# Electronic Work Diaries
# Final policy paper
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**Electronic Work Diaries: Final policy paper**

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# Report outline

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| **Title:** | Electronic Work Diaries: Final policy paper |
| **Type of report:** | Final policy paper |
| **Purpose:** | For publication |
| **Abstract:** | Policy findings and recommendations made in this paper are the culmination of work undertaken by the National Transport Commission as part of the EWD Operational Pilot (2011–2013). They are intended to ensure that EWD provisions are fit-for-purpose, and are not ambiguous or based on outdated technology assumptions; that a consistent and equitable approach to small breaches is agreed at a national level; that the collection, handling and disclosure of EWD personal information protects drivers from illegal or unreasonable contraventions of their privacy; and that the technical specification for EWDs is transparent and robust. |
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# Foreword

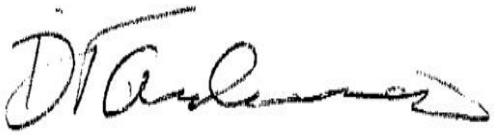
While we have seen a reduction in fatigue-related heavy vehicle crashes since the heavy vehicle reforms of 2008,[1] heavy vehicle driver fatigue remains a significant cause of crashes and further reductions in fatigue-related crashes is a key policy objective.[2] At the same time, one of the significant reform challenges ahead is how the potential of in-vehicle telematics is harnessed to drive safety and productivity.

The electronic work diary (EWD) has significant potential to yield safety and compliance benefits. The EWD provides an example of how technology can strip ambiguity and guesswork from complex laws, and provide assurance to partners in the chain of responsibility. However, while the EWD has been recognised in law for some time, a lack of regulatory and policy frameworks regarding its use has inhibited the uptake of this technology.

Between 2011 and 2013 the New South Wales Government funded a pilot to test the operational and technical requirements for the implementation of EWDs. As part of that pilot, the National Transport Commission (NTC) was charged with exploring the policy issues associated with EWDs, recognising that industry and government sought policy certainty as to how EWD data would be used for compliance and enforcement purposes.

Policy findings and recommendations made in this paper are the result of the NTC's work with industry and government stakeholders to identify legislative and policy solutions that will unlock the benefits of the technology. In particular, the NTC has sought to ensure that all fatigue-regulated heavy vehicle drivers will be treated equitably, regardless of whether they use an EWD or written work diary, and that robust and best practice privacy protections of personal information are introduced.

I would like to thank all those individuals and organisations involved in the consultation and development of the policy findings and recommendations contained in this paper. I would also like to acknowledge and thank the New South Wales Government and Transport Certification Australia for their role in the EWD Pilot. Finally I would like to thank the NTC staff who developed this paper, in particular James Williams and Marcus Burke.



**David Anderson PSM**
**Chairman**

[1] Fatigue-related accidents fell 50 per cent in 2009, immediately after the introduction of the National Model Legislation for Heavy Vehicle Driver Fatigue Reform: National Truck Accident Research Centre, *Major Accident Investigation Report*, 2013.
[2] In a 2012 fatigue survey, around 70 per cent of drivers reported feeling fatigued in some or most trips, down from more than 85 per cent of drivers in the 2006 survey: National Transport Commission, *Heavy Vehicle Driver and Company Longitudinal Surveys – Fatigue and Compliance & Enforcement*, 2012.

# Executive summary

## Introduction

The electronic work diary (EWD) is an alternative form of record keeping for fatigue-regulated heavy vehicle drivers. Available in the law, but yet to be approved for use, the EWD has the potential to significantly improve fatigue management. The EWD can assist drivers to comply with the law and contribute to a systems-based approach to managing drivers' performance in the context of chain of responsibility. These benefits are underpinned by higher visibility of work and rest hours, improved accuracy and accessibility and improved self-compliance. Enforcement can also be improved – the accuracy and higher probability of detection enables regulators and enforcement agencies to intelligently assess risk and identify high noncompliance.

The EWD is, in many ways, quite different from the current paper-based method of recording work and rest hours in the written work diary (WWD). The EWD generates information that can be accessed wirelessly by regulators and enforcement agencies. A balance is sought between optimising compliance and enforcement and recognising the individual's rights to privacy within a cost-effective framework.

The National Transport Commission (NTC) has worked with industry and governments to ensure that legislative and policy settings can maximise the safety benefits. Enforcement policy should recognise that EWDs are a voluntary alternative to the WWD and that if the safety benefits of EWDs are to be obtained through industry uptake there should be scope for accepting that even a highly compliant driver may, in good faith, occasionally commit a small breach of nominal fatigue impact. In these situations, equity of treatment between EWD and WWD drivers is sought.

Policy findings and recommendations made in this paper are the culmination of work undertaken by the NTC as part of the EWD Operational Pilot (2011–2013). They are intended to ensure that:

- EWD provisions are fit-for-purpose, and are not ambiguous or based on outdated technology assumptions
- a consistent and equitable approach to small breaches is agreed at a national level
- the collection, handling and disclosure of EWD personal information protects drivers from illegal or unreasonable contravention of their privacy
- the process for approving the EWD technical specification is appropriately transparent and robust.

The following recommendations are made for consideration by the Transport and Infrastructure Council in May 2014. They are aligned with the direction of the compliance framework for heavy vehicle telematics (currently under development) and the NTC's Compliance Review.

## Legislative amendments

The pre-existing legislative structure in the Heavy Vehicle National Law (HVNL) is largely sufficient to support the approval of EWDs, and the key requirements, legal relationships and obligations for the implementation and operation of the EWD. The proposed amendments are primarily maintenance or machinery changes to facilitate technological progress and to update operational provisions. Amendments to the HVNL and the Heavy Vehicle (Fatigue Management) National Regulation include:

- clarifying the meaning of the EWD, capturing local work and drivers who keep two diaries
- ensuring that current provisions based on outdated technology concepts are revised and that one of the key benefits of EWDs – accurate records that are not based on rounding rules – is realised
- supporting the operational model
- clarifying and strengthening record keeper obligations
- ensuring enforcement processes are rationalised and effective
- protecting drivers' privacy.

The policy findings concluded that EWD service providers, if separate to the record keeper, should be bound by record keeper obligations under pre-exiting shared liability provisions in the HVNL.

The policy findings further concluded that the system management and central registry roles should not be independently recognised in the HVNL at this time.

**Recommendation 1:** that proposed definitional, operational, responsibility and enforcement amendments to the HVNL and the Heavy Vehicle (Fatigue Management) National Regulation, specified in Tables 2 and 3 on pages 21–22 of the final policy paper, are adopted.

**Recommendation 2:** that the EWD compliance assessment software requires a 28-day review period for roadside enforcement, with the ability for Authorised Officers to review up to three months of records if required.

**Recommendation 3:** that expert advice is sought to assess options for allowing EWD drivers greater flexibility given that the rounding rules will no longer apply, for example, to assess the impact of three short rest breaks of 20 minutes' duration in a 24-hour period.

**Recommendation 4:** that the EWD approval process requires that EWD records are kept in Australia.

## Treatment of small breaches

The benefits of EWDs are underpinned by the increased probability of detection, which facilitates a more accurate and transparent system. However, a more accurate and transparent system challenges traditional enforcement perspectives because working a few minutes over time is a legal breach but, if infrequent, not usually a high safety risk. Furthermore, the likelihood of identifying these small breaches becomes very high, while EWDs also provide opportunities to focus on patterns of behaviour and to identify systemic issues and major breaches. Many stakeholders agree that operators, rather than enforcement agencies, should manage small breaches, particularly those operators who are accredited or operating in a safety management system. Were enforcement agencies to target small breaches they would likely conflict with their own internal policies regarding appropriate and proportionate enforcement action and, if enforced, would likely be considered trivial by the courts.

The key policy questions relate to achieving equity between EWD and WWD drivers, agreement on the acceptable limit of a small breach before enforcement action should be taken, and the form in which the policy position is conveyed to industry, for example, in national guidelines or legislation.

During the EWD Operational Pilot, the NTC consulted on a range of options to resolve the issues stemming from the treatment of small breaches. There were a number of perspectives from across both industry and governments, and the NTC recommended a non-accumulative legislated approach, whereby a breach of up to eight minutes *for any period* is deemed to be compliant with work rules. Adopting this approach, this eight minutes may be utilised by the driver in any of the work rules the driver is operating under within the 24-hour period. For example, a driver who exceeds work time by five minutes in the first period of work may only exceed work time by up to three minutes for the rest of the 24-hour period, unless the driver makes up for the five minutes at a later time in that day.

Industry seeks recognition that transport operations are subject to congestion and unforeseen circumstances and that the acceptable limit of a small breach should reflect the rounding rules for WWD drivers to ensure equity between EWD and WWD drivers. On the other hand, from a government perspective, policymaking should not be based on condoning the illegal and incorrect application of the rounding rules. It is therefore suggested that enforcement policy should take into consideration whether the small breach has occurred in good faith, is of nominal fatigue impact and not part of a broader pattern of behaviour.

The NTC commissioned advice from four fatigue and road safety experts on the fatigue impact of the recommended approach. Three of the four experts assessed the fatigue risk of a non-accumulative eight minutes is likely to be negligible, particularly if the eight minutes applied to all work limits, such that it cannot lead to an accumulation of excess work over multiple work periods. While University of NSW fatigue expert Professor Ann Williamson advised against an additional eight minutes, the advice also recognised the benefit of this approach for those drivers who would otherwise round down work and conceal 'hidden breaches' in the rounding rules for WWDs.

Further consultation was undertaken and the NTC is making a final recommendation in this paper for consideration by ministers. A legislative approach of eight minutes remains the preferred option, however with some key qualifications:

- The substance of the approach should be contained in national regulations.
- The approach should be framed as the acceptable limit of a small breach.
- The approach should not apply to drivers operating under advanced fatigue management.
- The treatment of small breaches should be reviewed after two years of initial uptake by industry.

**Recommendation 5:** that the HVNL and Heavy Vehicle (Fatigue Management) National Regulation are amended to provide that EWD drivers operating under standard hours or basic fatigue management may exceed a work period, under any applicable work rule in the 24-hour period, by up to and including eight minutes.

**Recommendation 6:** that the treatment of small breaches in the Heavy Vehicle (Fatigue Management) National Regulation is reviewed for its impact on fatigue risk and compliance and enforcement operational effectiveness after two years of initial uptake by industry.

## Privacy and surveillance

Like a WWD in use today, an EWD generates information – often personal information – that may be subject to privacy law. Unlike a WWD, however, an EWD has the potential to generate more information, more easily. The EWD system is likely to have a more complex structure of interrelated functions, roles, responsibilities and entities that may, under different circumstances, access, disclose, hold or destroy personal information. This is particularly the case, taking into consideration that the EWD tracks in real time the location of the driver (not just the vehicle) and the increased accuracy, volume and currency of the EWD compared with the WWD.

Service providers, who are regulated by the Australian Privacy Principles (APPs), will be responsible for managing personal information data within the remote connection access framework. In circumstances where an Authorised Officer views the EWD records on the service provider's database, then the personal information continues to be regulated under the APPs, with the Authorised Officer a permitted third party accessing the information. If a copy of the record is then made and handled by the Authorised Officer, then that information is regulated by the Information Privacy Principles of his or her jurisdiction.

A privacy-by-design approach is proposed to ensure that the EWD system only collects personal information necessary to undertake the task and to ensure the anonymity of data where possible. This should include undertaking an independent Privacy Impact Assessment to ensure the privacy principles are complied with, and that the highest possible level of privacy protection is attained.

A further amendment to the HVNL is proposed to the effect that any enforcement or investigatory matter not related to the HVNL should require a judicial warrant to access EWD information. This amendment should in no way prevent an Authorised Officer from conducting enforcement activities related to the HVNL, nor should it prevent or inhibit the collection of de-identified aggregated data for research and network management purposes.

**Recommendation 7:** that the HVNL is amended to ensure police, regulators and enforcement agencies obtain a judicial warrant to lawfully gain access to personal information contained in an EWD record for any purpose not connected with enforcement of the HVNL.

**Recommendation 8:** that the EWD system and its associated institutional environment adopt a privacy-by-design approach to ensure the EWD system can co-exist with other regulatory and/or commercial telematics systems and only uses personal information necessary to undertake the EWD task and to keep the data anonymous were possible.

**Recommendation 9:** that the National Heavy Vehicle Regulator commissions an independent Privacy Impact Assessment to ensure the collection, handling and disclosure of personal information within the EWD system is consistent with the Australian Privacy Principles and surveillance device laws, and meets the highest standards of privacy protection possible.

## Approval of technical standards

The EWD technical specification is anticipated to have significant operational costs and policy implications for industry and governments. For example, the extent to which the technical specification requires service providers to incorporate fatigue advice and driver warnings will have an impact on EWD costs.

Given the importance of the EWD specification, and to ensure alignment with better regulation principles of accountability and accessibility, the NTC recommends that the EWD technical specification, and any subsequent amendments, be approved by ministers and made available on the relevant agency website.

**Recommendation 10:** that the EWD technical specification, and any substantial changes, are approved by the Transport and Infrastructure Council, with minor and non-contentious amendments approved by TISOC; and that a public version of the EWD technical specification is made available on the National Heavy Vehicle Regulator website.

## Next steps

In the event that policy findings and recommendations are approved by the Transport and Infrastructure Council, the NTC will seek to draft legislative reforms for consideration by ministers at the subsequent meeting of the Transport and Infrastructure Council in November 2014, with legislative amendments expected to be progressed in 2015. Amendments to the HVNL will therefore be subject to council approval and parliamentary timeframes.

The National Heavy Vehicle Regulator has lead responsibility for EWD implementation, which is anticipated to be undertaken in parallel to the legislative amendment process. Consultation, including expert advice, on 20-minute rest breaks for EWD drivers could also be undertaken in parallel to the legislative amendment process. Other issues raised for further consideration, such as the balance between roadside enforcement and back-office investigation, would benefit from a period of settled EWDs operations prior to progressing further. The review of the treatment of small breaches after two years of initial uptake by industry is an appropriate time to consider other policy issues and proposals.

# Contents

# 1. Introduction

The electronic work diary (EWD) is an alternative form of record keeping for fatigue-regulated heavy vehicle drivers. Available in the law, but yet to be approved for use, the EWD has the potential to significantly improve fatigue management. The EWD can assist drivers to comply with the law and contribute to a systems-based approach to managing drivers' performance in the context of chain of responsibility. These benefits are underpinned by higher visibility of work and rest hours, improved accuracy and accessibility and improved self-compliance. Enforcement can also be improved – the accuracy and higher probability of detection enables regulators and enforcement agencies to intelligently assess risk and identify high levels of noncompliance.

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The National Transport Commission (NTC) has worked with industry and governments to ensure that legislative and policy settings can maximise the safety benefits. Enforcement policy should recognise that EWDs are a voluntary alternative to the WWD and that if the safety benefits of EWDs are to be obtained through industry uptake there should be scope for accepting that even a highly compliant driver may, in good faith, occasionally commit a small breach of nominal fatigue impact. In these situations, equity of treatment between EWD and WWD drivers is sought.

## 1.1 Aims of the final policy paper

This paper progresses EWD regulatory reforms for consideration by the Transport and Infrastructure Council. The recommendations made in this paper are the culmination of work undertaken by the NTC as part of the EWD Operational Pilot (the EWD Pilot). The policy findings and recommendations made by the NTC are intended to ensure:

- EWD provisions are fit-for-purpose and are not ambiguous or based on outdated technology assumptions
- a consistent and equitable approach to the treatment of small breaches is agreed at a national level
- the collection, handling and disclosure of personal information generated by EWDs sufficiently protects drivers from illegal or unreasonable contravention of their privacy
- the process for approving the EWD technical specification is appropriately transparent and robust.

### 1.1.1 Scope

The policy findings and recommendations made in this paper are based on stakeholder feedback from *Preparing Australia for Electronic Work Diaries: regulatory issues paper*,[3] in addition to earlier consultation with industry and government stakeholders through the EWD Pilot steering committee,[4] project management committee and industry reference group. The NTC also conducted independent research and sought advice from a range of organisations and experts, including Transport Certification Australia (TCA), Privacy Victoria and fatigue experts.

The policy findings and recommendations contained in this report have been shaped by the scope and direction of the EWD Pilot. The following operational issues are primarily the responsibility of the National Heavy Vehicle Regulator (NHVR), and are not within the scope of this paper:

- organisational match to roles and responsibilities
- finalisation of the technical specification, guidelines and relevant standards
- approval processes
- systems implementation.

[3] Submissions are available at http://www.ntc.gov.au/RFCCommentsView.aspx?DocumentId=2447 (viewed 03/02/2014).
[4] The EWD Pilot national steering committee was chaired by NSW Roads and Maritime Services and attended by representatives from the jurisdictions, police, the NTC, the NHVR and TCA.

## 1.2 Background

The Heavy Vehicle National Law (HVNL) provides that fatigue-regulated heavy vehicle drivers working 100 kilometres or more from base (100+km), or operating under basic fatigue management (BFM) or advanced fatigue management (AFM), must keep formal records of their work and rest hours in a defined manner. The policy intent of record-keeping requirements is to improve road safety by increasing visibility of driver activity and to reduce opportunities for drivers to drive while impaired by fatigue. Drivers undertaking local work (up to 100 km from base) are not required to keep the same work diary records but nonetheless could still use an EWD to manage their fatigue risks.

Heavy vehicle drivers are required to record their work and rest hours in the National Driver Work Diary. This is a paper-based WWD that records work in 15-minute periods. The HVNL provides that, as an alternative to the WWD, drivers may use an EWD. The NHVR has not yet approved an EWD for use.

A number of projects have progressed the development of an EWD. In 2010–11, the NTC developed the *Electronic systems for heavy vehicle driver fatigue and speed compliance* policy paper[5] in consultation with industry and governments. This paper proposed a way forward for industry and regulators on the voluntary use of EWDs to monitor fatigue and speed compliance. The then Australian Transport Council unanimously approved the finalised policy paper in 2011. Separately, Austroads developed a report[6] to complement the NTC policy paper.

