



# Reviewing the regulatory framework for tramway safety

An ORR consultation

February 2019

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# Summary and purpose

- 1. We are seeking the views of tramway duty holders on ORR's proposed approach to improving how the safety of Britain's tramways is regulated and supervised by ORR.
- 2. This document provides an outline of our conclusions from a review of the legislative framework for tramway safety, and current thinking on how to strengthen that approach.
- 3. This consultation explains and seeks the industry's views on
  - The consideration ORR has given to each aspect of the framework;
  - The areas where we are not recommending changes, and why; and

- Our three specific improvement proposals around the use of the Risk Management Maturity Model, the EU Common Safety Method on Risk Assessment and sharing of safety data.

4. A consultation feedback form is included at <u>Annex A</u> for ease of response.

# Background

- 5. Shortly after 06:00 on Wednesday 9 November 2016 a tram travelling from New Addington to Wimbledon overturned on a curve approaching Sandilands Junction. Seven people lost their lives and many more were injured. Recommendation 9 of RAIB's investigation report into the accident invited ORR to "carry out a review of the regulatory framework for tramways and its long-term strategy for supervision of the sector".
- 6. The consideration we gave to this recommendation was initially broken down into three work streams:
  - Carrying out a prior role review of our previous supervision of the Croydon system, which recommended inter alia that we "continue to press UK Tram to expedite central reporting and analysis of accident, incident and near miss-data. Until that goes live, we generate enhanced statistical data from our RIDDOR reports with greater granularity for tramways. This would help inform future decisions about resourcing regulation of the sector";
  - Setting out a high-level overview of the strengths and weaknesses of the current legislative framework for tramway safety; and
  - Establishing a plan for risk-based proactive supervision of the sector during 2018/19 and strengthening our tramway inspection team during 2019/20

# **Review of legislative framework**

- 7. To structure our thinking of the review of the regulatory framework, we identified the five key components of the framework and identified options for change by comparing tramway provision with relevant "reference systems" from the transport sector (rail and bus). We did not consider general health and safety legislation as this applies uniformly across the piece.
- 8. While our review concluded that the framework is sufficiently robust to support implementation of the safety improvements demanded by the Sandilands accident, we also identified some proportionate recommendations to strengthen it.
  - Safety management systems We should seek greater visibility and transparency of the sector's own internal safety audits and build up our RM3 evidence base. We would only support extending mandatory safety certification to the sector if evidence emerges of a safety benefit and subject to our being resourced to carry out certification without abstracting resource from proactive inspection.
  - Risk assessment We should encourage the sector to improve the rigour of its independent verification of new or significantly altered operations or technology, including through the voluntary use of the CSM risk assessment.
  - Safety critical work including tram driving We have not identified any safety benefits associated with licensing of tram drivers, though we will revisit our position if further appraisal of the mainline train driver licensing system identifies such benefit.
  - Authorisation of vehicles and infrastructure We have not identified a justification for overlaying new ORR authorisation requirements on top of existing statutory approvals for tram systems and their vehicles.
  - Safety performance reporting We should make better use of existing RIDDOR data from the tram sector and we will continue to encourage sector duty holders to share more of the data they currently collect with us.
- 9. A copy of the full analysis behind our decision-making and recommendation is at **Annex B**.

