speed	
Stop appropriately in an emergency	
Gear	
Selects the correct gear for the chosen speed in the given circumstances	
Acceleration	
Applies appropriate acceleration	

# **Motorways and Dual Carriageways**

Despite faster driving speeds, motorways are statistically the safest roads we travel on

Dual carriageways however, have the potential to be less safe, as they have the same speed limits as motorways without the same regulations. For example, cyclists, learners, pedestrians and other vulnerable road users – even horses – may be able to use dual carriageways. This, combined with less user-friendly entry and exit points, increases the potential for an accident or near miss.

It is vital for advanced drivers to recognise the differences between motorways and dual carriageways and to have a finely tuned awareness of the likely hazards – and how quickly they can develop



## Information

#### Advanced drivers must be able to:

#### Identify and use signs in planning their driving

- By extending and widening their vision, advanced drivers will be able to obtain early information from signs to assist in their decision making
- They must be able to identify whether they are entering a motorway or a dual carriageway
- Motorways have blue-backed signs, they have additional regulations which prohibit a number of vulnerable road users
- Direction signs prior to a motorway also show motorway information in blue hoxes
- Direction signs on motorways give additional information, e.g. an unusual feature such as a sharp bend on an exit slip road
- Smart or managed motorways also have overhead gantries to convey information or warnings of problems ahead, e.g. lane closures or a variable speed limit
- Dual carriageways have green or white backed signs. Unless signed to the contrary, a dual carriageway can be used by all road users
- On dual carriageways, traffic has the potential to leave or join from either side at junctions (some motorways also have this but it is a rare occurrence) and this may be at 90 degrees with no slip road

#### Gather information on traffic flow when entering a new road

 On approach to a motorway, it is sometimes possible to see the carriageway above or below this helps gather information in relation to traffic flow

- If traffic is at a standstill, advanced drivers should try to identify the problem early enough to choose an alternative route
- While in the slip road, they should try to obtain an early view of traffic and carry out blind spot checks - especially for motorcycles which can easily be lost in a mirror
- They should also assess the speed of approaching vehicles and identify entry gap early

# Conduct appropriate mirror and/or blind spot checks

- Check mirrors before changing speed or position on a motorway or a dual carriageway and make appropriate checks to cover the blind spot area
- When changing lanes, good mirror use will help to accurately assess the speed of approaching traffic
- It is essential to link what is in the mirror to the hazards developing ahead in order remain safe
- Be aware that high-speed traffic approaching from the rear is relevant to decision-making even when still a long way behind. It is important to ensure your mirror use is good enough to identify this early

# Communicate effectively with other road users

- Advanced drivers should be aware that the vehicle position they adopt may begin to communicate intentions to other road users
- Well-timed signals will help to reinforce this
- They should promote safe sharing of the road space by identifying a potential problem early and actively communicating with other road users
  - For example, early brake lights can alert a following driver to a problem ahead

# Anticipate the movements of other road users

- Traffic joining the main carriageway from a slip road may be travelling at a slower speed, so advanced drivers should be prepared to change lanes and allow others to join
- Whenever possible, they should avoid being immediately beside joining traffic and identify junctions early to assist in planning for this. This helps avoid the risk of being in the blind spot or being caught out by late lane changes
- On a dual carriageway, traffic joining may be slow to accelerate
- Traffic leaving a dual carriageway may have to slow considerably or early, causing passing traffic to displace into offside lanes. Early anticipation of where and when this is likely to happen helps to avoid heavy braking
- Large Goods Vehicles and coaches over 12 metres are limited to 60mph. Any smaller vehicles behind them may be travelling more quickly, so advanced drivers should anticipate them pulling out into their path - and plan for this. Early anticipation of where and when this is likely to happen will avoid possible conflict

#### · Gather appropriate exit information

- Motorways typically have a signing system giving early warning of junctions
- Dual carriageways tend to offer more limited information
- If countdown markers are present they will be equidistant from each other and usually 100 yards apart
- Exits may be very sharp or from the offside lane
- The size and shape of a junction will influence the speed of exit
- It may be necessary to slow and display brake lights earlier if exiting a dual carriageway to a sharp exit

- Having an early view helps with planning a route through other traffic

## **Position**

#### Advanced drivers must be able to:

#### · Adopt an appropriate entry position

- Make safe use of the entry slip road to build up speed and position alongside a gap
- Avoid being alongside any vehicle when they get to the main carriageway in order to maintain their 'safety bubble'

#### · Use the nearside lane whenever possible

- Monitor the position and speed of other road users in order to enter the nearside lane as soon as practicable
- This is the lane all drivers should be travelling in, unless overtaking slowermoving vehicles
- Advanced drivers should maintain their overtaking lane until a sensible gap appears and not move into the nearside lane if they would have to move straight back out again
- Monitor mirrors to avoid holding up any emergency vehicles or fast moving traffic that may wish to pass
- Staying out and attempting to enforce the speed limit is likely to provoke an adverse reaction from other road users

#### · Adopt an appropriate following position

- Advanced drivers should maintain their 'safety bubble' and the safety of other road users with a following gap of at least two seconds
- This allows time to respond to changing information and to plan safe progress
- They should be prepared to adjust this gap to avoid being alongside other traffic for a prolonged period

- They should be prepared to increase this gap if safety demands it
  - For example, stopping distances are longer in wet weather, and significantly longer in snow and ice
- It may be advisable to extend the following distance in heavy traffic, to allow other vehicles to move in and out of the space in front
- This can avoid the need for repeated braking

#### · Plan an appropriate overtaking position

- Avoid being alongside the vehicle being overtaken for any longer than necessary
- Move to the nearside lane as soon as it is safe and overtaking is complete
- In general avoid being three abreast i.e. alongside another vehicle which is itself overtaking as any displacement may have an impact
  - For example, if a lorry is overtaking another lorry, it is wise to hold back until a safe gap is available

- Position to maintain a safe space and gain the best view
  - Always position with enough space around to remain safe – and to be seen
    - For example, far enough behind an HGV to see its mirrors, or the HGV driver will not see you following
  - Adjust position to see beyond other traffic as this will help with planning
    - For example, increasing their following gap will allow an advanced driver to see beyond a group of large vehicles
  - Position safely when exiting
  - Achieve a safe exit gap in the appropriate lane in good time - to avoid affecting other road users
  - Exit to the appropriate lane of the slip road maintaining speed until off the motorway
  - Use the appropriate lane for the continuing journey
  - Ensure that any signals they give are updated as necessary

M62/M60

Junction 2 miles

A663



# **Speed**

Advanced drivers must be able to:

- Accurately adjust speed to match the identified entry gap
  - This should be achieved using acceleration sense
- · Balance progress with restraint
  - Advanced drivers should be aware that traffic, road surface and speed limits will all affect ability to make progress – and be prepared to alter speed to maintain a safe following distance

 They will be able to do this by looking beyond the vehicle they are following and adjusting their speed using acceleration sense instead of braking





- They should also recognise when it is necessary to show brake lights to warn following traffic
- They must also be aware of how weather conditions can affect their own and other vehicles
  - For example, wind may affect highsided vehicles and motorcycles causing them to change lanes unexpectedly
  - Take care moving into or out of the space beside a large vehicle in high winds
- Spray, especially from large vehicles, can make it difficult to see or be seen when making an overtake
- Bright sunshine can also have a negative effect on vision, in which case it is important to slow down