### 1.2.1 EWD Operational Pilot

The New South Wales Government funded the EWD Pilot between 2011 and 2013 to test the application of proposed EWD policy and technology specifications. The EWD Pilot was conducted by TCA on behalf of the NSW Centre for Road Safety and NSW Roads and Maritime Services, with cooperation from transport industry associations and pilot participants.[7] The EWD was found to be feasible and the optimal technical and operational environment was identified. It concluded that:

- a remote connection access framework[8] should be adopted rather than on-board printers
- EWDs should count time to the second but display to the minute
- vehicle tethering, tamper monitoring and global navigation satellite system (GNSS) technology are required to ensure a tamper-evident environment.

The EWD Pilot concluded that EWDs improve compliance through data accuracy and transparency, while real-time information can improve the responsiveness of operators to driver behaviour. Additionally, in-vehicle information can enable drivers to accurately plan their work and rest hours and be warned about upcoming rest breaks. The EWD Pilot also assessed the feasibility of different models, technology requirements and cost benefits.

The EWD Pilot made a number of assumptions reflected in this paper. Namely, that the EWD will be a voluntary alternative to the WWD and that the current balance of roadside enforcement and back-office investigations is expected to continue at this stage.

As part of the EWD Pilot, Sinclair Knight Merz (SKM) assessed future EWD roles and responsibilities from a governance and probity perspective. SKM identified that the NHVR, as the EWD regulatory framework owner, would be responsible for managing legislation and policy implementation governing the EWD.[9] SKM recommended that the functions of the EWD system manager should be performed by one entity and that TCA was best placed to perform this role in view of its mandate, operational skills, knowledge and experience with other telematics applications such as the Intelligent Access Program (IAP) and On-Board Mass Monitoring. SKM identified that it

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[5] National Transport Commission, *Electronic systems for heavy vehicle driver fatigue and speed compliance: Policy paper*, 2011, http://www.ntc.gov.au/filemedia/Reports/ElecSystHVFatSpeedCompFINAL.pdf (viewed on 24/01/2014)
[6] Austroads, *Performance-based specification for electronic work diary and heavy vehicle speed monitoring: Report*, 2011, https://www.onlinepublications.austroads.com.au/items/AP-R386-11 (viewed on 24/01/2014)
[7] New South Wales Roads and Maritime Services, *Final report: Operational Pilot of Electronic Work Diaries and Speed Monitoring Systems*, 2013, http://roadsafety.transport.nsw.gov.au/stayingsafe/drivers/heavyvehicledrvers/electronic_work_diaries_oct2013.pdf (viewed on 24/01/2014)
[8] Technical features of the EWD system, such as the remote connection access framework, are detailed in section 1.3.
[9] New South Wales Roads and Maritime Services, *Final report: Operational Pilot of Electronic Work Diaries and Speed Monitoring Systems*, 2013, p. 33

is important that the operations of the EWD are managed within a policy context and, as such, the establishment of formal accountability arrangements and refinement of roles between the NHVR and TCA will be an essential feature of any implementation plan.[10]

The issues raised in this paper need to be addressed regardless of the operational and governance arrangements adopted for EWDs.

### 1.2.2 EWD regulatory issues paper

As part of the EWD Pilot, the NTC undertook a review of policy issues. Working closely with industry and government within the EWD Pilot's governance and stakeholder engagement structure, the NTC identified legislative and policy issues for resolution. As a result of detailed analysis and stakeholder consultation, the NTC published a regulatory issues paper[11] that considered legislative amendments, compliance/enforcement policy and privacy implications of EWDs.

Stakeholder feedback from the regulatory issues paper is summarised throughout this report and underpins the NTC's recommendations to ministers.

#### *Legislative review*

The regulatory issues paper observed that since its introduction into the law in 2008, the concept of the EWD has changed in some ways as the available technology has progressed. Most evidently, there has been a shift in technology from on-board printers and an in-vehicle device, to a cloud-based systems approach that allows driver records to be accessed remotely for compliance and enforcement purposes. This includes the development of a single interface to enable drivers to use multiple service providers to produce a single set of electronic records for review.

These developments resulted in a range of suggested amendments to the HVNL. For example, the regulatory issues paper discussed amending the HVNL to remove rounding rules for EWDs and the removal of on-board printers. It also discussed amendments to ensure that EWD provisions relating to matters such as tampering and malfunctions related to the whole system, not just the in-vehicle device.

Suggested amendments from the legislative review are considered in detail in **Chapter 2** of this final policy paper.

#### *Compliance and enforcement*

Enforcement policy was identified early in the EWD Pilot as a key area requiring clarification in order to provide certainty to operators and drivers about how they would be treated. One of the key issues remains the extent to which equity of treatment between WWD and EWD drivers can be maintained, particularly given the exposure to small breaches and increased probability of detection for drivers who use an EWD. The regulatory issues paper discussed options and suggested recommendations in relation to the treatment of small breaches, the time period in which EWD records could be assessed at a roadside intercept, how locations should be recorded, the use of an EWD to record local work and how drivers can move between recording work and rest hours in a WWD and an EWD.

Suggested compliance and enforcement policy settings that would be reflected in amendments to the HVNL are considered in **Chapter 2**; the treatment of small breaches is considered separately in **Chapter 3**.

#### *Privacy and surveillance*

The regulatory issues paper considered the privacy and surveillance law implications of introducing EWDs. The paper noted that EWDs generate personal information and the NHVR is bound by the Queensland Information Privacy Principles that set out requirements in relation to the collection, handling and disclosure of EWD personal information. It also found that EWDs constitute a surveillance tracking device (and a workplace surveillance device in New South Wales), and under

[10] ibid.
[11] National Transport Commission, *Preparing Australia for Electronic Work Diaries: Regulatory issues paper*, 2013, http://www.ntc.gov.au/filemedia/Reports/PrepAustEWDsRegIssuesPaperOct13.pdf (viewed on 24/01/2014)

Commonwealth, state and territory laws requires consent from the individual to ensure the surveillance is not covert. The regulatory issues paper concluded that privacy can be managed, but it is a critical success factor given the sensitivity of the information generated by EWDs. The NTC recommended a privacy-by-design approach and raised for discussion amendments to the HVNL to regulate access to EWD personal information for non-HVNL enforcement purposes.

Suggested approaches to managing compliance with privacy principles and surveillance laws are considered in **Chapter 4** of this final policy paper.

## 1.3 Key features of the EWD

### 1.3.1 EWDs in the national law

The HVNL provides the legal structure for the approval and operation of EWDs. Specifically, EWDs are contained within chapter 6 of the HVNL, which has regard to driver fatigue. The EWD provisions are integrated with legal requirements for WWDs more generally. Key provisions relate to:

- requirements relating to work and rest time (including counting periods of 15 minutes)
- requirements to carry a work diary
- how information must be recorded
- requirements about record keeping
- approval of electronic recording systems (including provisions about EWD labels).

These provisions are primarily focused on the obligations of fatigue-regulated heavy vehicle drivers and record keepers. Under the HVNL, the NHVR has responsibility for approving EWDs, but the law does not have regard to other functions in the regulatory environment, such as a system manager, registrar or service provider. Further, unlike IAP, it does not limit or place conditions on access and disclosure of EWD personal information consistent with the *Privacy Act 1988*.[12]

### 1.3.2 Technical features of the EWD

In addition to the legislative requirements, duties and obligations described above, there are technical features of the EWD that are based on the specification released as part of the EWD Pilot.[13] These features are important from a regulatory perspective because, first, some require minor amendments to the HVNL, and second, because they in turn have policy implications. For example, the introduction of compliance assessment software for use by Authorised Officers provides a potential solution for managing drivers who are using both WWDs and EWDs in a 28-day period, given that the software can inform the Authorised Officer of the maximum work hours that should be contained in that driver's WWD.

**Table 1** summarises the technical features of the EWD, based on the outcomes of the EWD Pilot.

**Table 1: Technical features of the EWD**[14]

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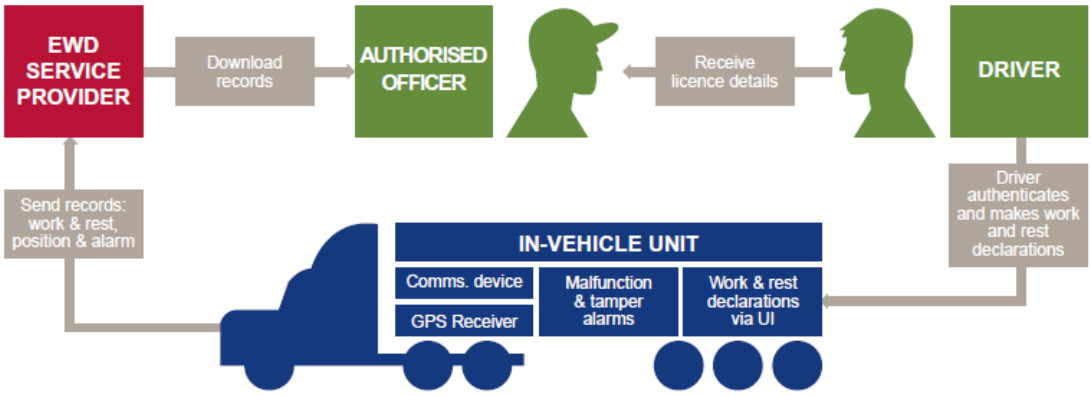
|---|---|
| **In-vehicle unit (IVU)** | The physical telematics box that is tethered in the heavy vehicle. |
| **User interface (UI)** | The screen and touchpad or keypad that will be used by drivers to access and enter information. |
| **Service provider** | The technology provision of hardware and software (excluding the IVU and UI) used in the collection, processing, testing, storage and communication of EWD data. |
| **Remote connection access framework** | Process by which EWD data is continuously captured by the IVU and transmitted to remote storage, from where it is accessed through the internet. |

[12] *Privacy Act 1988* (Act no. 119 of 1988) (Cwlth)
[13] Draft EWD Technical Specification, 2013, is available on the RMS website at http://roadsafety.transport.nsw.gov.au/stayingsafe/drivers/heavyvehicledrvers/index.html (viewed on 03/03/2014).
[14] New South Wales Roads and Maritime Services, *Final report: Operational Pilot of Electronic Work Diaries and Speed Monitoring Systems*, 2013, Executive Summary, http://roadsafety.transport.nsw.gov.au/stayingsafe/drivers/heavyvehicledrvers/electronic_work_diaries_oct2013.pdf (viewed on 24/01/2014)

| | |
|---|---|
| **Compliance assessment software** | Software developed by the EWD Pilot that allows Authorised Officers to assess driver compliance with fatigue rules. |
| **Interface for data storage and transfer** | An optional interface that enables the transfer of data from the IVU to an approved portable mass storage device. |

**Figure 1** provides an overview of how the EWD works: the remote connection access framework underpins the conceptual development of the EWD.

**Figure 1: An overview of how the EWD works**[15]




The EWD Pilot further recommended a central registry of EWD drivers to act as a directory to facilitate record access for drivers, operators, Authorised Officers and, where required, between service providers.[16] The regulatory issues paper discussed options to recognise the registrar function in the HVNL.

There is no proposal that the remote connection access framework supports automated penalty infringement notices.

### 1.3.3 Differences between electronic and paper-based records

From a regulatory perspective, the EWD is, in many ways, quite different from the paper-based method of recording work and rest hours. The EWD is both a device, or IVU, that is tethered to a vehicle, and an information system that transmits the work and rest hour information contained in the IVU via a remote connection access framework to the EWD record keeper. This approach enables operators and Authorised Officers to access a driver's records without necessarily accessing the IVU. EWDs are expected to have the following key features.

- **Data will be accessed remotely:** While a driver recording device (DRD) may be used as an auxiliary feature, the system will be based on a remote connection access framework for enforcement and reporting purposes. This means that, unlike WWDs, the data will be more easily accessible from a range of locations.

- **There will be greater data assurance:** EWDs will incorporate GNSS tracking.[17] While the recording of non-driving work time in both WWDs and EWDs relies on self-assessment, GNSS technology in EWDs confirms the vehicle location and time and thereby provides greater assurance regarding driving work time.

[15] ibid., p. 9
[16] ibid., p. 10
[17] Vehicles will not always be operating in GNSS range, but when a vehicle is once again within range, the backlog of data can be uploaded to the EWD system.

- **Data will be generated in greater detail:** Data (including GNSS information) will be displayed to the nearest minute for reporting purposes; data will generally be transmitted to the service provider within 15 minutes, depending on telecommunications availability.

- **Easier and faster analysis of the data:** While analysis of WWD records is time-consuming and relies on the skills and experience of individual Authorised Officers to be able to identify behaviours, the compliance software developed for EWDs can conduct instant analysis of the records in order to identify all breaches.

- **Multiple records will be viewed through a single interface:** Multiple service providers will provide interoperable data for third parties to access work records in a single interface.

- **Currency of the data:** Compliance reports may be generated in real time, depending on when the vehicle was last able to send data back to the server.

- **Drivers using an EWD will be registered:** All drivers using an EWD will be identified on a central registry to enable roadside enforcement to efficiently confirm whether a driver is registered to use an EWD.

Drivers will also receive warnings when their rest breaks are due and the EWD can be utilised by operators to better manage driver fatigue and planning. As a consequence of these features, the EWD is quite different from WWD-based record keeping. There are therefore regulatory challenges associated with EWDs that the policy findings and recommendations in this paper set out to address.

## 1.4 Strategic context

### 1.4.1 National in-vehicle telematics strategy

In 2011 the NTC released the *National in-vehicle telematics strategy: the road freight sector*,[18] which recognised that the voluntary and widespread uptake of effective in-vehicle technologies in the road freight sector would have significant safety, operational and environmental benefits.

The strategy proposed eight National Policy Principles. Endorsed by the then Australian Transport Council, the National Policy Principles addressed the role of government, open standards and the voluntary uptake of telematics based on demonstrable benefits to the community. Of particular relevance to EWD policy development, National Policy Principle 2 provides that:[19]

> 2. The role of governments is to provide **policy certainty by setting the regulatory framework**, creating an environment for business to invest with confidence.

The role of governments, and a key objective of this final policy paper, is to provide policy certainty so that the benefits of EWDs can be realised.

### 1.4.2 Policy framework for intelligent transport systems

In 2012 the *Policy Framework for Intelligent Transport Systems in Australia* established a policy platform to guide consistent implementation, integration and increased uptake of intelligent transport systems (ITS). The framework acknowledged the issues of applying ITS for compliance and enforcement purposes.[20]

[18] National Transport Commission, *National in-vehicle telematics strategy: the road freight sector,* 2011
[19] ibid, p. 6
[20] Standing Council on Transport and Infrastructure, *Policy Framework for Intelligent Transport Systems in Australia*, 2012, p. 11

**Applying ITS technologies for compliance or enforcement purposes**

***Issue:*** ITS systems create the potential for continuous monitoring of characteristics such as speed, location and distance driven. While creating the potential for improved compliance and enforcement of regulatory frameworks, there is also a risk that this capability could deter commercial take-up of ITS applications that could deliver net community benefits. These issues need to be taken into account in the development of regulatory frameworks for ITS.

***Position:*** Compliance and enforcement should be taken into account by jurisdictions in developing any regulatory arrangements for ITS. This should be approached from a national perspective with model national law that each state is working collaboratively to implement.

The *Policy Framework for Intelligent Transport Systems* sought to balance potential enforcement capabilities with industry's unwillingness to utilise the technology in the face of increased enforcement exposure. It recognised that privacy and data access are critical issues for resolution given that ITS is often based on the flow of personal information.[21]

The policy findings and recommendations in this paper support the *Policy Framework for Intelligent Transport Systems* focus on ensuring that privacy and risk management issues are addressed at the design stage, and that security measures are considered to prevent modification or misuse of personal information.[22]

### 1.4.3 Compliance framework for heavy vehicle telematics

The NTC is working closely with jurisdictions, the NHVR, TCA, Austroads and industry to develop a compliance framework for heavy vehicle telematics. This is intended to provide a strategic framework for regulatory systems that utilise telematics technology, such as the EWD.

The objective of the proposed framework is to provide certainty in national policy on the use of telematics data for compliance purposes, in order to encourage industry to adopt telematics and hence provide for improved road safety, productivity and environmental outcomes that contribute to higher standards of living. Therefore, the framework has three aims:

1. to identify a common telematics data set based on international standards, capable of facilitating multiple commercial and compliance-related applications
2. to identify opportunities for telematics to improve roadside enforcement, responsive regulation, audit-based schemes, safety management systems, chain of responsibility and meta-regulation approaches
3. to establish principles in relation to:
    - exposure of small breaches
    - certainty of when telematics data will be accessed for enforcement purposes
    - protection of personal information
    - equity of treatment before the law
    - confidence in the integrity and performance of systems (evidentiary value).

In December 2013 the NTC released *Developing a Compliance Framework for Heavy Vehicle Telematics – Discussion paper*.[23] Based on submissions and feedback received through the consultation process, Australian Ministers have endorsed the following framework principles:[24]

[21] ibid, p. 12
[22] ibid, p. 12
[23] National Transport Commission, *Developing a Compliance Framework for Heavy Vehicle Telematics: Discussion paper*, 2013, http://www.ntc.gov.au/DocView.aspx?DocumentId=2463 (viewed on 28/01/2014)
[24] National Transport Commission, *Delivering a Compliance Framework for Heavy Vehicle Telematics: Final policy paper*, 2014, pp. 25-27

**Compliance Framework for Heavy Vehicle Telematics – framework principles**

**Privacy and protection of information principles**

**Principle 1:** The access and use of telematics information must be consistent with Australia's international human rights obligations: public authorities must not apply or enforce laws, policies or programs in a discriminatory or arbitrary manner, and no one must be subjected to arbitrary or unlawful interference with his or her privacy.

**Principle 2:** When accessing telematics information for compliance and enforcement purposes, public authorities must be bound by privacy and information principles that are consistent with the Australian Privacy Principles – these principles should allow the aggregation of de-identified telematics data for research and planning purposes.

**Principle 3:** Information derived from telematics systems must only be accessed by public authorities for the regulatory purposes for which they were intended. For example, a telematics system installed only to meet regulatory requirements under the Heavy Vehicle National Law must not be accessed for any other regulatory, enforcement or investigatory purpose unless a court-issued warrant is obtained.

**Principle 4:** Each regulatory application must clearly identify to the user which organisation has responsibility for personal information generated by the telematics system, and which organisations may access or hold personal information derived from the telematics system.