# **Further information**

## **Risk management maturity model (RM3)**

- 10. In order to achieve and sustain this excellence in health and safety culture and risk control, we believe that duty holders need to have in place excellent health and safety management systems.
- 11. The Risk Management Maturity Model (RM3) describes what excellent management capability would look like for key elements of an organisation's health and safety management system as measured against five maturity levels. RM3 sets out the criteria used to assess an organisation's ability to achieve excellence when managing for health and safety risks. It is used by ORR, and increasingly by duty holders on themselves, to understand the management capability of the rail industry in a number of business critical areas.
- 12. ORR developed RM3 in 2011 and since then we have gained considerable experience in using the model to assess the businesses we regulate and holding structured and meaningful discussions to identify strengths in their health and safety management systems and areas to improve on. In the past year, the RM3 Governance Board has used this experience to review and revise the model. We are consulting on this revision, called RM3 2019.
- 13. Whilst UKTram sit on the RM3 Governance Board, we encourage the tram sector looks at the consultation version of RM3 2019 as this will ultimately be the edition we are encouraging tram operators to adopt. It can be found at <u>http://orr.gov.uk/rail/consultations/open-consultations/consultation-on-proposedchanges-to-the-risk-management-maturity-model-rm3</u>. Tram duty holders are very welcome to respond to the wider RM3 consultation as well as to this sector-specific consultation paper.

## Common safety method on risk assessment (CSM RA)

- 14. The CSM RA is an EU regulation, first published in 2009, which sets out a risk management process for any technological, organisational or operational change that affects safety. It is mandatory on the mainline railway (as the part of the sector affected by EU Directives) where it has replaced the safety verification provisions of ROGS.
- 15. The scope of CSM RA is wider than safety verification (which is only concerned with the introduction of new vehicles and infrastructure) but the process is broadly similar – including the need to for duty holder's proposing a change to have their risk

assessment validated by an independent third party (in the case an accredited assessment body).

- 16. We consider that application of the CSM RA has added rigour to some mainline duty holders' management of safety-related changes, and we have previously recommended that it be applied voluntarily to parts of the sector or to changes for which it is not formally mandatory. As such, we think its voluntary application (in full or in part) by tramway operators would support continuous improvement in the sector's risk assessment capability.
- 17. A copy of the regulation<sup>1</sup> and ORR's published guidance on it can be found at <u>http://orr.gov.uk/rail/health-and-safety/health-and-safety-laws/european-railway-safety-legislation/csm-for-risk-evaluation-and-assessment</u>. The guidance is aimed at the mainline railway so not all aspects are relevant to tramways (for example, interoperability requirements) and we believe tramway sector-specific guidance on the regulation could usefully be developed to support its adoption by tramway operators.

## Safety performance reporting

- 18. The tram sector (along with heritage railways) is the part of the rail industry from whom ORR receives the least detailed safety data.
- 19. In other parts of the rail industry, ORR benefits from access to duty holders' own safety data either directly (for example, Safety Risk Model (SRM) and Precursor Indicator Model (PIM) data through RSSB's portal), or through it being regularly provided to us (for example Network Rail's monthly Safety Health & Environment Performance report SHEP). Other parts of the rail industry also provide us with RIDDOR data direct from their safety reporting systems (for example, in relation to the mainline railways Safety Management Information System SMIS; and from TfL's LUSEA system). This data allows ORR to provide independent public reporting of the industry's performance and supports risk-based planning and prioritisation of our regulatory activities. It goes without saying that the duty holders use the data to support their own safety management interventions.
- 20. We are aware the tramway operators collect significantly more data than ORR has access to, and that there are plans in place to standardise and share this through the development of the TAIR database.

<sup>&</sup>lt;sup>1</sup> The CSM RA regulation will be replaced with an equivalent UK regulation in March 2019 in the event of a no deal exit from the EU but this will not involve substantive changes to its requirements. If UK exits the EU under a withdrawal agreement, the EU regulation will remain in force for at least the two year transition period after exit day.

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- 21. We would welcome consultees' views on what level of additional safety data could be made available to ORR and what the nature of ORR's access to it should be.
- 22. An annual summary of the data we have collected, what we do with it and our analysis of what it means is included in our Chief Inspector's Annual Safety Report. These reports can be accessed at <a href="http://orr.gov.uk/rail/health-and-safety/annual-health-and-safety-report">http://orr.gov.uk/rail/health-and-safety/annual-health-and-safety-report</a>, the most recent one covers the year 2017-2018.

