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ONE DRIVER - ONE LICENCE, WERE IT SO EASY?

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ABSTRACT

The National Road Transport Commission was established in 1992 following the signing of two Agreements (the Heavy Vehicle Agreement signed in 1991 and the Light Vehicle Agreement signed in 1992) by the Heads of Government of the Commonwealth, States and Territories of Australia Its role is to develop nationally uniform or consistent legislation based on the three fundamental goals of improvements in road safety and economic efficiency and reduction in the cost of administration of road transport.

One of the tasks set for the commission was the development of a framework for a national driver licensing scheme for heavy vehicles and the determination of whether or not there would be benefits in including light vehicle drivers in such a scheme.

In June 1995 the National Road Transport Commission published an evaluation of a national driver licence scheme for both heavy and light vehicles. Cost-benefit analysis was conducted on nine primary elements of a licensing scheme using data obtained from the six States and two Territories

This paper outlines the development of the national driver licensing scheme. It discusses the evaluation techniques used and the problems encountered in obtaining data and the methods used to overcome these problems. Finally, it discusses the steps involved in the implementation of a national driver licensing scheme

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1. INTRODUCTION

The National Road Transport Commission was established in 1992 following the signing of two Agreements by the Heads of Government of the Commonwealth, State and Territories of Australia. Its role is to develop nationally uniform or consistent legislation based on three fundamental goals of improvements in road safety and economic efficiency and reductions in the cost of administration of road transport.

One of the tasks set for the Commission was the development of a framework for a national driver licensing scheme for heavy vehicles and the determination of whether or not there would be benefits in including drivers of light vehicles in such a scheme.

This paper outlines the development and evaluation of the national driver licensing scheme.

2. BACKGROUND

Currently each State and Territory administers a driver licensing scheme to authorise persons to drive on public roads, to ensure the accountability of such persons and to enhance road safety. When a driver moves from one State or Territory to another, he or she must cancel the licence issued by the former jurisdiction and obtain a licence in the new jurisdiction. Although many pre-licensing requirements are similar, there are significant differences in the way the schemes are administered which results in costs to both authorities and licence holders.

It was thought that drivers of heavy vehicles, in particular, those engaged in interstate operations were more affected by differences in licensing schemes than were drivers of light vehicles (who drive primarily for private or social reasons)

To overcome some of the problems that had arisen from having different licensing schemes in the States and Territories, a National Heavy Vehicle Driver Licence was introduced in 1991 for drivers of vehicles with a gross vehicle mass of 15 tonnes and above. This scheme successfully enforced the principle that a person should be entitled to hold only one licence but it did not address other issues of concern to licence holders such as ensuring that a right to drive a particular class of vehicle would be recognised uniformly and automatically in all States and Territories.

In 1993 a set of Business Rules (Austroads 1993a), was developed by Austroads (an organisation consisting of representatives from all State and Territory road and Transport Authorities) outlining a means of making heavy vehicle driver licensing practices nationally uniform across Australia.

Additional work by Austroads (Austroads 1993b) developed a set of uniform licence classifications to address the concerns licence holders had in respect of the transportability of their qualifications to drive a particular class of vehicle.

In February 1995, the National Road Transport Commission published a Working Paper (NRTC 1995a) which summarised the work undertaken to progress national uniformity in driver licensing in Australia and outlined the elements considered fundamental to a national scheme.

3. THE NATIONAL SCHEME

Initially ten elements were identified as being primary to a national driver licensing scheme. These are listed below with a brief outline of the expected impact of each:

- i. Each driver to hold one licence
 - The inclusion of this element was expected to increase road safety through ensuring the effective application of sanctions for unsafe driving as drivers would no longer be able to spread offences and demerit points over a number of licences.
- This could be achieved by adding an alpha symbol to the licence number so that the issuing jurisdiction could be determined from the licence number. Costs would be incurred through adapting computer systems to establish a new code. Benefits were not expected to be significant, if any, as the addition of an alpha symbol would provide no extra information.
- iii Common licence classes with common eligibility criteria and competency standards for each

 Licensing authorities would initially incur implementation costs associated with

Licensing authorities would initially incur implementation costs associated with changes to computer software and training. There were, however, expected to be benefits for licence holders and licensing authorities as the new classes are broader and fewer than those that currently exist. This would result in fewer licence upgrades.