**Compliance and enforcement principles**

**Principle 5:** Each regulatory application must set out:

- the purposes for which information will be collected
- which data will be accessed for these purposes
- the conditions under which this information will be sought.

**Principle 6:** Public authorities that use telematics information for a regulatory purpose must develop and implement policies based on reasonable and proportionate enforcement. The treatment of telematics information should have regard to patterns of behaviour and the higher probability of detection.

**Principle 7:** Enforcement polices in relation to the use of telematics information should be publicly released where it is appropriate to do so, and when the release of the enforcement policy does not pose a risk to the integrity of enforcement or regulatory policy.

**Minimum standards of telematics**

**Principle 8:** The performance standard of telematics used for regulatory purposes is a policy decision to be guided by the objectives of the regulatory application under consideration. Where possible, standards should support interoperability and facilitate multiple commercial and compliance applications. Telematics used for enforcement must meet evidentiary requirements.

**Regulatory efficiencies**

**Principle 9:** The use of telematics to improve compliance should aim, where possible, to ensure greater safety and efficiency for industry and public authorities.

**Application of these principles**

**Principle 10:** These principles should be consistently applied by public authorities across all participating jurisdictions. Public authorities should demonstrate and communicate to stakeholders why a departure from the framework principles is warranted.

Stakeholder feedback from the discussion paper has informed NTC thinking on EWD regulatory issues. The policy findings and recommendations in this paper are aligned with the draft policy principles and direction of the framework towards a transparent and nationally consistent policy position.

# 2. Heavy Vehicle National Law amendments

In this chapter the NTC makes a number of policy findings and recommendations in relation to amendments to the HVNL. These are grouped according to four themes: (1) provisions relating to definitions; (2) operational matters; (3) roles and responsibilities; and (4) enforcement matters.

## 2.1 Definitional amendments

### 2.1.1 Meaning of EWD

The definition of the EWD at section 221 of the HVNL provides that the EWD is 'a device that is, or is part of, an approved electronic recording system'. This definition allows for the device to be part of a broader electronic recording system, but the object of the definition is the device, not the system. This casts uncertainty on whether EWD provisions, such as those that relate to reporting a malfunctioning device, apply only to the device or the broader EWD system administered by a service provider and overseen by a system manager. The NTC suggested in the regulatory issues paper that the intention of the HVNL is to capture the electronic recording system and not just the IVU, therefore the definition of the EWD should be clarified.

Clarifying the meaning of the EWD would only seek to ensure that when later provisions refer to the EWD they refer to the system, not just the device inside the vehicle. This amendment does not require the recognition of the service provider or system manager in the HVNL, which is dealt with separately in section 2.3 of this paper.

Second, section 304 of the HVNL sets out requirements in relation to when an EWD 'has been filled up.' The regulatory issues paper suggested that this terminology was not applicable to a systems approach. While the phrase 'has been filled up' is unlikely to apply, there is a possibility that either the IVU or back-office system could experience data capacity issues with the consequence that EWD records could be no longer stored.

***Stakeholder feedback***

Queensland Transport and Main Roads (QLD TMR) and the Australia and New Zealand Policing Advisory Agency (ANZPAA) supported clarifying the meaning of EWD and no stakeholders have objected to amending the definition. Stakeholders did not express a view on whether an EWD can be 'filled up' and the suitability of that phrase continuing in the HVNL.

***Policy position***

The NTC recommends that the definition of the EWD at section 221 is clarified to ensure it captures both the EWD device and the electronic recording system.

The NTC recommends that the phrase 'has been filled up' at subparagraph 304(b)(i) of the HVNL is not amended at this time.

### 2.1.2 Meaning of 'work'

The definition of work in section 221 of the HVNL means, among other things, to 'occupy the driver's seat of a fatigue-regulated heavy vehicle while its engine is running'. The regulatory issues paper suggested that drivers should be able to check their times on a rest break and that either the technical specification is amended to require that a driver's work and rest times can be viewed without the engine running, or the definition of work is amended to clarify that a driver can review the EWD in a rest break. This suggestion was made only in respect to reviewing records, not making an entry.

***Stakeholder feedback***

QLD TMR supported the suggested amendment. Transport for New South Wales (TfNSW) observed that any variation to the definition of work must not result in drivers using their rest breaks to make entries but agreed that a review of records equivalent to 'checking the clock' was acceptable. The South Australian Department of Planning, Transport and Infrastructure (SA DPTI) held that at present a driver accessing and reviewing a WWD would be regarded as work and the

same should therefore apply to EWD drivers in the interests of equity (or they should both be changed). SA DPTI further indicated that changes to the definition of work are broader than EWDs and should not be considered in isolation. ANZPAA did not support any changes to the meaning of work, which was thought to be unnecessary and inequitable to WWD users.

***Policy position***

Changes to the meaning of work for EWDs may have wider impacts on drivers using a WWD. The NTC recommends that any changes to the meaning of work should be considered as part of broader fatigue reforms and that amendments should not be made at this time.

### 2.1.3 Meaning of 'driver's possession'

Subparagraph 293(1)(b)(ii) provides that a driver must keep a work diary and ensure that the driver's work diary is *in the driver's possession* while the driver is driving the vehicle. The regulatory issues paper discussed potential amendments to this provision to clarify that 'possession' in the context of EWDs may capture knowledge or control of the IVU rather than physical possession of a diary within a dictionary meaning of possession.

Further analysis and stakeholder engagement suggests that the concept of possession in the context of this provision can be interpreted widely and is not limited to the physical possession of the device. For example, drivers will have control over the system through logging-on and using the IVU to record work and rest hours. The legal concept of possession may therefore continue to be valid.

***Stakeholder feedback***

There was no strong support for suggestions in the regulatory issues paper that the definition of possession required further clarification in the context of a systems-based approach. TfNSW suggested that established common law principles are sufficient, noting that there could be an opportunity to make clear that whatever is required to be in drivers' possession must be in their immediate physical control. QLD TMR also deferred to case law and observed that there is legal precedent for possession as it relates to having knowledge and actual control of something.[25] It argued that this should be sufficient for the purposes of the provisions in the HVNL and that the legal precedent should be relied upon, not the dictionary definition.

***Policy position***

On balance, the NTC accepts that the common law concepts of possession are sufficient and the meaning of possession in the HVNL does not require clarification at this time.

### 2.1.4 Meaning of supplementary record

During any period in which a fatigue-regulated heavy vehicle driver is unable to use the work diary, they must make a supplementary record of their work and rest hours. Subsection 305(5) provides that a supplementary record cannot be made in a WWD or an EWD but is in a similar form to a WWD or EWD.

By definition, neither a WWD nor an EWD can be a supplementary record. The regulatory issues paper suggested that a flexible and practical approach would be to allow drivers with malfunctioning EWDs to use their WWDs as the supplementary record. The regulatory issues paper recognised, however, that this approach may be unsatisfactory from an enforcement perspective, which seeks to discourage the use of two forms of work diary simultaneously.

In a related matter, the regulatory issues paper observed that EWDs will require GNSS recordings but the meaning of supplementary record does not consider whether 'similar form' includes the requirement to record longitudinal and latitudinal measurements.

***Stakeholder feedback***

Stakeholders did not provide support, or qualified support, for drivers being able to use a WWD as a supplementary record. However, TfNSW observed that the use of supplementary records rather

[25] He Kaw Teh v. The Queen [1985] HCA 43; and Williams v. The Queen [1986] HCA 88

than an existing WWD will maintain the distinction between the two forms of recording. ANZPAA, which seeks to limit drivers to one diary type generally, also did not support WWDs as supplementary records.

In relation to clarifying whether 'similar form' means the recording of GNSS location, TfNSW supported an amendment to extend the provision to identifying the driver's longitudinal and latitudinal location. No other stakeholder provided feedback on this matter.

***Policy position***

In view of the importance of preserving the distinction between drivers who use an EWD and WWD, the NTC recommends that the current supplementary record provisions and the definition of 'similar form' is sufficient and that amendments are not required at this time.

### 2.1.5 Change heading of 'keeping EWD and WWD simultaneously'

Section 326 of the HVNL provides that a fatigue-regulated heavy vehicle driver may use both an EWD and a WWD in the same 28-day period and that an EWD and a WWD may be kept *in possession* simultaneously – but not *used* simultaneously. This is explained in subsection 326(2) and the subsequent example in the law. However, the heading of the provision is misleading – it states: 'Keeping 2 work diaries simultaneously.'

***Stakeholder feedback***

An amendment to this provision would be a minor change to the HVNL and was broadly welcomed by members of the project management committee. No feedback was received regarding this issue in the submissions.

There was no enthusiasm from stakeholders to distinguish between using an EWD for a regulatory purpose (i.e. to record work and rest hours in an approved form) and using an EWD for a non-regulatory purpose (e.g. to provide warnings while continuing to use WWDs for regulatory purposes). Therefore, discussion in the regulatory issues paper relating to clarifying circumstances where an EWD may be used for non-regulatory purposes have not been pursued.

***Policy position***

The NTC recommends that the heading of section 326 is amended to clarify that using two work diaries simultaneously is prohibited, rather than keeping two work diaries.

## 2.2 Operational amendments

### 2.2.1 Counting periods of less than 15 minutes

Section 246 provides that work time must be counted in 15 minute periods. Subsection 246(2) provides that a period of work time of less than 15 minutes counts as 15 minutes of work time; subsection 246(3) provides that rest time must be counted in blocks of time of no less than 15 minutes and subsection 246(4) provides that a rest period of less than 15 minutes must be disregarded.

The regulatory issues paper suggested that rounding rules should not apply to EWDs given the benefits of aligning 'regulatory time' with 'real time', which in turn can improve the accuracy and operational benefits of EWDs. The NTC observed that rounding was introduced due to the physical constraints of recording time in a paper format. Rounding also creates a technical challenge for EWDs, given there is no logical method by which the software would reconcile the additional time against the work and rest hours the driver is undertaking.

Fatigue advice obtained by the NTC suggested that the removal of the rounding rules that bias work would not have a substantial fatigue risk:

> *If the rules are applied correctly, then drivers may work for slightly less time than the specified maximum, and they may obtain slightly more rest than the specified minimum. In the context of a day or week of work, it is unlikely that these effects of the rounding rules substantially affect the fatigue risk experienced by drivers. Indeed, the natural variations in fatigue risk between different drivers, or*

*within a particular driver on different days, are likely to be substantially greater than any effect that the rounding bias has on drivers' fatigue risk*.[26]

However, it is recognised that the removal of rounding for EWD drivers increases the probability of detecting small breaches and is in part the catalyst for the small breaches enforcement issue discussed in **Chapter 3**.

***Stakeholder feedback***

The removal of rounding rules for EWD drivers was supported by QLD TMR, SA DPTI, VicRoads, ANZPAA, Australian Livestock and Rural Transporters' Association (ALRTA) and the Australian Trucking Association (ATA).

A number of stakeholders, including TfNSW, SA DPTI, ANZPAA and Mr Hannifey, sought clarification as to how counting time would apply to short rest breaks. For example, a driver on standard hours must have a minimum of one hour of short rest breaks in a 24-hour period; counting time in 15 minute periods restrains a driver to taking four 15-minute rest breaks, but it is feasible that an EWD driver could take three 20-minute short rest breaks in the same period. This approach could create an additional incentive for drivers to use EWDs (provided that a minimum 15 minutes was taken) and ensure that additional rest minutes can contribute to a driver's rest requirements for the day. Further work needs to be undertaken to clarify the workability and fatigue risks of such an approach.

***Policy position***

The NTC recommends that the rounding rules contained in section 246 of the HVNL should not apply to drivers who use EWDs, who should count and record time to the minute.

The NTC recommends that expert advice is sought to assess the fatigue impact of allowing EWD drivers greater flexibility given that the rounding rules will no longer apply, for example, to assess the impact of three short rest breaks of 20 minutes' duration in a 24-hour period.

### 2.2.2 Printouts

Section 292 of the HVNL provides that when a driver uses a combination of an EWD and a WWD in a 28-day period, the driver must carry printouts of any relevant records that are not in the WWD or stored in the EWD. The requirement to carry printouts is referenced elsewhere in the HVNL (in relation to what a record keeper must do if an EWD is destroyed, lost or stolen, at paragraph 312(2)(b)) and what the record keeper must do if an EWD is not in working order or is malfunctioning, at paragraph 313(2)(b) and subsection 324(2).

Given that the EWD Pilot adopted a remote connection access framework approach, the regulatory issues paper suggested there would not be circumstances where printouts would be required and that these provisions should be removed from the HVNL. In circumstances where the remote connection fails, an Authorised Officer may view the records displayed on the IVU – thereby obviating the need for the driver to carry printouts.

The requirement to carry printouts is also linked to installing in-vehicle printers, which the EWD Pilot recommended should be replaced with the remote connection access framework. The removal of printouts and in-vehicle printers will reduce costs and increase the benefits for drivers to use EWDs to record work and rest times.

***Stakeholder feedback***

During the EWD Pilot there was general support from stakeholders for the removal of requirements to carry print-outs. This was reiterated in the submissions, with ALRTA and ATA supporting the suggestion and no stakeholders stating any concerns with this approach.

***Policy position***

The NTC recommends that sections 292, 312, 313 and 324 of the HVNL are amended to remove requirements to carry printouts.

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[26] Dawson D, *Electronic Work Diaries (EWDs): Treatment of Small Breaches*, unpublished advice to the NTC, CQUniversity, 2013, p. 5

### 2.2.3 EWD labels

Sections 344–350 of the HVNL contain provisions regarding EWD labels. For example, subsection 347(2) states that a person must not place an EWD label on a device unless the device is, or is part of, an approved electronic recording system to which the label relates.

Section 221 provides a definition of **electronic work diary label**, which means a label that:

> *(a) indicates that the device to which it is attached is, or is part of, an approved electronic recording system; and*
> *(b) states the number of the certificate of approval issued by the Regulator for the approved electronic recording system; and*
> *(c) is in a form approved by the Regulator.*

The regulatory issues paper observed that the remote connection access framework adopted by the EWD Pilot significantly reduces functional or enforcement benefits attributable to EWD labels, and that removal of this requirement in the HVNL would be an administrative benefit for both industry and the NHVR.

#### *Stakeholder feedback*

QLD TMR supported the removal of EWD labels and SA DPTI offered qualified support, seeking clarification as to how an Authorised Officer could be certain that EWD records were authorised if the remote connection access framework was not available and the Authorised Officer was reliant on a visual inspection of the IVU. ANZPAA did not support the removal of EWD labels on the grounds that labels provide an additional measure to reduce tampering. This perspective presupposes that EWD labels function as an anti-tampering seal, but this is not the primary intention of the provisions, which is primarily related to certification.

TCA expressed concern that the device itself may be under the dashboard and not visible for roadside enforcement purposes. Further, the IVU which displays the work and rest hour records may be on a smartphone, but this interface is not in itself the EWD device or electronic recording system and therefore should not have the EWD label positioned on it. An alternative option may be to place the EWD label on the exterior of the vehicle in a similar way to the National Heavy Vehicle Accreditation Scheme (NHVAS). However, even though an EWD unit may be approved, it does not tell the Authorised Officer whether the driver is also registered to use it. The central registry function is another integrity measure against fraudulent behaviour.

#### *Policy position*

On balance, the NTC suggests that the administrative costs of introducing EWD labels undermine the benefits of their introduction and that the concerns expressed by SA DPTI and ANZPAA can be dealt with effectively through the technical specification and registry function. This approach also aligns with the removal of vehicle registration labels in many jurisdictions.

The NTC recommends that the EWD label provisions in section 221 and sections 344–350 of the HVNL are removed. The technical specification could require that a visual inspection of the IVU provides certainty that the displayed records are from an approved EWD.

### 2.2.4 Malfunctioning EWD

Paragraph 293(3)(b) of the HVNL provides that if a driver fails to keep a work diary it is a defence for the driver to prove that the information was:

> *recorded in an EWD and destroyed or lost as a result of a malfunction of the EWD before the information was given to the driver's record keeper or recorded in another way.*

Working under a remote connection access framework, there may be circumstances where a driver's records cannot be transmitted to the record keeper because of a temporary loss of connectivity. The regulatory issues paper discussed options in relation to including a reference to a temporary loss of connectivity as a separate defence for drivers. In a similar way to a malfunctioning device, this would be outside the driver's control and therefore appropriate for consideration as a defence. On the other hand, it was observed in the regulatory issues paper that a temporary loss of connectivity may not necessitate a defence, given that EWD records will continue to be captured on the IVU.

A related scenario considered in the regulatory issues paper was where an EWD has malfunctioned but the driver thought it was working, and it was reasonable for the driver to hold that view. There may be grounds to consider a defence for a driver in these circumstances; however, the NTC suggests that should record keepers be charged with an obligation to inform drivers of a malfunctioning EWD (as recommended in **section 2.3.1**), this additional defence would be unwarranted.

***Stakeholder feedback***

TfNSW agreed with expanding the driver's defence to include temporary loss of connectivity. QLD TMR commented that the discussion in the regulatory issues paper was largely focused on the EWD as a device, and that malfunctions could be reconsidered as a system concept rather than a device. This approach is discussed further in **section 2.1.1**. Overall, however, there was minimal feedback from stakeholders in relation to a new defence for temporary loss of connectivity.

***Policy position***

On balance, the NTC recommends that the current driver's defence in relation to a malfunctioning EWD is sufficient and that no amendments should be made at this time. The temporary loss of connectivity should not prevent a driver or Authorised Officer from accessing the last 28 days of records from a visual inspection of the IVU.

### 2.2.5 Duplicate pages

Section 321 of the HVNL sets out records the record keeper of a fatigue-regulated heavy vehicle driver must have. The provision applies to both EWDs and WWDs; however, paragraph 321(1)(a) of the HVNL requires the record keeper to keep a copy of duplicate pages of work diary entries.

The regulatory issues paper suggested that this provision was relevant to WWD records only, given that the EWD model is based on holding records electronically and does not generate duplicate pages.

The potential removal of requirements to keep duplicate pages should be considered in light of proposed amendment 9 (discussed in **section 2.3.1**) that record keepers should store EWD records in the format received from the service provider and to the standard specified in the technical specification.

***Stakeholder feedback***

During the EWD Pilot there was general support from stakeholders for the removal of record keeper requirements to keep a copy of duplicate pages for EWDs. The submissions did not make any further comments regarding the suggested approach.

