



Discussion paper

January 2019

Summary

This document provides an outline of our current thinking on how to address key issues identified in our market study into automatic ticket gates and ticket vending machines, and invites interested stakeholders to comment.

1. Introduction

- 1.1. On 14 March 2018, we launched a market study into the supply of automatic ticket gates (“**ATGs**”) and ticket vending machines (“**TVMs**”).¹ On 13 September 2018, we published an update paper.² This set out our findings on the key issues affecting competition and innovation for the supply of ATGs and TVMs. We considered there was a case for regulatory intervention to address competition issues in both markets.
- 1.2. We considered that the most proportionate, effective and timely course of action was to work with industry participants to identify solutions to these issues, rather than make a reference to the Competition and Markets Authority.
- 1.3. In order to develop options to address the issues we identified, we are working closely with industry participants. As part of this process, we held two workshops, and, had a number of meetings with key stakeholders including the Department of Transport (“the **DfT**”), Rail Delivery Group (“**RDG**”), and Transport for London (“**TfL**”).
- 1.4. This document sets out our current thinking on appropriate actions we should take in this market. We will publish our final report on 13 March 2019.

¹ Statement of scope, available at: http://orr.gov.uk/_data/assets/pdf_file/0016/27214/market-study-into-the-supply-of-ticket-vending-machines-and-ticket-gates-statement-of-scope-2018-03-14.pdf

² Update paper, available at: http://orr.gov.uk/_data/assets/pdf_file/0006/38985/market-study-into-the-supply-of-ticket-machines-and-ticket-gates-september-2018-update.pdf

What we want to achieve

- 1.5. Our goal is to improve the functioning of these markets through increasing rivalry, improving value for money and, importantly, in the longer term increasing the potential for innovation and the introduction of new approaches to retail and revenue protection. In relation to both markets, the issues are long-standing and are not, in our view, likely to be resolved by an immediate 'quick fix'. Therefore our aim is to focus on reducing barriers to new businesses (including those currently active in other countries) to compete in the Great British ("GB") market, and propose solutions which increase the incentives for new businesses to enter, and introduce new technology.
- 1.6. When choosing what remedial actions to take, we take into account a range of factors including the need to be realistic and proportionate.³ Key stakeholders have indicated their support for our work and the principles of the remedies we are proposing; this is important as any market solutions we recommend will require support and cooperation from industry to ensure they are implemented.
- 1.7. Our update paper also identified other issues affecting these markets, such as complexity of fares and the continued prevalence of mag-stripe ticketing. We have decided to focus this discussion paper on solutions we consider necessary to address the most significant competition issues in the ATG and TVM markets. However, we continue to welcome comments about any of the issues we identified in our update paper.

³ The factors we take into account are:

- Our prioritisation criteria;
- The most appropriate tool(s) available to us to address a particular issue;;
- How the remedy addresses the barriers and the detriment we have identified;
- How effective and proportionate the remedy, or package of remedies, would be;
- How the different remedies are effective as a package of interventions to help make competition work effectively; and
- How the remedy, or package of remedies, supports other ORR work in the ticketing sector

2. ATG market

- 2.1. We outline below our current thinking on recommendations to address market issues and increase incentives for third parties to engage in the GB ATG market.

Access to TfL's Network

- 2.2. Currently there is only one ATG supplier (Cubic Transportation Systems Limited "**Cubic**") able to supply products which connect to the TfL network. There is no mechanism for alternative suppliers to connect to the TfL network; we note that TfL has not actually been asked to provide such a facility. As 10 out of 16 mainline franchise Train Operating Companies ("**TOCs**") have a London terminus and require at least some of their ATGs to be compatible with the TfL network, if an ATG supplier cannot offer a London compatible product, it is effectively excluded from a very significant proportion of the overall market.
- 2.3. We have worked with TfL to understand how third parties could feasibly access TfL's systems without exposing TfL to excessive risks or costs.

