

Ticket Vending Machines review

February 2017

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Executive summary

1. ORR has published today the results of our research into passengers' experience of ticket vending machines. The results show that across the industry one in five mystery shoppers were unable to select the most appropriate ticket for their journey from the ticket vending machine (TVM). Of those, 13% would have suffered financial detriment as result of not choosing the appropriate ticket.
 2. **We have therefore recommended to train operators that they introduce a voluntary TVM price guarantee to give a refund of the additional ticket costs to passengers who find that they could have bought a cheaper ticket for the same journey.**
 3. Our research also found that 7% of mystery shoppers selected a ticket that did not have the required flexibility, either by route or train operator, with the majority paying less than the required amount for their journey. A passenger travelling in these circumstances would have potentially been subject to a penalty fare.
 4. The research identified a number of areas of good practice where train operators should focus their efforts. These include the provision of clear, useable and timely information on the range of products available from TVMs, ticket restrictions and validities, and on and off peak sales.
 5. **We have written to the industry body, the Rail Delivery Group (RDG), to ask that they set out publicly what improvements RDG expect to be delivered at an individual train operator level in the good practice areas over the next six months.** We intend to repeat our research later this year to establish whether the experience of passengers has improved.
 6. This research was undertaken as part of our wider review into ticket vending machines. In this document we set out the background to our review, the work we have undertaken to understand what progress has been made to improve ticket vending machines, and our next steps.
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1. Chapter 1

Context

- 1.1 Ticket vending machines (TVMs) were originally designed to be 'queue busters' allowing passengers to make quick, straightforward purchases at the train station as an alternative to using other means such as ticket offices. Many thousands of passengers use TVMs on a daily basis and are content with their transactions. Over time, passenger expectations of what the TVM should do has evolved. Whilst there has been some welcome recent innovation, the development of TVMs has struggled to keep up with these expectations.
- 1.2 Government is keen that the rail industry moves toward smart ticketing technologies such as smartcards, QR codes, mobile ticketing, barcodes, and contactless payments. The Department for Transport (DfT) has established a team to work with industry to accelerate progress to deliver smart ticketing. The Chancellor has also made £80m funding available through the Autumn Statement to support further infrastructure roll out for smart ticketing by the end of 2018.
- 1.3 But change will take time. TVMs will therefore remain one of the most used methods to buy tickets for the next 5-10 years. About one third of passengers use a TVM to buy tickets¹ and in the financial year 2015-16 almost 21% of industry total gross receipts (around £2,100m) derived from TVM sales.
- 1.4 The Transport Select Committee expressed the view in their report on 'Improving the rail passenger experience'² that TVMs are confusing and do not always offer the best value fares. ORR has worked closely with DfT, RDG, Which? and Transport Focus to develop an action plan to drive improvements over the next 12 months. This action plan³ was published on 13 December. Progress against these actions will be reviewed regularly and an interim report on delivery against the plan will be published in the ORR's Annual Consumer Report in July 2017, and a final report in December 2017.

¹ORR rail passenger experience report 2014: <http://orr.gov.uk/what-and-how-we-regulate/consumers/consumer-insight/passenger-experience-report2>

²http://www.publications.parliament.uk/pa/cm201617/cmselect/cmtrans/64/6402.htm?utm_source=64&utm_medium=fullbullet&utm_campaign=modulereports

³ Action Plan for Information on Rail Fares and Ticketing:
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/579850/action-plan-for-information-on-rail-fares-and-ticketing.pdf

