Online Submission

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Dear Sirs

Winter Resilience in Transport: RTIG's evidence to the Transport Select Committee

Thank you for the opportunity to respond to the consultation at reference.

Executive summary

1. The overall resilience of the UK's transport network is dependent not only on the infrastructures and vehicle used to deliver it, but on the access that people have to it. Not only must services run (or, for safety, not run), but people must be told whether they are running.

2. In addition, the ability of those operating transport networks to have accurate information about the state of their networks is increasing. Better information on the state of road, rails and the vehicles on them leads to better decision making.

3. Continued investment in improving real time information about the network, given technology developments, has been recognised as essential in previous reviews. This remains, in our view, an important step.

About RTIG and this submission

4. RTIG is a community group whose members include UK local authorities, public transport operators and system suppliers, with representatives from Government and other key industry groups. Our aim is to further the effective use of information technology in the public transport sector, through sharing experience and through developing common approaches and specifications.

5. This letter provides the corporate view of RTIG as a group; individual members may have different perspectives and may, of course, make their own submissions.

6. Our response focuses on the issues within our competence, which relate to the effectiveness of monitoring, management and operation of public transport through information systems. Although the Select Committee's role is clearly much wider than this, we are not in a position to comment on:

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- Physical resilience of vehicles or infrastructure assets
- The resilience of other transport modes such as air and marine

7. We have commented below on the specific questions raised in the consultation document. We would of course be happy to expand on these points, or to address other resilience issues, if the Committee so desires.

How resilient are the UK's transport networks (including road, rail and air) to adverse winter weather?

8. Bad winter weather is not new, and the UK's transport market has evolved to take account of this. However there is always a trade-off between cost and reliability. It would be easy to exaggerate the difficulties that recent years have caused; for instance, the impact of flooding has arguably had a much more damaging impact on people's lives that the disruption on transport. Nevertheless problems have clearly arisen, and need to be addressed inteligently.

9. Transport resilience means more than just having clean dry rails and gritted roads. Information technology is now core to the business of most (though not all) transport operations, and is relied on by decision makers in a number of ways:

    - Deciding whether to run or cancel a service
    - Deciding where to intervene with protective/preventive activities
    - Monitoring vehicle progress for safe operation
    - Understanding the impact on staff availability
    - Determining what, how and when to communicate with passengers, so they are not left stranded *or* forced to cancel a journey that they could in fact, have made

10. In public transport, because the operation is divided between the private sector and the public (or quasi-public) sector, these challenges have a particular acuteness.

11. Managing passenger information and managing service delivery are strongly connected. A large build-up of passengers at rail stations or bus stops when services aren't running makes the job of transport providers much more difficult, and can cause safety problems.

12. With public transport, the operator's first priority is the safety and security of passengers. There is a continual tension between running a service where the operator is pretty confident, and responding to the small possibility of risk; it can be a case of "damned if you do and damned if you don't". There is no easy answer to this.

13. However what should be possible is the operator's ability to ensure that his staff and passengers have accurate, up-to-the-minute information on service

disruptions available. Here it is clear that the UK could do better. It is true that the technology is complex and not always reliable; but it is no longer innovative.

14. In summary, the transport network is fairly resilient in most places.

What lessons have been learned since the severe weather experienced in the winter of 2009-10? What practical changes have been made to ensure the UK is now better equipped to deal with severe weather?

15. Sometimes travel disruption is inevitable; there will be occasional situations where it is impossible to keep transport running smoothly. Times of severe weather such as heavy snowfall or large-scale flooding make it very difficult to run a complete transport service. There may even be occasions when it is better for public safety to close elements of the system altogether. Buses, for instance, are unlikely to be able to travel on the roads if the police are requesting that motorists avoid driving. Winter resilience needs to be about more than keeping transport running; it also needs to be about making the best decisions about keeping the transport systems safe for users. Sometimes that will mean closing it.

16. RTIG has worked on an industry-wide basis on handling disruptions since 2008. Our document, *Managing Buses during Civil Contingencies* (RTIGPR006-D003-1.0) addresses disruption from a security perspective, following the 7/7 bombs in 2005. The aim was to build on the Civil Contingencies Act, to develop a framework for how public transport can support the emergency services' command structure, specifically (because of our remit) on how technology can support managers both during and after an incident.

