House of Commons

Transport Committee

Keeping the UK moving: The impact on transport of the winter weather in December 2010

Fifth Report of Session 2010–12

Volume II

Additional written evidence

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The Transport Committee

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Committee staff

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List of additional written evidence

(published in Volume II on the Committee's website www.parliament.uk/treascom)

List of unprinted written evidence

The following written evidence has been reported to the House, but to save printing costs has not been printed and copies have been placed in the House of Commons Library, where they may be inspected by Members. Other copies are in the Parliamentary Archives (www.parliament.uk/archives), and are available to the public for inspection. Requests for inspection should be addressed to The Parliamentary Archives, Houses of Parliament, London SW1A 0PW (tel. 020 7219 3074; email archives@parliament.uk). Opening hours are from 9.30 am to 5.00 pm on Mondays to Fridays.

1 David Walsh

2 Additional material from Piers Corbyn

Written evidence

Written evidence from Lincolnshire County Council (AWC 01)

LINCOLNSHIRE HIGHWAYS WINTER MAINTENANCE OPERATIONS

REVIEW OF OPERATIONS DURING SEVERE SNOW EVENT BETWEEN TUESDAY 30 NOVEMBER AND MONDAY 6 DECEMBER 2010

General

It was a County of two halves. Area to the South of Sleaford had minor snow with no appreciable accumulations. North of that area experienced a major snow event.

Weather

1. Overall Weather forecasts from the Met Office were accurate and timely. Forecast provided under contract through the Open Road Service.

2. Forecasts through the period varied between:

(a) 30/1 Tuesday/Wednesday—Widespread spread snow 2–5cm, 15–20cm locally. Minimum road temps −2°C.

(b) 5/6 Sunday/Monday—No snow. Minimum road temps −10°C.

3. Particular problems on hills in the Lincolnshire Wolds and in and around Lincoln due to its topography.

4. South and West areas of the county were fully open with no major issues.

5. North and East areas had access to all villages by at least 4x4 vehicles. All main roads were passable with care with the exception of some sections of hill. However roads off the treated network were subject to significant ice accumulations with ongoing extreme low temperatures −10 to −15. This was especially true of back roads, estates and footways.

Lincolnshire's Winter Service

6. State of readiness on 1 November:

(a) 30,000 tonnes of salt in stock. (Policy is to have 23,000 tonnes in stock for an average winter).

(b) This equated to 75 runs at 20gms dry (400 tonnes) which is maximum treatment for snow.

(c) 48 gritters all with snow ploughs and one snow blower.

(d) 56 Farmers and Contractors on call across the county to aid with snow clearing.

(e) Mutual aid arrangement in place with District Councils. Salt supplied by LCC.

(f) Utilised Fire & Rescue services for hand salting of hills and footways. They managed to get through the grid lock to get salt supplies by use of blue lights. Initially some of our gritters were stuck in the grid lock. This was relieved the next day once the joint operations room was established.

(g) Local Resilience Forum set up Silver and Gold (Tactical and Strategic groups) which aided implementation of mutual aid.

(h) Police and Fire & Rescue staff collocated with Highway staff in Snow Room set up in the highways 24 hour emergency control room. This had access to all the winter maintenance systems and also CCTV.

7. Network:

(a) Lincolnshire precautionary salts 3,008 km out of 8,960km. 34%.

(b) A defined network of footways that are treated—when resources are available.

(c) Cycle tracks are not treated.

8. Mutual Aid Arrangements:

(a) Mutual aid arrangements have been set in place with District Councils for snow clearance of footways.

(b) Parish Councils have been written to by the Director on self help issues with a copy of the Snow Code developed by the Department for Transport—see attached.

(c) Also an extra 200 grit bins had been provided on top of the 1,500 already out on the network.

9. Finance:

(a) Despite significant reduction in overall highways budgets the winter service has been protected therefore no change in finances. Service financed for 85 turnouts and two snow days which this winter is £4.36 million.

(b) Pressure on winter funds from two consecutive bad winters require that the adequacy of Adverse Weather fund will need to be reviewed.

10. Lessons learnt during that ten days were that:

(a) Improved communications and protocols need to be developed with emergency services. Example of poor communications resulted with the police stopping all traffic on the hills, because of risk of accidents, but highways needed the traffic to continue to assist the action in cutting through the snow to enable the salt already spread to work.

11. Snow clearing ability:

(a) Snow clearing ability has been much reduced over the last 20 years mainly because of reduced workforce numbers due to more efficient general service delivery. Workforce available to LCC to man gritters and clear snow has reduced from 800 in the early 80s to around 250 now. The number of farmers available with snow clearing equipment has also reduced over this period. Both reductions are due to the move to more contractual labour forces than having own directly employed labour and as a consequence this cuts down on capacity and resilience. This will be exacerbated by significant reductions in highway budgets.

Communications and public expectations

12. Overview:

(a) Fully engaged with all media outlets through county communications team and highways staff. BBC Radio Lincolnshire is a full member of the both Silver and Gold teams. Utilised radio stations to get messages out. Regular hourly spots by highways staff.