# **Consultation questions**

23. While comments are welcome on any aspect of this consultation paper, we would particularly welcome this industry's views on the following questions:

## Safety management systems

- (1) Do you agree with our analysis that there would be no safety benefit associated with extending ROGS safety authorisation and safety certificate requirements to the tramway sector?
- (2) What do you consider are the principle advantages / disadvantages of introducing ROGs safety authorisation and safety certificate requirements to the tramway sector?

### **Risk management maturity**

- (3) Is your organisation familiar with or already using RM3?
- (4) Do you consider there would be any obstacles to introducing RM3 to your organisation?
- (5) What is your assessment of any costs that will arise from implementing RM3 in your company?
- (6) What further help and advice on RM3 would be welcome from ORR (or other expert third parties)?

## Common safety method on risk assessment

- (7) Do you agree with our proposal to encourage the voluntary application of CSM-RA, supported by sector specific guidance on the regulations?
- (8) Does your organisation have any experience of applying CSM RA?
- (9) What do you consider are the principle advantages / disadvantages of CSM RA by comparison to the current safety verification requirements?
- (10) Do you consider there would be any obstacles to introducing CSM RA to your organisation?
- (11) What is your assessment of any costs that will arise from implementing CSM RA in your company?
- (12) What further help and advice on CSM RA would be welcome from ORR (or other expert third parties)?

# Safety performance reporting

- (13) What safety performance data does your organisation currently collect?
- (14) Do you consider that any of this data should be usefully shared with ORR and/or other tramway owners / operators?
- (15) What are the obstacles to providing / sharing more safety data, within the tramway sector, and ORR?
- (16) What is your assessment of any costs that will arise from doing so?
- 24. A consultation feedback form is included at Annex A for ease of response.

# How to respond to this consultation

- 25. The closing date for responses is 24 March 2019.
- 26. Please use the form at <u>Annex A</u> for your response. You do not need to answer every question, but we would encourage you to answer all that you are able to.
- 27. Completed responses should be sent to oliver.stewart@orr.gov.uk .
- 28. We are happy to discuss the consultation issues with individual operators either bilaterally or through existing industry forums. If you would like to initiate such a discussion, please get in touch at the above email address.

# Annex A: Consultation response form

This pro forma is available to those that wish to use it to respond to our tramway safety regulatory framework consultation. Other forms of response (e.g. letter format) are equally welcome, though we would be grateful if these could be structured broadly in line with the areas listed below (where you wish to comment), to aid our review and analysis of responses.

Please send your response to <u>oliver.stewart@orr.gov.uk</u> by 24 March 2019.

Full name*	
Job title*	
Organisation	
Email*	

\*This information will not be published on our website.

#### Safety management systems

Q1. Do you agree with our analysis that there would be no safety benefit associated with extending ROGS safety authorisation and safety certificate requirements to the tramway sector?

#### Safety management systems

Q2. What do you consider are the principle advantages / disadvantages of introducing ROGs safety authorisation and safety certificate requirements to the tramway sector?

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Risk management maturity

Q3. Is your organisation familiar with or already using RM3?

#### Risk management maturity

Q4. Do you consider there would be any obstacles to introducing RM3 to your organisation?

#### Risk management maturity

Q5. What is your assessment of any costs that will arise from implementing RM3 in your company?

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#### Risk management maturity

Q6. What further help and advice on RM3 would be welcome from ORR (or other expert third parties)?

#### Common safety method on risk assessment

Q7. Do you agree with our proposal to encourage the voluntary application of CSM-RA, supported by sector specific guidance on the regulations?

#### Common safety method on risk assessment

Q8. Does your organisation have any experience of applying CSM RA?

#### Common safety method on risk assessment

Q9. What do you consider are the principle advantages / disadvantages of CSM RA by comparison to the current safety verification requirements?

#### Common safety method on risk assessment

Q10. Do you consider there would be any obstacles to introducing CSM-RA to your organisation?

#### Common safety method on risk assessment

Q11. What is your assessment of any costs that will arise from implementing CSM-RA in your company?