***Policy position***

The NTC recommends that requirements to keep duplicate work diary pages at paragraph 321(1)(b) of the HVNL is amended with the intent to apply to WWD records only.

### 2.2.6 Indication to the driver that records have been sent

When considering an application for approval of an electronic recording system, paragraph 343(2)(f) of the HVNL provides that the NHVR may only approve an electronic recording system if (among other things) the system has a mechanism that readily indicates to the driver that the information has or has not been sent to the record keeper.

The regulatory issues paper recognised the importance of EWD drivers having knowledge that their records have been sent to the record keeper. The intent of the provision is to ensure that drivers can meet their obligations under the law by being informed when records have been sent, and the intent of this provision should be preserved.

However, the regulatory issues paper noted that if the provision is understood to mean that the system must notify the driver *on every occasion* that information is sent to the record keeper, this may not be practical given that EWD records will almost continually be sent to the record keeper and frequent notifications could be a distraction or irritation for drivers. The paper suggested that

this provision be amended to allow for drivers to be notified with a daily notification message or by displaying the time the records were last sent on the screen rather than a periodic alert.

***Stakeholder feedback***

Throughout the EWD Pilot, stakeholders recognised that the intention of the notification could be achieved through daily messages or unobtrusive on-screen information, without requiring a notification on every occasion that the data has been transferred. There was general agreement that while the current provision may be adequate, a clarification may be sensible. TfNSW and ANZPAA submissions stated their support for the clarification; no submissions disagreed.

***Policy position***

The NTC recommends that paragraph 343(2)(f) of the HVNL is amended to enable drivers to receive, at a minimum, a daily notification that their records have been sent to the record keeper.

### 2.2.7 Local work

Fatigue-regulated heavy vehicle drivers who are engaged in local work (not 100+km from base) and not operating under BFM or AFM hours, are not required to use a work diary to record their work and rest hours. However, under paragraph 319(1)(a) of the HVNL they must record the total of their work and rest times for each day and each week that they are undertaking local work.

The regulatory issues paper observed that recording local work in EWDs would have clear safety advantages because it would enable drivers to have an accurate picture of their work and rest hours, particularly for drivers who may regularly switch between local work and 100+km work. However, the phrasing of paragraph 319(1)(a) is not aligned with record keeping for 100+km work. In particular, 'on each day' and 'for each week' do not apply to recording requirements for 100+km work. Given that the record-keeping requirements for 100+km are generally more detailed than those for local work, the regulatory issues paper suggested that the HVNL be amended to provide that an EWD record satisfies the record-keeping requirements for local work.

***Stakeholder feedback***

An amendment to clarify that the EWD can be used to record local work was supported by stakeholders. In particular, TfNSW, QLD TMR, VicRoads, ANZPAA, ALRTA and the ATA expressed support for the amendment. They each recognised that the EWD is a tool that can aid drivers to meet compliance and should therefore be encouraged for local work.

***Policy position***

The NTC recommends that section 319 of the HVNL provides an additional provision to the effect that a driver who uses an EWD to record work and rest hours meets record-keeping requirements for drivers undertaking local (100 km) work.

## 2.3 Roles and responsibilities

### 2.3.1 Record keepers

A range of record keeper obligations are presently recognised in the HVNL. These obligations relate to the records the record keeper must have, for what period of time and some reporting requirements. If the driver is operating under BFM or AFM accreditation, the record keeper is the operator, otherwise the record keeper is the driver's employer or – if the driver is self-employed – the driver.

The regulatory issues paper discussed a range of matters relating to the responsibilities of the record keeper and strengthening certain record keeper obligations in the HVNL. The paper made the case for the HVNL to establish the following:

- an obligation for the record keeper *to inform*:
    - the NHVR when an EWD system, or part of an EWD system, is not in working order or has malfunctioned
    - the NHVR of tampering or suspected tampering

- the driver if the EWD is malfunctioning

- an obligation for the record keeper *to maintain*:
  - EWD records in the format received from service providers and to the standard specified in the technical specification

- an obligation for the record keeper *to provide*:
  - the driver with three years of EWD data (on request of the driver).

The proposed obligation to provide the driver with records could be inferred in the current legislation, but it was considered desirable to establish a positive obligation on record keepers to provide the information on request of the driver. This approach is also consistent with the Australian Privacy Principles (APPs).

It is recognised that a record keeper may not have the resources to undertake each of these obligations themselves on a day-to-day basis. The HVNL allows the record keeper to contract their compliance obligations to a third party (such as an EWD service provider), and in doing so both the record keeper and the contracted third party are liable for offences incurred. These provisions are replicated below in section 2.3.2 of the paper.

***Stakeholder feedback***

Strengthening the obligations of records keepers was broadly accepted by stakeholders during the EWD Pilot. The ATA and ALRTA supported the obligation to notify the NHVR of a malfunction, tampering or suspected tampering. No feedback was received in relation to notifying the driver if the EWD is malfunctioning, or obligation to provide the driver with three years of records.

***Policy position***

The NTC recommends that the HVNL is amended to ensure the record keeper has obligations to: inform the NHVR and drivers in clearly defined circumstances; maintain records in an approved form; and provide drivers with records on request.

### 2.3.2 Service providers

EWD service providers are private sector entities that will provide hardware, firmware and software requirements for an electronic recording system, including the transmission of records via the remote connection access framework. The service provider is not currently reflected in the HVNL. The regulatory issues paper discussed that the following obligations placed on the driver and record keeper could be shared or replaced by the service provider:

- maintain and monitor the electronic recording system (including the responsibility for transmitting data and server hosting)
- ensure the EWD functions correctly and in accordance with the EWD specification
- alert the NHVR if the system fails or malfunctions or if there is suspected tampering
- expressly ensure service providers are bound by privacy and surveillance law obligations.

It was observed that recognition of service providers in the HVNL would reflect their important role, particularly in the remote connection access framework wherein the service provider will have physical responsibility for transmitting records.

However, the regulatory issues paper recognised that these obligations could be managed within the technical specification, approval process, privacy laws and – above all – shared liability provisions in the HVNL that capture contractual relations with the record keeper. Subsections 324(3) and 341(6) of the HVNL provide that:

> *If the record keeper has engaged another person under a contract for services to comply [with this section] for the record keeper –*
> *(a) the record keeper remains liable for an offence against the subsection; and*
> *(b) the other person is also liable for an offence against the subsection as if the other person were the record keeper mentioned in the subsection.*

It is likely that service providers would operate in a contractual environment with record keepers. This means that shared liability provisions in the HVNL would apply and adequately capture service providers and similar entities.

***Stakeholder feedback***

ANZPAA supported including service provider responsibilities in the HVNL as they are parties in the chain of data custody and transmission. QLD TMR observed that both service providers and TCA have legislated obligations under IAP and suggested that this approach is consistent for all regulatory telematics systems. SA DPTI also supported the recognition of EWD service providers in the HVNL, recognising the complexity of having multiple record keepers and the need to ensure service providers undertaking their role in compliance with the law.

Conversely, the ATA argued against recognising service providers in the law. It suggested that the EWD system should be less complex than what is proposed and that third parties, including service providers, should not intervene in what ought to remain a direct legal relationship between the regulator and the regulated.

In addition to whether the EWD service provider should be recognised in the HVNL, ANZPAA requested that EWD records remain in Australia, primarily to ensure the records were within the reach of law enforcement. This view was generally supported in discussions with SA DPTI. There was agreement that EWD compliance and enforcement could be more easily facilitated if all parties were based within Australia. There was no agreement in discussions with stakeholders that the HVNL was the appropriate platform to place territorial limits on data location service providers.

***Policy position***

The recognition of service providers would be a significant reform of the HVNL. Recognition of these roles would in many ways replicate the IAP provisions and would result in a substantial restructure of the balance between the roles and responsibilities of EWD drivers and record keepers. Given there is legislation already in place to ensure these functions can be captured in a contractual relationship with record keepers, it is not clear at this time that safety or enforcement benefits can be identified for such a significant reform.

While reform of the EWD provisions to align with the IAP framework may be desirable, a significant restructure of EWDs in the HVNL is a departure from the scope of this legislative review, which is to ensure that EWD provisions are fit-for-purpose and are primarily focused on maintenance or machinery changes. Furthermore, service providers are subject to EWD approval processes which, in addition to contractual arrangements and shared liability provisions in the HVNL, are believed to provide sufficient accountability of service providers.

On balance, the NTC therefore recommends that, given service providers will be bound by EWD obligations under pre-exiting shared liability provisions in the HVNL, further recognition of service providers in the law is not required.

The NTC recommends that the EWD records are required to be kept in Australia. This requirement should be managed by the NHVR through the EWD approval process.

### 2.3.3 Regulatory framework owner, system manager and central registrar

The NHVR has responsibility for approving EWDs under section 342 of the HVNL. The NHVR is also responsible for providing an approved electronic recording system with a numbered certificate of approval under paragraph 344(1)(a) of the HVNL, and approval for the amendment or cancellation of an electronic recording system is the responsibility of the NHVR under section 352 of the HVNL. The NHVR may delegate any of its functions under section 661 of the HVNL.

The EWD Pilot identified a number of other important functions:

- **regulatory framework owner:** responsible for managing implementation of EWDs
- **system manager:** responsible for certifying and auditing service providers, managing the remote connection access framework and managing the development and maintenance of the compliance assessment software
- **central registrar:** responsible for managing a registry of drivers using an EWD.

These functions are not reflected in the HVNL and this paper does not seek to assess which entities are best placed to undertake these functions.[27]

The regulatory issues paper discussed generally whether the HVNL should recognise a separate system management function. The regulatory issues paper also discussed recognising the central registry function in the HVNL.

***Stakeholder feedback***

Stakeholders did not indicate clear preferences for the system manager role to be treated separately under the law; however, the ATA commented on the complexity of the proposed EWD system and suggested that additional entities should not be included in the HVNL.

Throughout the EWD Pilot there was general acceptance from stakeholders that the central registry function was important, and this was reflected in the recommendations made by SKM in its assessment of the roles and responsibilities of the EWD system. However, there were no strong views on whether the registrar function should be recognised in the HVNL and there was no feedback on this issue through the submissions.

***Policy position***

In many respects the service provider discussion holds true in relation to these other systems roles and responsibilities. Further recognition of the roles of regulatory framework owner, system manager and central registrar, and their relationship to other entities, would result in substantial restructuring of the EWD provisions. Recognition of their obligations would represent a significant legislative reform.

The NTC recommends that the regulatory framework owner, system manager and central registrar roles are not independently recognised in the HVNL at this time. It is critically important that, as part of a privacy by design approach, roles and responsibilities are clearly defined and separated where appropriate. This can be achieved without recourse to amendments to the HVNL.

## 2.4 Enforcement amendments

### 2.4.1 Onus of proof

Section 725 of the HVNL provides that data generated by an EWD is admissible and is evidence of the matters stated in it. The provision makes no presumption about the accuracy of the information.

The regulatory issues paper suggested that section 725 could be amended to the effect that a report purporting to be made by an approved EWD system is presumed to be correct and properly made in the absence of evidence to the contrary. This approach is based on the expectation that reliable and robust EWD approval processes will be in place.

Without this provision, the EWD system manager or service provider could be faced with having to prove the accuracy of records in every matter brought before the courts. This would be a costly and timely exercise for the courts that would reduce the benefits of the EWD approval process.

***Stakeholder feedback***

TfNSW and ANZPAA supported the amendment. No objections were raised by stakeholders, either during the EWD Pilot or in submission.

***Policy position***

The NTC recommends that section 725 of the HVNL is amended to provide that EWD data is presumed to be correct and properly made in the absence of evidence to the contrary.

[27] SKM has undertaken this assessment as part of the EWD Pilot; see New South Wales Roads and Maritime Services, *Final report: Operational Pilot of Electronic Work Diaries and Speed Monitoring Systems*, 2013, p. 33.

### 2.4.2 Time period of review at the roadside

A fatigue-regulated heavy vehicle driver working 100+km from base or operating under BFM or AFM must keep work and rest hour records from the last 28 days under section 293 of the HVNL. However, the work diary has 100 pages and in practice a driver using a WWD may have considerably more work diary records in the vehicle than the 28 days required by law. An Authorised Officer may review records and action breaches that go back further than the 28-day rule and is only restricted by the statute of limitations.

At issue is the extent to which the EWD compliance software should be restricted to 28 days or enable the enforcement officer to inspect older records, as is the case with the WWD. In the interests of equity between WWDs and EWDs, and of focusing on the real and present fatigue risks, the regulatory issues paper suggested that some limit be set on the time period of records that can be reviewed at the roadside.

There may be cases where an enforcement officer would want to look back further than 28 days in order to have a clearer view of the patterns of behaviour. Up to three months (in total) was proposed as a logical limit commensurate with WWDs. It was further noted that back office investigations of an operator or driver could go back further as required.

The regulatory issues paper suggested that the specification for the compliance assessment software should provide a default 28-day view for roadside enforcement (which would highlight any breaches that occurred within that period) but also provide for Authorised Officers to go back further and look at a total of three months of records if required. The software would not allow the officer to review a longer period. A separate version of the software would be used for investigations focused on record keepers, which would allow longer periods to be viewed. Amendments to the HVNL were not considered necessary.

***Stakeholder feedback***

A default 28-day review period, with the ability to review up to three months if required, was supported by TfNSW, TMR, VicRoads and ANZPAA. SA DPTI agreed with the general approach and noted that Authorised Officers may at times be required to go back further than 28 days to account for the anchoring of counting-time rules. ALRTA did not support the proposal and suggested that roadside enforcement should be limited to the current fatigue period only.

***Policy position***

The NTC considers the 28-day default/three-month proposal to be a balanced approach and that the review period should be set in the technical specification rather than the HVNL.

The NTC recommends that the EWD compliance assessment software requires a 28-day review period for roadside enforcement, with the ability for Authorised Officers to review up to three months of records if required. *This recommendation is no way limits or restricts an Authorised Officer's ability to access up to three years of records, which are required to be kept by record keepers under section 341 of the HVNL.*

### 2.4.3 Drivers with both written and electronic records

The requirement to carry 28 days of records, as noted in section 293 of the HVNL, applies regardless of the record-keeping method. Drivers who use both an EWD and a WWD in the same 28-day period (for example, because they are contracted to operators with different record-keeping policies) may prove challenging for Authorised Officers reviewing records at the roadside.

The regulatory issues paper considered whether there should be any additional requirements in order to accurately assess drivers moving between a WWD and an EWD. A requirement for drivers to annotate when moving between a WWD and an EWD was considered to provide the greatest level of assurance to Authorised Officers without putting an undue compliance burden on drivers. It would mean that, at the start of a shift using a new record-keeping method, drivers would make a note that the previous record was made in their EWD or WWD. If the annotation was made in the EWD, it should provide the number of the corresponding WWD. This approach would be reflected in the technical specification and the Heavy Vehicle (Fatigue Management) National Regulation.

Restricting drivers to one record-keeping method is an alternative approach but was considered too limiting and a restraint on drivers moving between employers. A requirement to carry printouts was also considered but was thought to be impractical.

It is further noted that additional tools can assist a comprehensive review of work records across different record-keeping methods. The compliance assessment software, for example, could analyse the EWD data to inform an Authorised Officer what the maximum hours of work could be in the driver's WWD.

***Stakeholder feedback***

Annotation between EWD and WWD records was widely supported by stakeholders, including VicRoads, TfNSW, QLD TMR and ALRTA. ANZPAA supported the option to restrict drivers from using both record-keeping methods, on the basis of reducing possible roadside interception times.

***Policy position***

Annotating records when moving between the EWD and WWD is considered to be the least restrictive and administratively burdensome option for drivers. Compliance assessment software is also expected to support the efficient identification of breaches when two record-keeping methods are used.

The NTC recommends that the Heavy Vehicle (Fatigue Management) National Regulation is amended to require fatigue-regulated heavy vehicle drivers to make an annotation in their work diary when they are transitioning from one system of record keeping to another. This approach should also be reflected in the EWD technical specification.

### 2.4.4 Confirming the GNSS record location

Fatigue regulations require drivers to record their location when making a work diary entry, regardless of whether they are using a WWD or EWD. Driver location is important supporting evidence when considering the veracity of a work diary entry, and to identify the relevant jurisdiction in the event of a potential breach.

The EWD technical specification requires GNSS functionality, and longitude and latitude coordinates must be converted into common place names. The regulatory issues paper considered the extent to which this GNSS record should be accepted as the driver's location. GNSS records may not always be completely accurate, but they are thought to be sufficiently accurate for this purpose. The general view in the EWD Pilot was to accept GNSS location records but require drivers to confirm records as correct, and if it is not, to make an annotation to that effect. The original GNSS records would also be retained.

***Stakeholder feedback***

TfNSW, VicRoads, QLD TMR, SA DPTI, ANZPAA, the ATA and ALRTA supported the use of a GNSS to record location, with confirmation by the driver. The ATA observed that driver input should be limited, otherwise the benefits of the automated system would be undermined.

***Policy position***

The NTC recommends that the Heavy Vehicle (Fatigue Management) National Regulation is amended to provide that the GNSS location record meets location recording requirements for EWDs, and that a driver must confirm the record is correct. This approach should also be reflected in the EWD technical specification.

### 2.4.5 Odometer readings

Section 16 of the Heavy Vehicle (Fatigue Management) National Regulation requires drivers to record the odometer reading of the vehicle at the time of the work and rest change. The regulatory issues paper noted that odometer readings are an integrity measure to improve the accuracy of work diary entries, yet given the EWD uses a GNSS to locate the driver, the requirement to record odometer readings in the EWD could be reviewed.

***Stakeholder feedback***

None of the submissions actively supported an amendment to the regulations. QLD TMR and ANZPAA did not support the amendment. ANZPAA suggested that further consideration be given to introducing electronic odometers as part of the EWD technical specification, which could remove the requirement for the driver to manually write the odometer recording.

***Policy position***

The EWD technical specification takes a performance-based approach to capturing odometer readings. It provides that an odometer reading can either be declared manually by the driver or captured electronically.[28] This means that ANZPAA's suggestion that the EWD take advantage of electronic odometer readings is already captured in the EWD technical specification.

