

## Background to the report

### **The 2004 *Train Illumination Report***

- 1.1 In June 2004, The House of Representatives Standing Committee on Transport and Regional Services presented its report, *Train Illumination*<sup>1</sup> which examined the connection between train visibility and level crossing accidents and it reviewed the practicality of measures which had been proposed to improve train conspicuity in order to reduce level crossing accidents. The Committee made five recommendations which are included in full at Appendix A.
- 1.2 Between the tabling of this report and June 2008, there were approximately 272 road vehicle collisions at level crossings in Australia.<sup>2</sup> Although this is eighty-eight fewer than in the three and a half years prior to the 2004 report<sup>3</sup> the number of collisions remains unacceptably high, especially if there is loss of life. The Committee began investigating level crossing safety 5 years ago after a tragic accident in Western Australia which was brought to the attention of the Committee by Mrs Merrilea Broad and Mrs Karen Morrissey. In November 2008, following a crash at a level crossing between a truck

---

1 House of Representatives Standing Committee on Transport and Regional Services, *Train Illumination: Inquiry into some measures proposed to improve train visibility and reduce level crossing accidents*, June 2004.

2 According to the Rail Industry Safety and Standards Board there are more than 9400 level crossings spread across the national railway network.

3 Australian Transport Safety Bureau, Transport Safety Report, *Australian Rail Safety Occurrence Data 1 January 2001 to 30 June 2008*, October 2008, p. 10.

and a Tilt Train in north Queensland which killed two people,<sup>4</sup> the Committee resolved to update its 2004 *Train Illumination* report.

- 1.3 This accident was one of several recent level crossing accidents which have involved loss of life, the worst case being the tragic accident at Kerang when a semi-trailer collided with a Melbourne-bound passenger train on 5 June 2007. Eleven people were killed and 20 injured in this accident. A major collision between a B double truck and a freight train at Lismore, Victoria on 25 May 2006 resulted in the death of the truck driver and an estimated damage bill in excess of \$30 million.<sup>5</sup>
- 1.4 The causes of level crossing accidents are complex and involve a range of factors. The purpose of this update is to examine both the measures taken to reduce railway level crossing accidents since the Committee's 2004 report, and the efficacy of these measures.
- 1.5 To that end, the Committee resolved to update its previous report, to gather further evidence on the advances made with respect to level crossing safety in the intervening years. The Committee conducted wide research, and held a public hearing in Canberra with a number of key stakeholders.

## Government response to the 2004 report

- 1.6 The then government issued its response to the *Train Illumination* report in December 2005. It noted that:

... the Australian Government recognises that collisions at railway crossings are the most serious safety issues faced by the rail system in Australia, although the number of deaths and injuries is small compared with many other causes of road casualties.<sup>6</sup>

- 1.7 It supported the Committee's first recommendation in part, supporting the objective of improving train visibility with relatively low-cost reflective strips on locomotives and rolling stock but not

---

4 M. Wray, P. Michael, B. Judge and A. Caldwell, *Fatal crash blamed on signals*, Courier Mail, 28 November 2008.

5 Australian Transport Safety Bureau, *Railway Level Crossing Safety Bulletin*, April 2008, p. 1.

6 Australian Government, *Response of the Australian Government to the Report of the House of Representatives Standing Committee on Transport and Regional Services, Train Illumination, an inquiry into some measures proposed to improve train visibility and reduce level crossing accidents*, December 2005, p. 5.

supporting moves to make rotating beacons compulsory, 'without evidence that this would be worth the significant costs involved.'<sup>7</sup>

- 1.8 The government of the day fully supported the second recommendation and it noted that Ministers at the May 2003 meeting of the Australian Transport Council (ATC) endorsed national adoption of the Queensland Assessment Matrix for assessing risk at railway level crossings and prioritising treatments.
- 1.9 Recommendations 3 and 4 were not supported. With respect to Recommendation 3, the then government expressed support for research and trials into possible installation of rumble strips at high accident risk level crossings, but suggested that any widespread implementation program should await the outcome of the trials. Conversely, regarding Recommendation 4 the then government stated that it 'would not support detailed research into train-activated rumble strips because the available evidence suggests that they are not likely to have a favourable benefit-cost ratio or to compare favourably with other active warning alternatives'.<sup>8</sup>
- 1.10 Recommendation 5 was supported in principle, although it noted that 'responsibility for the management of [education, information and awareness] investigations rests with the Australian Railway Crossing Strategy Implementation Group (ARCSIG) and the Australasian Railways Association (ARA)'.<sup>9</sup> The complete government response is included at Appendix B of this report.

## Train illumination in context

- 1.11 The 2004 *Train Illumination* report focussed on the issue of train conspicuity as a means of addressing level crossing safety. In the intervening years, the relative importance of this cause of accidents at level crossings has arguably diminished. As will be discussed in Chapter 3 of this report, the introduction of a new conspicuity standard for locomotives has drastically improved the illumination of trains, and as such the relative significance of this issue with respect to level crossing safety, has declined. In its submission to the inquiry, the Rail, Tram and Bus Union explained that:

---

7 Australian Government, December 2005, p. 7.

8 Australian Government, December 2005, p. 11.

9 Australian Government, December 2005, p. 13.

...in terms of the magnitude of issues that have to be addressed concerning rail level crossing safety train illumination is a low order of magnitude issue.<sup>10</sup>

1.12 The Australian Rail Track Corporation submission states its belief that:

...when put in context of the accident data which shows that in excess of 75% of all level crossing accidents occur in daylight hours the adoption by industry of the new train conspicuity standard means this issue [of illumination] is now satisfactorily dealt with.

1.13 The Committee has received widespread evidence to the effect that combating other causes of accidents at level crossings, in particular the behaviour of motor vehicle drivers at level crossings, would now have a far greater impact on the number of accidents which occur at level crossings. As such, this report will outline the advances that have been made with regard to the conspicuity of trains since the 2004 report was published, but will also focus on other methods for improving the safety of level crossings more generally.

---

10 Rail, Tram and Bus Union, *Submission no. 12*, p. 4.