



RSA

Graduated Driver Licence Recommendations

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Údarás Um Shábháilteacht Ar Bhóithre
Road Safety Authority

Graduated Driver Licence- Recommendations

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The Introduction of Graduated Driver Licence Measures in Ireland

Section 1 Driver Licensing in Ireland

1.1 Introduction

Driver licensing rules have evolved in Ireland over a period of time; a critical factor was the 1961 Road Traffic Act which laid the foundation for the present driver licensing system. Before the introduction of the Act it was possible to buy a driving licence and the first driving test was held in March 1964. The introduction of a driver theory test, changes to drink driving laws, the introduction of penalty points and the introduction of the learner permit system are among the most important changes that have been put in place in the intervening years.

There are presently 2.65m licence holders in Ireland; the greatest number of licence holders hold car licences-presently 2.34m full licences and 0.24m learner permit holders. At age 16 it is possible to take out a learner permit for a moped, a car learner permit can be taken out at age 17. Before 2001, the route to a full licence was to take out a provisional licence, be accompanied, (save during the second provisional licence) take a driving test and apply for a full driving licence.

1.2 Evolution of the Irish Driver Licensing System

Significant changes to the driver licensing system have been taking place over the last twenty years. In 1991 an EU Directive introduced common licensing arrangements to EU Member States. The EU Directive allowed for the mutual recognition of Member State's licences.

In April 2001 a driver theory test was introduced, the test is taken before a learner permit for the licence category is issued and the person starts to drive. The purpose of the test is to ensure that learner drivers had information about a range of factors that impact on driving safely such as road signs, driving in poor weather conditions, vulnerable road users, anticipating hazards etc. The test was substantially revised in 2006 with extra questions added and a separate test for motorcycle users, in addition to the car, truck and bus tests that already existed. The current pass rate for the test is 70% which suggests that a significant group of potential drivers do not have an adequate grasp of issues relating to driving and road safety.

In October 2007 several changes were introduced the most important of which were-

- Learner permits replaced provisional licences,
- First time (car and motorcycle) permit holders could not take a test until they had six months supervised driving / learning experience,
- Regulations allowing second provisional licence holders to drive unaccompanied were removed from June 2008,
- The accompanied driver for a learner permit holder had to hold a full licence for at least two years, and
- Motorcycle learner permit holders had to wear an L tabard while driving.

In 1994 the law relating to drinking and driving was changed and the maximum allowed blood alcohol concentration was reduced from 100mg/100ml to 80mg/100ml. In 2006 mandatory alcohol testing was introduced and this is credited with playing a part in the ongoing reduction in death and injuries on our roads during the last number of years. The Road Traffic Bill 2009 proposes to lower this to 50mg/100ml for experienced drivers to 20mg/100ml for learner and novice drivers (drivers within the first two years of holding a full licence) and this brings us into line with most EU Member States.

In October 2002 the penalty points system was introduced, initially for speeding and has been gradually increased to cover 41 offences. An accumulation of 12 points within a three year period results in a 6 month driving disqualification. 176 drivers have been given driving disqualification and a total of 670,000 licence holders have had points endorsed on licences since the introduction of the system.

1.3 Next Steps

Despite a huge increase in car ownership and miles travelled, a combination of safer cars, better roads, increased education / awareness, improved enforcement of the law and the driver licensing system have combined to bring about a reduction in the number of death and injuries on our roads in recent years. Ireland is currently the 6th best performing EU state in terms of road deaths per million population. The objective of the Road Safety Strategy 2007-12 is to place Ireland among the best practice EU countries by 2012. The Strategy has a commitment (action 74) on the introduction a graduated driver licence system in Ireland.