#### Common safety method on risk assessment

Q12. What further help and advice on CSM-RA would be welcome from ORR (or other expert third parties)?

#### Safety performance reporting

Q13. What safety performance data does your organisation currently collect?

#### Safety performance reporting

Q14. Do you consider that any of this data should be usefully shared with ORR and/or other tramway owners / operators?

#### Safety performance reporting

Q15. What are the obstacles to providing / sharing more safety data, within the tramway sector, and ORR?

#### Safety performance reporting

Q16. What is your assessment of any costs that will arise from doing so?

#### Any other comments?

Q17. Do you have any other comments or views on improving the regulatory framework for tramway safety?

Thank you for taking the time to respond.

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# Annex B: ORR analysis of regulatory framework for tramway safety

## **Components of the regulatory framework**

- 1. The key components of the regulatory framework are:
  - Requirements for management of safety (safety management systems);
  - Requirements for introducing change (risk assessment);
  - Requirements for safety critical work (and the personnel carrying in out);
  - Requirements for authorisation of vehicles and infrastructure;
  - Requirements for reporting of safety performance.
- 2. Two other key components of the regulatory framework are the regulator itself (ORR) and the arrangements for independent accident investigation. Our reading of the report is that it assumes these arrangements will continue so an assessment of alternative options was not within the scope of the review. Standards are another key part of the regulatory framework on other railways, but our consideration of the options here is being addressed through our work on Recommendation 1 of RAIB's report.
- 3. The "reference systems" for making relevant comparisons with the tramway framework, and therefore identifying potential options for change, are:
  - The mainline railway
  - Non-mainline railways (for the purposes of this exercise, this does not include heritage)
  - Buses

## **Requirements for management of safety**

4. Safety management system (SMS) requirements for tramways are more stringent than those for buses but less so than those for mainline or non-mainline railways. Bus operators are subject to no SMS requirements additional to those in general health and safety legislation. Tramways must establish a written SMS, proportionate to the nature and extent of their activities, which has exactly the same minimum requirements as a railway SMS. Mainline and non-mainline railways must have their SMS certified by ORR before they start operation, at least every five years after that and whenever they change the type or extent of their operation. Mainline and nonmainline railways must also notify ORR of substantial changes to their SMS.

- 5. Options appraisal
  - No change It does not seem tenable in the aftermath of a multiple fatality tram accident to contemplate reducing the SMS requirements of tramways to the lower level required of buses, so the minimum option here is to maintain the current arrangements. The advantages of no change are that the current requirements are well understood by the sector and set a clear legal expectation that safety management on trams must be capable of addressing a risk profile that is akin to that of a railway rather than a bus. The disadvantages of continuing with the current system is that it provides less structured regulatory scrutiny than mainline and non-mainline railways as ORR is not required to take a periodic overview (for the purposes of certification) of the capability of tramway management systems. While there is no direct link between certification and safety performance, it is possible that further evidence (from the risk analysis and supervision work currently being implemented) will call into question the fact that the safety permissioning arrangements for tramways align more closely with low-speed, low-density heritage operations than they do with more obviously comparable urban mass transport systems (including some like Tyne & Wear Metro and Glasgow Subway which carry far fewer passengers than the larger tram systems).
  - Mandatory certification The most obvious option here is to align the requirements of tramways with those of railways and introduce safety certification<sup>2</sup> under the Railways & Other Guided Transport Systems (Safety) Regulations 2006 (ROGS) Legislative change would be required to make this happen. This is assumed to entail aligning trams with non-mainline certification as full EU-portable mainline certification is clearly not necessary. The advantages of doing so would be to a) give ORR a stronger regulatory lever to, among other things, press for implementation of those Sandilands recommendations which are not obviously enforceable; b) require greater discipline from ORR in maintaining an overview of SMS capability in the sector; and c) enhance public confidence in tramway safety by establishing beyond doubt that trams are regulated with the same rigour as railways. The principal disadvantage of introducing certification is that it would introduce administrative costs on the sector and there is no evidence it would lead to attendant direct safety benefit. (Previous impact studies of ROGS non-mainline certification

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<sup>&</sup>lt;sup>2</sup> For ease of reading, "certification" in this annex means either "safety certification" for a tram operator or "safety authorisation" for a tramway infrastructure manager or both.

indicate that each application for new or renewed certification costs comparable duty holders £20,000 - £25,000.) For ORR, ROGS certification would increase the burden of statutory work on the tramway inspection team at precisely the time we are seeking to refocus their activity on proactive inspection.