Background

- 1.5 For some time there have been concerns expressed about the quality of information provided to passengers using TVMs to enable them to select the most appropriate ticket for their journey. The statutory consumer body Transport Focus (then known as Passenger Focus) conducted qualitative consumer research in this area in 2010⁴. The clarity of information and the use of industry jargon were cited in the research as two of the main issues of concern for rail passengers. These informational issues were also highlighted by Which? in a 2012 study⁵.
- 1.6 During the course of our work with train operators, we identified a number of key problems with TVMs. In late 2015 we sought information from train operators to understand what they had done or planned to do to address these matters, and to see what was within their control to improve and what was an issue for the wider industry to address.
- 1.7 Our findings were summarised in our 'Measuring Up' report⁶ in June 2016. In our report we highlighted issues in five key areas: the use of jargon; information on the range of products; information on ticket restrictions; the timing of off-peak sales; and the filtering of fares. In the report we noted that whilst train operators had made some progress to address the informational issues, there remained more to do to ensure that TVMs meet the needs of passengers. We stated that we would therefore undertake mystery shopping in this area to understand in more detail the specific problems passengers are experiencing and any resultant detriment they are potentially exposed to.
- 1.8 We committed in our Business Plan for 2016/17 to publish a progress report on the information train operators provide to passengers when they are buying tickets, particularly from TVMs. As well as conducting mystery shopping research, to inform our TVM work we have also worked directly with train operators, RDG, and TVM suppliers. We sought an update from train operators on the progress they had made to address the issues we had identified in Measuring Up, and on how they were meeting the principles of the Code of practice on retail information⁷ in relation to TVMs. We discussed the responses with each of the train operators. We have also

⁴ <http://www.transportfocus.org.uk/research-publications/publications/ticket-vending-machine-usability-qualitative-research/>

⁵ <http://www.which.co.uk/news/2012/01/train-station-ticket-machines-confusing-customers-277029/>

⁶ http://orr.gov.uk/_data/assets/pdf_file/0012/22116/measuring-up-annual-rail-consumer-report-june-2016.pdf

⁷ The purpose of the code is to promote best practice in meeting consumer law and industry standards and help ensure that ticket retailers give passengers a clear understanding of what level of service they can expect, whether from a ticket office, online, a ticket machine, or other self-service channels.
http://www.atoc.org/download/clientfiles/files/publicationsdocuments/2015-03_retail_information_CoP.pdf

met regularly with RDG to discuss the delivery of the TVM 10 point improvement plan⁸, and have met with each of the three main TVM suppliers.

1.9 In this document we provide:

- an overview of our TVM research and high-level conclusions;
- a summary of progress made by train operators to address TVM issues;
- a summary of RDG progress and actions; and
- a summary of views of and meetings with suppliers.

Next steps

1.10 We have written to RDG and have asked them to respond to our letter by 10 March 2017. We will publish their reply on the ORR website.

1.11 We will repeat our research this autumn and will publish an update on our TVM work early next year.

⁸ <http://www.raildeliverygroup.com/what-we-do/publications.html?task=file.download&id=469771182>

2. Chapter 2 - Ticket vending machines research overview and conclusions

Summary

This Chapter provides background to the TVM research, the main findings regarding the level of consumer detriment and the five areas of 'Measuring Up', and the conclusions we have drawn from the research findings.

Research background

- 2.1 We engaged ESA Retail to undertake mystery shopping research to determine passengers' ability, when using TVMs, to select the most appropriate ticket for their journey. The research also examined each of the five key areas identified in the Measuring Up report noted above.
- 2.2 The research sample incorporated a spread of TVM transactions covering the majority of train operators⁹ with the number per train operator varied to reflect TVM sales volumes, and covered the most popular journey routes and ticket types on TVMs for each train operator. Mystery shoppers were given a range of travel time and priority scenarios covering the cheapest ticket, flexibility of route or train operator, and flexibility for time of return. The age, gender, and experience of using TVMs varied across the mystery shoppers. 721 mystery shops were completed.
- 2.3 The research report¹⁰ has been published alongside this document. The results show the extent to which the information (or lack of it) provided to rail passengers on TVMs is leading to the purchase of an inappropriate, and possibly more expensive, ticket than required for their journey needs.

⁹ TOCs assessed as part of the research: Arriva Trains Wales, c2c, Chiltern, East Midlands Trains, Gatwick Express, Govia Thameslink Railway, Great Western Railway, Greater Anglia, Heathrow Express, London Midland, London Overground, Merseyrail, Northern Rail, ScotRail, South West Trains, Southeastern, Transpennine Express, Virgin Trains East Coast, Virgin Trains West Coast. (Crossrail, and DW Metro were also considered for exercise but excluded due to small volume of TVM sales for these TOCs).