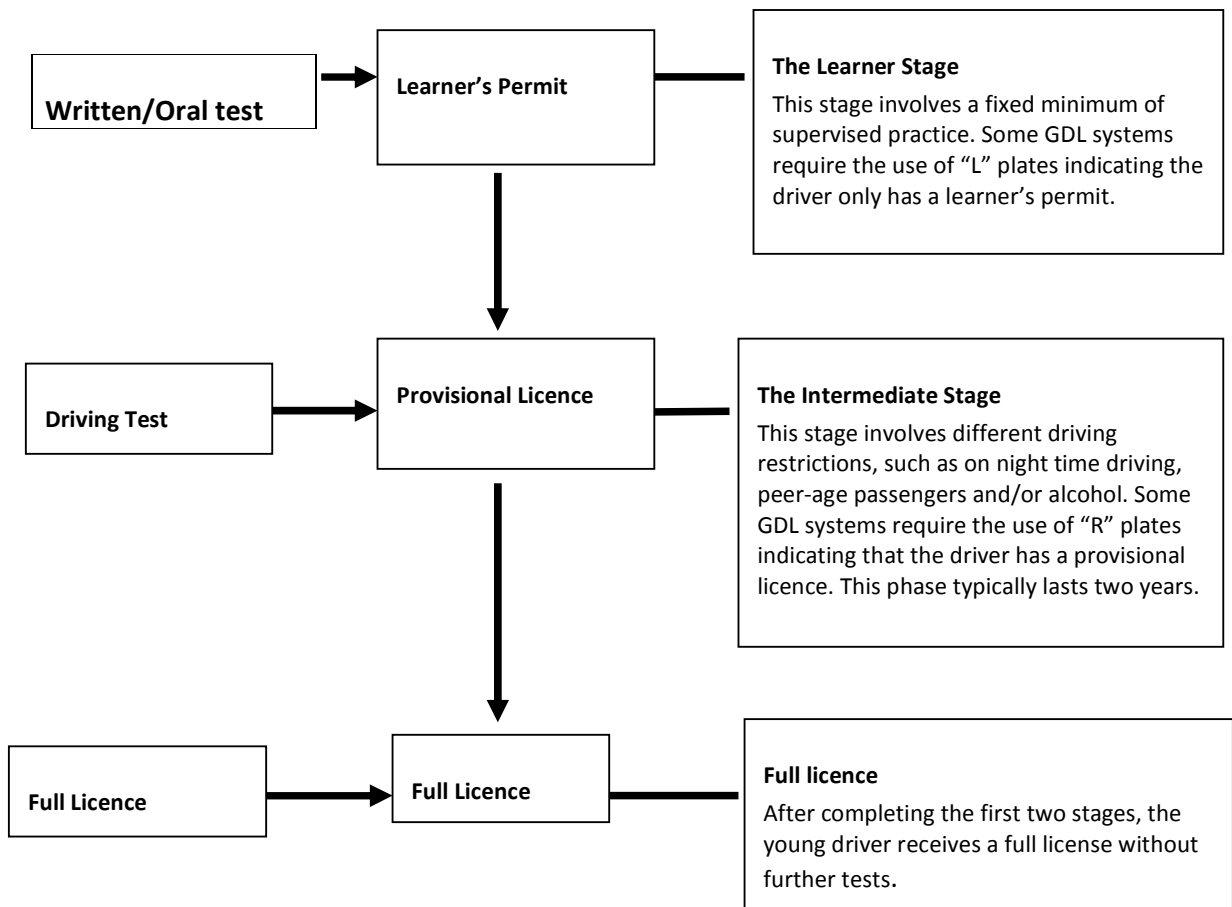
This paper is about exploring the contribution changes to the licensing system affecting learner and novice drivers can make to reduce the number and severity of collisions on Irish roads. It is known that drivers in the age range 17-24 are the most vulnerable road users as they balance learning to drive safely with managing the many risks they encounter during this phase. Driver inexperience is a critical factor in collision risk.

Section 2 Rationale for Graduated Driver Licence System

2.1 What is a Graduated Driver Licence?

A Graduated Driver Licence (GDL) is an approach to learning to drive that allows a learner to pass through a number of stages with a range of driver restrictions applied at each stage. This allows the learner greater exposure to risks as his/her ability improves. While there is no definitive GDL system all effective systems will exhibit certain critical features moving through the various stages governed by restrictions. Typically, a person would pass through an initial, intermediate and final stage as illustrated in Figure 1 below.

