



Statement of Scope

Supply of ticket vending machines and automatic ticket gates

14 March 2018

Contents

Statement of Scope	1
Supply of ticket vending machines and automatic ticket gates	1
1. Introduction	3
About ORR, and the legal framework	3
Market studies	4
2. Scope of the market study	7
Introduction	7
Definition of products within scope	7
Geographic scope	8
Areas on which we do not intend to focus	8
Themes we propose to consider	9
3. Why we are doing a market study	12
Introduction	12
Market review	12
Significance of TVMs and ATGs	13
Conclusion	14
Annex A - Previous work	15
Annex B - Use of information provided to ORR	17

1. Introduction

- 1.1 This document sets out the purpose and scope of the Office of Rail and Road's ('**ORR**') market study into the supply of ticket vending machines ('**TVMs**') and automatic ticket gates ('**ATGs**'). It discusses the themes we propose to consider, identifies possible outcomes, and outlines why we are doing a market study.
- 1.2 We invite submissions from interested parties on any of the issues raised within this document and the accompanying Market Study Notice: Supply of ticket vending machines and automatic ticket gates¹.

About ORR, and the legal framework

- 1.3 ORR is the independent economic and safety regulator for the railways in Great Britain ('**GB**'), and the monitor of performance and efficiency for England's motorways and trunk roads.
- 1.4 As the designated sectoral regulator for rail, we keep the provision of railway services under review² and monitor the competitive situation in rail services markets³. Additionally, ORR is a designated national competition authority with powers held concurrently with the Competition and Markets Authority ('**CMA**') to apply competition law in markets relating to the supply of services relating to railways⁴.
- 1.5 ORR has strategic objectives, which include ensuring: a safer railway; better customer service; value for money for the railway; and the promotion of a dynamic and commercially sustainable rail sector⁵.
- 1.6 ORR also has general statutory duties under section 4 of the Railways Act ('the **Duties**'), which it must apply in making any decision to launch a market study⁶. ORR

¹ http://www.orr.gov.uk/_data/assets/pdf_file/0018/27216/market-study-into-the-supply-of-ticket-vending-machines-and-ticket-gates-notice-2018-03-14.pdf

² Section 69(1) of the Railways Act 1993 ('**Railways Act**')

³ Regulation 34 of the Railways (Access, Management and Licensing of Railway Undertakings) Regulations 2016 ('**Access and Management Regulations**')

⁴ Section 67 of the Railways Act

⁵ <http://orr.gov.uk/about-orr/what-we-do/our-strategy/our-strategic-objectives>

⁶ In this case, ORR considers the following duties to be particularly relevant:

- Promoting improvements in railway service performance;
- Protecting interests of users of railway services;
- Promoting the use of the railway network in GB for the carriage of passengers and goods, and the development of that railway network, to the greatest extent that it considers economically practicable;

has to consider which of the Duties are most relevant to a particular case. Where more than one duty applies, we must weigh and strike a balance between them. In deciding whether to launch a market study, we must also consider whether an issue is one where the use of formal information gathering powers⁷ is appropriate with a view to deciding whether to make a Market Investigation Reference to the CMA⁸.

1.7 In order to ensure the effective delivery of our statutory duties and strategic objectives we seek to promote and protect the existence of healthy, robust, and competitive supply chains for products and services relating to railways.

Market studies

1.8 Market studies are one of a number of tools at ORR's disposal to examine possible competition issues and address them if appropriate. They are examinations into whether markets are working well, and possible causes of market failure. Market studies take into account regulatory and other economic drivers in a market, as well as patterns of consumer and business behaviour.

1.9 The purpose of a market study is to:

- (a) consider the extent to which a matter in relation to services related to railways has, or may have, effects adverse to the interests of consumers; and
- (b) assess the extent to which steps can and should be taken to remedy, mitigate or prevent any such adverse effects.

1.10 A market study begins with the publication of a Market Study Notice ('a **Notice**')⁹. We have published the Notice at the same time as this Statement of Scope; it includes details on the subject matter of this study and timing.

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- Contributing to the development of an integrated system of transport of passengers and goods;
 - Promoting efficiency and economy on the part of persons providing railway services;
 - Promoting competition in the provision of railway services for the benefit of users of railway services; and
 - Promoting measures designed to facilitate the making by passengers of journeys that which involve use of the services of more than one passenger service operator.

⁷ Under section 174 of the Enterprise Act 2002

⁸ This consideration is made in accordance with the legal test set out at section 130A of the Enterprise Act 2002 as applied by section 67(2C) of the Railways Act.

