

AFM



Examples of operating limits and countermeasures under Advanced Fatigue Management

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Advanced Fatigue Management (AFM) is the most flexible work and rest hours option available. This flexibility may include establishing hours that:

- reduce driver stress
- are optimised for certain routes or
- make rest more efficient.

This booklet provides real-life examples of how operators have made use of the flexibility offered by AFM.

These scenarios may not be applicable to all operators and drivers, and you should consider your individual circumstances when developing your own arrangements.

Operating limits

The following tables are examples of hours that have previously been approved for operators. You can use these hours as a guide for your own or propose something different.

Example 1 – Peace of mind hours

The primary goal of this set of hours is to offer extra peace of mind over what's available in BFM. It has enabled the operator to reduce some stress around scheduling and compliance by slightly tweaking the hours to better suit their needs.

TIME	WORK	REST
In any period of...	A driver must not work for more than a maximum of...	And must have the rest of that period off with a minimum rest break of at least...
6¼ hours	6 hours	15 minutes
24 hours	14 hours	10 hours – rest must include continuous stationary rest of at least 7 hours, including night rest
14 days	144 hours	192 hours – rest must include continuous stationary rest of at least 48 hours
28 days	288 hours	384 hours – rest must include continuous stationary rest of at least 4 x 24 hours

Example 2 – Route optimised hours

For this operator, one of the particular routes they run has stages that weren't able to be covered effectively and efficiently under Standard Hours or BFM. To overcome this, they devised a schedule incorporating additional rest opportunities that allowed for some periods of greater work hours, which maximised their fleet performance on the route.

TIME	WORK	REST
In any period of...	A driver must not work for more than a maximum of...	And must have the rest of that period off with a minimum rest break of at least...
4¼ hours	4 hours	15 minutes
17 hours	15 hours	2 hours
25 hours	15 hours	10 hours – rest must include continuous stationary rest of at least 8 hours
7 days	75 hours	24 hours – rest must include continuous stationary rest of 24 hours after no more than each 30 hours' work and 2 consecutive night rest
14 days	150 hours	24 hours – rest must include continuous stationary rest of 24 hours after no more than each 30 hours' work and 2 x 2 consecutive night rest
28 days	300 hours	24 hours – rest must include continuous stationary rest of 24 hours after no more than each 30 hours work and 4 x 2 consecutive night rest

Example 3 – Efficient rest hours

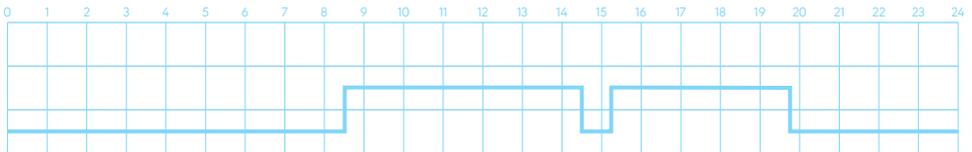
This operator has introduced split rest breaks, which are important due to their operational demands. The increased flexibility for work and rest means drivers have the opportunity to take some of their rest away from base, miss peak traffic times, and get the truck back to base to complete their rest. This means the driver gets the rest they need and the truck can get back on the road.

TIME	WORK	REST
In any period of...	A driver must not work for more than a maximum of...	And must have the rest of that period off with a minimum rest break of at least...
6½ hours	6 hours	30 minutes
24 hours	15½ hours	8½ hours – rest must include continuous stationary rest of at least 6 hours including 6 hours’ night rest or 8 hours in two parts
14 days	150 hours	186 hours – rest must include continuous stationary rest of at least 2 x 24 hours plus 4 x night rest breaks
28 days	288 hours	384 hours – rest must include continuous stationary rest of at least 4 x 24 hours and 8 x night rest breaks

Example 4 – Flexible operations hours

This operator simply wanted to incorporate a little more rest to access additional work time opportunities, and so designed hours that allowed them to achieve this goal.