#### · Exit at the appropriate speed

- Accurately adjust speed to match the identified exit gap, ideally using acceleration sense
- Try to avoid entering their chosen gap and braking, as this may cause following traffic to brake in response
- An automatic vehicle may slow down less quickly when the accelerator is released.
   Plan for this
- Allow time to adjust to the slower speed required at the end of the exit slip or to join any queue
- Be aware that on a dual carriageway, it may be necessary to start slowing early to achieve the desired speed reduction and to display brake lights to warn following drivers if the exit is sharp

#### Stop appropriately in an emergency

- If stopping in an emergency, advanced drivers should try to enter the hard shoulder before braking, so as to slow down with less risk to themselves or following traffic
- When re-joining the main carriageway, they should build up speed on the hard

- shoulder to match the traffic in the nearside lane
- They should also be able to identify when an apparent hard shoulder is actually a live lane, e.g. on SMART motorways or in roadworks

### Gear

Advanced drivers must be able to:

- Select the correct gear for the chosen speed in the given circumstances
  - Advanced drivers should aim to have enough flexibility to deal with the circumstances without constantly having to change gear
  - Understand that in many vehicles there may be more than one gear which is appropriate for a given situation
  - Consider higher gears for eco driving as long as they provide adequate performance

## **Acceleration**

- Apply appropriate acceleration
  - Display acceleration sense to achieve speed and lane changes wherever possible, and accelerate smoothly when circumstances allow a higher speed
- If using cruise control, be able to cancel it without affecting other road users

# Competency sheet - Manoeuvring

This page gives an overview of the competency requirements for this section.

Information	Achieved
Makes the correct decision on which manoeuvre to perform	
Makes the best use of available space	
Carries out correct observations	
Responds appropriately to changing information	
Uses available in-car technology to good effect	
Position	
Adopts the correct starting position for a manoeuvre	
Maintains a safe position during a manoeuvre	
Considers the safety of their finishing position	
Speed	
Maintains correct speed for a manoeuvre	
Gear	
Moves smoothly between forward and reverse gears	
Acceleration	
Applies correct acceleration to complete a manoeuvre	

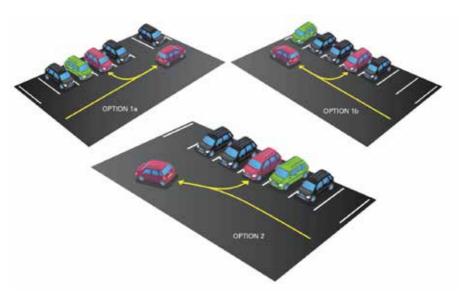


# **Manoeuvring**

It is expected that an advanced driver will be able to control their vehicle with a degree of finesse in all circumstances.

Novice drivers are expected to be able to turn their car around safely, using forward and reverse gears and to perform parking manoeuvres to the side of the road as well as in car parks.

Advanced drivers must be able to demonstrate their competence and proficiency in all of these areas.



If practice space is available manouvres can be set up using cones or barriers. If practicing in a live environment, try to utilise real life situations and remain flexible.

## Information

Advanced drivers must be able to:

- Make the correct decision on which manoeuvre to perform
  - In real life driving situations, drivers may have a number of options available to them when deciding how to turn their vehicle around or park it safely
  - An advanced driver should choose the most appropriate option for the given circumstances
  - They must show confidence and proficiency when turning their car around and performing parking manoeuvres
- Make the best use of available space
  - The most suitable manoeuvre will usually be dependent on the space available, for example:
    - A junction or driveway might be utilised to perform a turn in a narrow street
    - A turn in a slightly wider road might be
    - If access to the boot is required, reversing into a parking bay may not be appropriate
    - Ensure the gap is large enough to move into and allow you to exit vehicle
- · Carry out correct observations
  - An advanced driver must conduct all-round checks before carrying out a mannegyre
  - These observations must be timely
  - They must also prioritise the area of potential danger
  - Safety is paramount when driving and effective observation is essential
- Respond appropriately to changing information

- Observation is only the start of planning
- If a danger is identified, advanced drivers must ensure their response is correct and proportionate
- If there are any doubts about safety, they should usually stop
- Advanced drivers must also be aware of how others might be affected by their actions. For example, timely completion of the manoeuvre may be the safest action
- Use available in-car technology to good effect
  - In car technology is becoming commonplace. It is there to aid the driver and should be embraced, for example:
  - Reversing cameras and sensors help in assessing but are not a substitute for sound observation
  - Auto park systems help with parking but aren't always suitable; advanced drivers should be able to park both with and without them
  - If in doubt, advanced drivers should confirm information before moving

## **Position**

- Adopt the correct starting position for a manoeuvre
  - The correct starting position makes any manoeuvre easier to conduct
  - For a turn in the road, it helps to have a tight nearside position
  - For a parallel park, it helps to maintain the correct distance away from the other parked vehicles



# Maintain a safe position during a manoeuvre

- To ensure safety is retained while conducting the manoeuvre, advanced drivers should be mindful of their mirrors
- For example, they should check whether other vehicles have got tow hitches or other protrusions, look for trees or lamp posts, and check the position of the kerb

# Consider the safety of their finishing position

- When parking and leaving a vehicle, advanced drivers should consider whether it is likely to cause inconvenience
- And whether it is likely to be safe from damage

# **Speed**

Advanced drivers must be able to:

- · Maintain correct speed for a manoeuvre
  - With safety the primary concern, manoeuvres will generally be carried out slowly
  - "As slow as possible but as quickly as necessary" is a good guide
  - Slow enough to ensure accurate information assessment, quick enough to cause minimal inconvenience
  - Advanced drivers should control the speed of a manual vehicle by balancing the clutch pedal
  - Braking with your left foot in an automatic may help when conducting a manoeuvre

## Gear

Advanced drivers must be able to:

- Move smoothly between forward and reverse gears
  - When manoeuvring, advanced drivers should stop the car before changing from forward to reverse gear or vice versa
  - They must be prepared to use the clutch to smooth out changes (it may never be fully released)

## **Acceleration**

- Apply correct acceleration to complete a manoeuvre
  - Accurate pedal balance assists in completing manoeuvres safely
  - Advanced drivers must recognise when the manoeuvre requires more power and apply the accelerator appropriately



# **Spoken Thoughts**

Spoken thoughts, the practice of describing aloud everything you see, think and do while driving, is a great way to hone advanced driving technique. It not only highlights just how many thought processes a vigilant driver goes through on a drive, but can also bring focus to specific issues.

#### For example:

- A driver who tends to rush gear changes might include 'changing first to second, slowly and smoothly' to encourage that action
- A driver who is heavy footed when releasing the brake pedal might say 'gentle to firm brakes and then back to gentle' in an attempt to gain some third stage braking

# Increased focus through regular practice

In all circumstances, drivers must remember that safety is their number one priority

#### For example:

 If they are coming out of a bend, having correctly assessed the limit point on approach to the bend, and they see a tractor emerging, it is less important to vocalise "there is a tractor moving slowly out of the farm entrance blocking my path, so rear view mirror check, then gentle to firm brakes to avoid it" than it is to actually stop

Once comfortable with speaking whilst driving, advanced drivers will find their delivery becomes more ordered. So in the same scenario, they may say "mirror and brakes for the tractor, keeping brake lights on for the safety of following traffic."