13. Main public issues:

(a) A very split reaction from the public as would be expected. Some wanting every footway and estate road treated now! Unachievable rapid response to significant weather events. LCC has 9.000km of road, 43 gritting routes. This event was equivalent to having to move 4 million tonnes of snow off the road network.

14. Changes to message:

(a) Initial response would be to engender a more realistic expectation is the wider community and to keep people informed.

Quarmby Review

15. Implementation

(a) Lincolnshire was fully engaged with the Quarmby review, both as an authority and through its chairmanship of the National Winter Service Research Group.

(b) July 2010 Report:

(i) Engaged through the local Resilience Forum with District Councils and Health Authority on mutual aid arrangements.

(ii) Increased number of grit bins on the network for self help.

(iii) Reviewed policy on use of grit/sharp sand in winter maintenance operations.

(iv) Improved treatment of footways near transport interchanges.

(c) October 2010 Report and subsequent revision of the Well Maintained Highways Code:

(i) Engaged with Parish Councils and the local press on guidance concerning self help and snow clearance.

(ii) Implementation of revised precautionary salting spread rates.

(iii) Implementation of revised snow clearing practices. This includes a review of existing snow plough equipment to see if it is fit for purpose.

(d) Engaged with Transport Scotland on their proposal to adopt treated brine pre-wet spreading as used in Lincolnshire.

Looking Forward

16. Salt stocks:

(a) Lincolnshire had already ordered an additional 10,000 tonnes for delivery towards the end of December/early January. This is due for delivery on 26 January. This would mean that LCC has had a total capacity of 40,000 tonnes for the whole of the winter of 2010–11.

b) An option on a further 10,000 tonnes for delivery in February has also been taken. This will go towards restocking for the winter of 2011–12.

c) Adverse weather reserve now depleted through need to restock with the additional 10,000 tonnes of salt. Highways will be requesting additional funds from council reserves to pay for extra works necessitated by this event—not guaranteed at this time.

17. Messages to Government:

(a) Clear message from government on what the public can realistically expect in extreme weather events.

(b) Does the government and society wish to fund all highway authorities at a significant cost to deal with one week's disruption a year? This usually happens every five years. Our snow blower has been used for the first time in five years!

(c) Self help—clear expectations that communities will need to help themselves.

(d) Reduction in highways budgets will impact on ability to respond both to the severe weather event and its aftermath.

(e) Look at derogation of certain rules and regulations so that winter gritting can take place more effectively such as:

(f) Make precautionary salting an emergency activity which would then relax drivers hours regulations.

(g) Derogation to use 28 tonne vehicles for winter activities. Would increase the number of vehicles that would be available from the haulage and construction industry during severe weather that could utilise slot in spreaders.

APPENDIX

Date: 23 November 2010

To: The Clerk to the Privy Council

Dear Sir/Madam

GOVERNMENT GUIDANCE FOR SELF HELP ON WINTER SNOW CLEARANCE

Recently, you may have seen in the press, HM Government reference to guidance on self help during periods of severe winter weather.

This guidance has been published following an independent review into the response of England's transport system to severe winter weather. This review was carried out earlier this year, on behalf of the Secretary of State for Transport, and followed two consecutive severe winters across the whole country. The Quarmby Review, as it is called, can be accessed via the internet:

http://transportwinterresilience.independent.gov.uk/index.

Section 11 of Quarmby's Interim Report comprehensively covers the findings, which were developed into Recommendation 15 in the report, stating:

> The Department for Transport should develop, in collaboration with local government representatives and appropriate experts, a code setting out good practice for members of the public, including business owners, in clearing snow and ice from footways. This should:
>
> — be produced by the end of October 2010 in time for the coming winter;
>
> — be short, along the lines of Westminster's advice to its residents;
>
> — set a standard which, if observed, should guard the public against negligence claims;
>
> — be made available to households by local authorities.

It is due to this report and its recommendations that the Department for Transport has developed this national guidance. As David Quarmby said in the report "There were many unhelpful media pieces relating to potential liability of individuals clearing show and ice from the footways outside their homes". Further information can be found at the Direct Gov Website:

http://www.direct.gov.uk/en/NI1/Newsroom/DG_191868

It is from this work that the attached guidance note has been produced. This should allay any fears that you and your community may have had concerning self help and the use of grit bins that have been provided across the county.

By the Autumn of 2009, Lincolnshire County Council had already started a review of its winter maintenance operations, which was completely in early 2010. Copies of this review were presented to the Quarmby Review as evidence of good practice. Lincolnshire County Council's review also highlighted self help guidance and an aspiration to engage more collaboratively with both District and Town/Parish Councils. Two of the actions from the review were:

— In relation to the treatment of footways in severe weather, we recommend that officers explore with District and Town/Parish Councils, the possibility of redeploying operatives from other activities, to assist the clearance of snow and ice from footways. As part of this process, consideration should be given to holding a local conference to engage with Members and other local partners.

— In relation to salt/grit bins, we recommend a leaflet or guidance note should be prepared for Town and Parish Councils, outlining the insurance arrangements.