TIME	WORK	REST
In any period of...	A driver must not work for more than a maximum of...	And must have the rest of that period off with a minimum rest break of at least...
6½ hours	6 hours	30 minutes
24 hours	15 hours	9 hours – rest must include continuous stationary rest of at least 6 hours or 8 hours in 2 parts
15 days	156 hours	204 hours – rest must include continuous stationary rest of at least 2 x 24 hours and 4 x night rest breaks
28 days	288 hours	Rest must include continuous stationary rest of at least 4 x 24 hours and 8 x night rest breaks



Countermeasures

To access additional flexibility through AFM, you must be able to demonstrate that the appropriate countermeasures are in place. This information forms part of the 'safety case' that accompanies your AFM application.

The following are examples of countermeasures currently being used by AFM accredited operators.

Please note that not all countermeasures will be effective in all circumstances. You should devise countermeasures that are appropriate for each specific risk present in your proposed operating limits.



Principle

1

Reduce the time spent continuously working in the work opportunity

Hours-based

- Rest is able to be taken within schedules without affecting delivery times.
- A split rest break allows drivers flexibility to rest when required.
- Any work opportunity greater than 14 hours is followed by a night rest.
- Time-appropriate nap opportunities (afternoon rest) are encouraged.
- The work opportunity is performed as a day shift only.
- Drivers' work diary entries are reviewed weekly and compared to scheduled work and rest hours for compliance.
- Drivers are allowed to take regular non-recorded breaks (e.g. stop for 10 minutes to get coffee).
- Schedules are constructed to avoid delays (e.g. peak hour traffic).
- Drivers do not complete the same task on consecutive days.
- Night rest is maximised.

Non-hours-based

- Drivers do not do the loading and unloading, allowing more time for rest and less-strenuous activity.
- Fitness for duty assessment and statement is completed prior to driving.
- Meal and shower facilities are available to drivers.
- Routes used have rest areas on them.
- Drivers are educated about the risks involved in the tasks they are performing.

Principle

2

The more frequent breaks from driving, the better

Hours-based

- Trip plans do not allow/require extended driving periods with no breaks (e.g. average leg takes 3½ hours).
- The only time a driver reaches a high risk threshold is to access basic human amenities or safely and legally get off the road.
- A review process is in place that monitors drivers' hours to ensure no driver is working to the outer limit (high risk) on a regular or consecutive basis.
- If a driver exceeds the times specified in the trip plan, an incident report is completed
- Schedules require a maximum of 4 hours continuous driving.
- Drivers are allowed to take regular non-recorded breaks (e.g. stop for 10 minutes to get coffee).
- Outer limits of work and rest hours are not permitted to be used more than once in 48 hours.

Non-hours-based

- Fitness for duty assessment and statement is completed prior to driving.
- Drivers have experience and are authorised to self-manage their breaks within the limits.
- Cab of truck has air conditioning (includes Icepack sleeper cab air conditioning).
- Depots provide driver rest rooms.
- Cab of truck has an ergonomic air suspension seat.
- Drivers do not do the loading and unloading, allowing more time for rest and less strenuous activity.

Principle

3

Ensure an adequate sleep opportunity in order to obtain sufficient sleep

Hours-based

- Trip plans/schedules allow for 10 hours rest in any 24-hour period.
- If the minimum 6 consecutive hours stationary rest is taken, this is offset by a minimum 7 hours continuous stationary rest at the completion of the work opportunity. This also applies to drivers using the split rest option.
- Ensure that shorter sleep opportunities allow the rest between midnight and 6am.
- Drivers are encouraged to take half-hour short rest breaks.
- Split rest is not used in more than two consecutive 24 hour periods. Drivers who have used split rest are required to have 8 hours' consecutive rest the following day.
- Time-appropriate nap opportunities (afternoon rest) are encouraged.
- Split rest breaks give the driver the opportunity to take full advantage of a shorter sleep opportunity.

Non-hours-based

- All sleeper berths are air-conditioned (includes Icepack).
- Driver medicals include assessment of sleep disorders or physiological problems that may prevent sleep.
- Fitness for duty assessment and statement is completed prior to driving.
- Drivers are encouraged to seek medical advice and treatment. (Private health cover may be provided.)
- Drivers are educated about maximising sleep opportunities (e.g. minimising social media use).

