THE INSTITUTION OF ENGINEERS OF IRELAND

STOP ROAD CARNAGE NOW!

SUBMISSION TO

MR SEAMUS BRENnan TD
MINISTER FOR TRANSPORT

December 2002
1. **STOP ROAD CARNAGE NOW:**

The Institution of Engineers of Ireland (IEI) believes the issue of road safety and the fact that on average more than one person a day dies needlessly on the country’s roads and thousands are seriously injured every year, is a national scandal. The carnage on our roads brings heartbreak and suffering to thousands of individuals and families every year. The economic cost in terms of health cost, loss of productivity and human cost is enormous and is estimated as at least €1bn per annum of which €250m is the direct cost to the economy.

An “accident” is defined in the Oxford Dictionary as “an event that is without apparent cause” or as “an occurrence of things by chance”. With more than 400 road deaths each year over the past decade, the Institution would strongly submit that only a small percentage of these would correctly fit the definition of accident.

Probably because road deaths have been occurring at a steady rate each week over the past 10 years, it would appear that society in general has become immune to shock at the scale of tragedy which results to the deceased persons’ immediate families, the tragedy and cost to those personally injured, and the cost to society in general of the unnecessary road deaths and serious injuries.

All of us have a moral responsibility to seriously address this issue as a matter of the utmost priority and Government must show leadership. The “radical” short-term improvement brought about by the Minister for Transport’s welcome introduction of a limited penalty points system clearly demonstrates what progress can be made. The challenge now is to build on this improvement and set a radical target for a sustained reduction in death and injuries on our roads.

- **IEI recommends that a target of 50% reduction in deaths and serious injury on Irish roads within the 5 year period 2003-2007 be set immediately by Government.**

2. **TAKING ACTION:**

The Institution of Engineers of Ireland believes that to achieve the target recommended above and to make a significant reduction in the number of deaths and serious injuries sustained on Irish roads, a wide range of complementary actions need to be taken. Action needs to be taken across three areas:

- **Improve driver behaviour and competence.**
  Unless this area is seriously addressed and very recent progress built on, significant reduction in road deaths and injuries will not be achieved.
- **Improve the safety of roads**
- **Improve vehicle safety**
2.1 Improve Driver Behaviour and Competence:

Even if all our recommendations below on roads and vehicles were implemented, the road death figures will not decrease significantly unless driver behaviour and competence are addressed seriously.

The recent impact of the limited implementation of the driver penalty points system, even if the effect is only short-term, shows the positive results on driver behaviour of enforcement of the laws. The impact of the Christmas anti drink-driving campaign on driver behaviour is also clearly noticeable. These welcome initiatives must be complemented by further actions to enable a target 50% reduction in deaths and serious injuries to be achieved. IEI recommends:

- The speedy introduction of a comprehensive penalty point system for a wide range of offences, together with much greater enforcement of existing laws. This will require full implementation of the associated new Garda computer system.

- With a high percentage of road deaths occurring on Friday and Saturday nights, the Christmas anti drink-driving campaign should be replicated each weekend from July 2003.

- Random breath testing should be introduced and Gardai should be provided with adequate resources to implement this.

- There should be more speed checks on minor roads. More speed cameras, including mobile units, should be purchased for use on major roads and for high accident locations and at points of high visibility on minor roads.

- The Garda road traffic budget should be ring fenced.

- Reduce the waiting time for driving tests to four weeks and require all current 325,000 provisional license holders to take a test by mid 2004. Outsource the service if necessary to achieve this target.

- Limit the number of provisional licences a person can have to three and significantly increase the cost of a second and subsequent provisional licence and driving test to ensure the issue of taking adequate driving instruction before a test is taken seriously.

- A graduated licensing system similar to Northern Ireland where “L” drivers must be accompanied at all times and “R” drivers are restricted in road use should be introduced in the Republic from January 1st 2004.
Agree a scheme with the Insurance Industry, whereby young learner drivers who undergo particularly intensive safe driving training, would get a significant reduction in their first driver insurance premium.

Drivers who commit road traffic offences should be required to undertake, at their own expense, special remedial safe driving awareness lessons.

Introduce safe driving education/instruction in senior cycle in secondary schools.

All driving instructors should be required to obtain a National Driving Instructor’s qualification.

The High Level Group on Road Safety should fund research in Ireland on the potential for design and construction of a Driver Training Simulator and for its potential use in improving driver competence and behaviour.

2.2 Improve the Safety of Roads:

Complete implementation, before mid 2004, of low cost road safety improvement measures at the 109 high accident locations identified on National Roads in the NRA High Accident Locations 1996-2000 Report. If current Local Authority/NRA resource is insufficient to achieve this target, external contractors should be used.

Each Local Authority to progress a low cost road safety improvement plan in relation to non national road, high accident locations in its own jurisdiction and implement by December 2004, using contractors if the Local Authorities own resource is insufficient to meet this target. These measures should include engineering provisions to slow traffic where speed limits are below the current 30 mph.

In the interest of road safety, all planned road projects, which separate opposing traffic e.g. motorways and dual carriageways, should be implemented as a matter of priority.

Where the national road network is not being upgraded to motorway or high quality dual carriageway standard, make provision for safe overtaking opportunities and for safe right turns. Consideration should be given to reducing significantly the number of right turns even if this inconveniences local traffic.
We support the Minister’s proposal to change all road signs, including speed limit signs to kilometres/hour. An extensive information campaign is needed with a strategic plan for simultaneous implementation throughout the country on the same day.

Lower speed limits should be set for minor roads, and there needs to be a major publicity campaign to inform the public that the actual speed limit on any minor road is the maximum safe speed that a vehicle can travel on that road.