⁹ Under section 67(2C) of the Railways Act, ORR must publish a Notice where it is proposing to launch a market study to carry out its functions under section 69(1) of the Railways Act.

1.11 Market studies can lead to a range of outcomes. They may conclude that a market be given a clean bill of health. Where a market is not found to be working well however, we may consider several options including:

- taking enforcement action under the Competition Act 1998 or consumer law;
- dealing with matters which are capable of resolution under our sector specific powers, for example licence enforcement;
- engaging with industry to develop an industry-led solution, for example, a code of practice;
- asking the industry to review established industry mechanisms;
- making recommendations to government to change regulation or public policy;
- making a Market Investigation Reference¹⁰; and/or
- accepting undertakings in lieu of making a Market Investigation Reference¹¹.

1.12 The above is an illustrative list of possible outcomes and it is not exhaustive. ORR retains an open mind as to which outcomes, or combination of outcomes, may be appropriate to address any concerns that it may identify during the course of this market study.

1.13 Further information on market studies can be found in our guidance '*ORR's approach to monitoring and reviewing markets*'¹².

Invitation to comment

1.14 The ORR welcomes submissions on the market study from interested parties by no later than 4 April 2018. In addition to general submissions, we particularly welcome responses on the themes outlined in chapter 2 and the following questions:

- (a) Do you agree with the focus on the three themes?; and

¹⁰ ORR may make a Market Investigation Reference under section 131 of the Enterprise Act 2002 where the findings of a market study: (i) give rise to reasonable grounds for suspecting that any feature or combination of features of a market in the UK prevents for the supply of services relating to railways, restricts or distorts competition, and a market investigation appears to be an appropriate and proportionate response, and (ii) ORR has considered its General Duties under section 4 of the Railways Act.

¹¹ Section 154 of the Enterprise Act 2002.

¹² http://orr.gov.uk/_data/assets/pdf_file/0007/23974/orr-approach-to-monitoring-and-reviewing-markets.pdf

- (b) What factors do you consider are important in shaping market outcomes in the supply of TVMs and/or ATGs?

1.15 We expect responses may vary as between TVMs and ATGs.

1.16 To respond to this invitation to comment, 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

1.17 We intend to publish responses to this statement of scope in full. In providing responses:

- please supply a brief summary of the interests or organisations you represent, where appropriate;
- please indicate whether you are providing any material that you consider to be confidential, and explain why this is the case. Please provide both a confidential and non-confidential redacted version of your response; and
- if you are responding in an individual capacity (i.e. you are not representing a business), please indicate whether you wish for your response to be attributed to you by name or published anonymously.

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

1.19 Information and updates about this study will be added to the supply of ticket vending machines and automatic ticket gates market study page¹³ on a regular basis.

¹³ <http://orr.gov.uk/rail/publications/research-and-studies/monitoring-markets/supply-of-ticket-vending-machines-and-ticket-gates-market-study>

2. Scope of the market study

Introduction

2.1 This chapter defines the products that are within the scope of this market study and its proposed geographical scope. We also set out three themes that the market study will focus on, and, for clarity, state certain areas on which we do not intend to focus.

Definition of products within scope

2.2 We intend to consider the supply of rail TVMs and ATGs – including: the physical equipment¹⁴; the software/systems that sit behind the hardware to make it operate; and, ancillary services related to equipment such as installation, maintenance and upgrades.

TVMs

2.3 A TVM is a machine that is capable of selling rail tickets. A TVM sales channel consists of two parts: software and hardware. We will use the term 'TVM' to mean either the hardware alone, or the hardware and software.

2.4 The hardware may take many forms. Typically, a TVM shell consists of a metal 'box' with an interactive screen which enables consumers to select a ticket. TVM shells also contain other components such as a ticket printer, a coin hopper and card readers. In order to retail tickets and form an effective end-to-end sales channel, a TVM must be connected to/take a feed from a ticket information system ('a **TIS**').

2.5 TIS is a broad term comprising (typically) software that is in essence the 'brain' of a sales system; TISs facilitate the process by which tickets are sold. TISs are an essential 'input' to downstream ticket retailing. Each consumer facing sales channel (e.g. mobile, web, TVM, on-train) requires a TIS.

2.6 A TIS is required to connect to a range of centralised back office systems and use information from a number of data feeds. To sell rail tickets for use on the GB mainline, TIS suppliers have to access a number of core data systems, which are run by the Rail Delivery Group ('**RDG**')¹⁵.