# Prioritise to stay safe in all circumstances

Dividing the speech into a small number of categories also helps to focus.

#### · Areas that must be included

- Anything likely to affect safety

A hazard is anything that contains an element of actual or potential danger.

These should always be mentioned, so drivers can plan their response.

#### Areas that should be included

Road type and description, pedestrian activity and road signs

#### Areas we would like to include

 Observation links such as the bins are out for the collection lorry, a church steeple indicating a possible change in speed limit and so on

Priority matters, for while it is excellent to say "entering a built-up area expecting to see an increase in vehicular and pedestrian activity; I will mention junctions and driveways should they affect my drive", it is completely undermined if the driver fails to mention the school crossing patrol person stepping out into the road.

# Tips to improve talking whilst driving

#### Advanced drivers should:

- Talk back towards the car from their furthest point of vision, but remember to regularly lift their vision to continually prioritise the approaching hazard
- Remember that in national speed limit areas, that while hazards are fewer, they can arise quickly, due to the speed of travel
- Be prepared to interrupt their flow and prioritise IPSGA to keep the car safe

#### Hallmarks of good practice

 The driver should be informing the passenger (real or imagined) what allows them to drive this car, along this piece of road, in this position, at this speed

Additionally, a very good driver will include information about how they are going to achieve this. And a great driver will tie all the information together and sound seamless with good intonation, reflecting the circumstances of the drive.



# Run Sheets framed around IPSGA



This run sheet will assist in the development of the driver/rider on the reverse side is an area to record further information.

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	Rolling brake test		
	Knowledge - IPSGA		
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	Use of mirrors and rear observation		
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Information	Road signs and markings		
	Anticipation		
	Hazard Identification		
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	Junctions and Roundabouts		
Position	Motorways		
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	Speed limits		
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# **Run Sheet Driver/Rider- Competencies covered**

This run sheet will assist in the development of the driver/rider on the reverse side is an area to record further information.

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Competence Levels: 1 = Commended 2 = Satisfactory 3 = Requires Development

Nam	e	Competence	Observer comments Run no.
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Preparation	Cockpit Drill (car only)		
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	Pre-Drive/Ride Checks		
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# Appendix 1 Handouts





# **Car Technology**

In-car technology which was once only fitted to luxury or high-end vehicles is now becoming more commonplace. This handout offers advice for using this technology to complement your driving. It is not exhaustive but touches on the following areas.

### The technology discussed in this handout is:

- Auto Gearboxes
- Anti Lock Brakes (ABS)
- Auto Headlamps/ Winers

- Cruise Control/ Speed limiter
- Electronic Stability Programme (ESP)

### **Auto Gearboxes**

The range of functions available on automatic gearboxes is changing at an incredible rate.

You need to have at least a basic understanding of the system fitted to your vehicle and how to use the it

It is important that an advanced driver can at least select a gear hold where fitted and appropriate ( some hybrid or electric vehicles may not have this function) and operate the gear selector efficiently.

If you have further interest in the functions, consult the manufacturer's guide.

Try to explain the functions in layman's terms to your observer.

As firm acceleration will likely operate the kick down function you need to understand what is happening in the simplest form (the car has selected a lower gear for acceleration) and how to avoid unintended use.

When stationary the Stop/Start function will often switch off if the brake pedal is

released, the vehicle handbook will give advice as to how to prevent the engine restarting until you are ready to move off.

It may also be necessary to select neutral to prevent wear on the clutches in some

gearboxes - again this will be detailed in the vehicle handbook.

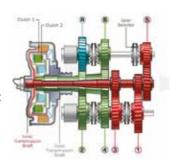


Aside from limited production exemptions, new cars supplied in the UK since July 2004 must be fitted with ABS.

The important message is it does not improve braking efficiency, it allows you to retain steering at the point of maximum braking and may allow you to steer out of a situation whilst still slowing.

It is also important to remember, that although steering is retained, a skid may still be induced if tyre grip is not sufficient at the speed of travel (tyre grip is shared between steering and braking).

ABS is a safety aid which may help in emergency situations. It should not be operated as a matter of course and planned progressive braking will help avoid activation.



# **Auto Headlamps/Wipers**

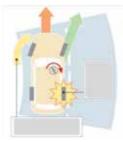
Many modern vehicles now have the option of setting windscreen wipers and/or lights to an automatic setting.

The headlamps will illuminate if a sensor fitted to the vehicle detects a reduction in the available light. Similarly the wipers will start in response to moisture on the screen. Both systems can be a useful aid but neither is foolproof.

The associate needs to know how to operate each in its manual form. In certain reduced visibility conditions an advanced driver may display lights when the automatic system has decided not to. Likewise an advanced driver may decide a certain speed of wipers is preferable to the one chosen by the auto setting.

# Electronic Stability Programme (ESP)

From November 2014 all new vehicles registered in the EU are required to have ESP. ESP is a safety aid which in an emergency situation helps drivers maintain



control by monitoring steering inputs and vehicle direction. The system detects when a vehicle is departing from its intended path and automatically applies brakes to the appropriate wheel, endeavouring to point the vehicle in the direction being requested by the steering wheel. Engine power may also be reduced in some systems.

It is a massive step forward in road safety, but as with all safety aids cannot operate outside the laws of physics. If a vehicle is being driven in a sensible, planned, advanced manner the system will not be called upon.

There are a number of film clips available to show how ESP works.



# Cruise Control/ Speed Limiter

These devices will either allow the vehicle to maintain a constant speed or prevent it from exceeding a set limit. With either function it is important to know how to operate and override the system safely.

In most cases the cruise control will have an on and off switch, functions to set, increase and decrease speed. There will also be a function to pause the system and then resume to the set speed. Operation of the brake pedal will cancel the system and in a manual car operating the clutch pedal will also cancel it

You should avoid cancelling with brake application unless the information conveyed by the brake lights will be required. Inappropriate brake light applications will cascade to following traffic and may cause over reactions from drivers behind. When possible cancel cruise control using the function button.

Speed limiters also have an override facility: firm application of the accelerator will allow the vehicle to exceed the set limit.

Do not use cruise control in heavy rain or on loose surfaces as it may cause the wheels to lose grip.



# Communication

Mobile communication and GPS is becoming more commonplace in cars, this handout offers advice for using this technology to complement your driving. It is not exhaustive but touches on the following areas.

### The technology discussed in this handout is:

- Satellite Navigation
- Mobile Phone
- Internet

# **Satellite Navigation**

Many drivers now have access to satellite navigation systems which are either fitted into their vehicle, after-market attachments or combined with a smart phone. When used correctly they will complement driving and can relieve the stress of route planning.

They can however be a distraction and may lead to sudden changes of direction if not used correctly. If you are using the system for directions, set the volume to a level that you can hear easily. The screens can be small and may distract concentration from other driving decisions.

In car systems will usually display a warning screen which must be accepted before use is allowed. They generally play through the car's audio system and will interrupt any other audio source. They may have voice activation and the ability to enter data via speech. Be aware that if you are doing this whilst moving you are likely to be distracted from driving.