17. During 2010, after several significant snowfalls, David Quarmby was commissioned to produce his "Winter Resilience Review", concluding among other things that there was an over-reliance on technology. Quarmby said, inter alia, that:

> *residents and public transport customers have growing expectations about the quality and timeliness of real-time information about transport networks and services during severe winter disruption, and the means of receiving it. Given the rapid proliferation of communication technologies and channels available, local authorities and transport operators should ask themselves whether there is room for further development in the real-time services they currently provide.*

18. Similar conclusions were drawn by Passenger Focus in its April 2013 report *Bus Passengers' experience of* delays *and disruption*, their conclusions include the following:

> *The ability to 'push' information that is specific to an individual's journey is key: bus passengers may not come looking for information and are wary of being bombarded with irrelevant details about problems 'on the other side of town'. In the main, apps should be regarded as a supplement to real-time information at bus stops rather than a substitute for it… [O]perators of real-time information systems should strive for a very high level of*

accuracy: passengers who have encountered systems which count down to zero and a bus never appears, or where the predicted arrival time 'jumps around', are reluctant to trust the information in future…

19. We support these conclusions and consider that they remain valid today: our document *Managing Disruptions: the issues involved* (RTIG-PR015-D001-1.0) draws on the experience of some key transport authorities (ATOC, SYPTE and TfL) to identify some of the process issues that managers need to attend to. We have worked since then to develop more specific technical and operational guidance, including with Passenger Focus on the needs of travellers, and indeed have an active and multi-stream project underway now to develop good practice on managing disruptions.

20. Our working group is made up of Local Authorities (both PTEs and smaller authorities), systems suppliers, Passenger Focus, Traveline and Guide Dogs. This gives us a wide set of perspectives both from passenger groups, including those with disabilities, as well as from those who are providing the information and the systems which disseminate it. The work which we have undertaken is challenging. It will not be complete before this winter and will require regular review as our understanding develops and information systems mature.

21. Some key interim conclusions include the following:

    - Information should be provided through as many channels are possible: station staff, public address, real-time signage, web services, social media, mobile apps etc.

    - Passengers should not be expected to work hard to find the information they need.

    - Stick to the basis, but make it personally relevant: is my service disrupted, how long will it last, what else can I do?

    - Make sure information is consistent and robust. Of course this becomes very challenging if the situation is developing and changing rapidly.

    - There is a need to clarify passengers needs and expectations for how information is presented.

    - There is a need to codify, and possibly to strengthen, the business case for deploying relevant tools.

How well prepared are the Government, local authorities and transport providers for adverse winter weather? What more should be done to ensure a coordinated response?

22. Decisions about what level of service it is safe to provide will often need to be made once the weather has arrived and may require regular decisions as the situation develops. Much can be achieved by forward planning and learning lessons from previous instances of heavy winter weather. However, human judgment and human input will always be required to ensure the best response. Winter resilience is, therefore a complex relationship between what can be

automated through expert planning and systems and the reactive judgments which are required as a situation develops. This is as true of information as it is of the transport services themselves.

23. Currently, information provision during disruption is patchy. In places like London and on the core rail network, systems for getting information to passengers are fairly well developed. London, however, has the advantage of a bus fleet which fully equipped with tracking and information facilities.

24. In other areas around the country and within the public transport system those systems are less well developed. There are some good examples of positive development. More is being made of the opportunity of co-locating operations management of buses and the road networks, and even to host operator personnel within a neutral public space – coming some way towards replicating the capabilities of TfL's CentreComm.

25. The technology landscape is not yet perfect – in particular, comprehensive deployment raises serious funding challenges. Encouragement of the supply industry towards robust low-cost signage would be a major step in this direction. So would the full use of GPS tracking on rail vehicles: train information currently relies on detecting vehicles as they pass monitoring points, so a stuck train can show as "on time" for a long time.

26. However the most significant opportunity for improvement lies in the procedural aspects of incident management. The rail industry's code on "Passenger Information During Disruption" (PIDD) is a high-level guide but does not present specific solutions. Furthermore the rail marketplace is considerably simpler in structure than the bus network.

27. It is particularly difficult to get whole journey disruption information. This will require time, experience and resource, and we are certainly not there yet.

I trust this is helpful.

We do not regard any of the foregoing as confidential.

Yours sincerely

David Brown
Chair