Current thinking

- 2.4. Our proposal is that we should recommend that TfL, industry and ATG suppliers work together to develop a solution to provide access to the TfL network for third parties through the 'yellow card reader' that TfL currently uses on its ATGs. This solution would be similar to the 'Pearl' reader TfL currently supplies to TVM manufacturers. TfL agree with the principle of this remedy, and, would be willing to work with industry and ORR to take initial steps forward.
- 2.5. We understand, having held discussions with TfL and Cubic, that this solution is technically feasible, notably:
- It is a standard operating model in a number of other jurisdictions; and
 - TfL already has an interface specification for its yellow card reader which could be adapted for use by third parties.
- 2.6. To make this solution operational, we understand that further work⁴ would be required, which would come at a cost. Whilst TfL are the only organisation in a position to deliver this solution, they will require support and resources from industry to ensure that any solution is effective. We consider that TfL and industry should work together to determine a fair allocation of costs.⁵

⁴ Including adapting the interface specification, dealing with security issues and determining commercial and operational responsibilities

⁵ Our initial view on cost recovery is that it should be feasible for TfL, Cubic, industry and potential third party gate manufacturers, to agree a model for cost recovery based on principles determined similar to those used in other regulatory contexts. For example, OFCOM's six principles of cost recovery:

- Effective competition - the mechanism for cost recovery should not undermine or weaken the pressures for effective competition;

- 2.7. The key benefit of this approach is that third party suppliers of ATGs would, for the first time, be able to supply a product that is capable of reading and accepting TfL products. This would benefit mainline TOCs, as it would generate viable alternative technological options to meet their needs, and, in the longer term, also TfL as it could increase the pool of suppliers bidding for future revenue collection contracts.
- 2.8. We note that this solution means that alternative suppliers would only be able to connect to the TfL network using TfL's yellow card reader. Suppliers would therefore be unable to compete against that reader, (although innovations could be introduced around it e.g. to gate hardware/alternative revenue protection technologies). However, we consider that working with TfL, even in a limited way, would provide businesses with the opportunity to gain experience of working with TfL systems and increases the potential for working innovatively with TfL in the future.
- 2.9. We are aware of concerns regarding Cubic's role in providing the reader and that it may not be incentivised (given its vested interest in supplying its own hardware) to supply the product at a reasonable price and on reasonable terms. We are also aware of some issues with regards to the supply of the 'Pearl' reader for TVMs. We recognise these issues, however we consider they can be mitigated through TfL controlling the terms on which the product is provided, and through ORR continuing to play a role in ensuring that access issues are resolved fairly.
- 2.10. In the longer term, we understand that TfL is planning to develop a new 'TR4' reader. At present this reader is being developed for the bus market and there are no plans to bring it to rail for the foreseeable future. However, our view is that we should recommend that future TfL readers are developed with interoperability considerations in mind.

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- Cost causation - costs should be recovered from those whose actions cause the costs to be incurred at the margin;
 - Cost minimisation - the mechanism for cost recovery should ensure that there are strong incentives to minimise costs;
 - Distribution of benefits - costs should be recovered from the beneficiaries especially where there are externalities;
 - Practicability - the mechanism for cost recovery needs to be practicable and relatively easy to implement; and
 - Reciprocity - where services are provided reciprocally, charges should also be reciprocal
- Available at: https://www.ofcom.org.uk/data/assets/pdf_file/0022/105682/Recovering-the-costs-of-investment-in-network-expansion.pdf

2.11. We considered whether it would be feasible for TfL to open up its network on a wider basis, allowing alternative suppliers to connect directly to the TfL network using their own readers. This would enable suppliers to compete against the full Cubic offering on a like-for-like basis. However, whilst it would be technically feasible, there are a number of risks and challenges with this option, in particular around commercial risk and security. Overall, we consider the costs involved in developing such a solution and its ongoing management would be significantly higher than the proposed alternative, and therefore consider that this is unlikely to be a proportionate and reasonable response to address market issues.

Discussion questions

1. Is the proposed solution a proportionate and effective response?
2. What are the likely challenges in implementing this solution?
3. Who should be responsible for paying for this solution?
4. If ORR were to make this recommendation, please describe what steps you would take.