- Voluntary certification or third party certification may offer an alternative approach. In this option, which could be effected without legislative change, we could encourage tram operators to seek certification of their SMS on a voluntary basis - either from ORR or from a third party certification body (similarly to certification of entities in charge of maintenance on the mainline railway). This approach could provide similar benefits to mandatory certification in terms of public confidence and providing greater ORR oversight of SMS capability in the sector (which has been one of the advantages of "entities in charge of maintenance" (ECM) certification on the mainline), without the associated disadvantages of occupying ORR resource in more statutory work (if the third party approach is pursued) or of needing to seek changes to the law. On the other hand, the ECM experience demonstrates that certification schemes of this nature take time (years) to set up and we would also need to understand the cost implications for ourselves and the tramways. Finally, of course, such an approach would require the voluntary co-operation of the individual operators with a risk of further diversification between those systems that volunteer and those that do not.
- 6. Recommendation
  - At the present time, there is no safety evidence to justify introducing mandatory ROGS certification and it would introduce cost and resource commitments on ORR and the sector that would be better spent on other aspects of improving tram safety.
  - Equally, we would not resist the introduction of mandatory or voluntary certification schemes if demanded by Ministers and/or the sector - subject to additional funding being secured in order that certification does not abstract ORRresource from proactive inspection.
  - We will reconsider our position at the end of 2019 to include consideration of the further evidence available from the industry's developing risk analysis work and our supervision of the sector.

## **Requirements for introducing change (risk assessment)**

7. Risk assessment requirements for making changes to tram operations are exactly the same as those that prevail on non-mainline railways. In particular, they include the

specific requirements of ROGS to carry out and record all risk assessments and, for significant changes, to apply safety verification by independent competent persons. These requirements are more stringent than those which prevail in the bus sector (where general H&S risk assessment duties are all that applies) and only slightly less so than the mainline railway, where safety verification has been replaced by the EU Common Safety Method for Risk Assessment (CSM RA) (which also includes independent scrutiny by third party assessment bodies).

- 8. Options appraisal
  - No change Continuing with the current arrangements would maintain alignment of tramways with comparable transport systems. Safety verification took time to embed in the tram sector and we would need clear evidence to support changing the system again. Greater third party involvement and challenge in risk assessment processes may help drive up the collective quality of risk assessments in the tram sector.
  - Strengthen "Independent Competent Person" (ICP) arrangements In this option, we would seek to bolster the independence and competence of "independent competent persons" (ICPs) by encouraging / requiring them to be accredited and registered in the same way as CSM RA assessment bodies. Requiring them to do so would require legal change. This approach could have benefits in terms of demonstrating and maintaining the competence of these independent assessors to ORR, operators and the public. An accreditation scheme would take time and money to set up, and the industry would incur the costs of gaining the necessary accreditations. We would also need to work through the potential implications for the "market" of ICPs some may be driven out of doing this work by the perceived or actual costs and demands of accreditation <u>or</u> the advent of accreditation may stimulate the development of more genuinely independent assessment providers.
  - Mandatory extension of CSM RA In this option we would make legal changes to ROGS to replace safety verification on tramways with the CSM RA (as we did on the mainline railway when CSM RA was first introduced in 2010). We believe the CSM has improved the quality of risk assessment in some mainline duty holders, so we would expect to see the same benefits on tramways. Aside from the need for legislative change, the main challenges of this approach would be presentational (difficult to justify requiring something of trams that is not required of, for example, London Underground) and cost (Network Rail have asserted that the use of an accredited assessment body adds 1% to infrastructure project costs).

