Understanding truck driver fatigue - Participant observation sheet

Summary sheet

Date			Day o	f weel	k	S	M	T	W	T	F	S
Location	Narrandera /	Tarcutta	Weatl	ner	•	Fine	/ Clo	udy /	Rain	/ Win	d / etc	
Observation period	Start time:	Finish time	Sunr	ise	(appro	ox.):		Sunse	t (app	rox.):		
Inclusion criteria	Drivers of heavy vehicles with a Gross Vehicle Mass (GVM) over 12 tonnes on long haul (100km+) journeys (Heavy Vehicle National Law, (HVNL) Sect 7)*											

^{*}Included vehicles will be identified by their configuration; prime movers with at least two drive axles towing at least one articulated trailer (a combination which will always exceed a GVM of 12 tonnes which are therefore classified as a 'fatigue regulated heavy vehicle' under Heavy Vehicle National Law and captured by truck driver fatigue laws) and truck markings indicating its use as a long haul vehicle (For example, 'XYZ Interstate Transport', or XYZ Transport, Sydney, Melbourne, Brisbane').

(This participant observation is about determining <u>actual</u> behaviour of long haul truck drivers and if that behaviour is consistent with truck driver fatigue laws. Observations of the driver on arrival and on departure may determine, a) if the behaviour is compliant with required rest periods and b) if the rest period is having its desired effect, to wit, enabling drivers leave the rest area in a refreshed state. This will be determined by the notes recorded on the attached participant Observation Sheet, in the notes area on each sheet, (guidance for which is provided on each page) and on an electronic audio recording device. While this observation is not able to capture truck drivers **attitudes and beliefs**, some **subjective norms** can be indicated by the fact that both the Narrandera and Tarcutta locations are situated at approximate 5 hour distal intervals from Australian capital cities, hence they are locations normally used by many within the truck drivers cohort to participate in a rest break while on interstate journeys. Some **perceptions of behavioural control** can be indicated by the fact that the facilities at both locations are purpose built for large trucks, featuring large volume, open air parking bays with wide turning circles and space for drivers to attend to vehicle and load maintenance if required. They are both in close proximity to restaurant, bathroom and truck re-fuelling facilities, thereby accounting for some of the physical behavioural controls drivers may perceive over their capacity to park/maintain their truck and take a rest break at these locations.)

Participant number	Arrival time	Departure time	Audio notes recorded	Y/N
Participant	Arrival	Departure time	Audio notes recorded	Y/N
number Participant	time Arrival	Departure time	Audio notes recorded	Y/N
number	time	1		
Participant number	Arrival time	Departure time	Audio notes recorded	Y / N
Participant number	Arrival time	Departure time	Audio notes recorded	Y/N
Participant number	Arrival time	Departure time	Audio notes recorded	Y/N
Participant number	Arrival time	Departure time	Audio notes recorded	Y/N
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Participant number	Arrival time	Departure time	Audio notes recorded	Y/N

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Participant	Arrival	Departure time	Audio notes recorded	Y/N
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Participant	Arrival	Departure time	Audio notes recorded	Y/N
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number	time			
Participant	Arrival	Departure time	Audio notes recorded	Y/N
number	time			
Participant	Arrival	Departure time	Audio notes recorded	Y / N
number	time			
Participant	Arrival	Departure time	Audio notes recorded	Y / N
number	time			
	Photo	copy this sheet as rec	quired	

Understanding truck driver fatigue - Participant observation sheet

Participant observation sheet

Participant number			Date				Location		Narrande	ra /	Tarcutt	a
Configuration			Single a	Single artic / b-double / road train / other			Line of sight period of a			Yes / No		
Interstate	markings		Yes	s / No			ul indicators gistration, etc)					
Time; 0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200
Work**												
Rest***												
Time: 1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	0000
Work**												
Rest***												

Note: Cells represent 15 min periods. Time is represented in 24:00 time.

(This sheet has been modelled on the National Driver Work Diary Daily Sheet as issued by the National Heavy Vehicle Regulator. See examples and further notes on rear of page.)

