



Transport Committee
House of Commons
By email

Our ref: RTIG-c109-mc
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Dear Committee members

Bus Services Bill enquiry: evidence submission

I am pleased to enclose a paper from the public transport technology association RTIG, which I trust may be of use to you during the forthcoming inquiry into the Bus Services Bill.

In line with RTIG's role, we have limited our input primarily to the following two Committee objectives:

- *The effectiveness of the measures relating to open data and how these could improve the accessibility of bus transport*
- *Measures in the Bill relating to ticketing schemes and new technologies*

We have tried to make this paper self-contained, but of course are prepared to appear to give oral evidence should the Committee so wish.

We do not regard any part of this submission as confidential.

Yours sincerely

A handwritten signature in blue ink, appearing to be 'MC' followed by a flourish.

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The Bus Services Bill 2016

August 2016

1. Executive summary

- 1.1. With regard to its areas of interest – namely, bus information and ticketing technology – RTIG supports the aims of the Bill, and its general approach as an enabling Bill. We believe that it offers the potential to significantly improve the availability of high quality bus information, particularly real time information.
- 1.2. Specific obligations as determined by empowered authorities, including under secondary legislation, will need to be carefully designed if they are to be realistic and effective in practice. We encourage all those authorities to work together, with the operators and the systems industry, to define and agree data specifications that are practical, open and purposeful.
- 1.3. We consider that the Bill, in its current form, provides insufficient clarity in setting the framework for this, and additional provisions may be necessary in order to ensure it fulfils these aims. These may include mechanisms:
 - To foster maximum consistency across the nation, in order to support end-to-end journeys
 - Supporting this, to maintain suitable national data/process standards, perhaps through a new duty on the Secretary of State
 - To ensure the provision of adequate base data on the road network, perhaps through a new duty on local highways authorities
 - To ensure that obligations are justified by clear requirements from the empowered authorities
 - To separate the use of powers under the Bill from the regulation of their use, perhaps including appeal mechanisms

2. About RTIG

- 2.1. RTIG is a community body¹ which brings together local authorities, public transport operators, the systems industry and the service sector. It was formed in 2000 to develop nationally-accepted standards and good practice in the delivery of real time passenger information on bus services. Its members cover the majority of the UK, and some overseas, bus services.

¹ See www.rtig.org.uk.

- 2.2. Under its Constitution² RTIG is “an independent, non-political organisation” whose principal aim is “to enable technology to deliver better passenger transport services, cost-effectively”. Because of this:
- We avoid making comments on areas outside our remit, even where our members share a strong common view. (Members are encouraged to make their own submissions.)
 - Where an issue lies within our remit, but our members take strongly divergent views – happily, a relatively rare occurrence – we will highlight this divergence but will not normally declare a position.
- 2.3. Specifically in this submission, therefore, our comments relate principally to Section 17 of the Bill (“Power to require provision of information about English bus services”), and to the technical but not the commercial aspects of Section 7 (“Advanced ticketing schemes”).

3. Factual evidence

The need for the Bill

- 3.1. The implementation of bus information and ticketing facilities around the UK has been left largely to market forces over the past few decades. While this has allowed a significant amount of innovation through trial and error – with quite a lot of both – it has resulted in a patchwork provision.
- 3.2. For a variety of reasons, both commercial and practical, current information and ticketing services vary significantly in type, in quality, and in structure; passengers are too often left confused, or lose trust, or both. While it is difficult to put a quantitative market cost on this problem, it clearly does have an impact on the attractiveness and competitiveness of bus services.
- 3.3. This Bill provides an opportunity to significantly improve the consistency, and therefore the quality and utility, of bus information, and to significantly simplify the provision of more integrated ticketing services.

Whether the Bill addresses the correct issues

- 3.4. For the aspects within RTIG’s remit, the Bill generally addresses the correct issues.
- 3.5. In Section 17, the Bill identifies in general terms the nature of the relevant information, the nature of its provision, and the role of the relevant authorities who may require provision of information. Section 7 covers the definition of an “advanced ticketing scheme” for the purposes of the Bill.

² *The RTIG-INFORM Constitution*, RTIGA002-1.0, 16 March 2009 (available through the RTIG website and on request).