- Promote greater voluntary use of CSM RA We have a general policy (in our guidance on the CSM RA) of encouraging mainline duty holders to apply the CSM to their risk assessments even when it is not strictly required by the regulations. In our recent statutory review of ROGS, we concluded that we should extend this policy beyond the mainline. In this option, we would actively promote use of the CSM RA on a voluntary basis in the tram sector. This approach would achieve some of the benefits of mandatory extension (depending on uptake) without attracting the disproportion challenge. It would add cost to some projects (depending on uptake) but could be focused on the projects where it is likely to have most benefit (rather than the blanket approach that applies on the mainline). The disadvantage is again the potential for further diversification in standards and quality between those who embrace the voluntary scheme and those who do not.
- 9. Recommendation
  - The tram sector recognises that it needs to improve its approach to risk assessment. The legal requirements that support this are rigorous and align with comparable systems.
  - We think application of the CSM Risk Assessment has been beneficial to mainline railway projects and we encourage tramways to consider applying it when making changes to their systems.

# Requirements for managing safety critical work (and the personnel who carry it out)

- 10. Tramways have exactly the same specific legal duties (Part 4 of ROGS) to manage the competence and fitness of staff carrying out safety critical work as mainline and non-mainline railways. Bus companies are not subject to specific legislation of this nature. Given that the regulation of tramways is therefore already in the "do max" position on regulation of safety critical staff generally, we have focused our consideration on the related issue of the management and licensing of drivers where the picture is more nuanced.
- 11. Tram drivers (like non-mainline railway drivers) do not require a statutory licence to drive vehicles in passenger service. On the mainline railway, driver licensing has been progressively introduced since an EU Directive was established in 2007 all UK mainline drivers had to be licensed by ORR by October 2018. When implementing the 2007 Directive, Government (with ORR's support) did not extend the requirements to non-mainline, heritage or tram drivers. A train driving licence covers a driver's fitness and general competence to drive trains. Bus drivers are required to hold a bus driving licence and to obtain and maintain a Certificate of

Professional Competence (CPC) from the Driver & Vehicle Standards Agency. The bus licence covers fitness (an application must be signed off by a recognised doctor) and the CPC concerns competence. So, tram drivers and non-mainline rail drivers are the only public service vehicle drivers in the UK who are not subject to any form of statutory licensing attesting to their competence and fitness.

- 12. Options appraisal
  - No change It is worth stressing that train driver licensing was introduced primarily for reasons of labour mobility and interoperability of rail services in the EU, rather than to enhance safety. Our recent statutory review of the Train Driving Licence Regulations found no evidence of safety (or any other) benefit from its introduction. Maintaining the current situation in respect of tram drivers would avoid imposing this non-beneficial and costly (for ORR and regulated businesses) regime on another sector and would avoid posing the awkward challenge of why we were not also extending the regime to other non-mainline systems (such as London Underground). The disadvantage of the current arrangements is that it could become presentationally difficult to explain why tram drivers do not need a special licence whereas bus drivers do.
  - Bring tram drivers in scope of road driving licence / CPC It is perhaps surprising that the absence of any form of licensing for tram (or indeed London Underground) drivers has not been subject to greater public attention / concern particularly following the Sandilands accident. Fixing this apparent gap by at least aligning tram drivers with bus drivers may have benefits for public confidence in tram safety. From a narrow ORR perspective, this approach would be less likely to provoke challenges in relation to non-mainline drivers and we would also not have to set up and manage the regime (it would fall to DVSA to do this). However, it is very difficult to see any safety benefit of doing so: the competence requirements to obtain CPC are set at a fairly basic level, and retaining CPC requires only 35 hours of training to be undertaken every five years. Periodic medicals are not required to maintain a bus driving licence. Both are less rigorous than a tram driver working under an SMS that complies with Part 4 of ROGS would expect to experience. Legislative change, and changes to the CPC scheme to make it relevant to driving a tram (particularly off street), would also be needed.
  - Bring tram drivers in scope of train driver licensing Given that trams are generally treated as rail businesses in terms of safety regulation, a more obvious step would be to bring their drivers in scope of train driver (rather than bus driver) licensing. This would be a simple way of enhancing public confidence in the system and may indirectly encourage tram operators to