Common conditions licence card symbols

Costs relating to changes in computer software would be incurred. Benefits stem from enforcement officers being able to comprehend the conditions imposed on a licence regardless of where the licence was issued.

v Driver to conclusively prove his or her identity

This element would also increase road safety through effective application of sanctions as it would minimise the chance of a driver obtaining a licence issued in a fictitious identity in order to evade sanctions.

vi. Mutual recognition of interstate licences (but not necessarily those conditions specifically designed to cover local matters)

This would allow a licence holder who was granted an exemption in one State or Territory to have that exemption automatically recognised in another State or Territory rather than go through the other State or Territories processes for obtaining an exemption.

vii Transmission and logging of demerit points and offence penalties to where the licence record is kept

This element also increases road safety by ensuring that the details of demerit points can be recorded against a licence no matter where the offence occurred. It will ensure more timely action where licence suspension or cancellation is required.

viii. Disqualification or suspension in one jurisdiction to apply in all

At present a disqualification or suspension imposed on a driver in one jurisdiction may not be affected in another as no power exists to do so. For a disqualification in one jurisdiction to apply in all, computer software will need to be changed to allow information to be stored and transferred. There will be road safety benefits from more effective enforcement of sanctions

ix Common medical standards and application thereof

This element proposes the adoption of common medical standards and their application either through compulsory medical examinations or driver self assessment. Significant costs would be incurred by licence holders but benefits would accrue through crash reductions

x A process to enable the conversion of an interstate licence to be treated in the same manner as an intrastate change of address

When people move interstate they have to cancel their licence and take out a new licence. This involves the person being re-photographed, paying a new licence fee and, where available, applying for a refund in respect of the former licence.

The proposal is that a licence holder who moves interstate should notify the authority which issued the licence. The issuing authority would then issue a change of address label to the licence and transfer the licence record to the new jurisdiction upon expiry

The proposed process would significantly reduce the time taken by a licence holder moving interstate. The impact on licensing authorities varies depending on the number of transactions.

The implementation of a National Driver Licensing Scheme based on these ten primary elements, would require a number of changes to current licensing systems, producing both costs and savings to licensing authorities and licence holders.

4. EVALUATION

To determine the impact of a national driver licensing scheme each element, except for mutual recognition, was evaluated. Mutual recognition of interstate licences was not assessed as no data are available on the number and type of exemptions that will be granted which will need to be recognised by other than the issuing State or Territory under a national driver licensing scheme. With the exception of medical standards, all primary elements were analysed on the basis of including each in its entirety or excluding each.

The elements were assessed in the context of:

- i adopting a national driver licensing scheme for heavy vehicle drivers only; or
- ii adopting a national driver licensing scheme which encompasses all drivers.

4.1. Obtaining the Data

To obtain the relevant data from State and Territory road authorities, the effect of each element in terms of changes to processes and computer systems was first determined. The impacts varied from changing the coding of licensing databases (such as the addition of a unique licence identifier which would allow the issuing jurisdiction to be identified from the licence number) to extensive changes in the procedures for transferring a licence. For example adopting a system which would allow a licence holder to report a change of address when he/she moved interstate rather than having to obtain a new licence in the new State or Territory. Based on the changes to computer systems and procedures, a list was developed of the data required to determine the economic impact upon licensing authorities and licence holders for each primary element and included such things as:

- the cost to change computer systems:
- numbers of transactions:
- labour costs:
- transaction time; and
- costs of consumables

Prior to the evaluation of a national driver licensing scheme, a national vehicle registration scheme was evaluated (NRTC 1994). The nature of the registration task and the plethora of other administration procedures which are attached to the registration process meant that the evaluation was broader than that undertaken for driver licensing. It had involved the collection of a considerable amount of data over several months from State and Territory road authorities and vehicle operators.

Where data from the registration evaluation were comparable with that required for the driver licensing evaluation, they were used in place of obtaining an estimate from State and Territory road authorities. This was done in an attempt to minimise the amount of data that the Commission had to specifically request from road authorities as experience showed that it can be very difficult for road authorities to provide data on costs and system operating times. The degree to which each State and Territory is able to provide information varies greatly and is mainly due to:

- i difficulties in accessing information from current licensing systems; or
- ii the road authorities having no records which could be of assistance.