After-market systems will need to be safely secured in the vehicle, they should not obscure the driver's view but need to be visible without substantial head movement.

Care should also be taken when routing cables to ensure they do not interfere with steering or other controls. When you remove the mount, bear in mind the tell-tale ring left may be an indication to thieves that the system is in the car.

If combined with a smart phone, ideally the phone should be secured in the car. All programming should be done before moving off, as using the phone whilst driving is subject to prohibitive legislation.



### **Mobile Phones**

Mobile phones have become an integral part of everyday life, legislation prevents the use of a hand held mobile device whilst driving unless making a call to the emergency services and it is unsafe to stop.

You are legally permitted to use hands-free devices fitted to the vehicle to make and receive any calls.

It has been shown by extensive research that making calls - even hands-free - substantially affects concentration and slows reactions when driving. This is a major safety concern.

IAM RoadSmart's advice is to pull over safely before making or taking a call and it is suggested the driver confirms this to the caller. Emergency calls as above are excluded from the policy if it is not safe or practicable to pull over.

Good practice is to keep the phone powered up (they take a long time to restart and may be required in an emergency and other functions such as GPS tracking may be useful) but secured away from the driver. If you are utilising navigation on the phone secure it in view.





### Internet

Some vehicles now have the facility to create a wi-fi zone within the vehicle to allow internet access for computers and tablets.

This is intended for use whilst parked or for the use of passengers. It is good practice, even if the passenger is going to use this, for it to be done in the rear seat. The screen can be a distraction for the driver, especially at night.

 Legislation prohibits a TV screen from being visible to the driver.

Ensure that any passengers using phones, computers or other electronic equipment do not distract you from your primary task of driving safely.



# **Driving at Night**

Night driving presents unique challenges for drivers, the limit of vision is dictated by the performance of your headlamps, your windscreen and your eyesight. This handout covers legislation and some practicalities regarding driving at night.

### This handout touches on:

- Legislation
- Practicalities of driving at night
- Limit point analysis

Practicalities of lighting

# Legislation

The Road Traffic Act 1988 and the Road Vehicle Lighting Regulations 1989 confer on vehicle users certain responsibilities when driving at night.

Obligatory lights must be displayed during the hours of darkness on all mechanically propelled vehicles. In areas with a speed limit above 30mph dipped headlamps must be used.

# **Practicalities of lighting**

It must be remembered that vehicle lighting is designed to ensure the vehicle is seen as well as to ensure the driver can see. With this in mind, care should be taken when parking at night with lights switched on, to ensure road users are not left confused as to whether the vehicle

is actually parked, or appears to be in the opposite carriageway.

Ensure all lights are kept clean and visible. In certain weather or driving conditions, they may require regular cleaning to ensure they remain efficient.

Automatic light functions on modern vehicles will respond to darkness, but may not operate in wet weather or other situations where visibility is severely reduced. Be prepared to switch on the headlamps manually if circumstances dictate.

Whilst it is dark and raining, visibility will be further affected by dazzle from oncoming vehicles, in these circumstances it is important to keep all windows and exterior mirrors as clean as possible. Include spectacles, if worn.





When dazzled by headlamps from the rear of your vehicle it is important to know how the rear view mirror dips.

# Practicalities of driving at night

The overriding principle of safe driving is that you must be able to stop in the distance you can see to be clear on your own side of the road. In areas of extreme darkness the limit of your vision is restricted to the limit of your headlamp beam.

In these circumstances your speed must be adjusted accordingly. It may be that your vision is extended by use of the headlamps on the vehicle in front. Use the information beyond them to good effect, but do not rely on them as a guide to a safe speed.

# Limit point analysis

Negotiating bends using the limit point requires adjustment when driving in the dark. Some lateral information that may have been available during the day, will not be visible at night.

The photo opposite shows a typical bend viewed in ideal daylight conditions.

Now study the same view taken at night and see how much detail is lost: depth of vision, colour and distance are all more difficult for the human eye to register in the dark.

Dipped headlamps rather than main beam may assist in locating the nearside of the road in a bend.

If you become dazzled by oncoming traffic, look down and to the left to try to locate the edge of the road and slow down until you can see again.

The way the human eyes work means that in very dimly lit conditions, peripheral vision is more sensitive to light than the central portion of your vision.





Bear this in mind on unlit rural roads.

You can aid your night vision by keeping interior and ambient lighting to an absolute minimum.

For information, the human eye takes around twenty minutes to become fully adapted to darkness. Any bright lighting, including mobile phone screen, dashboard lights or sat nav will diminish your night vision.

Make full use of the dimmer control on instrument panel lighting and be prepared to change your satellite navigation system to night mode if this is not an automatic function.



# **Emergency Vehicles**

An emergency vehicle responding to calls and using warning equipment would like to pass you but will not expect you to put yourself or others in danger to facilitate this. This handout applies a common sense approach to assisting where possible.

# **Highway Code References**

The Highway Code makes reference to emergency vehicles in three areas. In each instance a sensible planned response will assist.

# **Highway Code Rule 31** Emergency vehicles.

"If an ambulance, fire engine, police or other emergency vehicle approaches using flashing blue lights, headlights and/or sirens, keep off the road"

Whilst this rule applies to pedestrians it is also apt for drivers if you have not yet joined the main road. If you can safely stay out of the way let them pass. It may be that this information about an incident along a particular route will affect your choice of route.

Ambulances are easy to spot. Fire engines even easier. Both are likely to mean a possible delay on your route.



# **Highway Code Rule 219**

Emergency and Incident Support vehicles.

Emergency and Incident Support vehicles. You should look and listen for ambulances. fire engines, police, doctors or other emergency vehicles using flashing blue. red or green lights and sirens or flashing headlights, or traffic officer and incident support vehicles using flashing amber lights. When one approaches do not panic. Consider the route of such a vehicle and take appropriate action to let it pass, while complying with all traffic signs. If necessary, pull to the side of the road and stop, but try to avoid stopping before the brow of a hill, a bend or narrow section of road. Do not endanger yourself, other road users or pedestrians and avoid mounting the kerb. Do not brake harshly on approach to a junction or roundabout, as a following vehicle may not have the same view as you.

When you hear a siren the natural reaction is to look for a marked police car, a fire engine or an ambulance.

Try to be open to the possibility the vehicle trying to pass may be a plain looking car, with emergency warning equipment fitted. The lights are not always easily visible and the sirens can appear to come from a different direction. Motorcycles are now used by all emergency services and they may be hard to see, although they will make a lot of noise. Be sensible in your response and

plan as an advanced driver. Stopping may be inappropriate and slowing down may cause delay. Each situation will require its own response. The drivers of the emergency vehicles are trained to help you and should appreciate your efforts. Look for some indication of what they would like you to do, the position of the vehicle or a signal from the driver may help. If you can't help immediately, continue at a sensible speed until you can. Exceeding the speed limit is not expected of you and a camera will have no discretion if you get flashed.

Likewise with bus lane cameras you may find it difficult to prove why you went into the bus lane. (It is likely that the emergency vehicle will be using an empty bus lane in any case). As a general rule if the road is wide enough for them to pass pull over to the left and stop, if it is not wide enough keep moving until it is or you can pull into the mouth of a junction or utilise a dropped kerb (they will not expect you to drive up a kerb to allow them to pass).