modernise and standardise their driver management arrangements (little evidence of this on the mainline). It would not add much in relative terms to the overall administrative burden of train driver licensing as it would add only several hundred drivers to the current total of c.20,000 licensed drivers in GB. However, as noted previously, we have found no direct safety benefit from driver licensing elsewhere so it would be hard to justify on grounds of reasonable practicability. As well as requiring legislative change to expand the scope of licensing, a bespoke set of competence requirements would need to be developed to deal with the characteristics of driving on-street and on line-of-sight (the train driver requirements are based around lineside signal-controlled rail operations). Finally, it would be very difficult to extend the legislation to trams but not to other non-mainline systems – and doing this would bring an estimated additional 5,000 drivers within scope.

- 13. Recommendation
  - In the absence of any evidence of safety benefits associated with formal licensing of rail vehicle drivers, we do not support requiring tram drivers to be licensed.
  - The underpinning legal requirements for the management of competence and fitness of tram drivers are the same as those which apply on all UK railways and we consider they are more demanding than those which prevail in the bus sector.
  - We may revisit our position if future appraisal of driver licensing on the mainline railway provides evidence that it has been beneficial.

## **Requirements for authorisation of vehicles and infrastructure**

14. Similarly to all railways, tramways require statutory authorisation by Government before new systems are constructed (under either a Transport & Works Act Order; a specific enabling Private Act or a combination of the two). Tramways also have requirements to have some changes formally approved (although the extent of these requirements varies between Acts and Orders, and for more modern systems reflects the wider move away from statutory approvals of new railway works, plant and equipment). ORR is involved in these approvals - in practical terms, the varying approval requirements have always been carried out by Her Majesty's Railway Inspectorate (HMRI) on behalf of Ministers (either working directly for Ministers when HMRI was housed in the Board of Trade or DfT/DETR; by Agency Agreements between DfT and HSE / ORR; or between 1994 and 2008 under the Railways and Other Transport Systems (Approval of Works Plant & Equipment) Regulations 1994 (ROTS)). In common with the rest of the rail sector, general requirements for

approval of vehicles and infrastructure were dispensed with on trams in 2008<sup>3</sup> when ROTS was repealed. On the mainline railway, authorisation of new (or major upgrades to or renewal of) vehicles and infrastructure has again been subject to authorisation by ORR since 2011 as a result of interoperability legislation. Buses and coaches are similarly subject to type approval and individual vehicle approvable by the DfT's Vehicle Certification Agency.

- 15. Options appraisal
  - No change There is no apparent desire or justification for making a change to approval arrangements for trams, which were not called into question by the RAIB investigation and which align very closely with what prevails elsewhere on rail and bus. It is important not to conflate the issue of standards (where there is a clear need for the tram sector to make improvements pursuant to Recommendations 1 and 2) with that of the approval process. The current arrangements provide for sufficient ORR oversight and over time we have encourage the amendment of specific tramway Acts and Orders to remove our explicit approval role for technical changes. There could be a better regulation benefit from having a more clearly standardised set of approval requirements (but note we already address this in part by publishing a single guidance document on our residual approvals role under remaining tramway Acts and Orders).
  - Bolster third party assessment of technical changes See the consideration at paragraph 16.
  - Restore a ROTS style ORR approvals requirement The tram sector (with the heritage sector) resisted the repeal of ROTS and it is conceivable that many in the sector would be instinctively comfortable with a return to formal ORR approval of new or altered equipment. Public confidence in the safety of tram equipment may be improved by a return to statutory approvals. But there are many reasons why doing so would not be desirable. There is no evidence of a rise in technical safety incidents following repeal of ROTS has materialised. One of the reasons we repealed ROTS was a concern that the regulations led parts of the rail and tram industry to perceive that ORR "owned" an element of its risk through our approvals now is certainly not the time to revive that perception. We also repealed ROTS so as to reduce administrative burdens on the industry (and on ORR), these costs would be incurred again were an approvals regime to be restored.