The NTC recommends that odometer requirements in the Heavy Vehicle (Fatigue Management) National Regulation should *not* be amended at this time.

## 2.5 Summary of HVNL recommendations

**Tables 2 and 3** contain the recommended amendments to the HVNL and the Heavy Vehicle (Fatigue Management) National Regulation in relation to EWD definitions, operational matters, roles and responsibilities and enforcement.

There are therefore no specific recommendations made in relation to EWD service providers or the system management and central registry roles. The policy findings concluded that EWD service providers should be bound by record keeper obligations under pre-exiting shared liability provisions in the HVNL, and that the system management and central registry roles are not recognised in the HVNL at this time.

**Table 2: Summary of proposed amendments to the HVNL**

| | |
|---|---|
| Proposed amendment 1 | That the definition of the EWD at section 221 is clarified to ensure it captures both the EWD device and the electronic recording system. |
| Proposed amendment 2 | That the heading of section 326 of the HVNL is amended to clarify that a driver can keep an EWD and a WWD but not use both simultaneously. |
| Proposed amendment 3 | That the rounding rules in section 246 of the HVNL should not apply to drivers who use EWDs. Drivers who use EWDs should count and record time to the minute. |
| Proposed amendment 4 | That sections 292, 312, 313 and 324 of the HVNL are amended to remove requirements to carry printouts. |
| Proposed amendment 5 | That the EWD label provisions in section 221 and sections 344 to 350 of the HVNL are removed. |
| Proposed amendment 6 | That requirements to keep duplicate work diary pages at paragraph 321(1)(b) of the HVNL is amended with the intent to apply to WWD records only. |
| Proposed amendment 7 | That paragraph 343(2)(f) of the HVNL is amended to allow drivers to receive daily notifications that their records have been sent to the record keeper. |
| Proposed amendment 8 | That section 319 of the HVNL is amended to clarify that a driver who uses an EWD to record work and rest hours meets record-keeping requirements for local work. |

[28] Transport Certification Australia, *Electronic Work Diary Functional and Technical Specification (Draft)*, 2013, p. 13

| | |
|---|---|
| Proposed amendment 9 | That the HVNL is amended to ensure that the record keeper has obligations to: inform the NHVR and drivers in clearly defined circumstances; maintain records in an approved form; and provide drivers with records on request. |
| Proposed amendment 10 | That section 725 of the HVNL is amended to provide that EWD data is presumed to be correct and properly made in the absence of evidence to the contrary. |

**Table 3: Summary of proposed amendments to the Heavy Vehicle (Fatigue Management) National Regulation**

| | |
|---|---|
| Proposed amendment 11 | That the Heavy Vehicle (Fatigue Management) National Regulation is amended to require fatigue-regulated heavy vehicle drivers to make an annotation in their work diary when they are transitioning from one system of record keeping to another. This approach should also be reflected in the EWD technical specification. |
| Proposed amendment 12 | That the Heavy Vehicle (Fatigue Management) National Regulation is amended to provide that the GNSS location record meets location recording requirements for EWDs, and that a driver must confirm the record is correct. This approach should also be reflected in the EWD technical specification. |

**Recommendations – HVNL amendments**

**Recommendation 1:** that proposed definitional, operational, responsibility and enforcement amendments to the HVNL and the Heavy Vehicle (Fatigue Management) National Regulation, specified in Tables 2 and 3 on pages 21–22 of the final policy paper, are adopted.

**Recommendation 2:** that the EWD compliance assessment software requires a 28-day review period for roadside enforcement, with the ability for Authorised Officers to review up to three months of records if required.

**Recommendation 3:** that expert advice is sought to assess options for allowing EWD drivers greater flexibility given that the rounding rules will no longer apply, for example, to assess the impact of three short rest breaks of 20 minutes' duration in a 24-hour period.

**Recommendation 4:** that the EWD approval process requires that EWD records are kept in Australia.

# 3. Compliance and enforcement: the treatment of small breaches

## 3.1 Introduction to the issues

Industry and governments seek to ensure equity between WWD and EWD drivers. The EWD should create an administrative benefit by reducing paperwork for drivers and operators, and a road safety benefit by providing improved information to manage compliance and fatigue. However, policy settings should *not* result in drivers of one record-keeping method being treated differently from others. It is important that uniform laws are applied to both, and that drivers are not able to legally work additional time under one of the record-keeping methods.

Increased probability of detection is a key feature of EWDs. Greater record-keeping accuracy should benefit drivers and operators because it will enable them to operate within a more precise and transparent system. It will also enable regulators and enforcement agencies to intelligently assess risk and identify high noncompliance. However, the increased probability of detection also generates policy challenges because the likelihood of identifying these small breaches becomes very high; however, they should not become the focus of enforcement.

The technology affords enforcement agencies the opportunity to focus on patterns of behaviour and to identify systemic issues and major breaches. There is general agreement with this approach, and there is general agreement that operators, rather than enforcement agencies, should manage small breaches, particularly those operators who are accredited or operating in a safety management system. Were enforcement agencies to target small breaches they would likely conflict with their own internal policies regarding appropriate and proportionate enforcement action and, if enforced, would likely be considered trivial by the courts.

Therefore, the key enforcement issues relate to:

- the acceptable limit of a small breach
- the form in which the policy position adopted by governments is stated and conveyed to industry.

All stakeholders seek to resolve how small breaches will be treated; transport operators are unlikely to adopt EWDs until there is a settled policy position and a nationally consistent approach on this critical enforcement issue.

### 3.1.1 Enforcement principles

The NTC has drafted framework principles in its development of a compliance framework for heavy vehicle telematics. These principles consider, in part, the higher probability of detection of telematics systems such as EWDs, and include the following for consideration:

- **Principle 6:** Public authorities that use telematics information for a regulatory purpose must develop and implement policies based on reasonable and proportionate enforcement. The treatment of telematics information should have regard to patterns of behaviour and the higher probability of detection.
- **Principle 7:** Enforcement polices in relation to the use of telematics information should be publicly released where it is appropriate to do so, and when the release of the enforcement policy does not pose a risk to the integrity of enforcement or regulatory policy.

Taking this approach, small, one-off breaches should not be the focus of enforcement activities, and the approach taken in relation to small breaches should be made known to the industry. It is suggested that these principles underpin the approach taken in relation to the treatment of small breaches.

### 3.1.2 Key issues

In relation to the acceptable limits of a small breach, there is general agreement within governments that between five and eight minutes is acceptable, while industry is seeking a longer period of around 15 minutes. Governments are concerned that some operators and drivers will

schedule to the additional time when industry should be allowing a buffer when scheduling operations. Industry is primarily seeking recognition that transport operations are subject to congestion and unforeseen circumstances and that the acceptable limit of a small breach should reflect the rounding rules for WWD drivers to ensure equity between EWD and WWD drivers.

The challenge for policymakers is to establish equity of treatment between WWD and EWD drivers. A fully compliant driver who rounds up work and rounds down rest in 15-minute increments would benefit from an acceptable small breach limit of up to eight minutes. However, it is unlikely that the rounding rules are universally applied correctly, and a driver can presently conceal a small breach through a reverse application of the rounding rules – that is, round down a few minutes of work time, and not up to the next 15-minute increment. These small breaches are very difficult to identify in the current system and for these drivers the EWD creates a disadvantage. The question is to what extent these real-life practices should be taken into consideration when seeking to ensure equity between EWD and WWD drivers. If the fatigue risk is low, and the safety benefits of EWDs high, then it is arguable that, in the context of voluntary uptake, policymakers should take into consideration current practices.

In relation to the form in which the policy position adopted by governments is conveyed to industry, a legislative approach has the certainty of law and would ensure transparency and national consistency across jurisdictions and between road agencies and police. This perspective is reflected in the draft telematics framework principles. National guidelines have the benefit of flexibility and would not signal within a legislative framework the possible mutability of work and rest hour limits.

It is important to note that drivers will continue to have the benefit of the defence under section 252 of the HVNL for failing to take a short rest break under certain circumstances where there was not a suitable rest place.

### 3.1.3 Options considered during the EWD Pilot

The regulatory issues paper discussed the benefits and disadvantages of seven options to address the treatment of small breaches:

- **Option 1: Continue current processes – jurisdictions and enforcement agencies to set internal policy approaches.** Under this option, internal policies would be set by each enforcement agency, which could include different approaches to small breaches as per current practices for speed enforcement. Authorised Officers would continue to exercise discretion. Over time, the NHVR is expected to streamline these approaches, but different approaches could continue between road agencies and police.

- **Option 2: National internal guidelines.** Under this option thresholds would be set as part of agreed national guidelines for enforcement but are not made public. The NHVR could have a role in developing such guidelines.

- **Option 3: National published guidelines.** Under this option, thresholds would be published as national enforcement guidelines, making the rules clear for all road users and Authorised Officers.[29] This would set a consistent minimum framework for enforcement agencies while providing protections to prevent abuse; however, national guidelines may not necessarily be followed by police. Again, the NHVR could have a role in developing such guidelines.

  A variation of this approach advocated by some jurisdictions involved creating guidelines that would state only when a breach would definitely *not* be actioned (rather than when they would be), providing some comfort to industry on specific cases while still providing a degree of discretion for Authorised Officers.

- **Option 4: Legislative amendment.** Under this option, agreed thresholds would be included in the HVNL. There are some precedents for a legislative approach (e.g. speed enforcement in some jurisdictions); however, these are usually predicated on limitations in the accuracy of measurement devices. An eight-minute threshold was suggested as the

[29] There are precedents for taking this approach. Victoria Police, for example, publishes its position on minor speed offences on its website, http://www.camerassavelives.vic.gov.au/home/cameras/fines+and+penalties/ (viewed on 02/02/2014).

best way to establish equity between those WWD drivers who always comply with the rounding rules, and those who currently use the rounding rules to conceal small breaches.

- **Option 5: Differentiated penalties.** Under this option, a small breach would be recognised in the penalty regime as an offence, but a verbal warning would be made and no record of the breach would be made. This approach would require different penalties for drivers using WWDs and EWDs.

- **Option 6: Self-reporting by operators.** Under a self-reporting approach, operators would be provided with greater ability to manage their own driver fleet, with the obligation to report breaches to the NHVR.[30] One-off, small breaches could potentially be handled internally by a sufficiently responsible operator, through, for example, coaching and management of drivers. Such breaches would not necessarily give rise to enforcement action, provided a pattern of breaches was not shown and sufficient remedial action was taken to address the breach. More serious breaches (severe, substantial, critical) would be required to be reported immediately to the appropriate regulator, along with any actions taken to address the issue and to ensure it did not occur again.

- **Option 7: Safety management system approach.** Under this option, operators wishing to use EWDs would be required to establish a safety management system for driver fatigue. They would be required to identify fatigue risks and ensure they have systems in place to, as far as possible, prevent fatigue issues occurring, and to identify and address any issues that do occur. Patterns of noncompliance (rather than inadvertent or occasional noncompliance) would be the focus of enforcement action. Occasional, small breaches might be subject to educational follow-up, although not in the case of serious breaches. Major one-off breaches would still be the subject of enforcement action, including at the roadside.

The adoption of options 6 or 7 would require further clarification on the role of roadside enforcement in these alternative compliance approaches. The regulatory issues paper suggested that these operators would need very robust systems and auditing processes in place to obtain reduced roadside fatigue enforcement.

### 3.1.4 Small breaches approach recommended in the regulatory issues paper

The regulatory issues paper recommended **option 4 (legislative amendment)** to set an amount of **eight minutes** *for any period* above the prescribed hours without a breach being recorded. This would apply to all heavy vehicle-regulated drivers regardless of whether they are on standard hours, BFM or AFM options. The amounts could *not* be accumulated, with a driver being required to be no more than eight minutes over any maximum work time requirement, whether that be (in the case of a driver on standard hours) five and a quarter hours, seven and a half hours or 12 hours. This approach would *not* be applied for rest periods, given the greater control that a driver has over their rest.

Setting the same eight minutes for all work periods would mean that drivers could not accumulate eight-minute increments at each work period. Effectively, a driver who 'used' the eight minutes at the start of the day would not have the advantage of the eight minutes again in that shift. The nominal amount and non-accumulative nature of the approach was seen to reduce the risk that operators would schedule to the eight minutes.

The eight minutes applies to the 24-hour period. This would mean that a driver could exceed work limits within the acceptable limit of a small breach every day and have deemed to complied with the relevant work rules.

The legislated approach would provide police with legal certainty and not establish guidelines that have uncertain status in the law that could be a barrier to prosecution, while Authorised Officers could use their discretion at the roadside for anything greater than eight minutes.

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[30] For a comparison see the Australian Securities and Investment Commission's policy for Australian Financial Services licenses – 'Regulatory Guide 78: Breach reporting by AFS licensees,' September 2008, http://www.asic.gov.au/asic/pdflib.nsf/LookupByFileName/rg78.pdf/$file/rg78.pdf (viewed on 19/08/2013). Note that this is of course based on a licensing system, which is not the case for the heavy vehicle industry.

This approach was considered the most equitable for both EWD and WWD drivers and would best ensure that enforcement practices do not create a perceived disincentive for EWD drivers.

This approach was consistent with advice from Professor Drew Dawson that the impact on fatigue risk of setting an-eight minute threshold for all work limits is likely to *have a negligible fatigue risk*, particularly if applied to all work limits such that it cannot lead to an accumulation of excess work over multiple work periods. Further, Professor Dawson advised that whether the eight minutes is applied to a 12-hour limit (standard hours), a 14-hour limit (BFM) or a 16-hour limit (AFM), the impact on fatigue risk is likely to be similar. By definition, such an approach would only affect offences classified as minor breaches, and would not impact on more significant offences.

This option was seen to provide an appropriate and reasonable balance between legal certainty and consistent enforcement on the one hand, and recognition of industry concerns on the other.

It was noted in the regulatory issues paper that while the treatment of small breaches is not generally legislated, the voluntary nature of EWDs, along with the higher probability of detection caused by greater accuracy and accessibility of the data, necessitates that alternative approaches are considered.

### 3.1.5 Fatigue advice

As noted in the previous section, during the EWD Pilot the NTC commissioned advice from Professor Dawson on the effect on heavy vehicle driver fatigue of allowing a driver to exceed a maximum work period by up to eight minutes and is deemed to have complied with the relevant work period. Professor Dawson advised that the impact on fatigue risk of this approach for all work limits in the 24-hour period is likely to be negligible, such that it cannot lead to an accumulation of excess work over multiple work periods.[31] Professor Dawson advised that, adopting this approach, the impact on the fatigue risk should be negligible for standard hours, BFM and AFM.

Professor Dawson further advised that compliance checking could include the examination of a driver's recent work and rest history (e.g. one to four weeks) to ensure that the application of the rule does not create a quasi-standard. Professor Dawson suggested that 'unreasonable' could be defined as greater than 50 per cent of work and rest periods not complying with the work and rest limits, even if no individual violation is outside of the eight-minute rules. Given the fatigue negligence of non-accumulative eight minutes, Professor Dawson observed that the main purpose of such an approach would be to avoid a quasi-standard being created rather than to reduce a fatigue risk.

The NTC sought further advice from Dr Mark Howard, Professor Narelle Haworth and Professor Ann Williamson in relation to the fatigue risk of a non-accumulative eight minutes and the comparative impact of five minutes and 15 minutes. The NTC also asked each expert to consider the fatigue impact of extending the treatment of small breaches to BFM and AFM.

Dr Howard advised that 'allowing a degree of tolerance around work times appears sensible when using the precise monitoring of EWDs so as to not penalise drivers for short unforeseen delays and contribute added pressure to the demands of work schedules'.[32] He observed that if there were strict time limits and penalties placed on drivers, this may result in unsafe driving, such as speeding. In relation to the eight minutes, Dr Howard advised that 'while a degree of tolerance is recommended, the amount of tolerance has to be small enough as to not impact on fatigue levels … it is unlikely that eight minutes added to the total time awake would have a major additional effect on an individual's fatigue level for a single day'.[33] He further stated that a five-minute limit did not have an appreciable difference to eight minutes. On the other hand, 15 minutes was considered to substantially increase risk. Dr Howard further supported the inclusion of BFM but stated that under AFM sleep is frequently less than five hours per day, and may be as low as four hours, and that these levels already entail substantial fatigue and crash risk: 'any increase in sleep

[31] Dawson D, *Electronic Work Diaries (EWDs): Treatment of Small Breaches*, unpublished advice to the NTC, CQUniversity, 2013, p. 2. Report to be made available on the NTC website.
[32] Howard M, Wilkinson V, *Electronic work diaries: the fatigue impact of an eight minute tolerance for small breaches: report to the National Transport Commission*, Institute of Breathing and Sleep, Austin Health, 2014, p. 2. Report to be made available on the NTC website.
[33] ibid., p. 2

debt under this scenario entails an unacceptable level of fatigue, whether it be an eight minute tolerance … or 15 minutes tolerance'.[34]

In his concluding statements, Dr Howard advised:

> *If current legislation for maximum work hours for heavy vehicle drivers have adequately ensured that drivers have a safe level of alertness and are not effected by excessive fatigue due to their work schedule, a further eight minute "tolerance level" should be negligible in terms of fatigue level and increases in error rate for drivers under standard working hours and BFM. Tolerance for breaches under AFM should be minimised given the higher potential for fatigue under these regulations.*
>
> *New methods of reporting work times (EWDs) should improve recording accuracy in comparison to previous methods (WWDs) meaning tolerance levels surrounding work durations will be shorter and total work time may be slightly decreased.*
>
> *Longer tolerance levels, such as 15 minutes, risk increasing fatigue by extending time awake and time-on-task while decreasing time available for sleep. In drivers who are already at an increased individual fatigue level this may have significant negative consequences. A shorter tolerance level, such as five minutes, would have no measurable difference from a tolerance level of eight minutes in terms of fatigue level, but have a somewhat greater operational impact.*[35]

Dr Howard's advice indicates that an eight-minute non-accumulative limit is unlikely to have an additional effect on drivers' fatigue, whether a driver is working under standard hours or BFM, and the proposed approach should *not* extent to 15 minutes or apply to drivers working under AFM.