All junctions should be identified at night by the use of reflective green delineator posts.

Implement clear road markings (centre line, edge line, stop line, etc.) on all roads.

Implement clear, uncluttered, signage in standard colours/format with removal of all other “advertising” signs. Overhead gantry signs should be mandatory on motorways.

Provide footpaths as standard for road improvement works adjacent to villages, rural schools or in densely inhabited rural areas.

Introduce road safety audits/assessments for housing, commercial and industrial developments as a requirement for planning permission using the Development Control function of a Local Authority.

Carry out more detailed analysis and research into the causes of road traffic accidents so that investment can be properly targeted to produce measurable improvements.

2.3 Improve Vehicle Safety:

Introduce regulations requiring European NCAP vehicle safety information to be published by car manufacturers for all vehicle models and such information to be publicly displayed in car retail outlets and included in all car advertising and sales material.

Make the inclusion of ABS and Traction Control mandatory on all new vehicles sold in Ireland.

Require the installation of “best-practice” side mirrors and mud flaps on all heavy goods vehicles prior to NCT tests.
The speedometers in all new vehicles sold should display kmph only following the changeover of road speed limit signs to kmph.

Implement the current requirement that speed limiting governors are fitted to all heavy goods vehicles and that they are switched on and in use at all times – this requirement is being flagrantly ignored.

Ensure the electronic weigh bridges installed around the country are used to randomly check that loading of heavy goods vehicles is within legal limits – this practice is rarely followed at present.

Ban the use of “bull bars” on all vehicles.

Implement the compulsory use of daytime running lights.

Record and analyse safety defects in vehicles undergoing NCT tests and recommend actions which would further improve the safety of vehicles on Irish roads.

### 2.4 Prioritise, Fund and Implement:

IEI recognises that the actions recommended in this report, while necessary, cannot all be completed in year 1. It is essential that a properly funded National Road Safety Action Plan is prepared which prioritises the proposed actions from a cost versus road safety benefit point of view. This plan should include ring fenced funding for Local Authorities and the Garda road safety activity.

The High Level Group on Road Safety to immediately prepare and monitor implementation of a five year National Road Safety Action Plan.

Allocate “road safety” as a responsibility to a specific Director of Services within each Local Authority.

### 2.5 Proposed IEI Action:

IEI, under the aegis of its Local Government Division, will prepare, by June 1st 2003, an advisory document for use by Local Authorities on how to highlight and implement road safety as a priority issue at community level using Local Authorities as a champion for road safety improvement.
3. **ROAD SAFETY – THE FACTS:**

The following statistics highlight the need for road safety to be treated as an issue of national priority. However, they also indicate that if addressed seriously, the number of deaths and injuries on our roads can be reduced significantly.

**Potential for Improvement:**

- Between 1993 and 1998 the state of Queensland in Australia implemented an aggressive road safety strategy and achieved a 42% reduction in fatal crashes.

- The National Development Plan includes over 900km of motorways and high quality dual carriageways. The risk of head-on collisions and conflicts associated with junctions and right-turning manoeuvres will effectively be removed with the construction of these roads and will result in a saving of 50 lives annually.

- In the UK research shows that when 20mph zones are introduced in residential areas, in combination with engineering measures pedestrian casualties are reduced by 61%.

**Accidents:**

- Car crashes are the number one killers of young men in Ireland and driving at excess speed is the primary cause of these crashes.

- Of the 415 people killed in 2000, 55 were in the 18-24 age bracket. This is much higher than any other age cohort and higher for males than females.

- Despite there being very low traffic volumes between 9.00pm and 3.00am three out of ten road accident fatalities occur between 9.00pm and 3.00am (These are the hours most strongly associated with drinking and driving).

- Proportionally more accidents occur on Saturdays and Sundays.

- Factors contributing to accidents as determined by the Gardai are driver (82%), pedestrian (10%), road (4%) environment (3%) and vehicle (1%). Clearly driver behaviour is the key area for action.

**Speed:**

- Over 40% of fatal accidents are caused by excessive or inappropriate speed.
In 1999 51% of cars exceeded the speed limit on two lane national primary routes. By 2001 the figures worsened with the number of cars exceeding the speed limit increasing by 8%.

68% of cars exceed the 30mph speed limit on urban residential roads, 10% are in excess of 40mph.

Research indicates that when pedestrians are struck by a moving car:
- At 20mph only 5% are killed, most injuries are slight, and 30% suffer no injury at all
- At 30 mph 45% are killed and many are seriously injured
- At 45 mph 85% are killed

A pedestrian hit by a car at 35mph is twice as likely to be killed than if he or she was hit at 30mph.

Seat Belts:

In 1999 only 55% of Irish drivers used their seat belts. Amongst males the figure was only 48%.

Without a seat belt 3 out of 4 people will be killed or seriously injured in a 30-mph head-on crash.

In a head on collision for a car occupant wearing a seat belt the risk of serious injury is three times more likely at 30mph compared with 20mph.

In a head on collision for a car occupant wearing a seat belt the risk of serious injury is five times more likely at 40mph compared with 20mph.

Driver Competence:

23% of Irish drivers do not have a full driving licence.

Only 55% of people taking the driving test pass.

Drink Driving:

Ireland has 14,000 licensed premises/off licenses. In 2001, 12,834 drivers were arrested on suspicion of driving under the influence of alcohol/drugs. Of those arrested, 93% were over the permitted blood alcohol limit, 61% were over twice the permitted limit. 3.5% were under the influence of drugs/medication.
In Finland, population 5.5 million, approximately, 1.4 million breath tests are carried out annually (1.35 million random)

In Queensland, Australia, population 3.7 million, over 2 million breath tests are carried out annually