- 3.6. Both sections address the options for local variation. Section 7 imposes duties on local authorities for consideration of travel outside their areas. We consider that these provisions are relevant and necessary, although they beg the question of how to ensure an adequate level of national coherence.

How Advanced Quality Partnerships and Enhanced Partnerships are likely to contribute to the Government's aims of improving services for passengers and enabling a successful commercial sector

- 3.7. This issue lies outside RTIG's remit, and we make no comment.

The appropriateness of limiting the automatic right to introduce franchising to combined authorities with elected mayors

- 3.8. This issue lies outside RTIG's remit, and we make no comment.

The likely effect of franchising on small and medium operators

- 3.9. This issue lies outside RTIG's remit, and we make no comment.

The effectiveness of the measures relating to open data and how these could improve the accessibility of bus transport

- 3.10. Generally we believe that the measures enabled by the Bill would be positive for bus transport. We have three comments, relating respectively to the specificity, delivery and consistency of the obligations, which risk undermining the benefits of the Bill unless they are addressed.

- 3.11. First, on ***specificity***, the Bill itself is very generic on the nature of the information to be provided, the circumstances of provision, etc. We think that this is sensible, given the complex and changing social and technological landscapes involved. However it means that there is little clarity on the exact nature of the obligations.

- 3.12. From a practical perspective, some kinds of data are much simpler to provide as open data than others. Route and timetable data are relatively simple data types, common across operators, and change only slowly with time. Real time information is also fairly simple, but its dynamic nature imposes significant additional challenges in data management. Fares change less often but may be much more complex data types.

- 3.13. Further, a large operator with a central scheduling system, and a technical team able to understand and work with the relevant IT standards, is much better placed to provide open data than an operator with a handful of vehicles and a paper-based scheduling system. The potential solutions to this (for example, local authority-provided web portals) have yet to fully prove themselves robust.

- 3.14. We suggest that the Bill could be improved by including a duty on the Secretary of State and on local authorities to have due regard to the practicality of any obligation imposed on third parties. It would be perverse to impose requirements which are difficult or impossible to meet. Because of the deeply technical nature of the systems that deliver these services, this is seen as a real risk.

- 3.15. In similar vein, it might be helpful to include a mechanism for appeal if an operator (or a local authority, if the Secretary of State is the requiring authority) feels that an unreasonable obligation is being placed upon them.
- 3.16. Second, on **delivery**: while the Bill provides for obligations to provide information, it is silent on how fulfilment of those obligations will be assessed. While some of this will doubtless be clarified through the specification of “the manner and form in which it is to be provided”³, there is little clarity on what these might look like.
- 3.17. To take a trivial example, there is little public value in an operator emailing (under obligation) a list of routes and timetables to the local authority, if the list never reaches the public. More substantively, real time information in particular is valueless if it is provided very late.
- 3.18. Again, where information is provided, it is axiomatic that it needs to be accurate, timely, complete, etc. In practice many of the problems with bus information have been associated with this kind of problem: that is, a data service is provided, but it isn’t very good. The reasons are many and complex, but some indication is required on what an acceptable data quality level looks like.
- 3.19. We suggest that the Bill needs to be clearer on the meaning of “provision”, perhaps with an indication of expected (or typical) formats, recipients, and downstream obligations or expectations on those recipients. For example, perhaps an operator needs to have the opportunity to challenge a local authority who has failed to make adequate or proper use of data provided, especially where there is a tangible cost to making the required data available.
- 3.20. Further, much of the data from operators, specifically about routes, depends critically on the provision of underlying data from the local authority, specifically about the road network and bus stop locations and facilities. Currently this, like operator data, is provided on a voluntary basis; if operator provision is, under the Bill, to become a statutory requirement, logically local authorities should have a corresponding duty to ensure that the necessary base data is made available.
- 3.21. Finally, on **consistency**: to be most useful to the public, or to independent parties providing services to the public, information from different operators and different local authority areas needs to be available in a broadly common form, and should ideally be complete across the whole operator base.
- 3.22. We acknowledge that what is practical in some areas might be unpractical elsewhere. That notwithstanding, it is our experience that variations in the use of available standards has made projects more complex, difficult to deliver and less capable.

³ Clause 17 (1), sub 141A(4)(c) of the draft Bill; lines 9-10 on p69.