Professor Haworth's advice[36] discussed the impact of tolerances on behaviour and observed that speed and drink driving research has demonstrated that driver behaviour and safety are influenced by actual and perceived levels of enforcement tolerances: 'The experience with tolerances in other fields of road safety suggests that people will use the tolerances'.[37] Professor Haworth stated that if tolerances are needed to encourage the uptake of EWDs then the question is whether 'the small negative safety effect of up to 8 minutes more driving in each 24 hour period is compensated for by the other safety benefits of better compliance associated with EWDs'.[38]

Professor Haworth considered the fatigue impact of a non-accumulative eight minutes. The advice noted that, in practice, periods of work time of less than 15 minutes are likely to be rounded down, 'particularly if they are less than half that length.'[39] This could result in more hours of work and fewer hours of rest. Professor Haworth noted that over a longer period a driver's WWD in this scenario would significantly diverge from real time, the advice nonetheless recognised that the fatigue impact of a non-accumulative eight minutes must be understood in the context of current rounding practices:

> *The proposed non-accumulative eight minute tolerance for EWD drivers would probably be not greatly different than the degree of "tolerance" resulting from the rounding that occurs with WWDs. Therefore, it is not likely to have any greater effect on work and rest hours. In reality, eight minutes corresponds to about 1% of the total working time allowed in the 24-hour period. The fatigue effect of this is expected to be minimal. Thus any discussion of whether or not to allow such a tolerance needs to be based on principle, rather than on actual effects on fatigue levels.*[40] [NTC emphasis.]

Professor Haworth further noted that the non-accumulative nature of the proposed approach was important. The advice did not consider that the fatigue impact was significantly improved by reducing the limit to five minutes. Professor Haworth stated that it is difficult to provide firm advice on how the fatigue risk would change if the allowable limit was adjusted to 15 minutes, and suggested that the direct fatigue impact might be marginally greater 'but it is difficult to tell whether this would be offset by a greater take-up of EWDs'.[41]

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[34] ibid. p. 4
[35] ibid., p. 5
[36] Haworth N, *Electronic Work Diaries: the fatigue impact of an eight minute tolerance for small breaches*, Centre for Accident Research and Road Safety, Queensland University of Technology, 2014. Report to be made available on the NTC website.
[37] ibid., p. 3
[38] ibid.
[39] ibid., p. 5
[40] ibid.
[41] ibid.

Professor Haworth stated that it is difficult to apply scientific research to understand the fatigue risks of an additional non-accumulative eight minutes to BFM or AFM. The advice observed that the eight minutes 'might be greater at the end of the longer work periods allowed under AFM (and to a lesser extent, BFM) than under standard hours. There is little evidence available to confirm or deny this possibility.'[42] However, the advice did consider research that a driver may be able to manage fatigue over the first 16 hours of a schedule but that the ability to do so diminished after the second and third 16-hour shifts. This suggests to Professor Haworth that perhaps there might be concern if the eight minutes extended work after several long shifts.

Professor Williamson focused on the fatigue impact of current working conditions for drivers operating under maximum standard hours, and particularly those drivers working through the night period, which produces greater fatigue. Professor Williamson advised that, based on the current state of knowledge about fatigue and performance, there is good evidence that longer work periods and work that extends through the night period will produce greater fatigue:

> *This means that extensions to work hours limits, especially at the ultimate limits in any 24 hours or at the end of a period of work in the midnight to dawn period, will increase fatigue risk further and must therefore increase the risk of crashing.*[43]

However, Professor Williamson recognised the potential benefit of allowing up to eight minutes for those drivers who would otherwise not apply the rounding rules correctly using a WWD:

> *I understand that one of the issues of the current use of WWDs relates to the practice of rounding down work time which allows longer work periods (and potentially shorter rest periods) than intended by work hour limits. This potentially allows drivers a 15 minute tolerance on each working hour period and would, of course be of greater concern for fatigue risk management than an 8 minute tolerance in a maximum of one work period in any 24 hours. Assuming the majority or even a significant proportion of drivers take advantage of the 15 minute tolerance when using WWDs then the EWD with a constrained 8 minute maximum tolerance would be of potential benefit for fatigue risk management for those drivers who take advantage of the longer tolerances. It would not be a benefit for drivers who do not use the 15 minute de facto tolerance in WWDs; in fact it would allow the possibility of longer work time which they did not legally have before.*[44] [NTC emphasis.]

The advice also observed that extending the last part of the shift was the worst-case scenario and that 'adding eight minutes to work time at other periods in the work schedule would be likely to have little or no effect as drivers are less likely to be experiencing fatigue'.[45] The fatigue risk of the eight minutes is affected by the extent to which a driver manages his or her fatigue: 'a driver who was managing their fatigue would not show significantly increased fatigue and crash risk with an additional 8 minute period of driving whereas for a driver who was already tired an additional work period, even 8 minutes, may be sufficient for fatigue to rise to levels that increase crash risk'.[46]

Professor Williamson further advised against extending any limits to BFM and AFM but noted in particular the higher fatigue risk associated with extending the outer limits of AFM. The advice stated that 'allowing a tolerance around scheduling elements in an AFM that are at or near absolute limits should not be allowed under any circumstances on the basis that they are already at the limit for fatigue risk management'.[47]

## 3.2 Stakeholder feedback

The treatment of small breaches generated a wide range of responses from across government and industry. There is broad agreement that small breaches that are not part of a wider pattern of concern should not be the focus of enforcement activity. This approach will be reflected in Compliance Framework for Heavy Vehicle Telematics, which will seek to identify opportunities for technology to enable enforcement agencies to direct their attention to more significant offences while operators manage small breaches within a meta-regulatory environment. However, accepting that small breaches will not be the focus of enforcement activity, this raises a number of

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[42] ibid., p. 7
[43] Williamson A, *Electronic Work Diaries: The fatigue impact of an eight minute tolerance for small breaches*, University of NSW, 2014. Report to be made available on the NTC website.
[44] Williamson A, *Electronic Work Diaries: The fatigue impact of an eight minute tolerance for small breaches*, University of NSW, 2014: addendum, p. 1
[45] ibid., pp. 1–2
[46] ibid., p. 2
[47] ibid., p. 4

subsequent issues that stakeholders have different perspectives on, namely the acceptable limit of a small breach and the form in which the acceptable limit should be conveyed to industry.

### *Industry perspective*

Industry was in agreement that drivers and operators should know what the acceptable limits of a small breach are, and that verbal statements by enforcement agencies do not provide sufficient comfort to operate with EWDs. They supported a national, legislative approach that applies to both road agencies and police. However, industry had divergent views on whether eight minutes was appropriate and whether it should also apply to rest periods. Industry generally seek a small breach limit of around 15 minutes. The ATA made the following observations in relation to the treatment of small breaches:

> *On the surface, the NTC's [proposal] for any period above the prescribed hours without a breach being recorded, is appealing, but there are consequences from more precise time counting. Each time the tolerance option is used, it needs in effect to be "paid back". This need not occur with WWD, since a driver can apply his own 'fuzzy logic' around the blocks of time with some degree of confidence in a practical sense, given this approach is applied to both rest and work periods. However, it is difficult to argue that any tolerance should apply to rest time, even if in practice some WWD users choose to do so.*[48]

The principle of equity between written and electronic record keeping lies at the centre of ATA's response. ATA's position was that a non-accumulative approach does not establish equity because drivers do not always apply the rounding rules correctly. ATA therefore had concerns that equity cannot be achieved within a limit of eight minutes and if it has to be 'paid back'.

NatRoad and the Victorian Transport Association ( VTA) endorsed ATA's position on this issue. That is, they are supportive of a legislated approach but have reservations about the non-accumulative feature of the option proposed in the regulatory issues paper and are in favour of a longer period.

Mr Hannifey, a driver and road safety advocate, expressed concern with the non-accumulative feature of the proposed option. He commented that non-accumulative eight minutes was inflexible given congestion or unforeseen circumstances can result in a driver being a few minutes over time. Mr Hannifey suggested an alternative approach based on a 30-minute daily maximum that could only be used twice a week.

ALRTA also did not support a small breach limit of eight minutes. ALRTA emphasised that the reasons for a breach should be recorded by the driver so that the context of the breach can be understood by the Authorised Officer, and that there should be off-sets allowed over specified periods. The quantum of these off-sets was not discussed.

The South Australian Road Transport Association (SARTA) favoured a legislated penalty-based approach wherein 'any breach of less than X duration (and if really necessary, less than Y cumulatively in a day) attract a zero penalty'. Drivers within the limits would receive a verbal warning only. SARTA did not have a view on what the quantum should be under this approach but emphasised that the penalty-based option should be set in legislation, unlike the British model, which is very similar but set in guidelines.

### *Governments' perspectives*

State jurisdictions supported the legislative recommendation based on the non-accumulative eight minutes in a 24-hour period, with the exception of TfNSW. ANZPAA also did not support the recommendation.

TfNSW disagreed with the recommendation of an approach enshrined in legislation and suggested that the policy settings should be directed by internal national guidelines and administratively applied while ensuring that officer discretion is maintained. Under this approach, industry would not know the acceptable limits of small breaches. TfNSW recognised that the treatment of small breaches may be a deterrent to taking up EWDs, and suggested that a transition period of around

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[48] Australian Trucking Association, *Submission to the National Transport Commission: Preparing Australia for Electronic Work Diaries*, 2013, p. 13, http://www.ntc.gov.au/RFCCommentsView.aspx?DocumentId=2447 (viewed on 03/02/2014)

two years could be considered, where drivers with a one- or two-minute breach would not be infringed.

Underpinning the TfNSW view is a concern that a legislated approach sends a message to drivers and operators that the work and rest hour rules are mutable. Furthermore, TfNSW commented that EWDs are less likely to cultivate cultural change in the industry, given that a legislative approach 'takes away the responsibility of the parties to make realistic trip plans and comply with the law':

> *Schedules should be constructed to ensure that a driver is able to work within the limits of driving hours, accounting for traffic, hold ups, rest breaks etc (noting that a reasonable steps defence is available to drivers under standard hours).*[49]

TfNSW commented that the cycle of punitive and prescriptive roadside enforcement will continue unless operators stop relying on maximum work hour limits and focus instead on safety management systems and tackling fatigue management at a cultural and systemic level.

It was also suggested by TfNSW that, if a legislative approach is adopted, it should only be applied to standard hours given that added flexibility and extended working hours are already available to drivers on BFM and AFM. This would be consistent with the availability of the reasonable steps defence.

ANZPAA supported option 1, continuing the current approach whereby internal policies are set by each enforcement agency. In its response to the regulatory issues paper, ANZPAA did not support either a legislated approach or published guidelines: 'drivers should be managed to work within regulated maximum limits and minimum requirements, with contingency times to allow for delays as part of planning'.[50] The submission did not assess the comparative benefits and disadvantages of a guideline or legislative solution.

The ANZPAA submission also noted that one police member does accept that a period of seven minutes over a defined work opportunity (e.g. 17 hours or 24 hours) is inconsequential provided that the time is made up in the next rest period and that there is legislation regarding the rule. That member stated that 'EWDs are different to WWDs, so should be treated differently'.[51]

The proposed eight-minute legislative approach was supported by QLD TMR. The department observed that the less certain industry and drivers are about the treatment of small breaches the greater the barrier to uptake will be. Further, QLD TMR noted that the focus of investigations in a back-office audit environment will be serious breaches, based on the identification of such serious breaches with the assistance of EWDs. This provides a framework to target those serious and high fatigue offences at an organisational level. The submission observed that this enforcement model was not the focus of the regulatory issues paper, which assumed a roadside enforcement paradigm. QLD TMR also noted that from an audit and business management standpoint, small breaches may be a useful tool to assess how a business operates and manages its fatigue.

VicRoads also supported the recommended approach, provided that the driver could not accumulate the eight minutes under each work period, and that it would not apply to rest periods. VicRoads sought to clarify whether the legislative approach would apply to the AFM risk classification system and exemption hours, and recommended that further research be conducted to identify any unintended flow-on effects of the approach if that was the case.

SA DPTI indicated that it understood the dilemma created by the accuracy of EWD records but was also concerned that the recommended treatment of small breaches would lead to operators and drivers working to the higher limits. SA DPTI therefore welcome the non-accumulative aspect of the proposal and supported the recommendation. It further suggested that an additional rule could require the eight minutes to be made up for in the next work period.

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[49] Transport for New South Wales, *Submission to the National Transport Commission: Preparing Australia for Electronic Work Diaries*, 2013, http://www.ntc.gov.au/RFCCommentsView.aspx?DocumentId=2447 (viewed on 03/02/2014)
[50] Australia and New Zealand Policing Advisory Agency Trucking Association, *Submission to the National Transport Commission: Preparing Australia for Electronic Work Diaries*, 2013, p. 4, http://www.ntc.gov.au/RFCCommentsView.aspx?DocumentId=2447 (viewed on 03/02/2014)
[51] Australia and New Zealand Policing Advisory Agency Trucking Association, *Submission to the National Transport Commission: Preparing Australia for Electronic Work Diaries*, 2013, p. 2

## 3.3 Treatment of small breaches: policy position

The NTC notes the support of QLD TMR, VicRoads and SA DPTI for the non-accumulative eight-minute legislated approach. In relation to SA DPTI's suggestion that the exceeded time is made up at the next period, the NTC suggests that by being non-accumulative, a sensible driver would seek to ensure that the time was made up in the next period so that the eight minutes was available later in the shift. The intention of SA DPTI's position is arguably encapsulated in the recommended approach.

The NTC understands ANZPAA's position and recognises the importance of transport operations being scheduled within maximum work times and ensuring that drivers and operators do not work to the eight minutes. The NTC suggests that the non-accumulative feature of the proposed approach – whereby the eight minutes simultaneously applies to all work hour rules in the day – would ensure against expanding work schedules.

***Underpinning rationale for treating small breaches***

The NTC notes that industry supports the treatment of small breaches being resolved within a legislative framework. However, while the NTC understands the perspective of industry in relation to its position on an acceptable small breach limit of 15 minutes (preferably accumulative throughout a driver's shift), it does not believe that governments can accept a policy position based on condoning the illegal and incorrect application of the rounding rules.

Equity of treatment between EWD and WWD drivers is important, but that equity should primarily be based on what is legally permissible, with some recognition of the practicalities of transport operations and acceptance that small breaches with nominal fatigue impact may occasionally occur in good faith. If industry's approach was adopted, a small breach limit of 15 minutes would be tantamount to condoning drivers who round down work up to 15 minutes. This would not be acceptable to policymakers and road safety experts. Alternatively, an eight-minute non-accumulative small breach limit based, not on equivalence with an illegal application of the rounding rules but in recognition that small breaches with nominal fatigue impact may occasionally occur in good faith, does not undermine the integrity of the rounding rules for WWD drivers. Under this approach, a practical equity between EWD and WWD drivers can be attained while recognising the legal parameters that will continue to exist for WWD drivers.

***Acceptable limits of a small breach***

In relation to the amount of time that is an acceptable small breach, the NTC suggests that an eight-minute non-accumulative limit is not an additional fatigue risk when seen in the context of a 24-hour period. This was supported by the fatigue advice. While Professor Williamson advised against an additional eight minutes, the advice also recognised the benefit of this approach for those drivers who would otherwise round down work and conceal 'hidden breaches' in the rounding rules for WWDs.

The NTC understands that fatigue levels are dependent on a range of factors, including night driving and human biology, and that it is difficult to put a 'fatigue value' on an additional eight minutes that would apply across all heavy vehicle drivers operating under different circumstances. It is also the case that drivers and other in the chain of responsibility have a general duty to manage driver fatigue, and compliance with work and rest hours does not necessarily ensure that a driver is not fatigued.

As per the discussion above, the eight minutes is based on an acceptance that small breaches with nominal fatigue impact may occasionally occur in good faith, rather than an attempt to replicate the incorrect and illegal application of the rounding rules by some WWD drivers. Regardless of a non-accumulative eight minutes, if a driver is impaired by fatigue at any time during their 24-hour work period, that driver should stop driving. The general duty not to drive while impaired by fatigue underpins the policy position on the treatment of small breaches.

***Patterns of behaviour***

Principle 6 of the draft framework principles states that 'the treatment of telematics information should have regard to patterns of behaviour and the higher probability of detection'. In the event that recommendation 6 is supported, small breaches up to eight minutes will not be detectable by the compliance assessment software. This will enable Authorised Officers to focus on patterns of

behaviour that are a fatigue risk, and ensure that the higher probability of detection afforded by EWDs does not result in Authorised Officers targeting minor and inadvertent small breaches. Operators, on the other hand, would be aware of small breaches and patterns of small breaches to comprehensively manage their drivers' fatigue and to ensure responsible and accurate scheduling of drivers.

***Two-year review***

The accepted limits of a small breach could be introduced with the expectation that the fatigue risk and operational effectiveness of the approach will be reviewed after two years of initial uptake by industry. This would allow for a transition phase towards a non-legislative approach, if that was the recommended outcome of the two-year review.

***Application to drivers working BFM, AFM and exemption hours***

The NTC notes that TfNSW further suggested that such an approach, if accepted, should not apply to drivers working under BFM and AFM hours. The NTC agrees that this approach to small breaches should *not* apply to drivers operating under AFM hours, given the additional work hours and higher standards expected of accredited AFM operators. This perspective was confirmed by a majority of the fatigue experts who considered that an additional eight minutes to the outer limits of AFM a significant fatigue risk. Treatment of small breaches could also be included as part of an AFM application and factored into the risk classification system. In relation to BFM, however, it is noted that drivers operating under BFM hours are following a similarly structured approach to standard hours and that it is important to have a consistent enforcement approach between drivers working under standard hours and BFM. It is also important that enforcement policy does not unintendedly create a disincentive for BFM drivers and operators to use EWDs.

The NTC suggests that the non-accumulative eight-minute legislated approach should not apply to exemption hours, given that an exemption may provide similar hours to AFM which, as discussed earlier, should not receive the benefit of the legislated approach. If deemed necessary, the treatment of small breaches could be included as a matter in the exemption notice.

***Fatigue regulations***

The accepted limits of a small breach should, where possible, be reflected in the Heavy Vehicle (Fatigue Management) National Regulation rather than primary legislation. To take this approach, however, it is noted that section 249 of the HVNL, which provides that the national regulations may prescribe work times, would have to be amended to provide a sufficient head of power to treat small breaches in the national regulations.