¹⁰ http://www.orr.gov.uk/data/assets/pdf_file/0016/24046/research-into-passengers-experience-of-ticket-vending-machines-february-2017.pdf

Main findings

2.4 We have set out below a summary of the main findings of the research.

Passenger detriment

2.5 *The research examined whether the mystery shopper would have purchased the appropriate ticket for their journey.*

- 13% of shoppers would have suffered financial detriment as a result of not selecting the cheapest fare for their journey.
- 7% of shoppers would have suffered detriment in terms of lost time through selecting a ticket that did not have the required flexibility for their journey. The majority underpaid, i.e. they did not select the most appropriate ticket and should have paid more for the right one.

Five areas of 'Measuring Up'

2.6 *Jargon - mystery shoppers were asked whether they understood the terminology used on the TVM*

- Overall only 5% of mystery shoppers found the terminology used confusing or hard to understand.
- Across train operators' individual scores ranged from 80-100%.

2.7 *Product range - mystery shoppers were asked if there was information on the TVM about what could/could not be bought and that other fares may be available elsewhere*

- Across train operators' individual scores ranged from 8-52%.
- Shoppers were more likely to select the most appropriate ticket when ticket information was available on the TVM.

2.8 *Information about ticket restrictions or validities – mystery shoppers were asked whether this information was provided, and whether it was easy to find and view*

- Across train operators' individual scores ranged from 57-91%.
- Shoppers were more likely to select the most appropriate ticket if information about ticket restrictions and validities was available from a TVM.

2.9 *Sale of off-peak fares – mystery shoppers were asked how easy it was to get information about times, and the restrictions on the use of the ticket*

- 57% of shoppers reported that the TVM did not tell them at what time they could use their off-peak tickets.

- Across train operators' individual scores ranged from 8-70%.

2.10 *Filtering of fares – mystery shoppers were asked whether tickets were listed in price order, and whether there were other options to filter fares*

- Almost 75% of shoppers reported that TVMs listed ticket options by cheapest first, but filtering in any other way, for example fastest journey, was rarely an option.

Passenger experience

2.11 *Mystery shoppers were asked to comment on their overall experience as a TVM user*

- 39% of shoppers said they would have abandoned the process and gone to the ticket office if they had been a genuine customer.
- In 41% of these cases the mystery shopper did not select the most appropriate ticket.

Conclusions

2.12 TVMs are intended to provide a fast and effective 'queue busting' alternative to other means of buying train tickets such as ticket offices. For many passengers they serve this purpose effectively.

2.13 Nonetheless, when using them rail passengers have a reasonable expectation that they will get information from the TVM to enable them to select the most appropriate ticket for their journey. The results of the research show that 20% of mystery shoppers were unable to do so and do not choose the appropriate ticket for their journey. 13% of these would potentially have suffered financial detriment through paying too much for their ticket, whilst 7% selected a ticket that did not have the required flexibility, either by route or train operator (with the majority paying less than the required amount for their journey).

2.14 Progress to address the five areas identified in our Measuring Up report has been mixed. Mystery shoppers' ability to understand the terminology used on the TVM was overwhelmingly positive and most felt that no jargon was used. However, whilst the research identified some areas of improvement across individual operators, it is clear that more needs to be done across the sector. In particular, the research results show that limited progress appears to have been made on providing information about what can be sold on the TVM and elsewhere, on giving key information about ticket restrictions and validities, and on providing information on the timing of off-peak sales. Giving passengers more information in these three areas is a key part of meeting passengers' needs and expectations.

2.15 The research demonstrates a high degree of preparedness amongst mystery shoppers to abandon the TVM transaction and go to the ticket office instead. A passenger's adverse experience when using a TVM may result in them not using it in future and instead rely on the ticket office. Studies in a variety of sectors have also shown that an individual is likely to share information about their adverse experience with a particular service with around 10 others. Therefore, failing to make improvements to TVMs may serve to increase pressure on ticket offices.

3. Chapter 3 – Train operators’ progress to address TVM issues

Summary

In this chapter we provide background to our discussions with train operators, a summary of the main areas of discussion, and the areas for further action.