¹⁴ Including peripheral equipment, such as ticket readers

¹⁵ In some cases core data systems are outsourced by RDG

ATGs

- 2.7 ATGs are barriers installed in some stations primarily for the purpose of revenue protection. They are made up of the gate hardware and ticket validation readers.
- 2.8 Validation readers are typically connected to a back-office system/software to ensure they correctly permit entry to valid ticket holders, and deny entry to holders of invalid tickets.

Geographic scope

- 2.9 Our market study will cover the supply of TVMs and ATGs in GB. Our market study will not cover Northern Ireland as our jurisdiction for carrying out a market study only relates to the supply of services relating to railways in GB¹⁶.

Areas on which we do not intend to focus

- 2.10 For clarity, we consider that it is appropriate that we specify the following areas which are outside the scope of this study:
- Third party ticket distribution¹⁷; and
 - Smaller markets such as plastic card supply and orange card printers¹⁸.

¹⁶ Section 69(1)(a) of the Railways Act

¹⁷ Third party ticket distribution has been previously considered in other ORR work, namely the retail market review (see Annex A)

¹⁸ The small value of these markets do not make them a priority for review.

Themes we propose to consider

2.11 We intend to focus our work across three interrelated themes:

- Theme 1: Concentration¹⁹ and market shares
- Theme 2: Outcomes for customers, passengers and the wider railway sector
- Theme 3: Drivers of market outcomes, including consideration of:
 - buying practices, namely, whether the award of large, aggregated contracts with long durations for retail equipment may be restricting or distorting competition in the supply chain; and
 - whether accreditation processes may be causing a disproportionate barrier to entry.

2.12 We are open to hearing concerns from stakeholders about other factors that they consider may be relevant to our market study, particularly in relation to theme three, and whether there may be alternative possible causes for market outcomes.

Theme 1: Concentration and market shares

2.13 We will obtain evidence that will enable us to consider the extent of concentration in the TVM and ATG markets and how it has changed over time. We will use this as part of an assessment of whether suppliers have market power in relation to the supply of TVMs and ATGs.

Theme 2: Outcomes for customers, passengers and the wider railway sector

2.14 We will explore whether the industry is generating value for money in terms of price and service quality for customers. We will explore whether the industry is generating innovation benefits for passengers. This may involve comparison or benchmarking with other sectors and jurisdictions.

2.15 We also propose to assess the relative safety of GB equipment (as a specific measure of service quality). This may include reference to comparable systems in other jurisdictions.

¹⁹ Concentration refers to the number and size distribution of businesses in a particular market

Theme 3: Drivers of market outcomes

2.16 We will explore the drivers of identified market outcomes. This will include consideration of the two issues set out below.

Whether the award of large, aggregated contracts with long durations for retail equipment may be restricting or distorting competition in the supply chain

2.17 Competition effects from purchasing decisions can be both positive and negative. Large buyers may be in a position to protect and promote competition, for example by maintaining a competitive market structure through structuring purchasing strategies to encourage greater diversity of suppliers, by providing incentives to suppliers to invest and innovate, or by helping firms to overcome barriers to entry. However, purchasing decisions also have the potential to restrict and distort competition; for example, tendering for large scale, long-term or overly aggregated contracts may restrict the number of suppliers capable of bidding, and/or result in the successful bidder obtaining market power, with potential adverse wider market effects.

2.18 We propose to look at the wider impact purchaser's decisions have on GB markets for the supply of TVMs and ATGs. We will use the Office of Fair Trading guidance '*Assessing the impact of public sector procurement on competition*'²⁰ to explore these issues, in particular:

- whether buyers are effectively balancing short-term value for money considerations against longer term supply chain management issues;
- the cost and benefits of contract aggregation and long term contracts, and the effect on the remainder of the market; and
- the long term effects of purchasing decisions on investment, innovation and the competitiveness of the market.

2.19 We are not seeking to consider any purchasers' compliance with procurement law or the efficacy of their tendering procedures.

Whether accreditation processes may be causing a disproportionate barrier to entry

²⁰ <https://www.dotecon.com/assets/images/oftmain.pdf>, since adopted by the CMA OFT742a

2.20 We propose to consider Rail Settlement Plan²¹ ('**RSP**') accreditation.

2.21 We consider it is important that accreditation process do not disproportionately deter new companies from entering the market or inhibit innovation. We therefore propose to explore whether the accreditation process pursues its legitimate objectives in a proportionate way, and whether alternative approaches may result in a more competitive supply market.