- 3.23. Relevant standards do exist, and they are being used by local authorities, bus operators, and systems developers. However the relevant standards are hugely complex, and still evolving⁴. For instance, standards for timetable data are much more mature than those on fares data.
- 3.24. While – because of this complexity – the Bill is not the correct place to define the details of how this will be achieved, we believe that it would be helpful to clarify that consistency is a primary goal of the Bill. That is, the Bill should state that it is a duty of any relevant authority to set the obligations on data provision, manner of provision, advanced ticketing schemes etc in such a way as to foster and improve the consistency of provision.
- 3.25. Specifically, we suggest that the Secretary of State should have a duty to provide, maintain, authorise or facilitate the necessary data specifications applicable under the Bill. Then, in obliging a local operator to provide data, a local authority should be making use of the relevant national specifications.
- 3.26. National services like Transport Direct (when that was operational) and Traveline, and fora like RTIG, have historically assisted in the process of defining and agreeing practical usage of available standards. This has been to the mutual benefit of policymakers and practitioners, and we would strongly encourage this to continue under the new, statutory, scope of the Bill.

The basis for a prohibition on new municipal bus companies delivering bus services, particularly in non-franchised areas

- 3.27. This issue lies outside RTIG's remit, and we make no comment.

Measures in the Bill relating to ticketing schemes and new technologies

- 3.28. Our overall view is that the Bill makes some very specific assumptions about the technical nature of an "advanced ticketing scheme", which are restrictive and arguably already out of date.
- 3.29. Further, it fails to clarify adequately the nature of the institutional relationships (commercial, regulatory, procedural) between authorities and operators. For example, it is unclear when and how an authority could oblige local operators to participate in a scheme, either at all or in respect of specific ticket types.
- 3.30. To begin with, the draft Bill does not mention technology; and it does not include any definition of a "ticket". Although various types of ticket are defined, these represent only a subset of possible commercial and contractual arrangements between passengers and providers of public transport.

⁴ This statement mainly applies to technical standards for data and systems interfaces. Common approaches to system design, stakeholder responsibility, processing algorithms, and many other aspects of delivery have fewer documented standards but would similarly benefit from increased coherence.

- 3.31. While it is beyond RTIG's remit to comment on the pros and cons of the alternative arrangements, it is clear that new technology-mediated opportunities exist which could hamper the implementation of the Bill, in its current form; and conversely the Bill could unhelpfully restrict market innovation in the bus sector.
- 3.32. For instance, one of the key developments affecting both UK and overseas is "account based services" – also known as "account based ticketing" or ABT. This has many potential models of implementation, but could involve (for instance) billing monthly in arrears for journeys taken⁵.
- 3.33. The interaction of ABT with advanced ticketing schemes (as defined in the Bill) is very difficult. If, for instance, a person has two accounts – one with the local authority, and one with a preferred local bus operator – and conducts a local journey, which account gets charged to? The problem is especially difficult if, as could well happen, both schemes use a connectionless bank card as an identifying token.
- 3.34. To complicate this further, suppose the operator has arranged with a local coffee shop for a free cup of coffee with 10 in-month journeys taken under his account. Multiple accounts could make it very difficult for a passenger to understand to know whether they could claim (or should complain).
- 3.35. While these are not reasons to drop the provisions on advanced ticketing schemes, which do indeed help to fulfil some genuine passenger needs, they do indicate that there is the potential for some significant unintended consequences which could undermine the goals of the Bill. We suggest that two things could be done to help mitigate this.
- 3.36. The first is to broaden the definition within the bill of "advanced ticketing schemes" to acknowledge the likelihood of newer contractual models, up to and including what has become known as "mobility as a service" (MaaS)⁶. Coupled with this should be an expectation (or even a duty) for proposed schemes to include an analysis of the implications on the local private bus services market, to ensure that the net impact is beneficial for passengers. This would also help to forestall the worst of the unintended consequences.
- 3.37. The second involves the operation of a service which performs observatory and advice functions: seeing what models work, and where problems arise, and guiding new developers of advanced ticketing schemes to more robust solutions. It is, however, beyond our remit to comment on what the governance and authority of such a service should be.

⁵ TfL's daily caps are perhaps the best known UK example of ABT, albeit quite a simple one.

⁶ Further to the point made at para 3.29: if a local authority could oblige a bus operator to participate in a scheme, would they also be able to oblige other publicly-available transport providers - such as Uber?