Background

3.1 We contacted all train operators in 2015 to seek information about the measures they were taking to improve TVMs. The results of this request were summarised in our Measuring Up report. As part of this current review we wrote to each train operator to gauge their progress to address the informational issues identified in the Measuring Up report 12 months on from the original request. We also asked each train operator to describe how they were meeting the principles of the Code of practice on retail information in relation to TVMs. To better understand their replies we discussed the responses directly with each train operator in December 2016 and January 2017.

Responses from train operators

- 3.2 It was clear that there is a high degree of activity already underway or planned in relation to TVMs by some train operators. Much of this is dictated by new franchise commitments. Conversely other train operators were less proactive in replacing or updating their TVMs.
- 3.3 Train operators anticipated that the changes they were introducing to their new TVMs would enhance the TVM customer experience and provide better information to enable the most appropriate ticket to be purchased. There were a number of examples of innovation cited by them such as smart kiosks, an intuitive ticket buying process called ticket wizard, and a user interface which replicates the ticket office experience (for example, by adding a video link from the TVM to the train operator’s customer service centre, enabling passengers to receive help from staff at a point of purchase). Some train operators also deploy staff at or near the TVM to help passengers with their TVM purchases.
- 3.4 A number of train operators planned to use the developments to enhance their general service offering to customers such as providing live train running information, train capacity information, and network maps on the TVM. For the train operators that do not already provide these, other changes include the introduction of Groupsave tickets and Railcard discounts to the TVM offering, contactless payment, and Smartcard readers.

- 3.5 There was a concern expressed by many train operators that enhancing the service and product offering from the TVM might have unintended consequences for example increasing the time the passenger spends at the TVM. Some had sought to address this by providing dedicated TVMs selling only the most popular journeys with accompanying information to make this clear or by turning off the video link help facility during peak periods.

RDG 10 point plan

- 3.6 Train operators had a varying degree of knowledge of and involvement with the RDG 10 point improvement plan for TVMs (see chapter 4). Those operators going through the contracting process for new TVMs had made compliance with the 10 point plan a contractual obligation for TVM suppliers. Other train operators reported being at different stages in the 10 point plan implementation process.

Areas for action

TVM 'good practice'

- 3.7 The research has identified areas of good practice where all train operators need to take action. These include **the provision of clear, useable and timely information on the product range, ticket restrictions and validities, and on and off peak sales** so that passengers can make informed decisions when purchasing a ticket from the TVM. In particular:
- on the *range of products* available, many mystery shoppers did not see any information about the types of tickets that could be purchased from the TVM or that other, possibly cheaper fares might be available from the ticket office.
 - on the *information about ticket restrictions and validities*, many mystery shoppers could not find any information alongside ticket prices and of those that did, many found it difficult to locate.
 - in relation to *on and off-peak tickets*, many mystery shoppers found it difficult to get information about times, could not find information about when tickets could be used, and did not understand the restrictions on travel.

Voluntary TVM price guarantee

- 3.8 Train operators must work hard to build trust and in turn demonstrate publicly that they are responding to passengers' needs and are treating TVM users fairly.
- 3.9 It is important that rail passengers can be confident that they are paying the right amount for their ticket when making a purchase using a TVM. The introduction of a voluntary TVM price guarantee by train operators to give a refund of the additional ticket costs where the passenger finds that they could have bought a cheaper ticket

than the one they did buy may increase passengers' confidence when using TVMs. We are aware that at least one company, C2C, has made a 'Right Ticket, Right Price'¹¹ commitment which provides a refund of the difference in costs between the two ticket prices (in C2C's case offering twice the amount), and ScotRail¹² also has a Price Promise scheme which makes a similar commitment.

- 3.10 We view a form of TVM price guarantee to be good practice as it could provide redress for consumers who have incurred financial detriment as a result of not selecting the most appropriate ticket for their journey. We have therefore recommended to all train operators that they make a similar commitment to TVM customers.