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<sup>&</sup>lt;sup>3</sup> The repeal of ROTS in 2006 was subject to an extended transition period in relation to the tramway and heritage sectors, meaning the requirements were maintained until 2008 in those areas.

- Extend interoperability authorisation to trams Interoperability regulation on the mainline railway has helped support standardisation (for wider reasons than safety) and an authorisation process for tramways could potentially help give the standards developed by the Recommendation 1 body more bite. The authorisation process also includes rigorous third party verification of compliance with standards, which parts of the mainline industry have found beneficial. This option would involve some complex legislative changes, however, especially given that the standards called up by the interoperability regulations are very specific to mainline rail. Similarly to driver licensing, we would also need to justify continuing to exclude non-mainline rail from the requirements. As with ROGS certification, it would also add to ORR's burden of statutory work if not carefully constructed so as to avoid duplication with requirements in existing Acts and Orders.
- 16. Recommendation
  - Tram vehicles and infrastructure are already subject to sufficient approval requirements. There is no safety justification to overlay another authorisation or approval regime.

## **Requirements for safety performance reporting**

- 17. This section is specifically about reporting on safety incidents and performance to the regulator. It is not concerned with the industry's implementation of recommendations to improve, standardise and share the data it collects for its own safety management purposes.
- 18. In common with non-mainline railways and buses, there are no statutory safety reporting requirements on tramways additional to those set out in RIDDOR. Mainline railway businesses are required to submit an annual safety report to ORR, including a statistical return against EU Common Safety Indicators (CSIs).
- 19. On a voluntary basis, we receive much better safety data from mainline and some non-mainline railways than we do from the tram sector.
- 20. Options appraisal
  - No change The tram sector's compliance with RIDDOR is good. The Prior Role Review recommended that make better use of this data. The tram sector has made tentative efforts, which they are bolstering following the RAIB recommendations, to improve its data collection beyond the requirements of RIDDOR. Discussions have implied that elements of this data would be shared with us in future and we ought to confirm that. The disadvantage or risk here is

that this work does not deliver and we continue to have access only to minimal tram safety data.

- Extend mandatory reporting Non-mainline railways (though not tramways) were previously subject to ROGS annual reporting. We repealed this requirement in 2011 because duty holders were finding it burdensome and we did not find the data valuable. In this option, we would reinstate annual reporting. This would at least give us a regular return of tram safety data supported by commentary about operational safety performance. However, we would need to support this with some better guidance (or list of required data) to ensure we received useful reports. Legislative change would be required and may be resisted on cost grounds by all those brought into scope. We would need to explain why we had changed our mind and decided annual reporting was useful.
- Voluntary reporting In this option we would challenge the tram sector to provide us with better data, noting that voluntarily sharing safety data with the regulator is common practice on the mainline (via SMIS) and for LU (via LUSEA). This could be formalised, if necessary, by updating our MoU with UK Tram. We know that the individual operators already collect more data than they share with us, so this approach would not necessarily need to await the development of the cross-industry safety database it is developing. We would need to work with the industry to define what we wanted, and there might be a small admin burden associated with providing the data (and processing / analysing it on our part).
- 21. Recommendation
  - We have formally recognised (through the PRR) that we need to make better use of the RIDDOR data we get from tramways.
  - We will continue to work with the sector and UK Tram to encourage the sharing of more safety data to help inform our regulatory activities.

Reviewing the regulatory framework for tramway safety



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