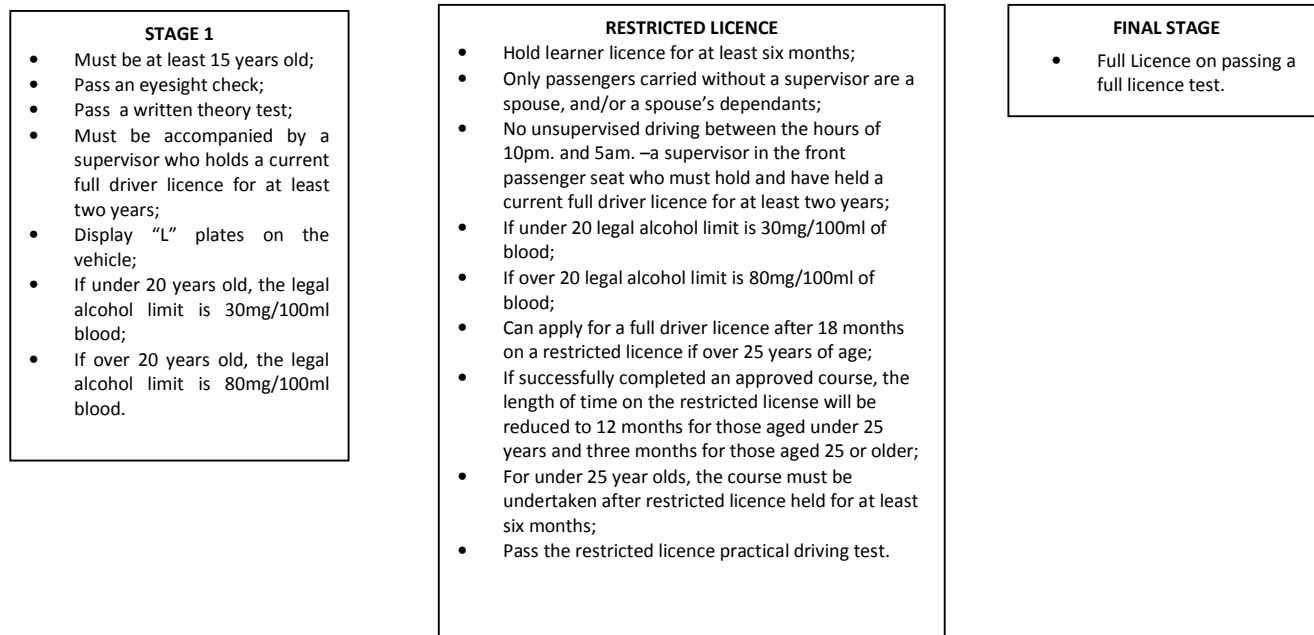
Figure 1 Stages of a Graduated Driver Licence System



Source *Young Drivers – The Road to Safety*
OECD/ECMT 2006

The GDL system in place in New Zealand is considered to be a model scheme and has certain key elements that are considered important in the way learners learn to driver. Figure 2 below describes the system in place in New Zealand, the New Zealand system allows a person aged 15 to take out a learner permit and start driving practice.

Figure 2 Aspects of New Zealand Graduated Driver Licence Scheme.



2.2 Benefits of Graduated Driver Licence Scheme

One of the shortcomings of the Irish driver licence system is that the learner driver phase concentrates to a great extent on preparing the learner to take and pass a driving test. This is borne out by the report- Enhancing Driver Education, Training and Testing in Ireland prepared by Competence Assured Solutions (CAS) on behalf of the RSA about driver education and training in Ireland; see Appendices C and D. Observations by Gardai, Road Safety Officers and Driver Testers were to the effect that *too many ADIs were only teaching learner drivers the practical test routes* - CAS Report Vol. 2 p.16 (See Appendix D). However, it is most probable that this approach is in response to the needs and demands of the learner whose primary objective is to pass the driving test.

It is important to establish what should be the objective of the licensing system for learner drivers. The OECD/ECMT 2006 report- Young Drivers: The Road to Safety concludes that-

The fundamental goal of pre-licence training and the licensing process should be to create drivers who are safe, and not just technically competent, by the time they are permitted to drive unsupervised. This will involve instilling novices with an appropriate cognitive skill level and safety-oriented motives. The primary goal of training should not be to help novices pass their driving tests (p.105).

