



Guidelines for managing mobile device use in the active driving cabs of rail vehicles

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In-Cab Checklist

Introduction

As part of the Australasian Railway Association (ARA) Signals Passed At Danger (SPAD) Working Group (SPADWG), it was identified that the use of mobile devices in the active cabs of rail vehicles may be a precursor to a SPAD event. The SPADWG determined that providing better guidelines to the rail industry on appropriate mobile device use may assist in reducing SPAD events or mitigating their consequences.

Mobile devices are rapidly proliferating across the rail industry in recent years: not just through the increasing use of mobile telephones for operational purposes, but also through the penetration of tablet computers into rail workplaces. While the management of work-issued mobile devices present a particular challenge, the appropriate use of personal mobile devices (such as mobile telephones, music players) is increasingly complicated through the growth of 'wearable' mobile devices such as internet connected watches, biometric monitors and glasses.

The challenges of adaptation to the proliferation of mobile devices are not only faced by the rail industry: many other sectors of the transport industry need to deal with the impact of mobile devices on situational awareness and responsiveness by operating staff. There is a clear imperative for managing mobile device use, as a number of high-profile, fatal rail incidents feature their inappropriate use in the active driving cab of rail vehicles. Such incidents led to a loss of situational awareness and subsequently derailments and collisions, often at high speed. These incidents include:

- Clarendon, Texas (2002)
- Chatsworth, California (2008)
- Santiago de Compostella, Spain (2013)

Scope

The purpose of this document is to provide guidelines to the Australasian Railway Industry on the safe and appropriate use of mobile devices in the active driving cab of rail vehicles to reduce SPAD events. These guidelines inform good practice for rail vehicle operators in passenger, freight and infrastructure environments including all personnel who work or travel in active driving cabs.

In developing a mobile device policy, rail operators should consider the risks of using mobile devices in situations other than the active driving cab of rail vehicles. This guideline does not give advice on these alternative situations.

Policy context

The ARA's members through the SPADWG accept the need to control the distraction risk from mobile devices in active driving cabs of rail vehicles, it also recognises there are safety benefits in providing alternative means of communication for operational staff, whether in emergency situations or when other communications systems have failed. Furthermore, there can be performance benefits during degraded operations.

The ARA recognises the difficulties inherent in monitoring mobile device use and the requirement for rail operators to educate all staff of the risks associated with mobile device use in the active driving cab. Evidence suggests that prohibition and enforcement-based mobile device strategies alone have proven to be ineffective.

Definition of a ‘mobile device’

The ARA through the SPADWG has developed the following definition of a mobile device that may be encountered in the active driving cab of rail vehicles:

Portable or wearable electronic equipment/devices capable of receiving or initiating speech calls, text messages, video or audio voice recording, emails or other notifications, or able to access the internet.

In supporting this definition, the SPADWG has developed an indicative list of the main types of mobile devices currently encountered and likely to be encountered by the rail industry currently and in the near future. For the purposes of developing organisational guidelines, the following categories of mobile devices have been identified as including:

- Mobile telephones
- Tablet computers and laptop computers
- Music players (MP3 players, iPods)
- E-readers (e.g. Kindle, Kobo)
- Portable DVD players
- Wearable devices (e.g. Fitbit, Apple Watch, Google Glass)

Developing mobile device guidelines

In developing a set of guidelines, the following principles are viewed by the ARA as important considerations for operators when framing their policies for mobile device usage in the active driving cabs of rail vehicles:

- Definition of the types of mobile devices to which the policy applies
- A clear distinction between personal and company issued mobile devices
- To whom the policy applies (e.g. drivers, other staff travelling in the active driving cab)
- Definition of an active cab for the operator (i.e. when this procedure is relevant)
- Any variation in restriction on the use of mobile devices in the active driving cab (e.g. emergency situations or failure of in cab systems)
- Instructions to how other company staff contact drivers in the active driving cab.
- How the policy will be monitored

Company mobile device policies should also clearly state whether the driving controls in the active cab should be immobilised or may remain active when personnel are using a mobile device.