Market size and demand

- 2.12. Excluding TfL's revenue collection contract, the potential market size for ATGs in GB is small as compared to the investment necessary to develop a viable product. That said, there is some residual demand for ATGs⁶ and a potentially significant market for the development of approaches to revenue protection using new technology.
- 2.13. Most opportunities to tender for the supply of ATGs to TOCs are linked to the franchise cycle, with any residual demand sourced sporadically and at short notice. This results in a fragmented release of demand to market. In addition, suppliers highlighted a lack of a centralised or coordinated industry strategy for ATGs and their role in ticketing. Combined, these factors significantly reduce incentives for suppliers to invest in innovation or new product development for use on the mainline.
- 2.14. We have worked with industry to identify solutions which could obtain better market outcomes.

Current thinking

- 2.15. We propose to recommend that RDG, as the passenger rail transport industry's central membership body, facilitates a joint government and industry working

⁶ For example, gating stations which were previously ungated, although the majority of stations which can be gated are gated; adding additional gates to gated stations; and, replacing end of life gates

group to specifically consider issues regarding ATG procurement and the future of revenue protection. RDG agrees with the principle of this remedy and has indicated a willingness to take it forward.

2.16. We consider the working group could include representatives from the DfT, TfL, RDG and TOCs. Its objectives would include:

- Influencing the vision for the future of revenue protection;
- Providing a forum for suppliers involved in revenue protection, ATG supply and smart ticketing to engage with the whole industry;
- Implementing solutions for better forward planning and lead in times; and
- Exploring options for consolidating procurement where appropriate.

2.17. The key benefits of this approach are that industry parties would be able to come together to set a vision for the network providing clarity to the supply chain and incentivising alternative suppliers to develop innovative products to enter the market. The working group would be able to explore a wide range of issues and factors which are contributing to the lack of competition, and properly consider the value of consolidating demand.

2.18. Plainly, the downside is that any changes will take time to implement. However, we consider this may be inevitable given the entrenched issues in this market. As with any cross industry working group there is a risk that discussions could stray into anti-competitive territory. However, we consider this risk could be mitigated by establishing a competition compliance policy and ensuring all members are aware of what can be discussed.

2.19. We considered whether to recommend that RDG run a procurement for a framework contract consolidating demand across the mainline. Such an approach would directly address the issue of fragmented demand and could deliver benefits through increased buyer power. However, we consider that there are a number of risks and challenges in implementing this approach, and these would need to be fully considered, possibly by the working group, before this could be recommended.

Discussion questions

5. What issues should the working group consider?
6. What are the challenges in setting up the working group and ensuring its continued success?
7. What would the working group need to achieve to be considered effective?
8. If ORR were to make this recommendation, please describe what steps you would take.

Conclusion

2.20. We consider that the proposed package, (which should be viewed together but could be pursued separately), would generate incentives for third parties active in wider international markets for ATGs and revenue protection, to engage with and ultimately compete for demand in the GB market. This should eventually lead to greater competitive pressure in the market.

Discussion questions

9. Would this package of remedies be effective in improving competition in the ATG market, if not, why?
10. Is the package of remedies a reasonable response to the issues?

3. TVM market

- 3.1. The TVM market is characterised by a similar set of issues as those that impact on ATGs. However, our view is that there is a moderate level of competition. The focus in the TVM market is therefore primarily on RDG accreditation processes which were identified as hampering innovation and new entry.

Commitments on RDG accreditation

- 3.2. At the conclusion of the initial phase of our market study, we secured commitments from RDG to improve and simplify their procedures for accrediting new and innovative retail products (including TVMs but also applying to other retail channels such as websites/mobile etc.). These commitments are aimed at making RDG accreditation processes less complex more effective and efficient for prospective and existing rail retailers, and easier for new entrants to enter the rail retailing market with new technological propositions.
- 3.3. The agreed nine commitments were published with our update paper.⁷ ORR has monitored their delivery against the target dates in bi-monthly reviews with the RDG accreditation team. RDG formally outlined the progress they have made to date in a letter dated 23 January 2019⁸ and an updated delivery plan.⁹ ORR is of the view that RDG has met the commitments to date. Notably, RDG held an Accreditation Surgery on 23 November 2018 which was attended by three potential entrants, with further surgeries planned for 22 February 2019 and 26 April 2019.