Occasionally difficulties arise from misunderstandings as to what is being requested.

Data were requested from the road authorities using a questionnaire which was designed to make questions as clear as possible. Supporting documentation was also circulated to provide an explanation of how the data were to be used

Only one State and one Territory provided all the data required. It was necessary, therefore, to make a number of substitutions, assumptions and estimates in order to complete the analysis. Some of the methods used are outlined below:

Where costs for consumables such as the cost of a licence data card were not provided for a State or Territory the cost from one of the jurisdictions which provided a complete response was substituted. The estimate used was based on data from the State or Territory with a similar population size.

Similarly where a jurisdiction was unable to provide data relating to the cost of a particular software change, data were substituted from another jurisdiction considered to have a similar software system

Where a jurisdiction was unable to provide an operating cost which was related, at least in part, to the number of drivers in a jurisdiction, the cost from another jurisdiction was adjusted using the ratio of drivers in one jurisdiction to another For example, the Northern Territory was unable to provide an annual operating cost of a demerits point scheme as it does not yet have a demerits point scheme

The cost of the scheme in Victoria was adjusted using the ratio of Victorian licence holders to Northern Territory licence holders to obtain an operating cost for the Northern Territory.

Often responses received vary considerably from jurisdiction to jurisdiction. Table 1 shows the cost of adding a unique licence identifier to the computer software by State and Territory.

Table 1: Cost of Unique Licence Identifier (\$'000)

State/Territory	Cost
New South Wales	500
Victoria	10
Queensland	-
Western Australia	
South Australia	640
Tasmania	6
Australian Capital Territory	100
Northern Territory	-

⁻ No estimate was given

The cost varied from \$6.000 to \$640.000 but as this was the only information available it was used in the analysis. Only where the information received varied greatly from what was expected (eg the information indicated a cost when overall benefits were expected) was the information checked

Not all data were readily available from State and Territory road authorities or already published elsewhere. In such cases it was necessary to estimate a value based on reasonable assumptions. For instance, trials have shown that a medical examination would take approximately 30 minutes but no data are available on travel time and waiting time. To the 30 minutes was added assumptions about travel time (40 minutes) and waiting time (20 minutes).

Apart from benefits that accrue directly from the change in procedures, there are also road safety benefits associated with the introduction of a national driver licensing scheme, most notably in relation to those elements which improve the application of sanctions which occur from the primary elements of:

- each driver to hold only one licence:
- drivers to conclusively prove their identity:

- transmission and logging of demerit points and offence penalties to where the licence record is kept; and
- disqualification in one jurisdiction to apply in all.

The costs of these elements were estimated separately, but the benefits of each could not be reasonably estimated separately. The approach was to estimate the benefits of exchanging demerit points by States and Territories based on the proportion of travel that occurred interstate by vehicle type (as the exchange of demerit points would only be for offences that occurred interstate) and on the effects of existing demerit points schemes on:

- the reduction in fatal and serious injury crashes in Victoria:
- the level of accrued points and disqualification in Victoria, Western Australia. South Australia and the Australian Capital Territory; and
- differences in the level of accrued points for truck drivers and all drivers in Victoria

On this basis, it was estimated that improved application of sanctions associated with a national driver licensing scheme would result in a 0.08 per cent reduction in car crashes and a 0.25 per cent reduction on truck crashes. These estimated crash reductions are small, but they nevertheless represent the largest estimated benefit of an all driver scheme and the second largest benefit for a scheme restricted to heavy vehicle drivers (see Table 2). For the all driver scheme, the benefits represent about 0.1 per cent of total crash costs in Australia.

Five options for compulsory medical examinations or medical self assessment were examined. They varied with age of the driver and the frequency of examination (having regard to the natural history of chronic disease which typically begins in mid life and accelerates thereafter). An extensive review of the literature indicated that a link between medical examinations and road safety outcomes is difficult to establish. Even more difficult is determining the effect of the frequency of medical examinations on road safety outcomes.

The approach used was to assume that an annual medical examination would identify enough medical conditions that affect driving performance to result in a reduction of road crashes of 1 per cent overall. Crash reductions were then reduced proportionally for lower frequencies of medical examinations, ie 0.5 per cent for examinations every 2 years and 0.2 per cent for five yearly examinations.