- *Increase focus in pre-licence training on risk awareness factors and self-evaluation, including on personal motives and the context in which driving is performed.*

- *Research the benefits of using the GDE Matrix¹ as a basis for developing driver training objectives and testing.*

It is clear therefore that working to pass a driving test is not a sufficient condition to become a capable confident driver. Given that limitation, how can arrangements be put in place that will best enable learner and novice drivers to become safe drivers. For the purpose of this paper learner drivers are those on a learner permit while novice drivers are those driving within the period within two years of taking out a full licence. The research tells us that while learner drivers are accompanied they are relatively safe, the risk increases when a novice driver starts to drive solo. Attitudes and skills taken on board during the learner phase are critical to mitigate the risk during solo driving. The challenge is to devise a driver training and learning system that complements the driving test by ensuring that when a learner takes a full licence s/he has attained the critical skills and competencies that a driver needs.

2.3 Effectiveness of Graduated Driver Licence Systems

One of the difficulties in looking at the effectiveness of GDL systems is that the components of systems can vary across different states, with a number of different versions in some countries eg. Australia. The OECD ECMT 2006 report offers the following view-

Most evaluations of GDL conducted to date have reported significant reductions in crashes and fatalities, albeit with great variation (for an overview see Senserrick and Whelan 2003;). Some studies have reported a reduction in crash rates of 4%, whereas others have reported reductions as large as 60%. Simpson (2003) notes that these variations partly reflect the evaluation methods used and differences among drivers studied, such as age differences. Other factors that could impact on the safety benefits of GDL are the previous licensing system and the number of GDL elements implemented. Results from New Zealand (Gegg and Stephenson, 2003,) show that safety benefits of GDL last beyond the GDL period and into the period of full licensure (p.124).

2.4 Conclusion

We have seen that the existing learner driver training is directed at passing a test; this in itself is a limitation since the test does not and cannot examine all necessary driving competencies eg. night-time driving. Graduated driver licence systems have been shown to be effective in transferring necessary skills to learner drivers. Various GDL systems throughout the world have different aspects and phases but best practice ones have a number of critical elements. In the next sections we look at how we can introduce some of these elements into the Irish licensing system to improve road safety.

¹ The GDE Matrix was developed on foot of an EU project which looked at the various phases of learning to drive. It stresses the need for learners to be aware of their own personal motivation as well as reflecting on their role as a driver while interacting with other road users and having the necessary technical ability to drive a vehicle.

Section 3 Proposal for a Graduated Driver Licence System

3.1 Introduction

Currently in Ireland the learning to drive process starts with a theory test following which the learner gets a learner permit and at the end of six months can sit the driving test for a full licence. At present the learner driver can take the driving test without any formal compulsory tuition or training. In any event the learner is not obliged to take formal tuition nor do a minimum number of hours practice with a supervising driver. The measures described in this section are designed to enrich the learning process and to manage risk taking for learner and novice car drivers; it is proposed that the measures be applied to those taking out a learner permit for a car after a particular date. Primary legislation will be needed to introduce these measures.

3.2 Strengthen the Role of Accompanying Driver

Anecdotal evidence would suggest that learners often drive unaccompanied; it is also the case that the role of supervising driver is not clearly defined, nor is there adequate support materials to help the supervising driver play a meaningful role in the learning process.

Ironically, accompanied driving is considered to be among the most effective ways of learning to drive. The OECD/ECMT, 2006; report states-

Evidence discussed below indicates that post-licensing driving risks would be greatly reduced if all learner drivers were to acquire much higher levels of pre-licensing driving experience, making informal training one of the most potentially effective countermeasures (p.107).

Significantly enhancing the role of accompanied driving in an Irish context is not without difficulty given the current perception (on the part of learner drivers) that it does not have an important role in the learning/training process. As a first step the supervisor must understand the importance of the role s/he can play in the learning process. To make this a reality an information campaign must be put in place to explain to supervisors how they can influence the learner, including a guidance manual and logbook for the use by the supervisor as s/he works with the learner. Work to produce these manuals has already started. Clearly there are some tasks that the supervisor is best placed to help with while a driving instructor may also have a key input.

There is no consensus on the number of hours a learner driver should complete with a supervisor; research in Sweden, Sagberg, 2002; [referenced in OECD/ECMT, 2006; (p.132)] suggested that 5,000 to 7,000 km gives a learner a good grounding. This equates to about 200 hours supervised driving practice. During this time the supervisor would complete a learner's logbook indicating type of driving aspects practiced, problems arising and solutions put in place. During this phase the supervisor may suggest that the learner calls on the professional expertise of a driving instructor to help work through particular problems being experienced.