TVM penalty fares

- 3.11 As noted above, our research found that 7% of mystery shoppers selected a ticket that did not have the required flexibility, with the majority paying less than the required amount for their journey and effectively 'underpaid'. A passenger travelling in these circumstances may have faced the possibility of incurring a penalty fare despite having made a genuine attempt to purchase the appropriate ticket for their journey from the TVM.
- 3.12 We recognise that revenue protection is an issue for the industry. However, it is important that where a passenger has made a genuine attempt to purchase the appropriate ticket from the TVM they should not be subject to the same approach to revenue protection as passengers attempting to evade payment. Therefore, we have asked train operators to review any revenue protection policy, instructions, and guidance given to relevant staff to assure themselves that they adequately reflect this situation and discretion is used in such circumstances.

TVM complaints

- 3.13 As part of our review we sought data from train operators to establish the extent to which rail passengers are making complaints about TVMs and the action being taken by them to address the issues being raised. Whilst the number of complaints is relatively small, we intend to enhance the data we collect from train operators regarding passenger complaints about TVMs. This will help us to better understand and monitor the areas of concern for TVM users.

¹¹ <http://www.c2c-online.co.uk/about-us/our-policies/right-ticket-right-price-commitment/>

¹² <https://www.scotrail.co.uk/about-scotrail/our-price-promise>

4. Chapter 4 – Rail Delivery Group industry progress and action

Summary

In this chapter we provide a summary of the measures taken by the industry to improve TVMs, and the areas where further action is required and for which we have asked RDG to provide a public response.

Industry progress

- 4.1 In December 2014 the Minister of Transport hosted a TVM summit which was attended by train operators, RDG (then known as ATOC), TVM suppliers, ORR, and Transport Focus. One of the outputs of the summit was the creation of the TVM design guidelines¹² for the graphical user interface of TVMs to reduce the risk of passengers purchasing the wrong ticket. These guidelines were launched in July 2015. 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 2016.
- 4.2 We noted in our Measuring Up report in June 2016 that the plan was aimed at delivering or facilitating improvements in a range of areas in the next three to six months, including those which would address some of the five issues we had identified in our report. We also noted that RDG had been working with train operators and TVM suppliers on a number of work-streams, including the delivery of a new Product Management System (PMS)¹³ for the industry. It was originally anticipated that PMS would go live in May 2016 but it is now delayed until February 2017.
- 4.3 Since last summer and over the course of this TVM review we have met regularly with RDG to discuss progress on delivering the plan. This constructive dialogue together with the addition of further dedicated resource in RDG in the autumn to deliver the plan has seen positive progress being made in a number of areas. We also note that RDG has recently made a number of commitments as part of the *Action Plan for Information on Rail Fares and Ticketing* including delivery of the improvements set out in the 10 point plan.
- 4.4 We have encouraged RDG to publish a customer-facing document which demonstrates that it is proactively taking ownership of and leadership on the issue

¹² <http://www.raildeliverygroup.com/what-we-do/publications.html?task=file.download&id=469771183>

¹³ PMS is intended to provide significant improvements in the quality of data available to train operators, in areas such as route descriptions and Off-Peak validities.

and is serious about making improvements. We therefore welcome the recent publication of the 10 point plan¹⁴ as a positive step toward greater transparency.

Areas for action

4.5 We recognise that TVM suppliers and train operators have roles to play to ensure that the improvements in TVMs are realised, and it is important that the relevant parties are held to account for the delivery of those improvements. RDG has a key industry leadership role ensure effective action is taken across the sector. We have therefore written to RDG regarding the following areas and have asked them to provide a public response.

TVM 'good practice'

4.6 As noted above, the research results demonstrate the need for further action in the short term across the sector. It has identified a number of key areas of good practice where train operators should focus their efforts particularly **regarding information on the range of products available, ticket restrictions and validities, and on/off peak tickets**. Giving passengers more information so that they can exercise greater choice is one of the main factors in helping them to select the most appropriate ticket for their journey needs. We have asked RDG what improvements they expect to be delivered at an individual train operator level in the good practice areas in the next six months.