At traffic light junctions or give way lines be aware that you have no exemption to ignore them. However well intentioned your actions may be any collision or incident will be your responsibility. The presence of the emergency vehicle would merely be regarded as mitigating circumstances.

Do not place yourself or others in danger by proceeding through a red traffic light, safety is the number one consideration. Be aware a camera at the location may record you jumping the light but may not accurately capture the circumstances in which you did it. The emergency services driver is trained to make "safe" progress and will be aware that you may not be able to assist. (In these circumstances their training would suggest switching off the warning equipment to "relieve the pressure").

On a wide road simply showing a left signal, moving left and slowing may suffice. If they don't come past stop. It may be they wish to speak to you. On a narrower road it will





help to be mindful of traffic bollards, parked vehicles and other hazards when choosing where to stop.

If you are not able to assist then proceeding safely at the speed limit allows them to get to their intended location (unless they indicate otherwise: see above). Be positive and do not panic. If they ask you to move somewhere specifically and it is safe, follow the instruction.

Be aware that a collision involving you will likely result in the emergency vehicle not arriving at their intended incident as they will be required to stop and deal as a "vicinity only" incident so they definitely do not want you "crashing" in an attempt to help.

Whilst the emergency services are in certain circumstances exempt from some road traffic legislation they have to comply with a large proportion of it specifically in relation to the standard expected of a careful and competent driver.

You may also see other plain cars fitted with blue lights, senior fire officers often use an unmarked vehicle to respond to serious incidents

All of the emergency responders work to the rule

"No call is so urgent as to justify an accident which will in itself always cause delay"

They should be courteous and grateful for your efforts.

# **Highway Code Rule 281** Warning signs or flashing lights.

If you see or hear emergency or incident support vehicles in the distance, be aware there may be an incident ahead (see Rule 219). Police officers and traffic officers may be required to work in the carriageway, for example dealing with debris, collisions or conducting rolling road blocks. Police officers will use rear-facing flashing red and blue lights and traffic officers will use rear-facing flashing red and amber lights in these situations. Watch out for such signals, slow down and be prepared to stop. You MUST follow any directions given by police officers or traffic officers as to whether you can safely pass the incident or blockage.

Try to be patient - if the road is closed, it is done for safety or to gather evidence. It may seem that not much is happening, but the emergency services want the road opened and moving as much as you do.

They do have better things to do! But none as important as the incident they are dealing with at the moment.

Doctors and some of the volunteer ambulance services may have vehicles fitted with warning equipment but not have any exemption from road traffic legislation. Be sensible if you see them trying to get somewhere quickly help if you are able to do so.





### The Legal Bit.

The Road Traffic Regulation Act 1984 and The Traffic Signs Regulations and General Directions 2002 exempt emergency vehicles from:

- 1) observing speed limits
- 2) observing keep left/right signs
- 3) complying with traffic lights (including pedestrian controlled crossings).

These exemptions are subject to further guidelines during the emergency response driver's training.



# Inclement Weather

This handout offers advice for driving during inclement weather. With each season comes a range of conditions all of which need to be managed safely.

### The weather conditions discussed in this handout are:

Rain

Snow and Ice

Bright Sunlight

· High Winds

Fog

### Rain

The Highway Code gives advice in relation to doubling potential stopping distances when driving on a wet road, but there is so much more to consider when driving in wet conditions.

Ensure your windscreen and wipers are in good condition and the washer system works correctly. Know how to operate them. Be able to set the ventilation system to demist, as the rain is likely to cause misting on the inside of the windows.

Consider if you are struggling to see other drivers that they may struggle to see you. Consider dipped headlamps (not fog lamps as they dazzle).

Standing water may affect steering, a puddle may pull the wheel towards the verge or centre of the road. Apply a firm grip to prevent unwanted steering.

Deep water may cause "aquaplaning" this is where the tyre treads are unable to clear sufficient water and a wedge of water forms and preventing the tyre from gripping the road this feels like driving on ice and steering and braking capabilities are lost.

Take your foot off the accelerator and retain a light grip on the steering wheel, do not brake or attempt to steer as any input is likely to be excessive when the grip returns. The grip will return within a short time: do not overreact

If possible avoid standing water.

### Consider

### What is in it?

Does it have potentially damaging pot holes that are now concealed?

### How deep is it?

Will it flood the air intake of the vehicle? If so don't drive into it as the engine may "hydro-lock" causing major damage.

If you must go through it and it is not too deep keep engine revs high but speed slow.

When you reach the other side dry the brakes by applying them in a safe area.

### Snow and Ice



Highway Code advice for stopping distances in the snow and ice is they need to be increased by up to 10 times.

On packed snow and ice tyres have virtually no grip available, which has a serious effect

on vehicle stability programmes, almost negating them. Whilst it is possible to get a vehicle moving reasonably effectively, stopping it or changing direction can be much more difficult.

Gentle acceleration in the highest possible gear will assist in moving away. Slowing down is best achieved using the gears. A common problem in snow and ice is driving at a generic speed which is perceived to be "safe". At times it may be that 40mph is acceptable but at other times 15mph may be far too fast.

Where you need to be able to change direction or perhaps to stop, reduce speed gradually. Be aware that the car may skid. ABS systems are designed to allow the wheel to lock at very low speeds (otherwise they would never stop) severely reduced grip may mean the vehicle slides forward at a slow speed.

Coarse steering may induce a skid. Be smooth and progressive with steering in order not to break grip. If you steer do it gently until you are back to the course you wish the car to follow

Understand that packed snow may adhere to the wheel arches and affect steering.

Make sure you carry extra clothing/blankets in the vehicle to stay warm in the event of being stranded.

Be aware some small roads are not always treated ice. If there is evidence of road salt on major routes, or the temperature is low, take extra care. In extreme conditions stay on the major routes if possible.

Understand where a micro climate is likely to occur, ice may form in isolation in low lying areas under trees or on bridges and will remain for longer in shaded areas.



# **Bright Sunlight**

Bright sunlight may affect your vision. If it does you must slow down. In winter the sun is lower and may affect you even more.

If you decide to wear sun glasses be aware they will reduce your vision out of tinted windows. Take extra care when emerging from junctions and if in any doubt don't move. Be ready to remove the glasses if you drive into a tunnel or shaded area.

Know how to use the sun visor to hest effect.

# **High Winds**

Be aware that wind will affect vehicles in different ways. High sided vehicles will be more susceptible to wind and speeds must be reduced.

When passing a high sided vehicle be aware the wind affecting you will change, and give them as much space as possible. If you see them being affected don't pass.

Be especially careful if crossing exposed bridges.

## Fog

Fog and mist cause some of the most dangerous and difficult driving conditions.

Use dipped beam; many modern car instrument panels light up even when the headlights are turned off so check the control to be sure. Use your fog lights when the visibility drops below 100m. Don't forget that when the fog clears, you will need to turn the fog lights off again as soon as possible, otherwise you may dazzle other road users. Remember in patchy fog, you may need to turn your fog lights off in the clearer patches, and on again when the fog gets thicker.

Avoid using full beam, even when there's nobody else around, because the fog will reflect the light back at you, and that has the effect of reducing, rather than improving, your vision.