## 3.4 Treatment of small breaches: final recommendation

The NTC recommends that the HVNL is amended to provide a head of power for the Heavy Vehicle (Fatigue Management) National Regulation to have regard to the treatment of small breaches. The National Regulation should provide that a fatigue-regulated heavy vehicle driver who is: using an EWD to record work and rest hours; operating under standard hours or BFM hours; and working as a solo driver or in a two-up arrangement, is within the acceptable limit of a small breach when he or she exceeds maximum work in a 24-hour period by up to eight minutes.

This eight minutes may be used by the driver in any of the work rules the driver is operating under within the 24-hour period. For example, a driver who exceeds work time by five minutes in the first period of work may only exceed work time by up to three minutes for the rest of the 24-hour period, unless the driver makes up for the five minutes at a later time in that day.

The acceptable limit of a small breach does not apply to rest periods.

The NTC recommends that the treatment of small breaches in the Heavy Vehicle (Fatigue Management) National Regulation is reviewed for its impact on fatigue risk and compliance and enforcement operational effectiveness after two years of initial uptake by industry.

**Recommendations – treatment of small breaches**

**Recommendation 5:** that the HVNL and Heavy Vehicle (Fatigue Management) National Regulation are amended to provide that EWD drivers operating under standard hours or basic fatigue management may exceed a work period, under any applicable work rule in the 24-hour period, by up to and including eight minutes.

**Recommendation 6:** that the treatment of small breaches in the Heavy Vehicle (Fatigue Management) National Regulation is reviewed for its impact on fatigue risk and compliance and enforcement operational effectiveness after two years of initial uptake by industry.

# 4. Privacy and surveillance

## 4.1 Introduction to the issues

Introducing a regulatory EWD will have privacy implications and entail responsibilities for operators, employers, the NHVR, agencies and police to handle the personal information of drivers prudently, and within the law.

Like a WWD in use today, an EWD generates information – often personal information – that may be subject to privacy law. Unlike a WWD, however, an EWD has the potential to generate more information, more easily. The EWD system is likely to have a more complex structure of interrelated functions, roles, responsibilities and entities that may, under different circumstances, access, disclose, hold or destroy personal information. This is particularly the case taking into consideration that the EWD tracks in real time the location of the driver (not just the vehicle) and the increased accuracy, volume and currency of the EWD compared with the WWD.

Associated privacy risks are avoidable. All parties handling personal information contained in an EWD, including the NHVR, police, record keepers and service providers, should assess, design and manage their privacy responsibilities legally and effectively. Complying with privacy laws will not only minimise noncompliance but increase industry confidence in the EWD – a critical feature in a voluntary environment.

Privacy laws are complemented by Commonwealth, state and territory surveillance device laws. While privacy laws regulate how information is collected, handled, disclosed and destroyed, surveillance laws have regard to the legality of the surveillance activity itself. It is highly likely that an EWD constitutes a surveillance tracking device, given the technology's GNSS functionality and its identification of the driver operating the vehicle. Under surveillance laws, tracking a driver with an EWD must be overt and the driver must have informed knowledge of the surveillance.

### 4.1.1 Privacy and surveillance laws

Corporations and Commonwealth public sector entities are bound by the APPs, which are set out in the Privacy Act.[52] State and territory public sector entities are bound by state and territory privacy legislation except in South Australia (where public sector organisations are bound by a cabinet instruction) and Western Australia. There are 13 APPs that regulate the collection, handling, disclosure and destruction of personal information:

**APP 1 – Open and transparent management of personal information:** personal information must be managed in an open and transparent way. This includes having a clearly expressed and up to date privacy policy.

**APP 2 – Anonymity and pseudonymity:** individuals must have the option of not identifying themselves, or of using a pseudonym, unless it is impracticable to do so.

**APP 3 – Collection of solicited personal information:** personal information must not be collected unless the information is reasonably necessary for, or directly related to, one or more of the entity's functions or activities.

**APP 4 – Dealing with unsolicited personal information:** outlines how entities must deal with unsolicited personal information.

**APP 5 – Notification of the collection of personal information:** as soon as practicable, the individual must be notified of the collection of personal information, the purpose of the collection, and whether the information will be held overseas.

**APP 6 – Use or disclosure of personal information:** personal information may not be used or disclosed for a secondary purpose without the consent of the individual, or unless it is required by law, or the entity reasonably believes that the information is necessary for law enforcement activities.

[52] *Privacy Act 1988* (Cwlth)

**APP 7 – Direct marketing:** an organisation may only use or disclose personal information for direct marketing purposes if certain conditions are met.

**APP 8 – Cross-border disclosure of personal information:** before personal information is disclosed overseas, the entity must take reasonable steps to ensure that the overseas entity does not breach the APPs.

**APP 9 – Adoption, use or disclosure of government-related identifiers:** there are limited circumstances when an entity may adopt a government-related identifier of an individual as its own identifier.

**APP 10 – Quality of personal information:** an entity must take reasonable steps to ensure the personal information it collects is accurate, up to date and complete.

**APP 11 – Security of personal information:** an entity must take reasonable steps to protect personal information it holds from misuse, interference and loss, and from unauthorised access, modification or disclosure. An entity has obligations to destroy or de-identify personal information in certain circumstances.

**APP 12 – Access to personal information:** an entity must provide an individual with access to his or her personal information, unless the request is unreasonable or access is subject to other regulations.

**APP 13 – Correction of personal information:** if the entity is satisfied that the information is inaccurate, out of date, incomplete, irrelevant or misleading, the entity is obligated to correct the personal information it holds.

State and territory legislation largely replicates the approach taken in the Privacy Act. The state-based privacy principles do not prescribe what information is relevant or necessary for an organisation to collect. They are limited to stating that, if an organisation is required under law to collect the information, or if it is necessary to undertake one or more of its functions to collect the data, the privacy principles provide protocols and procedures to be maintained in doing so. This includes the collection, use, storage, amendments, disclosure and destruction of personal information.[53]

Surveillance devices enable organisations to track the movement and behaviour of individuals. While they can be an effective compliance tool to tackle serious crime, they have the potential to have a direct and egregious impact on the privacy of individuals. Surveillance device legislation to protect individual privacy has therefore been enacted in various states and territories across Australia.

Unless the entity is a Commonwealth enforcement agency (in which case the *Surveillance Devices Act 2004* applies), state and territory surveillance device laws apply in the jurisdiction where the surveillance is conducted. State and territory surveillance device laws apply to both government and private surveillance, and express or implied consent of the surveillance will be required.

Queensland is the only jurisdiction in Australia that does not have surveillance device legislation. In Queensland an operator would only have to notify drivers of their obligations under privacy law and would not have to obtain the consent of drivers to undertake surveillance.

### 4.1.2 Application of privacy and surveillance device laws

Privacy and surveillance device laws provide the framework to robustly protect drivers' privacy. The relevant privacy laws depend on the entity collecting the information and the following table summarises the applicable privacy regime for each organisation or function within the EWD regulatory environment. **Table 4** outlines which privacy regime will apply for each EWD entity or function. The Queensland Information Privacy Principles will apply to the NHVR because it is an agency enacted in Queensland.

[53] For example, Victorian Information Privacy Principle 1 states 'an organisation must not collect personal information unless the information is necessary for one or more of its functions or activities'.

**Table 4: EWD entities or functions, and applicable privacy regimes**

| Organisation or function | Applicable privacy regime |
|---|---|
| National Heavy Vehicle Regulator | Queensland Information Privacy Principles |
| Record keeper, system manager, service provider, operator | Australian Privacy Principles |
| Road agency and police | State Information Privacy Principles |
| Registrar | State Information Privacy Principles |
| Employee records | Exempt (Fair Work best practice guide) |
| Small business (including owner drivers) | Exempt |

Service providers, regulated by the APPs, will be responsible for managing personal information data within the remote connection access framework. In circumstances where an Authorised Officer views the EWD records via the remote connection access framework, and the personal information remains on the service provider's database, then the personal information continues to be regulated under the APPs, with the Authorised Officer a permitted third party accessing the information. If a copy of the record is then made and handled by the Authorised Officer, then that information is regulated by the Information Privacy Principles of his or her jurisdiction.

***Application of exemptions to the Privacy Act***

A key privacy issue is the exemption of employee records from the Privacy Act and the APPs, given that record keepers for many fatigue-regulated drivers are expected to be the driver's employer. Section 6 of the Privacy Act defines an employee record as:

> *a record of personal information relating to the employment of the employee. Examples of personal information relating to the employment of the employee are health information about the employee and personal information about all or any of the following:*
>
> *(a) the engagement, training, disciplining or resignation of the employee;*
> *(b) the termination of the employment of the employee;*
> *(c) the terms and conditions of employment of the employee;*
> *(d) the employee's personal and emergency contact details;*
> *(e) the employee's performance or conduct;*
> *(f) the employee's hours of employment;*
> *(g) the employee's salary or wages;*
> *(h) the employee's membership of a professional or trade association;*
> *(i) the employee's trade union membership;*
> *(j) the employee's recreation, long service, sick, personal, maternity, paternity or other leave;*
> *(k) the employee's taxation, banking or superannuation affairs*.[54]

EWD personal information may form part of an employee record. However, an employee record is understood to be information that is directly related to the employee relationship. This would mean that EWD personal information collected by an employer for regulatory or compliance purposes would be captured by the APPs, while EWD personal information collected by an employer for performance management purposes would be classified as an employee record. If the records are employee records, the Fair Work Commission sets best practice for handling employee records that is largely aligned with the APPs, but is not enforceable.

Small businesses with an annual turnover of $3 million or less will continue to be exempt, regardless of whether they are employers of the driver. The small business exemption will not

[54] *Privacy Act 1988* (Cwlth), section 6.

apply to service providers who collect or disclose personal information for a benefit, service or advantage.[55]

***Application of surveillance device laws***

Given that an EWD will track an individual in time and place using a GNSS, it is most likely that an EWD would be classed as a surveillance device, and specifically a surveillance tracking device. This will mean that federal officers must obtain a warrant from an eligible judge to use an EWD for covert law enforcement purposes. However, it is less certain that surveillance device laws will apply if the federal agency has not installed the EWD but accessed information that was already collected under the HVNL.

Under state surveillance laws, EWDs are tracking or data surveillance devices that *any person* must obtain the individual's consent to use, whether express or implied. Consent could be sought at the point of purchase or registration of the EWD driver. Drivers should be made aware of the implications of consent.

Employers and small businesses installing and using EWDs will not be exempt from the surveillance device laws.

***Application of the Workplace Surveillance Act***

Operations in New South Wales will also be subject to the Workplace Surveillance Act,[56] which requires that surveillance of an employee must not commence *without prior notice in writing* to the employee. The notice must indicate the kind of surveillance, when it will start, whether it will be continuous or intermittent, and whether it will be for a limited period or ongoing.[57] In addition to which, tracking surveillance must not be carried out unless there is a notice clearly visible on the vehicle indicating that the vehicle is the subject of tracking surveillance.[58]

### 4.1.3 Options considered as part of the EWD Pilot

The regulatory issues paper made two recommendations in relation to privacy and surveillance:

- **A privacy-by-design approach** is adopted, whereby privacy protections are integrated into the system rather than mitigated after the design is finalised. This should consider information flows and separation of functions and ensure that only personal information that is relevant to the task is collected.
- **A Privacy Impact Assessment** is undertaken by an independent privacy specialist to ensure consistency with privacy principles and privacy-by-design best practice.

In addition to these recommendations, the paper suggested the following risk mitigation strategies:

1. Ensure the EWD is a voluntary method to record work and rest times: when drivers have a real choice not to use EWDs it increases the meaningfulness of accepting the collection, use and disclosure of their personal information.

2. Clearly define reasons for collection, and notify the driver of the collection, handling and disclosure of the personal information.

3. Minimise the amount of information that is collected and ensure that what is collected is necessary to undertake a legitimate function or task.

4. Collection should be undertaken by private sector organisations, where possible.

5. The NHVR and/or system manager should maintain a current privacy risk register to log privacy risks and ensure timely and appropriate mitigation strategies address the issues.

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[55] *Privacy Act 1988* (Cwlth), paragraph 6(e).
[56] *Workplace Surveillance Act 2005* (No. 47 of 2005) (NSW)
[57] *Workplace Surveillance Act 2005* (No. 47 of 2005) (NSW), subsection 10(4)
[58] *Workplace Surveillance Act 2005* (No. 47 of 2005) (NSW), section 13

6. Introduce a privacy code for EWD-related entities, thereby capturing entities that would otherwise be exempt from privacy principles, including small business and employers (when data directly relates to employment records).

7. Strengthen privacy protections through legislative reform.

In relation to improving legislative protections, the regulatory issues paper noted that privacy laws exempt a number of activities and functions:

> *To increase the uptake of EWDs and to realise the optimum safety benefits of the EWD in a voluntary environment, access to EWD personal information for exempt purposes could be restricted to very specific circumstances. This may be reflected in the national law or the privacy code, or both (the case studies provide examples of such approaches). For instance, agencies engaged in broader investigative purposes not related to national law enforcement could be required to seek a warrant to access EWD personal information. This would be on the basis that the EWD is a type of tracking device that produces location information that, outside the national law, the police would only be able to access with a warrant.*[59]

Legislative protection of EWD personal information was discussed in the context that current provisions in the HVNL allow broad sharing of information by police, for any purpose.[60]

In addition to these risk mitigation strategies, the regulatory issues paper suggested that consent, required under surveillance laws in every jurisdiction except Queensland, could be obtained from drivers through employer or service provider contractual relations.

Draft principles in relation to privacy protections were also canvassed in the NTC discussion paper, *Developing a Compliance Framework for Heavy Vehicle Telematics*. The draft principles are replicated in **section 1.4.3** of this paper. They seek to ensure that legislation and policy settings do not subject individuals to arbitrary or unlawful interference of their privacy, and that governments are bound by rules that are consistent with the APPs, including when accessing and using personal information for enforcement purposes. The draft principles adopt the approach taken for IAP and require court-issued warrants for agencies to access personal information for any enforcement or investigatory purpose not intended by the regulatory application.

Each of these principles are highly relevant to EWDs and should be taken into consideration when reviewing policies and legislation that impact upon the personal information of drivers. For example, an EWD fitted to meet regulatory requirements of the HVNL should not be accessed for another enforcement or investigatory purposes outside the HVNL without obtaining a court-issued warrant. This mechanism recognises the sensitivity of EWD personal information, particularly because the data can accurately locate a driver in place and time and is a powerful investigatory tool.

## 4.2 Stakeholder feedback

Many submissions endorsed the findings of the regulatory issues paper. There was strong concern from both industry and government stakeholders that the privacy of drivers must be robustly protected to ensure personal information is properly collected, handled and disclosed. Any misuse of personal information can be expected to have a detrimental impact on the uptake of EWDs and clarity regarding the purpose of protection and third-party disclosure should be established prior to implementing EWDs.

Stakeholders also agreed that privacy and surveillance risks were manageable and that laws in relation to privacy and surveillance in no way hindered the legal and effective operation of EWDs. The ATA and ALRTA stated the necessity of clarifying which privacy regime will govern the operation of the remote connection access framework. Industry is also concerned that the ownership of the data is retained by the record keeper and not third parties or government.

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[59] National Transport Commission, *Preparing Australia for Electronic Work Diaries: Regulatory issues paper*, 2013, p. 44, http://www.ntc.gov.au/filemedia/Reports/PrepAustEWDsRegIssuesPaperOct13.pdf (viewed on 24/01/2014)

[60] *Heavy Vehicle National Law 2012* (Qld), subsection 727(2): 'It is also an authorised use of protected information disclosed to or otherwise held by a police agency for any purpose or for a particular purpose to disclose the information to another police agency authorised to hold protected information (whether or not for the same purpose).'

VicRoads supported guidance and training for road agencies and industry regarding their privacy and surveillance device law obligations in relation to EWDs. SA DPTI and ANZPAA commented that any privacy restrictions that would severely limit or deny access to critical information to undertake investigations under the HVNL would be a significant concern from an enforcement perspective. This was reflected in the following statement made by ANZPAA:

> *If the information which is electronically recorded and stored, such as a location at a given time, is unable to be provided due to privacy concerns then the EWD as a regulatory tool is ineffective.*[61]

However, there was wide support for legislative restrictions on access to EWD personal information for enforcement purposes *not* related to the HVNL, including police. The ANZPAA submission stated that 'police support the use of a warrant for access to EWD data for reasons which are unrelated to the HVNL'.[62]

QLD TMR stated that privacy and surveillance measures should be consistent with the approach taken in IAP, and emphasised that personal information should only be available for lawful purposes. The department recognised, however, that de-identified and aggregated data was also important for future infrastructure and road usage planning.

The NTC notes that stakeholders did not support the introduction of a privacy code for entities responsible for EWD personal information.

The NTC also notes that police do not support the removal of GNSS technology as an alternative to being captured by the surveillance device laws. In other words, it is more important to police that the surveillance device laws are complied with than removing a key functionality of the EWDs so as not to meet the legal definition of a surveillance device.

## 4.3 Privacy and surveillance: policy position

Given that EWDs are intended to accurately track the location of individuals, and in consideration of the fact that a database of EWD records will be created, the strongest levels of privacy protection should be sought.

As discussed, current provisions in the HVNL allow broad sharing of information by police, for any purpose. Given that the EWD is a surveillance tracking device and a potentially invasive enforcement tool, it is recommended that access to data for enforcement or investigatory purposes is regulated to ensure any enforcement or investigatory matter not related to the HVNL requires a judicial warrant to access the EWD information. This is consistent with the approach taken in relation to IAP and cooperative intelligent transport systems (C-ITS).

Following this approach, EWD personal information could nonetheless be accessed without a warrant for *any matter* related to the HVNL. For example, an investigation to determine if an employer's business practices caused a driver to exceed the speed limit could allow access to EWD records without recourse to a judicial warrant because an employer's duties in relation to speed are contained in section 204 of the HVNL. Speeding offences of the driver, however, are contained in the road rules that sit outside the HVNL. This would mean that an Authorised Officer could not issue a driver with a speeding infringement based on the evidence of EWD records, unless a judicial warrant was obtained.

These protections should in no way prevent or inhibit an Authorised Officer from conducting enforcement or investigatory activities related to the enforcement of the HVNL and, in particular, compliance with work and rest hour obligations. These protections should not prevent or inhibit the collection of de-identified aggregated data for research and network management purposes.