In developing a mobile device policy, operators should consider how much importance should be given to including the following requirements for devices in the active driving cab:

- Using specific modes (silent, vibrate, flight, off) on mobile devices to manage potential distraction
- Specific locations for placement and storage of mobile devices (e.g. out of reach/sight)
- Any time limits or appropriate situations where mobile devices can be used.
- Authority for drivers to manage other personnel’s use of mobile devices in active driving cabs

- Appropriate situations for use of company-issued work mobile devices
- Clear understanding on when the use of hands free/Bluetooth devices are permitted or not permitted.

Applying the guidelines

Rail operators should apply the above guidelines by publishing a company policy on the use of mobile devices in active driving cabs, which should then be issued to train drivers and other personnel whose duties require access to driving cabs when a train is in service.

Rail operators will need to adapt these guidelines to ensure they provide a good fit for their particular rail operating environment.

For example, freight and long-distance passenger operators will have a broader range of situations where mobile device use in the active driving cab could be permitted for short periods of time (such as low-traffic density, single track regional environments). This contrasts with urban passenger and freight operations where multiple running lines and high traffic densities require greater concentration and situational awareness.

Infrastructure owners/operators will also need to develop their specific guidelines around the use of mobile devices in the driving cabs of track machines and high-rail vehicles. Consistency between rules for mobile device use in on-road and on-rail environments may be an important consideration.

Similarly, organisations using company-issued mobile devices as platforms that allow drivers to manage their own rostering, HR forms and operating documents will need to develop specific guidelines to mediate the interactions between corporate staff and drivers, particularly when drivers are engaged in driving duties in the active driving cab.

As part of developing a mobile device policy, rail operators should provide personnel with education on the appropriate usage of mobile devices in the active driving cab. In developing education packages, the following topics should be considered:

- The impact of mobile devices on the role driver in the active driving cab
- Mobile device related distraction and its impact more generally
- Specific policy in relation to roles and responsibilities for all personnel (e.g. drivers, inspectors, other operational staff) in the active driving cab
- Capacity for making good risk-based decisions around the appropriate situations for using mobile devices

References

KiwiRail, National Rail System Standards – 1 Definitions, 2011. Viewed on 21 June 2015 at:

<http://www.kiwirail.co.nz/uploads/Publications/NRSS%201%20-%20Definitions%20%28Issue%203%20Effective%20Date%2020-11-2011%29.pdf>

Parliament of NSW, Rail Safety National Law (NSW), 2012. Viewed on 18 June 2015 at:

<http://www.onrsr.com.au/operations/legislation>

Rail Safety and Standards Board (UK), Rail Industry Standard on use of mobile telephonic equipment in driving cabs, RIS-3776-TOM, 2010.

Definitions

For the purposes of this document, the following definitions are used, based on appropriate sources of information.

Mobile devices

A ‘mobile device’ is defined as: Portable or wearable electronic equipment/devices capable of receiving or initiating speech calls, text messages, video or audio voice recording, emails or other notifications, or able to access the internet.

Active Driving Cab

The ‘active driving cab’ is defined as the cab of a rail vehicle (such as a locomotive, multiple unit, track maintenance machine or hi-rail vehicle) that faces the direction of travel with the driving controls switched in for active operation by a driver.

Rail Transport Operator

In Australia, the definition of a ‘rail transport operator’ is the same as the definition contained in the Rail Safety National Law, meaning either a:

rail infrastructure manager; or

rolling stock operator; or

person who is both a rail infrastructure manager and a rolling stock operator.¹

In New Zealand, the definition of ‘rail transport operator’ is the same as that contained in the NZ National Rail System Standards, namely: “...any person granted access rights by the Access Provider (KiwiRail) under an Access Agreement...”²

¹ See Section 4 of Rail Safety National Law (NSW), 2012.

² KiwiRail (2011), National Rail System Standards – 1 Definitions

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