A sensible technique when it's foggy is to turn the radio off and open your windows at junctions – that way, you can listen for oncoming cars when you can't see them.



# **Pre-Drive Checks**

This handout describes how to conduct a pre-drive check, how to go through a systematic cockpit drill and then the start up procedure to be used prior to driving off.

### Pre-Drive Checks (Weekly)

Visual examination of the exterior of the vehicle for:

- 1. Damage (dents and scratches, wheel rims etc).
- 2. Defects (wires hanging down, exhaust loose, plastic under trays not secure).
- 3. Leaks (fluids under the vehicle, what are they, you may not want to touch them). If the vehicle has been started be aware the air conditioning unit will release water. Can you see the brake calipers; is there fluid on them?

### Tyres

- 1. Condition (no cuts or bulges).
- Tread (1.6 mm across the central ¾ around the whole circumference is legal. More tread is safer).
- Pressure (check cold if possible with an accurate gauge). The recommended pressure will be found in the manufacturer's handbook and also on the bodywork somewhere.

### Under bonnet checks

- How does the bonnet open (Key, one pull latch, two pull latch; where is the secondary release?)
- 2. Oil (does the oil require a physical check using the dipstick or is it checked via a computer?
- Engine coolant (visual inspection of the header tank, if it is below the level required add the correct mixed coolant). Modern cooling systems contain a

- chemical mix which is more efficient than water alone and has corrosion inhibiting properties. If it has lost fluid why? This may be a problem.
- 4. Brake fluid (a physical check of the reservoir will show the level). If the level is low why? Could it be the brake pads are close to the wear limit, or do you have a leak?
- Clutch fluid (physical check of fluid as above).
- Screen wash (Keep level topped up with suitable mix to prevent freezing and assist in cleaning).
- 7. Is everything as you expect it to be, no loose items or leaks visible.

### Lights/Electrics

- Check operation of all lights, remember that some lights will require the ignition to be active. If possible get help to operate or check the lights. If this is not possible you may be able to see reflections in windows or may have to walk around. Don't forget the reversing lamps and fog lights (most modern cars will check bulbs when the ignition is activated and display a warning if a defect is found).
- 2. Check horn (be aware of not sounding it between 11.30pm and 7am).
- Wipers/washers (do not operate on a dry screen as you may damage wiper blades).

A brief examination of your car needs to be conducted every time you drive.

# How to conduct a Cockpit Drill

### A good cockpit drill needs to include:

A static brake test (firm pressure on the foot brake, release the parking brake, is the pressure maintained and is there space for travel below the pedal?).

Seat and mirror adjustment (for control, comfort and vision), seat-belts and head restraints for safety.

A description of vehicle, transmission and how to select reverse. (I am driving a Volvo V40 which has a six speed gearbox driving the front wheels, reverse is "push down away and forward").

### Controls of vehicle

Be logical and ordered but understand what you are trying to achieve, can we demist the car, can we find the hazard warning lights without taking our eyes off the road. How do we operate the fog lights, if we stop to let a passenger in where is the door lock.

Start in the centre console, particularly heating and ventilation controls, take time to understand them and how to direct the air or control the temperature. Where are the vents aiming? Minor controls (often fog lights will be controlled from here) and some window switches. Often a central locking hutton

Move across to steering column stems, these will control indicators and windscreen wipers and often headlights and rear wash wipe systems.

Again take time to understand the functions and where the manual and auto settings are and which settings are appropriate for your journey. Is the horn here?

Some operating systems for cruise control or speed limiters may be on a secondary stem.

Move to the driver's door, mirror adjustment is normally found here, understand how it works

Window switches if not already located and possibly the central locking button. If you still haven't found window switches you may have stepped back in time and have to wind the window (or really far back in time and have to slide it).

Onto the steering wheel you may have a number of functions or nothing. You can often control radios, mobile phones and navigation systems from the steering wheel, each system is different, know how yours works.



# **Startup Procedure**

- Check vehicle is in neutral or park
- Make ignition live
- Check warning lamps:
- What is on?
- What should be on?
- · What goes out?
- · What doesn't?
- Is everything as it should be?
- Are you left with the lights that should be illuminated?

Vehicle is in neutral (manual) or park (auto). Depress clutch pedal (manual) as this guards against false neutral and reduces strain on the starter motor. Most modern cars won't start without the clutch being depressed.

Firm pressure on the foot brake. When the engine starts the brake servo becoming active will be felt through the brake pedal.

Most automatics won't start without the brake pedal being depressed.

Pull down on the steering wheel with the hand not turning the key or pressing the starter button. When the engine starts, the power steering becoming active will be felt through the steering wheel.

Press start or turn key to second stage and start engine.

All warning lights should now extinguish except for the parking brake warning light.

This is actually the brake failure warning light that is checked every time you apply the parking brake (if this illuminates whilst driving, stop and have the vehicle checked).

The steering should have become light (if power steering fitted). The brake servo should have become active (if fitted)

Gauges should read as you expect.

The rev counter (if fitted) should respond to the accelerator.

The fuel gauge should show sufficient fuel for your immediate journey.

# **Moving Brake Check**

Check your brakes in a safe environment before getting into a situation where you may need them. Ideally achieve 30mph in a non-retarding gear and apply the brakes in a progressive manner. The vehicle should pull up evenly and as expected, you should now know the required pressure to slow and stop your car. If it is not possible to conduct this check due to traffic conditions or other factors, you must ensure you introduce the brakes early for a hazard until you are satisfied with their performance.





# The Test - What to Expect

The test is the culmination of your training, it is your opportunity to show how good you are and justify your observer's faith in you. A little bit of nerves can be a good thing. Stay focused and try to enjoy it. The perfect driver has not yet been discovered but how close are you?

### What to expect during the test

- The administration process
- The test

You

 At the conclusion of the test

# The administration process

Having applied for your test you will be contacted by your examiner either by telephone or email. This is to arrange a mutually convenient date, time and location for the test to take place. The location should be safe, easy to find, of no cost to either of you with facilities and easy access to a variety of roads. Supermarket car parks and fast food restaurants are often chosen. (Beware of time limited parking).

### The test

This should be about 75 minutes from start to finish with no more than 60 minutes riding or driving.

### What will be tested?

After the document disclaimer is dealt with the examiner will conduct an eyesight check. This is the same as the DVSA test or a police roadside check. You must be able to read a standard number plate at a distance of 20 metres (20.5 metres for pre 2001 number plate).

During the drive you can be tested on anything from the course material. It may not be possible to assess some areas practically so the examiner may ask questions.

You will be asked to conduct a practical real life manoeuvre or demonstrate competency during the test. Your decision making process is part of the assessment. On a motorcycle you may be asked to perform a slow riding manoeuvre if this has not been displayed during the test.

Your drive must be safe and legal. Use your speedometer to keep to the speed limits which must be adhered to at all times, there are no exemptions when making an overtake so do not plan to exceed the speed limit when deliberating.

### Your Examiner

All of the IAM RoadSmart examiners are trained advanced police drivers or experienced IAM RoadSmart drivers who have National Observer and Masters qualifications. They are all experienced in dealing with road safety matters. They will:

- Put you at ease.
- Set the scene for you and explain what they are looking for.
- Explain clearly the route directions and how they will communicate them.
- Explain test protocols such as safety and spoken thought.
- Explain that any road traffic offence is likely to lead to a fail.