Maximise adequate night sleep

Hours-based

- Particular tasks are required to be followed by a night rest opportunity for the driver.
- Schedules are regularly reviewed to ensure all drivers have adequate night rest opportunities.
- Night work only represents a small percentage of all schedules.
- A high percentage of trip plans include night rest breaks.
- Trips that finish in a high-risk time bracket are followed by a longer rest period.
- Drivers working in high-risk periods have shorter work opportunities.

Non-hours-based

- Depots have clean, air conditioned sleeping facilities for drivers.
- Where possible, driver shifts should have regularity.
- Technology systems are used to ensure breaks are being taken between midnight and 6am.
- If a relief (stand-in) driver is required to work night hours, they are selected based on experience and a safe record working during these hours.



Minimise shifts ending between 00:00 and 06:00

Hours-based

- Drivers working in this time period have experience and are authorised to self-manage their breaks within the limits. (Discretionary rest is encouraged.)
- The end of the work opportunity is followed by a longer sleep opportunity.
- Drivers working a shift in this period are scheduled for an extended period of continuous stationary rest at its conclusion.
- Drivers have the opportunity to use a split rest break so napping can occur in this period.
- Additional short rest breaks are available in the work opportunity.
- Ensure a sleep opportunity is available before and after a work opportunity in this period.
- Schedules do not require drivers to work during this period on consecutive days.

Non-hours-based

- Night work only represents a small percentage of all schedules.
- Drivers working in the period are deemed medically fit and healthy.
- The driver has slept in a comfortable environment before conducting a shift ending in these hours.

Minimise extended shifts

Hours-based

- Trip schedules do not include shifts with a maximum work time of over 14 hours.
- If a driver exceeds 14 hours, it will only be due to unforeseen circumstances (e.g. roadworks or traffic) or to reach a rest facility.
- Extended shifts are completed before midnight.
- A reset rest period is available at the completion of extended shifts.
- If 14 hours are required to be exceeded, a driver will not be permitted to do so more than twice in 7 days.
- Consecutive extended shifts are minimised.
- Ensure longer rest periods are available before and after extended shifts.

Non-hours-based

- Company policy requires senior staff to approve extended shifts.
- Drivers working extended shifts are deemed medically fit and healthy.
- Any time a driver enters a high risk threshold, an incident report is completed.

Fatigue detection and monitoring technologies are emerging and are being adopted by a number of operators. These technologies can be a useful countermeasure across a number of the fatigue principles if they are suitably supported through procedures and policies that can be consistently and effectively applied.

Prevent accumulation of fatigue with reset rest breaks of at least 30 hours (and include two night periods 00:00 – 06:00) between work sequences

Hours-based

- Drivers are scheduled to have the opportunity for two 30-hour reset breaks in a 14-day period.
- More short rest breaks are available during the work opportunity.
- Drivers are encouraged to have 3 x 24-hour rest periods in 14 days. At a minimum, drivers have 24 hours continuous stationary rest in 7 days.
- There are regular sleep opportunities between midnight and 6am.

Non-hours-based

- The taking of reset rest breaks is monitored via documented schedules and rosters and checking of work diaries.
- Drivers who have worked consecutive days are subject to additional monitoring.
- Comfortable sleep environments are available.



Linking with your safety case

After determining your proposed work and rest hours and countermeasures, you will be in a position to complete the **Overview of Risks and Countermeasures** section of your **safety case**. The format you choose is up to you; however, an easy option is to list the risks and countermeasures in a table, and then provide more detailed descriptions of the countermeasures after the table.

Example table for safety case

You can format the table to suit your own document style. Using a landscape page layout may make it easier to complete and view.

Principle	Operating limit	Risk score	Countermeasure/s	Documented location(s)
Reduce time spent continuously working in the work opportunity	11 hours work with ¾ hour short rest (11¾ hour work opportunity)	High (6.38%)	<ul style="list-style-type: none">• Drivers are scheduled to work 11 hours with a 1½ hour short rest.• Drivers are required to have frequent short stops to break up the time spent driving.• Schedules include at least 10% rest in every work opportunity. Deviation from this is only permitted in extenuating circumstances.	This is located in section x of the AFM manual.

A more detailed example of a safety case is available on the NHVR website.



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