2.22 We note that consideration of this issue may involve looking at the impact of RSP accreditation on other sales channels which are also subject to its processes, for example, web and mobile (app) retail.

²¹ RSP is a subsidiary of RDG

3. Why we are doing a market study

Introduction

- 3.1 Markets, including those in the railway sector, work well when businesses compete vigorously and fairly to win business. When markets work well, efficient businesses are rewarded, productivity growth is higher, and customers have confidence that the supply chain delivers good outcomes for them in terms of price, quality, variety, innovation and service.
- 3.2 In the case of the railways sector, we consider that effective competition and rivalry may drive the delivery of more innovative and reliable products.

Market review

- 3.3 In October 2017, we opened a review into the wider market for ticketing equipment and systems, in particular, TISs, TVMs and ATGs. That review consisted of evidence gathering and analysis, albeit without the use of our formal information gathering powers or our concurrent powers to apply competition law.
- 3.4 We held 20 meetings with stakeholders including suppliers of TIS, TVMs and ATGs. We also met with the Department for Transport ('DfT'), RDG, third party ticket retailers, train operating companies ('TOCs'), and Transport for London ('TfL').
- 3.5 We sent targeted voluntary information requests to 35 stakeholders. We created separate information requests for purchasers and actual/potential suppliers of TIS, TVM and ticket gates. In total, we sent 62 information requests and there was an 82% response rate. This indicates, in our view, a high level of stakeholder interest.
- 3.6 Our review identified the following preliminary concerns:
- The supply chains for the supply of TVMs and ATGs have few suppliers and limited new entry or churn.
 - There may be a number of barriers which make it difficult for new businesses or products to enter the market for the supply of TVMs and ATGs.
 - We suspect that a lack of effective competition in these markets may be resulting in consumer detriment in the form of higher prices, lower quality, and stifled innovation.
 - Possible causes of the high concentration and lack of effective competition appear to be:

- Purchasing decisions to award long-term contracts with highly aggregated service packages. We have preliminary concerns that only large suppliers are capable of bidding for these contracts, and, once they are awarded, the successful companies may obtain market power, with wider impacts for the GB market; and
- The complexity of the accreditation process for bringing new retailing products/services to market.

3.7 The recommendation of the review was to open a market study focussed on the supply of TVMs and ATGs.

Other work

3.8 Prior to undertaking our review, ORR conducted a number of other studies into TVMs and ATGs using other regulatory tools, including our consumer powers. A summary of all of our previous work in these markets is at Annex A.

Significance of TVMs and ATGs

3.9 TVMs and ATGs are an important interface between the rail industry and passengers and are key to the retailing process:

- In 2016/17 ticket sales through TVMs totalled a value of £2 billion; 20.2% of total passenger ticketing revenue.
- The principal function of ATGs is revenue protection. Fare evasion remains a significant issue for the industry. By its nature, loss incurred due to fare evasion is difficult to quantify, though some TOCs estimate cross-industry losses of upwards of £200 million per year²².

3.10 The direct customers of the products are typically TOCs and metro-transport operators such as TfL. However, end users (passengers and taxpayers) would see the benefits of any improved market outcomes through having the benefit of access

²² <https://www.greateranglia.co.uk/about-us/news-desk/news-articles/fare-dodgers-end-paying-%C2%A3121500-ride-railway>; <https://www.northernrailway.co.uk/2016-03-18-16-08-49/corporate-season-tickets/122-fines-and-penalties/825-myth-busting>; <https://www.eastmidlandstrains.co.uk/information/contact-us/policies-procedures/Penalty-Fares/>

to more innovative equipment, and through improved value and efficiency in the rail industry.

3.11 TVMs and ATGs play a significant role in the delivery of smart ticketing. Government has committed £80 million to deliver smart ticketing²³ on the national rail network in England and Wales by the end of 2018. The implementation of smart ticketing will require upgrades to TVMs and ATGs, and/or the provision of new equipment, to ensure seamless distribution and acceptance of new forms of ticketing. While this market study is not specifically focused on smart ticketing, we consider that smart ticketing may be affected by conditions of competition in the supply chains for TVMs and ATGs.

Conclusion

3.12 In light of the findings from our review, we consider that the current status of the market for the supply of TVMs and ATGs may be causing an adverse effect on the competition for supply of such equipment, and that further examination of the market is required. ORR has had due regard to the required considerations and its general statutory duties²⁴ in taking its decision to open this market study²⁵.