4.2 Results

Once all the data had been collected, the costs and benefits of introducing a national driver licensing scheme based on the ten elements outlined in Section 3 were estimated using cost-benefit analysis over a ten year period as this was expected to be the maximum operating life of the hardware and software required to operate a national driver licensing scheme. Costs and benefits were discounted at five per cent per annum to the base year.

The quantified costs and benefits of a national driver licensing scheme are presented in Table 2.

 Table 2:
 Cost-Benefit Analysis of a National Driver Licensing Scheme (\$'000)

0	Discounted	Discounted	Net Present
	Benefits	Costs	Value
Heavy Vehicle Drivers			
Application of Sanctions	8 400	1 610	6 790
Unique Licence Identifier	-	2 472	-2 472
Common Licence Classes	243	3 344	-3 101
Common Definitions and Symbols	-	18	-18
Common Medical Standards			
and Examinations (Option 5)	-	143	-143
Interstate Change of Address	9 700	1 124	8 576
Public Education	-	600	-600
Total	18 343	9 311	9 032
All Drivers			
Application of Sanctions	68 130	8 007	60 123
Unique Licence Identifier	-	2 472	-2 472
Common Licence Classes	243	3 664	-3 421
Common Definitions and Symbols	-	41	-41
Common Medical Standards			
and Examinations (Option 5)	-	1 090	-1 090
Interstate Change of Address	21 709	7 419	14.290
Public Education	-	3 296	-3 296
Total	90 082	25 989	64 093

The majority of the benefits for an all driver scheme accrue from improvements in road safety through more effective application of sanctions and for a heavy vehicle scheme the majority of benefits accrue from the proposed interstate conversion process. Adopting a process which would enable the conversion of an interstate licence to be

treated in the same manner as an intrastate change of address also represents approximately 22 per cent of the benefits of an all driver scheme. The majority of the benefits of this element will accrue to licence holders whereas the costs will be incurred by licensing authorities. This element is the most significant in terms of a national scheme providing benefits to licence holders.

It was not possible to quantify all costs and benefits associated with the proposed primary elements

Unquantifiable benefits include:

- improved transportability of driving qualifications for licence holders through uniform licence classification and eligibility criteria;
- improved comprehension of licence classes and condition codes by enforcement personnel carrying out on-road enforcement activities;
- more efficient data exchange facilitated by use of common nomenclature and terminology;
- improved opportunities for monitoring scheme performance on a national basis to assist future decision making; and
- improved opportunities for licensing authorities to undertake benchmarking exercises and streamline processes, based on a uniform national scheme

Unquantifiable costs include:

- the difficulties that licensing authorities and existing heavy vehicle licence holders will experience in the transitional phase to the new licence classes: and
- the cost of computer changes to facilitate common licence condition codes.

On the basis of the cost-benefit analysis and the unquantified costs and benefits, the preferred scheme was a national driver licensing scheme covering **all** drivers. Two of the primary elements (unique licence identifier and application of medical standards) were omitted from the scheme as the costs associated with these elements was substantially greater than any benefits, quantified or otherwise. The resulting benefit is approximately \$68 million in net present value terms

5. WHERE TO NOW?

The proposed national driver licensing scheme is approaching finalisation. The Act. Regulations and evaluation (NRTC 1995b) have been circulated for public comment and for comment from State and Territory road authorities

Discussions with State and Territory road authorities have revealed that the issue of attempting to treat an interstate conversion of a licence as a change of address may be legally and administratively more complex than first thought. Assessment of the

administration processes will need to be conducted prior to the Act and Regulations being submitted to Ministers for voting.

Once the administrative procedures required for the operation of the proposed interstate conversion process are determined, it is expected that costs will be obtained using the cost of the most similar procedure which already exists.

Advantages of this method are twofold, firstly it allows the Commission to produce an assessment relatively quickly but more importantly it provides a starting point from which the States and Territories can determine alternative costs, if necessary, rather than leaving it to each road authority to estimate the appropriate data where they may not have sufficient knowledge.

It is expected that once the assessment is completed, as well as any further consultation, the national driver licensing scheme will be able to be submitted to Ministers for consideration late this year.

REFERENCES

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