In addition to regulating access to EWD personal information for non-HVNL purposes, it is proposed that a privacy-by-design approach should be adopted by the NHVR and governments to ensure the EWD system only collects personal information necessary to undertake the task and to anonymise data where possible. A privacy-by-design approach should apply to the design and development of the EWD system, and to the institutional arrangements of the EWD regulatory

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[61] Australia and New Zealand Policing Advisory Agency Trucking Association, *Submission to the National Transport Commission: Preparing Australia for Electronic Work Diaries*, 2013, p. 5
[62] ibid., p.6

environment. This should include undertaking an independent Privacy Impact Assessment to ensure the privacy principles are complied with, and that the highest possible level of privacy protection is attained.

It is recognised that industry may develop an EWD that is integrated into a telematics system that collects a range of data inputs for both commercial and regulatory applications. For example, a telematics system may incorporate an approved EWD and a speed compliance application for driver management purposes. This approach is consistent with the development of a common dataset and the direction of telematics outlined in NTC's *Developing a Compliance Framework for Heavy Vehicle Telematics* discussion paper.[63] Where this is the case, the additional personal information would be collected for a necessary purpose and would not be inconsistent with the privacy principles. It is important to note, however, that the access to, and use of, that additional information should be limited to the primary purpose for which it is collected, and not accessed and used for a secondary purpose without the individual's consent. An Authorised Officer should not be able to access all data generated by a telematics system merely because an EWD is one application integrated into the system. This necessities that the EWD system and its associated institutional environment (actors as per the outputs of the EWD Pilot) adopt a privacy by design approach to ensure the EWD system can co-exist with other regulatory and/or commercial telematics systems.

The NTC understands industry's concerns that EWD data should remain the property of the record keeper, and agrees that governments should not have ownership of the data EWDs generate, but notes that the APPs are not contingent on concepts of property and ownership.

## 4.4 Privacy and surveillance: final recommendations

The NTC recommends that EWD personal information is only accessed for enforcement purposes related to the HVNL; for any other purposes a judicial warrant must be obtained.

The NTC recommends that a privacy-by-design approach is adopted to ensure that the only personal information collected is necessary to undertake the task and is anonymous where possible.

As part of the privacy-by-design approach, the NTC recommends that an independent Privacy Impact Assessment is undertaken to identify and evaluate risks and to ensure the EWD system is consistent with the APPs and surveillance device laws, and meets the highest standards of privacy protection possible.

**Recommendations – protecting driver privacy**

**Recommendation 7:** that the HVNL is amended to ensure police, regulators and enforcement agencies obtain a judicial warrant to lawfully gain access to personal information contained in an EWD record for any purpose not connected with enforcement of the HVNL.

**Recommendation 8:** that the EWD system and its associated institutional environment adopt a privacy-by-design approach to ensure the EWD system can co-exist with other regulatory and/or commercial telematics systems and only uses personal information necessary to undertake the EWD task and to keep the data anonymous were possible.

**Recommendation 9:** that the National Heavy Vehicle Regulator commissions an independent Privacy Impact Assessment to ensure the collection, handling and disclosure of personal information within the EWD system is consistent with the Australian Privacy Principles and surveillance device laws, and meets the highest standards of privacy protection possible.

[63] National Transport Commission, *Developing a Compliance Framework for Heavy Vehicle Telematics: Discussion paper*, 2013, http://www.ntc.gov.au/DocView.aspx?DocumentId=2463 (viewed on 28/01/2014)

# 5. Approval of the technical specification

A finalised EWD technical specification will underpin the EWD approval process. A draft technical specification was developed by TCA as part of the EWD Pilot, and stakeholders had an opportunity to provide comments on the detail of the draft technical specification.

National standards and rules are usually approved by ministers or ministerial councils. For example, the Commonwealth minister approves standards relating to new vehicles (called Australian Design Rules) and the Transport and Infrastructure Council approves the standards relating to in-service vehicles. One of the principles of best practice regulation is effective consultation with key stakeholders at all stages of the regulatory cycle.[64]

In addition to ensuring alignment with Council of Australian Governments (COAG) guidelines, ministerial approval of the EWD technical specification will increase transparency and accountability of the standards, which are recognised as having a direct impact on EWD uptake. It is also important that technical standards reflect the policy position agreed by the Transport and Infrastructure Council; a ministerial approval process is an appropriate mechanism by which policy settings and the technical specification can be aligned.

Amendments to the technical specification that are minor and non-contentious should be considered outside the council. Three options are proposed:

- Option 1: that the council delegates minor and non-contentious changes to the Transport and Infrastructure Senior Officials Committee (TISOC)
- Option 2: that the council establishes a disallowable instrument that enables TISOC to retrospectively endorse or disallow minor and non-contentious changes
- Option 3: that the council delegates minor and non-contentious changes to the NHVR.

Option 1 is the preferred option because it ensures the highest level of transparency and accountability, recognising that minor changes may have an impact on policy. This would mean that the EWD technical specification could only be updated with minor or non-contentious amendments twice a year, but this is considered effective in view of the number of changes that have been made to the IAP technical specification since its approval.

Option 2 also delegates minor and non-contentious changes to TISOC but introduces a mechanism to retrospectively endorse or disallow an amendment that has been accepted by the NHVR. This option may introduce uncertainty in the telematics industry if a minor amendment to the technical specification was accepted by the NHVR but consequently disallowed by TISOC. Alternatively, option 3 delegates minor and non-contentious changes to the NHVR. This is considered to be the least transparent option.

***Stakeholder feedback***

Stakeholders have not provided specific feedback on the approval process for the EWD technical specification, and it is recognised that procedural requirements for approvals was not considered during the EWD Pilot or discussed in the regulatory issues paper. However, ministerial approval of the EWD technical specification would align with industry seeking greater contribution to system design and technical standards. The ATA, for example, stated:

> *Industry's concern over the use of telematics for regulatory purposes does not relate to the capacity of the technology to cater to regulatory ends, but to the policy foundations, system design, likely cost and effect, as well as its application by regulators.*[65]

The requirements of the technical specification will impact on policy, system design and industry costs. Ministerial approval of the technical specification could therefore facilitate a more open and collaborative process between governments and industry.

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[64] Council of Australian Governments, *Best Practice Regulation: a guide for ministerial councils and national standard setting bodies*, 2007, p. 4

[65] Australian Trucking Association, *Submission to the National Transport Commission: Preparing Australia for Electronic Work Diaries*, 2013, p. 6, http://www.ntc.gov.au/RFCCommentsView.aspx?DocumentId=2447 (viewed on 03/02/2014)

In relation to minor and non-contentious changes to the EWD technical specification, New South Wales and the NHVR have expressed concern that changes may need to be made quickly and the approvals system needs to be agile. The NHVR supports option 3.

***Recommendation***

To ensure consistency with the COAG guidelines, the NTC recommends that the EWD technical specification, and any substantial amendments, should be approved by the Transport and Infrastructure Council. Amendments that are minor and non-contentious should be approved by TISOC.

Subsection 343(3) of the HVNL requires that the regulator, in deciding whether or not to grant an approval for an EWD, 'must have regard to the approved guidelines for granting electronic recording system approvals'. Section 653 of the HVNL provides that ministers have responsibility for approving guidelines in relation to granting electronic recording system approvals. Ministerial approval of the EWD technical specification is therefore consistent with the approval of EWD guidelines in the HVNL.

The process for approving amendments should include a public consultation period, as specified in COAG guidelines. This consultation period will allow affected individuals and organisations to make submissions about any proposed changes.

Furthermore, most national standards are freely available on a government website rather than by request. By placing the technical standards in the public domain, there are greater opportunities for service providers to develop integrated telematics applications for both commercial- and compliance-related purposes. To ensure transparent system requirements and to facilitate the development of EWDs within the broader context of compliance-related telematics solutions, the EWD technical specification should be made available on the relevant agency website.

**Recommendation – approval of the technical specification**

**Recommendation 10:** that the EWD technical specification, and any substantial changes, are approved by the Transport and Infrastructure Council, with minor and non-contentious amendments approved by TISOC; and that a public version of the EWD technical specification is made available on the National Heavy Vehicle Regulator website.

# 6. Conclusion

This paper has sought to address the principal regulatory and legislative issues for consideration by the Transport and Infrastructure Council. While the legislative framework, enforcement policies and privacy principles are largely in place to facilitate the introduction of EWDs in Australia, a number of key legislative amendments and policy positions are recommended.

In this final chapter, the paper concludes with a discussion on the potential prioritisation of legislative amendments, further issues for future consideration and next steps for implementation.

## 6.1 Prioritisation of amendments to the HVNL

The regulatory issues paper identified essential and non-essential amendments to the HVNL. Essential amendments were understood to be those changes necessary for the EWD to function properly. Most critically, these included removal of the rounding rules and the requirements to carry printouts. Non-essential amendments were those changes that could improve the clarity and certainty of the law but that the present legislation (or other laws, such as privacy principles or contract law) adequately capture under a functioning EWD system.

In its submission to the regulatory issues paper, TfNSW recommended a larger number of potential amendments be included as essential. These included clarification of roles and responsibilities, keeping two diaries simultaneously and an expansion of the drivers' defence for a malfunctioning EWD.

Alternatively, VicRoads proposed that all amendments should be dealt with as a single package rather than be divided into two work streams:

> *Splitting the EWD amendments into two groups was originally done to ensure time frames for the introduction of the national law and the EWD work planned by the Regulator could be accommodated. Recent outcomes from SCOTI and TISOC have amended the Regulator's EWD timeframes allowing more lead time to complete all amendments.*[66]

Given TfNSW's suggestion that a larger number of changes should be considered essential, the NTC agrees with VicRoads that the recommended amendments to the HVNL, if accepted by ministers, do not require prioritisation and should be progressed as a single amendment package.

## 6.2 Issues for future consideration

Further issues were identified by stakeholders through the submission process, including the appropriate balance of roadside enforcement and back-office audit for EWD operators, capturing non-driving work and recognition of operators' systems.

### 6.2.1 Balance of roadside enforcement and back-office investigations

The scope of the EWD Pilot was to assess the technical functionality and policy issues of EWDs as they relate to current compliance and enforcement approaches. This was not intended to suggest that, once implemented, EWDs could not contribute to a rebalancing of roadside enforcement and back-office investigations. This theme is relevant to the NTC's Compliance Review and *Developing a Compliance Framework for Heavy Vehicle Telematics*.

In its submission to the regulatory issues paper, QLD TMR observed that a combination of roadside intercepts and exception reporting or regular audits of back-office records would demonstrate an operator's commitment to fatigue management. However, police emphasised the value of roadside intercepts, both in terms of enforcement and deterrence, while the ATA expressed a preference for keeping EWDs focused on traditional roadside enforcement.

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[66] VicRoads, *Submission to the National Transport Commission: Preparing Australia for Electronic Work Diaries*, 2013, http://www.ntc.gov.au/RFCCommentsView.aspx?DocumentId=2447 (viewed on 03/02/2014)

QLD TMR recognised that a balance needs to be achieved between utilising the enforcement benefits of the technology and encouraging industry uptake, and suggested a phased approach may be necessary. That is, the current roadside enforcement approach should continue for the time being. For industry this would mean that the uptake of EWDs, certainly in the first instance, would not result in the reduction of roadside intercepts.

There are clear benefits for highly compliant operators to take up EWDs if there was a reduction in roadside enforcement, and for agencies to undertake back-office audits and chain of responsibility investigations, but the current focus of governments is to establish the essential policy settings and to progress initial implementation.

### 6.2.2 Capturing non-driving work

One of the key benefits of the EWD is that the driving activity will be electronically captured and the time and distances travelled by drivers will no longer be predominantly based on driver self-declaration matched against odometer readings. Police are particularly concerned with drivers who are not recording loading and unloading activities and the ANZPAA submission emphasised the importance of ensuring that the benefits of EWDs are not over-stated, given that non-driving work will continue to rely on driver self-declaration. The ANZPAA submission observed that there are limited measures available to Authorised Officers, particularly at the roadside, to have confidence that non-driving work is being captured. The ANZPAA submission stated:

> *Without certainty for capturing non-driving work, the NTC's assertion that agencies will be able to enforce fatigue provisions more efficiently, with greater confidence in the data, is not a view shared by enforcement.*
>
> *At the October 2013 NTC Telematics Workshop held in Melbourne, a representative from BORAL provided a presentation on their current electronic recording system. This system enables automatic capture of non-driving work (loading/unloading) for their aggregate trucks, via sensors to the Power Take Off (PTO). It is the view of police that further research be undertaken to investigate the potential incorporation of such technology into EWDs before final specification is determined. Incorporation of such technology may result in enhanced enforcement confidence in EWD data assurance and accuracy.*
>
> *Alternatively, the use of EWD could be restricted to freight sectors that do not perform loading/unloading work which police believes is the most suitable EWD target user group.*[67]

The NTC recognises the limitations of the technology, and roadside enforcement processes should have regard to whether work and rest records provide realistic time to load and unload if these activities are being undertaken by the driver. But recognising these limitations, the NTC supports the conclusions made in the EWD Pilot that there are significant safety, compliance and enforcement benefits attributable to the electronic recording of driving work.

Alternative options raised in the ANZPAA submission are believed to be only effective for certain vehicle types and the technology options to capture non-driving work for other transport operations are not yet at a mature stage of development for consideration as a regulatory requirement. Such an approach could also be expected to significantly increase EWD costs for industry.

### 6.2.3 Recognition of operators' systems

The extent to which operators' systems may be recognised as alternatives to the WWD was a key issue raised in the ATA's submission. There are two aspects to consider: the extent to which operators' systems may be approved as EWDs, and whether operators (either separately or as record keepers) can undertake the service provider functions envisioned in the EWD technical specification. These questions are also linked to issues relating to the intellectual property of EWD data, which NatRoad suggested should belong to the drivers.

Resolution of these questions will take into account operational issues relating to cost, roles and responsibilities and third-party audit processes. These factors are broader than the regulatory issues considered as part of this paper and is an implementation issue for the NHVR. It is therefore suggested that the policy findings and recommendations obtained in this paper can be progressed in parallel to the resolution of these questions.

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[67] Australia and New Zealand Policing Advisory Agency Trucking Association, *Submission to the National Transport Commission: Preparing Australia for Electronic Work Diaries*, 2013, p. 2

The following additional proposals were raised by stakeholders:

- prohibit automated enforcement in the HVNL
- develop government systems to manage increased data flows
- complement government investment in EWDs with investment in improved rest areas
- consider incorporating speed monitoring in the technical specification
- consider mandating operator monitoring
- examine the impacts of GNSS blocker devices on the efficiency of EWDs
- widespread EWD usage could reduce, even eliminate, reliance on fixed roadside infrastructure.

The NTC recognises the potential benefits of many of these proposals. For those proposals that relate to policy, the proposals would benefit from a period of EWD implementation prior to further exploration, and the review of small breaches after two years of initial uptake by industry (recommendation 6) provides an opportunity to do so. The ATA submission recommended that it would be premature to advance the EWD proposal as it stands to the NHVR for implementation until the policy is more clearly developed.[68] It is the NTC's view that the recommendations contained in this paper provide sufficient policy certainty to allow EWD implementation planning to commence.

## 6.3 Next steps

### 6.3.1 Amendments to the HVNL

This paper progresses EWD regulatory reforms for consideration by the Transport and Infrastructure Council in May 2014. In the event that policy findings and recommendations are approved by the council, the NTC will seek to draft legislative reforms for consideration by ministers at the subsequent meeting of the council in November 2014, with legislative amendments expected to be progressed in 2015. Amendments to the HVNL will therefore be subject to ministerial approval and the timing of legislative priorities and timeframes. EWD implementation by the NHVR is anticipated to be undertaken in parallel to this process.

### 6.3.2 Further fatigue advice

Recommendation 3 provides that expert advice is sought to assess options for allowing EWD drivers greater flexibility given that the rounding rules will no longer apply. For example, to assess the impact of three short rest breaks of 20 minutes' duration in a 24-hour period. If approved, the NTC will commission this advice in parallel to progressing amendments to the HVNL. Any agreed changes based on the fatigue advice can be incorporated into the legislative amendment process after the Transport and Infrastructure Council meeting in November.

### 6.3.3 NHVR implementation

The NHVR will have responsibility for implementing the EWD system and approval process. As stated above, EWD implementation is anticipated to be undertaken in parallel with the legislative amendment process.

The establishment of governance structures and process to ensure compliance with privacy and surveillance laws are to be progressed by the NHVR as part of its implementation of an EWD system and approval process.

### 6.3.4 Progressing other issues requiring further discussion

Issues for further consideration, discussed in **section 6.2** above, are not considered to be essential regulatory issues requiring finalisation prior to the implementation of EWDs. As stated above, other issues and proposals would benefit from a period of EWD implementation prior to further exploration, and the review of small breaches after two years of initial uptake by industry (recommendation 6) provides an opportunity to do so. Complementary emerging technologies, such as the electronic capture of non-driving work, would also benefit from further market maturity before being considered.

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[68] Australian Trucking Association, *Submission to the National Transport Commission: Preparing Australia for Electronic Work Diaries*, 2013, p. 3, http://www.ntc.gov.au/RFCCommentsView.aspx?DocumentId=2447 (viewed on 03/02/2014)

# 7. Submissions received

**Table 4: Submissions received from the regulatory issues paper**

| | |
|---|---|
| TfNSW | Transport for New South Wales |
| QLD TMR | Queensland Department of Transport and Main Roads |
| VicRoads | VicRoads |
| ANZPAA | Australia New Zealand Policing Advisory Association |
| ATA | Australian Trucking Association |
| NatRoad | National Road Transport Operators Association |
| SARTA | South Australian Road Transport Association |
| Mr Hannifey | Rod Hannifey, Road Transport and Road Safety Advocate |
| TIC | Truck Industry Council |

Submissions are available at: http://www.ntc.gov.au/RFCCommentsView.aspx?DocumentId=2447.

Informal feedback was also received from the following organisations:

- Government of South Australia, Department of Planning, Transport and Infrastructure (SA DPTI)
- Transport Certification Australia (TCA)
- Victorian Transport Association (VTA)
- Australian Livestock and Rural Transporters' Association (ALRTA)
- Queensland Trucking Association (QTA).