TVM price guarantee

4.7 It is important that rail passengers' can be confident that they are paying the right amount for their ticket when making a purchase on the TVM. We see a form of TVM price guarantee to be one way of building trust and demonstrating publicly that train operators are responding to passengers needs' and have recommended to all train operators that they make such a commitment. We have asked RDG whether they support the introduction of a price guarantee.

RDG action plan

4.8 RDG has agreed in the *Action Plan for Information on Rail Fares and Ticketing* to produce a transparent roadmap of current capability to identify what can be done in the short term including the delivery of the 10 point plan. However, it is currently unclear what the industry parties have committed to in the 10 point plan and how this will lead to improvements at an individual train operator level particularly in the good practice areas in the next six months. This roadmap should set out what will be delivered, by whom and when, and what improvements TVM users will see as a result. We will test the success of these changes in our next research.

¹⁴ <http://www.raildeliverygroup.com/component/arkhive/?task=file.download&id=469771182>

Future TVM research

- 4.9 RDG conducts its own annual mystery shopping TVM research. It shows a higher, and a year on year increase, in purchasing accuracy. RDG's published results for 2014 and 2015¹⁵ show a level of accuracy of 91% and 97% respectively. We understand there have been some changes in the methodology used by RDG; in 2014 (and 2013) the ticket type scenarios used for the mystery shops were to purchase 189 cheapest tickets and six tickets with required flexibility, whilst in 2015 the ticket type scenarios were 187 with required flexibility and 13 cheapest tickets.
- 4.10 We intend to repeat our own research later this year to establish whether the experience of passengers in this area has improved, and will publish the results at an individual train operator level. We will discuss with RDG why the results of our research are different from theirs.

¹⁵ <http://www.raildeliverygroup.com/component/arkhive/?task=file.download&id=469770969>

5. Chapter 5 – TVM suppliers

Summary

In this chapter we provide a summary of comments from train operators about their interaction with TVM suppliers, together with a summary of our meetings with TVM suppliers themselves to gauge their views of the TVM market.

Train operator relationships with TVM suppliers

- 5.1 Train operators relationships with the three main TVM suppliers were mixed. Some reported problems, in particular the lack of responsiveness and proactivity on occasion to resolving problems or providing updates to existing TVMs was noted. There was a concern that the focus of some suppliers was more toward acquiring new business than servicing current clients. Those train operators who had recently engaged with TVM suppliers in the contracting process and subsequent award were more positive about their interaction.
- 5.2 Train operators also highlighted a contrasting approach between TVM suppliers, particularly in terms of those who add value by proactively offering innovative ways of delivering TVM functionality over and above the requirements as set out by train operators. The lack of sharing of information by suppliers about innovations developed for other train operators was highlighted as a source of frustration.

Views of TVM suppliers

- 5.3 We have met separately with the three main suppliers of TVMs to train operators: Parkeon; Worldline; and Schiedt & Bachmann, to understand their view of the TVM market. Whilst some of the discussion was commercially sensitive we were very grateful for their open and helpful approach.
- 5.4 As illustrated in the section above, TVM suppliers are developing a range of innovative TVM products in response to the needs of train operators. They noted that change was largely driven by where the train operator was in the life of their franchise; new franchise holders were keen to meet their agreed commitments whereas some other franchisees were either less able or willing to fund changes to TVMs even when they are mandated.
- 5.5 While the three main TVM suppliers said that they are influenced in their investment decisions by the requirements in the franchise agreements, and the specifications set by the train operators, many pro-actively provide innovative solutions and ideas. Some also invest in their own passenger research to enhance their offerings. However, they reported that what they can offer is limited by the design of the

industry fares system, and often slowed-down by the industry rules relating to accreditation.

- 5.6 TVM suppliers confirmed that they are familiar with the requirements of the TVM guidelines and the 10 point plan. TVM supplier engagement with RDG regarding the latter varies, and many said that they would benefit from greater opportunity to share, discuss, and receive feedback on the 10 point plan developments.
- 5.7 TVM suppliers hold user group meetings with the train operators. In view of the comments from train operators above, these could be used to greater effect to share new and innovative developments in addition to disseminating information on forthcoming mandatory changes.



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