3.2.1 Implementation Issues

Primary legislation is needed to give effect to this measure. So as not to impact on driving test wait times and in the interest of uniform application the measure when introduced

should be for any person who is taking out a first learner permit on the implementation date. Before rolling out this measure it is important that a pilot phase take place to ensure that when introduced it will have maximum impact.

Recommendation 1

Strengthen the role of the supervising driver in the driver learning process for car learner permit holders; prepare guidance manuals and logbook for the supervising driver. Proposed that a learner's log a minimum of hours driving with the supervising driver, including a minimum of night-time hours.

3.3 Role of Driving Instructors

At present there is no obligation for a learner driver to take formal lessons with a driving instructor. Driving instruction is now regulated and each instructor meets a minimum standard in aspects relevant to their industry. This places driving instructors in a good position to contribute to the learning process. Available research does not support the view that a minimum number of hours of driving lessons be taken by a learner drivers without being clear on the tasks/skills to be taught.

There is evidence to support the view that driving instructors should sign-off on particular driving competencies- see CAS report Appendix C (p.22). These are competencies that are not tested at present by the driving test eg. night-time driving, motorway driving, hazard avoidance/management skills. Some of these driving skills are among the most important for safe driving. Because there is no formal test of these skills, in most cases learners will not have been given instruction or guidance as to how to deal with these situations.

The RSA presently has a project up and running to define a number of key competencies that the driving instructor will be expected to give instruction in and affirm that in his/her view the learner has reached a minimum standard in those areas. While those competencies have not been finalised it is likely that they will involve 10-15 hours of mandatory tuition/competence assessment before a driving test can be taken.

3.3.1 Implementation Issues

Primary legislation is needed to underpin this measure. It is suggested that the measure would be applied to new learner permit holders as and from a particular implementation date. There is a strong case also to apply this provision to a person who is on a fifth or subsequent learner permit. It is reasonable to assume that such person has not been able to pass a test or has driving skill deficiencies that need to be remedied. A pilot scheme can be run before formal rollout.

Recommendation 2

Introduce compulsory basic training (CBT) requiring learner drivers to cover a set syllabus with an approved driving instructor.

3.4 Lower Alcohol Levels for Learners

It is known from research that learner drivers are particularly vulnerable and that those in the age group 17-24 are overrepresented in our death and injury statistics. We also know that low levels of alcohol impair driving ability. It is imperative that the licensing laws do not permit any form of impairment that might accentuate the level of risk learners are exposed to. For that reason there are strong scientific grounds for reducing the level of blood alcohol in the case of a learner driver. The proposal is that learner drivers and drivers in the two year period following taking out a full licence is subject to a blood alcohol concentration of 20mg/100ml.

This measure is allowed for in the Road Traffic Bill 2009 and will be introduced when the Bill is enacted.

Recommendation 3

The Blood Alcohol Concentration to be reduced to 20mg/100ml for learner drivers and for novice drivers.

3.5 Faster accumulation of penalty points for learner drivers

The penalty points system currently applies equally to all licence holders and a person who has twelve points is disqualified for a period of six months. Penalty points can act as a targeted mechanism to inhibit risk taking among drivers. Risk taking among learners and newly qualified drivers is compounded due to inexperience. There are a number of approaches to penalty points systems that seek to mitigate risk amongst learner and novice drivers. For example penalty points for offences could be doubled for specific high risk offences or a person could be disqualified having accumulated six points instead of twelve. However, it may not be fair to unduly penalise learners/novice drivers for driving errors that will arise as a result of inexperience as they get to grips with the learning process. It should be recognised also that some penalty points result from offences that are inherently less dangerous than others.

A targeted approach would be to specify a number of penalty point offences that relate to risk factors and increase their value (severity) for learner and novice drivers. Among the high risk offences that should be targeted are, speeding, seatbelt wearing, mobile phone use while driving, breaking traffic lights and dangerous overtaking. Penalty points for these offences should be doubled for learners and novices.

3.5.1 Implementation Issues

Primary legislation is needed to effect this change. The Department may wish to add additional offences and look also at the relative value of points for various offences and whether a lower number of targeted offences might make for a more effective system.