- Explain about their note taking. (They write positive points as well as areas for development).
- Give advice on how mistakes will be dealt with. (You will not necessarily fail for a minor mistake).
- · Answer any questions you may have.

### You

We know that you will be nervous, we all were in the same circumstances. Your examiner will have been through the assessment process a number of times from both seats.

If you have any concerns or are unsure of anything don't be shy, ask the question, there is no such thing as a stupid question and you will get an answer to help put you at ease.

If you are suffering from any disability or mobility issues let the examiner know.

If you are dyslexic or hard of hearing let the examiner know.

All reasonable adjustments will be made to the test to make it all-inclusive. It must however be assessing a standard that is perceivably higher than the DVSA test.

You will be asked to attempt a spoken thought. To achieve a F1RST you must have tried (unless medical reasons apply) give it a try; it can help you to focus.

During the test if you don't hear or think you may have misunderstood an instruction ask. We are all human.

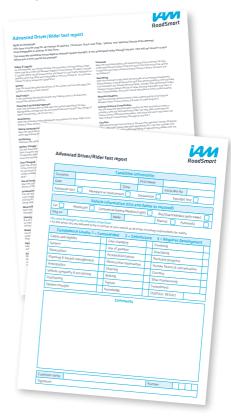
# At the conclusion of the test

You will be told your result straight away

You will be given verbal feedback followed by a written report containing the detail of your drive or ride.

If you are successful you will be given an interim pass certificate. You will also be given advice on other options within IAM RoadSmart that you may choose to further develop your skills such as Local or National observer, the F1RST register, the Masters program, or regionally run skills days.

If you are unsuccessful your areas to develop will be highlighted and this reinforced by the written report. If you don't understand what is being said, ask; the examiner wants you to develop and be successful.



# RoadSmart

# **The Thinking Driver**

# The thinking driver – A pause for thought An article by Peter Rodger.

This is about every one of us – I hope. Some thoughts to prompt your own thinking...

In recent years, at the annual IAM Groups' Conference in October there has been a session on test standards queries. These sessions have involved much discussion about specific driving or riding issues – some of them very specific indeed.

In many cases, the questions being raised seem to be seeking – as is so often the case for driving or riding related questions – a form of "rule" that can always be applied.

As examples, issues around crossing or straddling double white line systems, speeding, and being on the right hand side of the road in, or approaching, bends were in discussion.

The impression I gained was that a decision on whether it was always right, or never right, in a test scenario was what was being sought. I can understand that observers helping people prepare for the test seek some form of guidance about these things. I can understand that they want to know they are "giving the right advice" and not all giving differing messages to those preparing to take the test.

Let me work through an example to try and help understand how to deal with this in an everyday way. If you are not an observer – please read on, this is for you as well. It's actually about how we all behave on the road.

Imagine driving or riding along an unfamiliar country road towards a left hand bend, with a high hedgerow on both sides, a comfortable road width for two lorries to pass each other.

Please picture the road as a lengthy virtually straight stretch, which allows you to travel at the national speed limit. You cannot gain any effective observation to the left, the direction the road bends, because there is a banking, topped by trees, and that thick, high hedge.

The centre line is a hazard warning line as you approach the bend, and there are oncoming vehicles restraining you from positioning near the white line, so as you approach the bend you are positioned a bit to the left of that.

It is a bright sunny, early summer – let's say early June – day, and the foliage is thick and not yet cut back from all its energetic spring growth. You lose some speed – probably down to about 40 mph - turn into the bend, and see the road straightens again with some houses on either side a hundred yards or so away.

As you straighten up, and start to accelerate back up towards the speed limit, a 30 mph speed limit sign buried in the depths of the foliage on your left becomes visible, giving you just enough space to brake to that speed, if you brake very firmly indeed (at the level of an emergency stop).

### The questions are:

Do you brake very firmly and reach the speed by the time you get to the sign, or a bit less firmly and run the braking though into the 30 zone by perhaps twenty yards?

There is a decision to be made here – if you do not brake and meet the speed restriction by the time you get to it, you are breaking the speed limit – that's simple, it is a black and white law.

Now if I, as the Chief Examiner, were to give a black and white ruling about "what is allowed in the test", the only one I could give which would satisfy the black and white constraints of the criminal law is to brake very firmly and conform with the law. The test form has a box for marking whether the drive or ride was legal or not, and doing more than 30 in the 30 zone would clearly be illegal.

But things are not really like that. Let me pick up on just one thing I did not mention in the description of the approach:

What is in your mirror/over your shoulder? Do you have a car following you at a one car length distance, being "pushy"? Is the mirror clear?

Let me alter things a little in a different way. Instead of being a nice sunny June day, let's make it a proper English summer's day – so pouring with rain, and with a road surface that's highly polished, and oily looking. Would that affect your decision in the real world, on an everyday journey?



I hope that thinking about these differing circumstances which arise in exactly the same place is prompting some alteration to the idea that there is an "I would always..." answer.

Where this takes us is where driving and riding become interesting – this is the bit where the person sitting at the controls of the vehicle – be it a lorry, motorcycle, car or bus – has to look at the circumstances they are dealing with, apply some interpretation, and reach a decision.

A decision which might be different if the circumstances were different. So does a "that's simple, it's a black and white rule" statement stand up to the rigour of real life?

I don't think it does. Now I happen to hold the view that if you were prosecuted for breaking the speed limit in that first few yards, someone involved in making that happen needs to be taken to one side and be given some advice about what proper enforcement is about. However – when I am pressed for black and white rules about what is allowed in the IAM RoadSmart test, I find that these kind of issues are there all the time

The advanced driving or riding test is performed in the real world among real people going about real journeys – just the same as the "L" test is. Like all those other people making their journeys, the person taking the test has to deal with real circumstances, and – whilst my example above is a deliberate construction designed to produce a theoretical dilemma – they will sometimes face real decisions, in which conforming with "Always do..." or "Never do..." produce results which are obviously not the best outcome – or may even conflict with another "always do/never do.." rule.

So the response to the question becomes " It depends..."

I get asked to define "It depends".

Allow me to let you into the secret of that definition. After seventeen years of dealing with life, death, injury, honesty and deviousness in operational policing of things

happening on the road, twelve years of dealing with driver and rider training in the police service, conducting driving and riding tests throughout it; training and qualifying as a driving instructor, and a driving examiner; acting as a volunteer examiner for an advanced driving organisation for just under twenty years; and a further period of nearly ten years here as Chief Examiner at IAM RoadSmart – I have yet to see a definition of that which is clear or concise or answers queries in a black and white way.

Therefore – advanced driving and riding is not about being black and white, and having things laid out in simple rules. It is about being mature, sensible, and applying principles to the circumstances. It is about being "the thinking driver" or "the thinking rider". Actually, "ordinary" driving and riding are like this – let alone advanced driving and riding.

Without the flexibility to meet



circumstances and deal with real life head on, safely and sensibly, advanced driving or riding would be valueless and not worthy of your time, or mine. When you first become a parent, you control the life of your newborn child. As the baby becomes a toddler, you allow it a little more freedom, but you decide when it goes to bed, and you put it there.