Adjustments to commitments

- 3.4. Since the commitments were agreed last year, a number of adjustments to scope have emerged. These are outlined below.

Commitment (5) Review Governance of Standards

- 3.5. RDG has set up an internal Retail Steering Group which brings together technology, accreditation and licensing leads within RDG. This group has been tasked with identifying the appropriate subject matter expert for governance over each particular standard. This is covered in document RSPS 9000 which is currently out for review and RDG would encourage suppliers, third party retailers and TOCs to comment and submit their views by the 28 February 2019.

⁷ Annex A: RDG commitments letter, available at: http://orr.gov.uk/data/assets/pdf_file/0009/40311/market-study-into-the-supply-of-ticket-machines-and-ticket-gates-january-2019-discussion-paper-annex-a.pdf

⁸ Annex B: RDG progress letter, available at: http://orr.gov.uk/data/assets/pdf_file/0010/40312/market-study-into-the-supply-of-ticket-machines-and-ticket-gates-january-2019-discussion-paper-annex-b.pdf

⁹ Annex C: RDG delivery plan, available at: http://orr.gov.uk/data/assets/pdf_file/0011/40313/market-study-into-the-supply-of-ticket-machines-and-ticket-gates-january-2019-discussion-paper-annex-c.pdf

Commitment (6) Review Standards

- 3.6. RDG reviewed and identified that the majority of standards are fit for purpose, however, the analysis also revealed that not all standards are relevant to all retailers, as their retail offerings may differ.
- 3.7. At present all retailers (including new entrants) are required to accredit against all standards even if they do not use them. RDG is currently looking to introduce a more bespoke approach where standards are categorised and retailers only need to accredit against a set of standards specific to their retailing activities. This is likely to make accreditation easier and potentially cheaper for new entrants and existing retailers and ensure a more appropriate level of accreditation.
- 3.8. RDG's accreditation team plans to pilot this new approach in June 2019 when the next new wave of applicants will be requesting a licence.

Commitment (8) Pilot Retrospective Accreditation

- 3.9. RDG is considering removing the automatic three year re-accreditation process and replacing it with ongoing annual accreditation of standards that have changed during the preceding 12-month period. Under this new approach, retailers would not be required to be re-accredited against standards which have not changed. The aim is that this approach will be better suited to agile software development models which underpin modern retailing solutions.
- 3.10. RDG is currently obtaining input from a group of rail retailers. The next step is to obtain TOC approval to trial the approach. The aim is to carry out a trial in February 2019, with a potential rollout date of April 2019.

Next steps

- 3.11. ORR propose to continue to monitor RDG's delivery of the commitments (including the aforementioned adjustments to scope). RDG will report on progress when we publish our final report in March 2019. In addition, RDG will send a formal report to the ORR on 30 June 2019, summarising their work.

Discussion questions

- 11. Do you consider that RDG's work on the nine accreditation commitments has been effective so far?
- 12. Are the changes to the scope the most effective, proportionate and timely course of action?
- 13. What are the pros and cons of the suggested changes to scope?
- 14. Is it likely that changes to scope will have unintended consequences?

4. How to respond

4.1. To respond to this discussion paper, please email or post your submission to:

Email: Ticketing.Supply@orr.gov.uk

Address: Ticket vending machines and ticket gates market study,
Competition Team,
Office of Rail and Road,
One Kemble Street,
London,
WC2B 4AN

4.2. The deadline for providing responses is **5pm on 8 February 2019**

4.3. In providing responses:

- Please supply a brief summary of the interests or organisations you represent, where appropriate;
- Please refer to the discussion questions set out throughout this document; and
- Please indicate whether you are providing any material that you consider to be confidential, and explain why this is the case.

4.4. Annex D sets out how the ORR may use information provided to it during the course of this market study.



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