Recommendation 4

That penalty points for particular offence be increased for specified penalty point offences for learner and novice drivers so that accumulation of penalty points during the learning phase and in the first two years post passing a driving test will pose a real threat of disqualification and will impact positively on risk taking and driver behaviour.

Section 3.6 Hazard Perception Test

An important outcome during the learning phase is for learners to understand the nature of hazards and how to identify and react to them appropriately. Research (SWOV 2008) indicates that hazard perception should form part of the assessment of driver skills. Research into crash causation by McKnight and McKnight, 2003; in the US concluded that failure to detect hazards resulted in 43.6% of crashes. The EU Licensing Directive obliges Member States to assess hazard perception; in Ireland this is done through the existing driver theory test by asking a number of questions. Some Member States are taking a more sophisticated approach supported by research through the use of video technology. The ability to identify hazards is a skill that can be measured. A distinction is made between merely identifying hazards and taking appropriate mitigating actions.

Given that hazard perception skills are developed through driving practice an assessment test should only be taken when the learner has attained a certain level of driving practice. It is probable that the most likely place to test this aptitude is following the driving test during the intermediate phase of the licensing process. In devising any test it is important that learning from those EU countries who have recently introduced a hazard perception test be taken on board so that the test is effective and does not impose an excessive cost on the learner.

3.6.1 Implementation Issues

Primary legislation is needed to give effect to this measure. There are a number of different models operating in EU countries and consideration is needed as to which to adopt in Ireland. While the recommendation is that the test should be taken at novice stage this is to ensure that the driver has had sufficient practice hours, it may be possible and administratively more straightforward to take the test during the learner phase and after the learner has completed logged driving hours. Further consideration will be given to this issue to minimise inconvenience and cost for learner drivers and to maximise driver learning and competence.

Recommendation 5

That a standalone Hazard Perception Test be developed using best practice and that this test be carried out during the novice driver phase.

3.7 Enhance the Driving Test

The current driving test has remained largely the same since 1964, however, it is not dissimilar to driving tests across the EU in terms of its content. We have seen already from the research phase that took place as part of the CAS report that much of the formal tuition that a learner receives is directed to passing the driving test. This means that by changing the test we can influence the learning that precedes it.

It is recognised that the driving test has limitations, it is of short duration and distance which in turn constrains the extent and quality of assessment it can achieve. Within some EU Member States work is being done to determine how the driving test can be modified to assess factors relating to the higher levels of the GDE Matrix i.e. looking at the cognitive processes that influence the way we approach driving. Essentially, if we assess those aspects, the learner will have to take account of this as part of test preparation and in doing so will become aware of the broader factors that influence driving and therefore be in a better position to manage these factors as a driver.

Some of the most promising measures being developed are those relating to independent driving and self reflection. Independent driving means that the test candidate is asked as a segment of the test to drive to a particular local landmark with no direction from the driver tester as to which route to take. Self reflection is a process by which the test candidate explains to the driver tester the approach s/he took to undertaking a particular manoeuvre or in dealing with a particular hazard on test. This will give the driver tester an insight into the thinking and motivation of the person as s/he tackled a particular problem. The role and benefits of independent driving and self reflection are considered in two Transport Research Laboratory Reports, TRL 2008a; TRL 2008b.

The RSA is considering the degree to which it is practical for these aspects to be integrated into to the driving test. In tandem with this the role that a driving instructor can play in developing routines around independent driving and self-reflection will also be explored as part of the driving competencies to be signed off by the driving instructor.

Recommendation 6

Review the existing driving test to enhance it to make it more effective and to enable it to influence the learning undertaken by the learner before taking the test.

3.8 Require Novice Drivers to Display an R Plate

During the learning to drive phase one of the most dangerous periods is that immediately after s/he passes the driving test. The driver moves from the accompanied driving phase to driving solo and having passed the test may have an exaggerated confidence in his/her driving ability. This often results in risk taking behaviour which leads to collisions. Indeed one of the purposes of a GDL scheme is to continue restrictions during this intermediate phase to reduce collision risk. Developing awareness of heightened vulnerability during this time is important and this can be done through advice in learner driver manuals, through the driver theory test and giving the learner some guidance material immediately after the

driving test. Some states oblige the driver to display on their vehicle an identifying plate similar to the L plate for the learner for a period after passing the driving test. Display of the plate will also help with the enforcement of the GDL measures that apply after the driving test.

