2

IPSGA

Information, Position, Speed, Gear and Acceleration –
This is 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'.

IPSGA runs like a spine through the entire Advanced Driving Course. It promotes careful Observation, sensible Anticipation and accurate Planning (OAP). Your 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. Combined with accurate use of the controls and good communication with other road users, this is the mark of an advanced driver.

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Competency sheet
IPSGA and timing of IPSGA

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

	Progress
Apply IPSGA appropriately	
Time IPSGA correctly	

Achieved all competencies **Date**

2a 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

INFORMATION

I — Information
Gather and process relevant information in order to make accurate decisions about driving. Communication is also important, as clearly conveying intentions allows for road space to be shared more effectively with other users

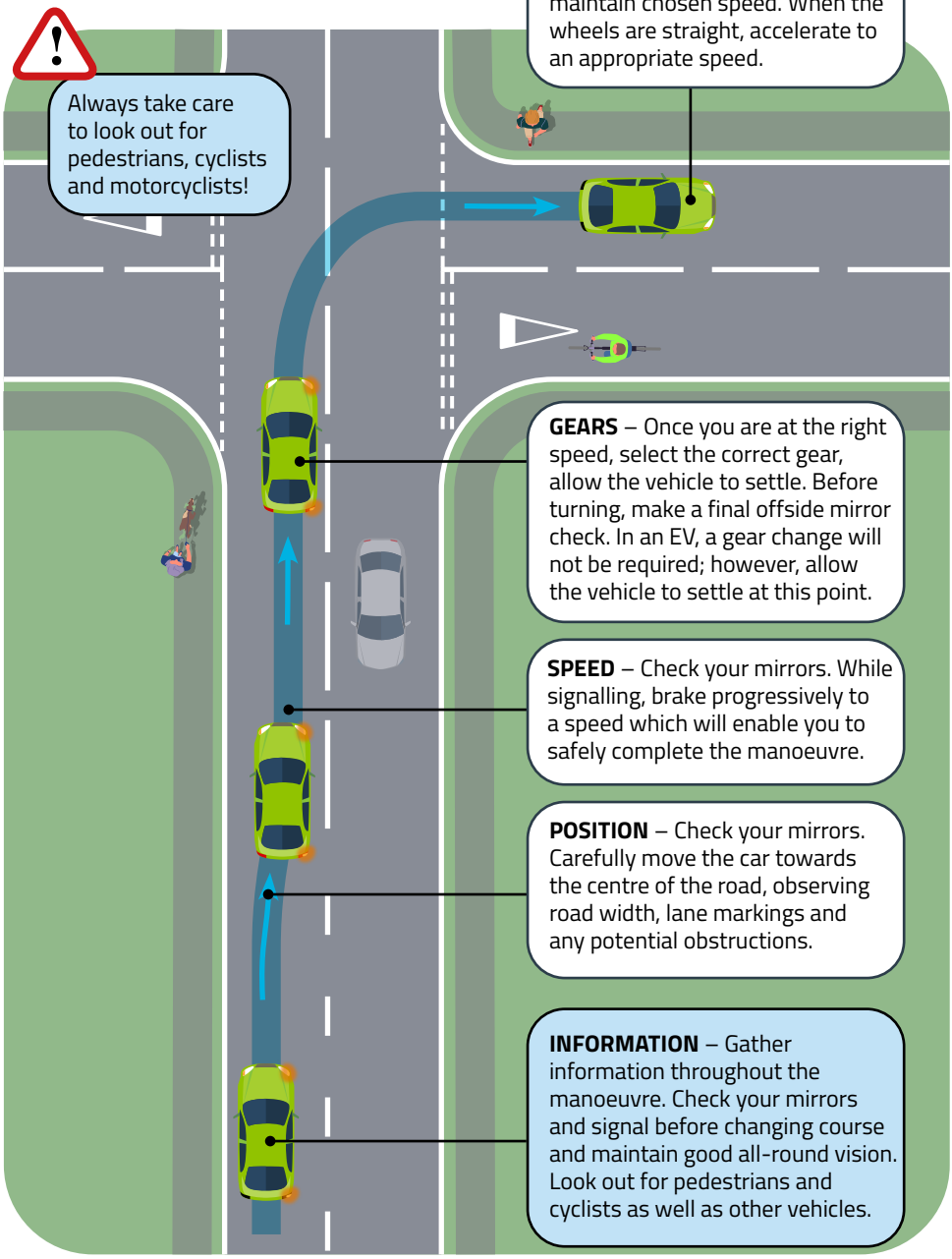
P — Position
Position vehicle appropriately in all traffic situations

S — Speed
Travel at the appropriate speed in all traffic situations

G — Gear
Select the appropriate gear for the chosen speed in all traffic situations. If driving an EV or an automatic, no gear is required, but allow the vehicle to settle

A — Acceleration
Apply the appropriate degree of acceleration to leave any hazard safely

2b Using IPSGA on a right-hand turn



2c Information

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

Take information

As an advanced driver, you should:

Look all around, scanning to the front and sides of your vehicle

– Remember: the further you project your vision, the more information you will gather

Consistently use your mirrors and check into potential blind spots

– Use your mirrors throughout the IPSGA stages. Check for any 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
– 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
– A siren will signal the presence of an emergency vehicle

Use information

As an advanced driver, you should:

Use the information gathered to plan how to deal with identified hazards

Prioritise hazards to stay safe

– Consider which hazard is closest and which presents the greatest risk. Deal with the most important first

Use observation links to anticipate how your driving may be affected

– By identifying seemingly normal items such as bins at the roadside or a church steeple in the distance you can adjust your driving plan for possible problems

For example:
– The bins are out = I am expecting to see the collection lorry = I am planning to deal with that
– Church steeple in view = I am approaching a village = I should limit my speed

Give information

As an advanced driver, you should:

Reinforce the information given by your vehicle's position and speed with accurate signalling

– If any other road user may benefit from a signal, give it 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

– 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

– Remember: 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 your level of awareness

– Consider showing 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 your intentions

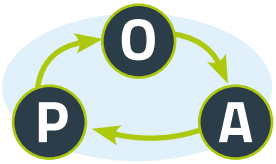
– Make eye contact to give information, and this is also a good way to TAKE information

Use other communication methods, such as sounding your horn or flashing your lights, only when it's appropriate to let other drivers know you are there

Observe, Anticipate and Plan (OAP)

As you drive, you should continuously observe what is happening around you, noticing any potential hazards. As you anticipate a hazard, you should then plan what you will do. By anticipating what could happen, you gain more time to act and respond safely

For example: a child on the pavement might step out. What will you do?



2d Position

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

As an advanced driver, you should:

Always consider safety first

– Do not relinquish safety for any other perceived advantage
– Position your vehicle to see and be seen

Be aware of potential hazards on both sides of your vehicle

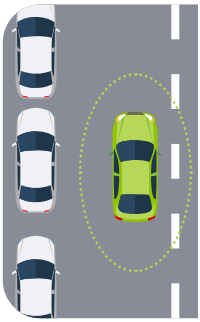
– Be aware of hazards to the nearside – cyclists, pedestrians, parked vehicles and their occupants are all examples of who and what might present a hazard, as are other drivers pulling out of junctions
– Be aware of hazards to the offside – there is potential conflict with oncoming traffic

Assess your speed when moving to the nearside or the offside

For example: when it is not possible to allow a door-width of room when passing a parked car, you should slow down so you have time to react if a door were to open

Be particularly aware of cyclists and motorcyclists when adopting your 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 shape of the 'bubble' needs to be varied to prioritise hazards

Position yourself at least two seconds behind any vehicle you are following

- Remember: this allows enough time to respond if the vehicle ahead slows down. It gives you better vision beyond it, and enables you to develop an overtake, if appropriate

Take up the appropriate position for turning, depending on the size of your vehicle, the road width and layout, and other traffic

- To turn left – position yourself in the centre of the left-hand lane on the approach to a junction when turning from major to minor. When at a T-junction stay to the left of the junction (following the contour) to avoid other traffic moving down your nearside.
- To turn right – position yourself towards the centre of the road, paying particular attention to oncoming traffic. If in any doubt, you should stay away from the centre white line. At a T-junction, be mindful of traffic turning in.
- When stopping behind other traffic – you should use the 'tyres on tarmac' guide.

Stop far enough back so you can move around the vehicle in front without reversing

- As a guide, this is the point where you can see the wheels of the vehicle in front meet the road (hence 'tyres on tarmac'). This will also prove safer if you 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 book

2e 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

As an advanced driver, you 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 demands a slower speed for safe entry to a bend than is normally required

Similarly, if there are vulnerable road users close to a hazard, you may need to further reduce your speed

Be aware that 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

Understand how regenerative braking works when driving an EV or hybrid

2f Gears

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

As an advanced driver, you should:

Develop sound knowledge of the performance of your vehicle in each gear

- Use your knowledge 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 you are driving now, while taking account of what may be required in the immediate future

- Select a gear with sufficient flexibility to allow for speeding up and slowing down
- Consider other factors, such as fuel economy, vehicle sympathy (not over-revving or allowing the engine to labour) and the amount of acceleration required

Conduct gear changes in a smooth, steady manner

- In a manual vehicle, be capable of changing to your chosen gear without using an intermediate gear. This is termed 'block changing'. The vehicle will settle at this point
- Operate an automatic gearbox appropriately
- In an EV a gear change will not be required; however, allow the vehicle to settle at this point

When required, match engine revolutions to road speed

Know when to select neutral if stationary for a period of time

2g Acceleration

For the purpose of IPSGA, acceleration is mainly concerned with your ability to leave any hazard safely

As an advanced driver, you should:

Assess a number of factors when deciding on the correct amount of acceleration you need to apply

- Remember: 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 is not about making maximum progress; it is about making the level of progress required for the particular journey safely in the given conditions

- Remember: The correct timing of IPSGA is paramount in achieving a safe, smooth drive