Then as the child grows, that bedtime tends to become a bit later... and later... and later, as the years go by. When your child has grown up and left school and is at work or college, you no longer tell it what time to go to bed – but you might remind him or her "Don't forget you have to go to work in the morning".

Driving is similar – as we first start our instructor needs to give us close attention and help, with easy to understand ideas and "rules". But as we mature, we need to be allowed more room to think and make decisions... to use our experience and understanding.



Of course, there are principles we should abide by – be safe, be systematic, be legal and be smooth. There are others, but let's hold it there, as those are enough for now. Sometimes they can conflict with one another, and the one that must always come out on top is safety.

I was intrigued by an enquiry I received in the office recently from a driver who was having a problem at a roundabout. He explained it all, and when I read it the position was clear – he said that he did not want to "do what is wrong" according to how he read the Highway Code, but this meant he was in conflict with other traffic, with potential danger arising.

Ignoring the complexities of roundabouts, the principle is clear – it is better to be wrong but safe, rather than right but dangerous. (Please don't write in about dangerous driving always being wrong – I'm trying to make a point here about prioritising).

So - be a "thinking driver" or a "thinking rider". If you are an observer, doing that

brilliant thing that so many of you do so inspirationally well around the UK of helping people develop – help them become "thinking".

If you are an examiner doing that thing you do so well – look for the "thinking" solution. We all need to give each other enough space to allow for the thinking to happen, allowing people to grow and develop, and to value the maturity and flexibility that brings.

Examiners need to give candidates room to adopt the "thinking" solution, observers need to help the thinking to develop, and we all need to think when we drive and ride.

The advanced test should really just be a drive or a ride like any other – safe, systematic, smooth, legal, and thought through. A demonstration of the thinking driver or rider making a journey and doing it well

I cannot advise you to break speed limits, or enter bus lanes and cycle lanes you shouldn't be in, or lots of other things. However I can advise you to think as you drive or ride. Be a thinking driver or rider, (and decide your own bedtime as well!).

This article was written by Peter Rodger and appeared in the Advanced Driving (Summer 2014) magazine.



# **Vulnerable Road Users**

This handout offers advice for sharing the road with vulnerable road users. The roads are there for everyone to use and as advanced drivers and riders we have a duty to make sure we share them safely.

A vulnerable road user is someone who has very little or no protection around them. There are many types including:

- Pedestrians
- Motorcyclists
- Horses

Cyclists

Mobility scooter users

## **Pedestrians**

Pedestrians are made up of different types of people e.g. young, elderly, blind, deaf, people with limited mobility, all of whom share the road with us and do not have the protection of being in a vehicle with modern safety features. Pavements are usually the safest place for pedestrians to be, however, they need to be able to cross the road safely. Where there is no pavement for them to use they may be in the road. Not everyone on the pavement will be walking: people use roller blades, skateboards and scooters, you may need to adjust your driving to share the road safely with them.

Most of us will walk at some time; treat pedestrians the way you would want to be treated, keep them safe.

 Give them the time and space they need to use the road, especially those who have restricted mobility.

Children can be hard to see, moving quickly and doing the unexpected. Anticipate this and plan for it.

 Be patient when directed to stop by a school crossing patrol or when stopping at pedestrian crossings. Think about where you park your vehicle.

- Is it obstructing a dropped kerb?
- Does it obscure or restrict the view of a vulnerable road user?

Never wave a pedestrian across the road, you could be inviting them into danger.

## **Cyclists**

Cyclists share our roads and are therefore vulnerable to other traffic, especially at roundabouts and junctions. In heavy traffic cyclists may filter on either side, so you have to ensure you check your mirrors and blind spots before changing position or speed.

Cyclists may wobble because they are easily affected by side winds, which can also be generated when being overtaken. They may adjust their road positioning unexpectedly



to avoid drains and uneven road surfaces; anticipate this and prepare to adjust your driving.

### You can help keep cyclists safe by:

- Allowing plenty of room when passing, be patient and plan to overtake only when it is safe to do so.
- Not following too closely as this may be intimidating.
- Respect cycle lanes and advance stop lines, give cyclists time to move off safely as they may not move away as fast as you.

# **Motorcyclists**

There have been a number of campaigns highlighting the vulnerability of motorcyclists and yet there are still high numbers being injured every day on our roads.

### Motorcyclists are:

- Harder to see, especially at junctions; they may be in a blind spot created by the 'A' pillar.
- Often travelling faster than you perceive or may be filtering either side of you.
- More affected by side winds when being overtaken or when in open areas.

Where is a motorcycle likely to be, in your mirrors or in your blind spot?

Take extra care when at junctions. Motorcycles are harder to see as they have a different profile to a car or van. A motorcycle's headlamp may be confused with that of a car behind it, and high visibility clothing can sometimes blend into the background.

Motorcyclists may avoid riding over drain covers and paint on the road as these can cause stability problems especially in the wet.

A wet road surface may also cause them to alter their positioning on bends and roundabouts; be prepared to allow them extra space.

# **Mobility Scooters**

Mobility scooters are becoming more prevalent. There are 2 main types:

- Class 2 which are designed to be used on pavements and footpaths and have a top speed of 4 miles per hour.
- Class 3 which may be used on the roads and have a top speed of 8 miles per hour.

These vehicles are electric, almost silent and therefore difficult to hear. Their slow speed means traffic may catch them up very quickly. Both types of mobility scooters may use the road at junctions and at some roundabouts; this is where they are most vulnerable. Remember, the users of these types of transport may have restricted movement, vision or hearing. As an advanced driver/rider you need to allow these road users plenty of space and time.

### **Horses**

Horses are normally found being ridden in the rural areas, but may be encountered in towns. Although they prefer to ride on bridleways and other off-road places, sometimes the riders have to use the roads.

Horses can be very unpredictable and scare easily. When you see a horse and rider, slow right down, give them plenty of room, turn the radio down and keep the engine revs low, be as quiet as possible; the highest useable gear will help. Only pass when you can give them plenty of space.

Sometimes you may find horses riding double file, this may be because of a young or novice rider, or a nervous horse. Give them plenty of space and be patient.



# Documents Declaration

### How to use this form

This form replaces physical checks of your driving licence, MOT and insurance documentation and should be signed and handed in prior to your drive or ride with IAM RoadSmart.

If you do NOT hold all of the required valid documentation listed then you should not sign the form and will not be able to drive or ride with IAM RoadSmart.

If you have any questions then please speak to your local IAM RoadSmart group or call Customer Care on 0300 303 1134.

Name	
Membership number	
Date	

### IAM RoadSmart documents declaration

I confirm that I am the holder of a valid current driving licence and that I have appropriate insurance for any vehicles used for IAM RoadSmart courses, either personally or via my employer, and that those vehicles, if appropriate, have valid MOT and tax. I also confirm that these will be in place throughout the duration of my IAM RoadSmart course.

I confirm that I am fit to drive or ride and not under the influence of any drug (including prescribed medication that may adversely affect my fitness to drive/ride). I will wear corrective eyewear while driving or riding if my eyesight requires it.

I am aware that I am responsible for all driving or riding decisions and I will make my Observer/ Examiner or Trainer aware if I become distracted. I agree that any advice/direction given will require my diligence to be applied safely. If I have any doubt I will ask for clarification before following the advice/direction.

Signature	
3	