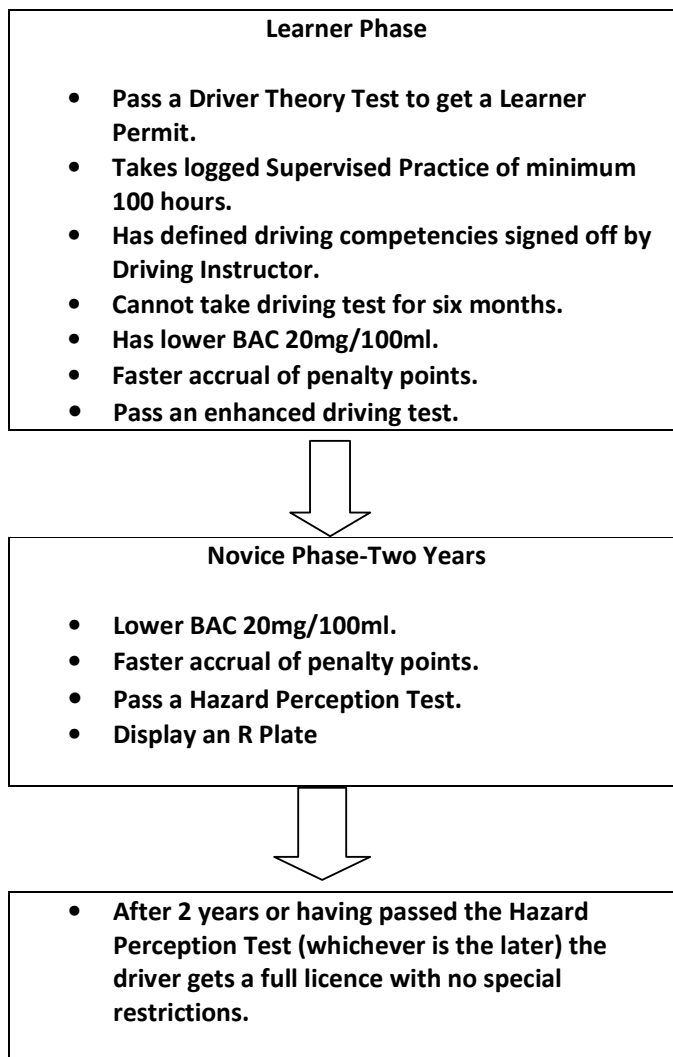
It is proposed that we oblige those covered by the GDL scheme to display an R (Restricted) plate during the novice (2 year) phase following the driving test.

Recommendation 7
That novice drivers display an R plate during the two year novice, post driving test period.

3.9 Conclusion

If all of the recommendations above are accepted and implemented a new graduated driving licence model for Ireland would look as set out in the diagram below-

Figure 3 Model Irish Graduated Driver Licence System



Section 4 Other Driving Licence Reforms

4.1 Introduction

There are a number of measures that are considered to be graduated driver licence measures that it is felt are not suitable to adopt in Ireland at this time for various reasons- they may be considered for implementation at a later time if the proposed measures in this paper are not seen to be yielding dividends. There are also licence reform measures that should also be considered for adoption that will enhance administration of the licensing system, improve compliance and improve road safety. This section describes those measures and suggests recommendations that should be considered for implementation.

4.2 GDL Measures not being Recommended at this Time

Many GDL systems advocate a night-time curfew as being important. There are a number of reasons for this- night-time driving is an increased risk factor for the learner as s/he comes to grips with reduced visibility, the glare of lights from other traffic, difficulties caused by being unable to clearly see other road users or hazards such as water on the road. Aside from there is a possibility that the learner may have consumed alcohol or drugs, may be more fatigued or may be carrying passengers who are peers.

Nonetheless, each measure must be looked at in the round and where it is determined that a particular measure would likely cause significant inconvenience then there may be justifiable grounds for not proceeding with it. Ireland has a low density population and a limited rural transport network, given these factors it is most probable that this measure would not garner significant public support and that compliance rates would suffer. For these reasons it is not proposed to recommend this measure at this time. However, to the extent that the risks relating to night-time driving can be dealt with they will form part of the syllabus for compulsory lessons to be delivered by driving instructors.