Instructions: Mark a point and write the time the participant arrives, in the 'work'** row. When the participant appears to change from 'work'** to 'rest'*** related activities, mark a point and write the time in the 'rest'*** row. Continue marking points at each change of activity, drawing a straight line between each activity in the same row to calculate time spent at 'work'** and 'rest'***. See examples overleaf. Additional notes can be made in the space below.

**Work, in relation to a fatigue-regulated heavy vehicle, includes driving a fatigue-regulated heavy vehicle; or performing another task relating to the use of a fatigue-regulated heavy vehicle, including, for example, loading, unloading, inspecting, servicing or repairing the heavy vehicle and inspecting or attending to a load on the heavy vehicle, and cleaning or refuelling the heavy vehicle, and recording information or completing a document, as required under this Law in relation to the use of the vehicle, or occupying the driver's seat of a fatigue-regulated heavy vehicle while its engine is running (Heavy Vehicle National Law, Sect 221).

***Rest, in relation to a fatigue-regulated heavy vehicle, means not work in relation to a fatigue-regulated heavy vehicle (Heavy Vehicle National Law, Sect 221).

Additional notes may include relevant observations of; A participants behaviour, appearance and/or demeanour that may be consistent with fatigue; Any significant changes in appearance or demeanour after the period of rest; Any specific activities the driver engages in while under observation; Availability of truck parking/manoeuvring space, for example, other vehicles on site that impact on parking availability/manoeuvring space such as cars, caravans, other trucks, oversize loads etc; changes in weather that may affect ease of inspecting truck/load etc;

These notes and any audio recording <u>must not</u> record any identifying features or characteristics of the participant under observation.

The definition of 'work' provided by HVNL Sect 221, upon which this observation relies, identifies 12 specific behaviours/tasks which can be recorded under a heading of 'Work activities' with sub-headings regarding behaviours related to 'Vehicle', 'Load' or 'Administrative' tasks. This grouping will be used to assist with data analysis. The definition of 'Rest' is broad, hence observations of a driver's rest related behaviour can be recorded under a heading of 'Behaviour at rest' and without limitation can include activities such as time spent in the sleeper cabin, sitting outside the truck, eating, smoking, etc will all be grouped under a 'rest' heading.

An audio recording device will also be used by the researcher to aid in the collection of data related to the observation.

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Work activities	S**						Arrival time	
Vehicle – Inspe	cting, Servicing/Rep	air, Refuelling, Cle	aning, Sitting in dri	iver's seat (engine	running), Other.			
Start time:-	End Time:-	Start time:-	End Time:-	Start time:-	End Time:-	Start time	:- End Time:-	
Load - Loading	g, Unloading, Inspec	ting, Attending/adjı	ısting, Other.					
Start time:-	End Time:-	Start time:-	End Time:-	Start time:-	End Time:-	Start time	:- End Time:-	
Administrative	 Recording information 	ation, Completing a	document,					
Start time:-	End Time:-	Start time:-	End Time:-	Start time:-	End Time:-	Start time	:- End Time:-	
Behaviour at r	est***						Total work time	
Rest – any beha	viour that is not wor	rk** for example, ti	me spent in the slee	eper cabin, sitting o	outside the truck, ea	ting, smoking		
Start time:-	End Time:-	Start time:-	End Time:-	Start time:-	End Time:-	Start time	:- End Time:-	
							Total rest time	
		·					Departure time	

Example #1:

A truck driver arrives at 1303hrs, leaves the truck and enters the restaurant area until 1348hrs before checking the load and driving away, representing a 45 minute rest period.

Time; 0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200
Work**												
Rest***												
Time: 1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	0000
Work**	1303	4										
Rest***		1348										

Example #2:-

A truck driver arrives at 0730hrs and enters the restaurant area until 0745hrs. The driver returns to the truck, checks the load and changes a tyre, with the work concluding at 0848hrs. The driver returns to the restaurant from 0848hrs to 0903hrs before entering the truck and driving away, representing 48 minutes of work and 2 x 15 minute rest periods while under observation.

inaci observation.												
Time; 0000	0100	0200	0300	0400	0500	0600	0700	800	(848	1000	1100	1200
Work**							-					
Rest***								0745	\$ 0603			
Time: 1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	0000
Work**												