²³ Smart tickets include products such as mobile tickets, e-tickets, barcodes, and smart card tickets. See also: <https://www.gov.uk/government/news/government-plans-80-million-smart-ticketing-rail-revolution>

²⁴ Under section 4 of the Railways Act

²⁵ See paragraph 1.6 above

Annex A - Previous work

This annex contains a summary of our previous work in relation to TVMs and ATGs.

- **Retail Market Review.** Our Retail Market Review was launched in February 2014 and concluded in October 2016. Our recommendations included, ensuring that TOCs have stronger incentives to introduce new products and ensuring that TOCs do not suppress the potential for innovation from technology providers of ticket machines. Our full recommendations are set out in our Retail Market Review²⁶.
- **Action plan.** In 2016, we worked with the DfT, Which?, RDG and Transport Focus to identify actions that would improve fares and ticketing for passengers. TVM improvements were an area of significant focus within the Action Plan. A report published by DfT in December 2017 summarises progress made by industry to date²⁷.
- **Ten Point Improvement Plan and TVM Design Guidelines.** In July 2015 the industry developed TVM design guidelines for the graphical user interface of TVMs to reduce the risk of passengers purchasing the wrong ticket²⁸. RDG subsequently produced a 10-point improvement plan designed to provide a roadmap for the implementation of the design guidelines. The 10-point plan was agreed with TVM suppliers in January 2016²⁹. Six of the ten 10-point plan actions have been completed thus far for the existing TVMs or are currently being rolled out where old machines are being replaced with new ones. The remaining actions are in progress, and RDG has undertaken to complete these by early 2018.
- **TVM market review.** For some time concerns have been expressed about the quality of information provided to passengers using TVMs to enable them to select the most appropriate ticket for their journey. In 2017, we released our findings from our review into TVMs. The findings showed that whilst the majority of shoppers (80%) selected the most appropriate ticket for their journey from the TVM, across the industry one in five mystery shoppers were unable to do so³⁰.

²⁶ <http://orr.gov.uk/rail/consultations/policy-consultations-by-topic/consumer-consultations/retail-market-review>

²⁷ <https://www.gov.uk/government/publications/review-of-the-action-plan-for-information-on-rail-fares-and-ticketing>

²⁸ <https://www.raildeliverygroup.com/about-us/publications.html?task=file.download&id=469771183>

²⁹ <https://www.raildeliverygroup.com/about-us/publications.html?task=file.download&id=469771182>

³⁰ <http://orr.gov.uk/rail/consumers/what-we-do-for-consumers/ticket-machines>

We are currently repeating this mystery shopping research to see what improvements have been made over the last 12 months. We expect to publish research results by the end of March 2018.

- **London Bridge overcrowding.** In 2015, ORR investigated station management at London Bridge station following crowding between January and March 2015. This included exploring concerns that the performance of the ATGs, and the lack of availability of contactless payment, may have contributed to the congestion during these months, thereby slowing the flow of passengers. ORR found that while gates remain open if there is constant flow of passengers touching or inserting tickets, gates would close where passengers struggled to have their ticket ready in time, or when the gate rejected a passenger ticket, in both cases this normally occurred where a paper ticket was being used. ORR recommended that Network Rail keep abreast of technological developments in ATGs to optimise efficient and safe passenger flows through ATGs. ORR also considered that the continued spread of contactless cards and advances in ticket gate design would further improve passenger flow.

Annex B - Use of information provided to ORR

1. This note sets out how ORR may use information provided to it during the course of this market study.

Why is ORR asking for information?

2. The information you provide will help us better understand how well the markets for the supply of TVMs and ATGs is working.

What will ORR do with the information I provide?

3. Your information will inform our final market study report. The report will set out our findings and any proposed remedies to any problems we find.

4. Where appropriate, we may also use information you provide to take enforcement action, using our competition or consumer powers, or may share your information with another enforcement authority or with another regulator for them to consider whether any action is necessary.

5. We may only publish or share information in specific circumstances set out in legislation (principally in Part 9 of the Enterprise Act 2002). In particular, prior to publication or any such disclosure, we must have regard to (among other considerations) the need for excluding, so far as is practicable:

- any information relating to the private affairs of an individual which might, in our opinion, significantly harm the individual's interests; or
- any commercial information relating to a business which, if published or shared, might, in our opinion, significantly harm the legitimate business interests of that business.

6. We will redact, summarise or aggregate information in published reports where this is appropriate to ensure transparency whilst protecting legitimate consumer or business interests.

7. If you wish to submit information either in writing or verbally that you do not wish us to publish or share, please let us know when you contact us with your reasons.



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