Some GDL systems include a restriction on vehicle engine size on the basis that this will discourage learners from excessive speeding as well as not leading to general overconfidence about the ability of the car to overtake other vehicles. It is considered that in some cases this could cause a burden on one car household whose car was over the restricted size, some larger cars have safety features not always in evidence in lower powered cars and this could lead to a learner being exposed to unnecessary risk in some cases.

Many GDL systems feature a ban on young passengers being carried by learner or novice drivers. This is directed at the phase where the learner has passed a driving test and is going into the solo driving phase. However, gaining support for this measure during this introductory phase of the GDL system is likely to be very difficult as will the enforcement of a passenger ban in practice. While it is not being recommended here the introduction of this measure should be kept under review.

4.3 Enhancements to the Driver Licensing System.

There are a number of measures that should now be considered that will improve the way driver licensing works to manage various aspects of driving to the betterment of road safety.

4.3.1 Driver Theory Test

The current test was last updated in 2006 and that overall pass rate is 70%. Preparing for the test a test candidate has access to the entire question bank with the correct answer highlight among a number of distracters. CAS suggested on foot of the research carried out on behalf of the RSA that the question bank no longer be made available as part of the learning material. The rationale being that learners would have to study various source materials to enable them to pass the test.

There were two particular criticisms of the present system, firstly, it is argued, that there is a possibility that a person could memorise the correct answer to issue presented rather than understand the wider thinking underpinning it. Secondly, the possibility exists that a driver could confuse a correct and incorrect answer in his/her mind and at some future point engage in hazardous driving behaviour as a result of this misunderstanding.

It is considered that taking away the question bank completely is unfair, but in response to the issues raised believe that a reconfiguration of the material can be effected. It is planned to review all the question bank material and instead of presenting several possible responses merely give the correct answer and a short explanation for the reasoning behind it. The question bank presented at the actual test will be, as now, in multiple choice format.

Carrying out this work has a number of dependencies, relating to resources, but the RSA is working to have the new format in place by the end of 2010.

Recommendation 8

Material for the Driver Theory Test should be reconfigured to make it more effective as a learning tool.

4.3.2 Penalties for Deviant Drivers

The licensing laws at present punish drivers who misbehave by disqualifying them or by assigning penalty points to their licence and in the case of the most serious offences by imprisoning them. This is appropriate in most cases; however, it is also important to explore other possibilities available to the courts that are shown to be effective. While punishment is often appropriate if this can be coupled with approaches that help rehabilitation and better driving behaviour then this is most desirable. Education based and technological interventions have been successfully tried in various countries. These cover special courses aimed at drink driving, speeding, and aggressive drivers.

Drink and drug driving is shown to be a particularly risky activity. There is research available as regards the effectiveness of rehabilitation courses taken by drivers convicted of drink driving in the UK. The RSA is working on a project to see how similar courses might be offered here for drink/drug drivers. The most effective approach is one that will combine traditional punishments with an incentive to take a course that has been approved. Typically, a lower penalty would be imposed on a driver who agreed to take the course. Options relating to directing a driver to install an alcolocks and/or other 'black box' technology should also be open to the courts.

It is important that the courts have arrange of sentencing options open to them when dealing with most at risk inexperienced drivers. These could include court sentencing options such as:

- Requirement to re-take a driving test.
- Requirement to fit and use a certified speed limitation device.
- Prohibition on the carriage of passengers.
- Specific curfew on permitted driving times.
- Requirement to undertake a specific rehabilitation course.
- Requirement to undertake a set number of additional driving lessons with an approved driving instructor.
- Requirement to fit and use a certified alcolock device.
- Requirement to fit and use a certified tachograph device.
- Requirement to fit and use a certified speed recording and tracking device.

By increasing the sentencing options available to the courts one avoids restrictive / punitive measures at a population wide level whilst increasing the general and specific deterrence.

Recommendation 9

That the range and combination of sentencing options available to the courts for driving offences be expanded.

4.4 Conclusion

This document sets out nine separate measures each of which has the potential to improve safety on our roads. Decisions must now be made as to which of these recommendations to proceed with. Primary legislation is needed to give effect to most of the measures of these measures. The interim period can be used to carry out pilot phases for some of the measures and to develop implementation plans. Following implementation it is important that each of the measures be evaluated for effectiveness and modified if necessary.

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