As can be seen, there is a local and national dimension to utilising the limited resources available, both locally in Lincolnshire and in the UK. The challenge for us all in times of severe financial restraint, is to co-ordinate our actions better and engage where appropriate. To this end, the County Council is placing an additional 200 grit bins across the county, where they meet our necessary criteria, and are for use on the public highway and footways. All grit bins put out on the highway network by Lincolnshire County Council will be re-filled by Lincolnshire's Highways Alliance.

I trust you find this guidance helpful and that it assist you with any further consideration your Council may give to possible ways of encouraging self help within the local community during times of severe weather.

Please contact your local Highways Divisional Officer should you wish to discuss this letter.

January 2011

Written evidence from Phillip Bratby (AWC 02)

1. The Transport Committee welcomes written evidence from those affected by the adverse weather conditions. I and my neighbours have been severely affected by adverse winter conditions for the last three years.

2. I live in a remote rural area which receives minimal support in adverse winter weather conditions. The only support received this winter is two bags of salt left by the local council for use by residents to cover over one mile of single-track lane. Beyond the lane in both directions is at least one further mile of lanes before roads are reached which may have some form of treatment.

3. In each of the last three winters I have been unable to use my car for at least a week. This winter I have so far been cut-off for periods of four days and 12 days. Neighbouring farmers use a JCB and tractors to clear the lane, but, due to the gradient, compacted snow and ice prevent use by cars. One neighbour has had to throw milk away because milk tankers have been unable to get through and he is now giving up dairy farming. I have to maintain a sizeable food stock and have on occasions walked a three mile round trip to the village community shop, only to find they have had no fresh food deliveries. This winter, the two periods of snow were such that my rubbish was not collected for six weeks.

4. Essentially, the local council leaves local residents to fend for themselves in times of severe winter weather.

5. It is the county council's policy to build and maintain roads assuming an ever warmer and wetter climate. For example, thinner layers are used in road construction and use is made of road marking materials to cope with warmer weather.[1] We have not experienced such warmer weather, rather we have experienced record low temperatures and considerable snow falls. It would appear that the council is relying on flawed computer models to prepare for winter rather than using experience and historical data concerning winter weather.

6. As a result of flawed council policy, we are seeing more pot holes, of considerable size and depth, which make driving more dangerous.

7. In its submission to the Winter Resilience Review 2010, the county council states:

> "Short term forecasting is generally very good and has improved significantly over recent years. Medium term forecasts are useful in general planning and trends but not good for weather on specific days. Long range forecasting is still in its infancy and of very little use to winter planning as it currently stands, and no weighting was given to the long range forecast received".

Despite this belief in the accuracy of short term forecasting, the county council still regularly gets caught out by severe weather. Without a definition of what "medium" and "long range" constitute, it is difficult to comment on what these mean. Despite the Met Office being unable to predict the weather beyond about five days and thus having given up seasonal forecasting, the county council is currently partnering with the Met Office to pursue forecast developments.

8. It has been speculated that the Met Office computer model contains a warming bias, which explains why it consistently forecasts a milder than average winter.[2] The Met Office appears to be concerned with global climate at the expense of UK weather/climate. Examination of the Central England Temperature (CET) record[3] shows the cyclical nature of the English temperature record over the last 238 years, the rapid fall in temperature over the last three years and the fall in the 10-year running mean temperature. The CET record demonstrates the folly of ignoring the lessons from history and assuming ever warmer winters.

9. There are independent forecasters whose livelihood depends on the accuracy of their medium and long range forecasts. It is obvious that independent forecasts should be pursued, rather than placing reliance on the Met Office, with its flawed computer model. The Met Office has singularly failed to provide accurate seasonal forecasts.

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[1] A Warm Response Our Climate Change Challenge. A Devon County Council Strategy for 2005 … and the foreseeable future.
[2] http://www.bbc.co.uk/blogs/paulhudson/2010/01/a-frozen-britain-turns-the-hea.shtml
[3] http://hadobs.metoffice.com/hadcet/

10. The effects of failure to prepare for severe winter weather has been profound, in terms of economic impact, the UK's reputation and, not least, in human suffering. Rather than placing undue emphasis on hypothetical sea level rise, warming and flooding, action should be based on historical evidence of actual winter conditions. A cost/benefit analysis would show that a moderately small investment in winter resilience would pay enormous dividends.

January 2011

Written evidence from Thomson Airways (AWC 03)

Thomson Airways, the airline of Thomson and First Choice Holidays, welcomes the opportunity to present evidence to the Transport Select Committee relating to the impact of recent adverse weather conditions. Thomson Airways is the UK's third largest airline, behind BA and EasyJet that operates from 22 UK airports including London Gatwick, Manchester, Birmingham, Luton, Glasgow, Cardiff and many of the smaller regional airports. As an airline providing seat capacity for tour operators, it is our general policy that we do not cancel flights, as there will nearly always be passengers overseas in resort awaiting their return flight back to the UK. Because of the wide range of airports from which we operate we were able to witness the spectrum of responses to the severe weather conditions that were experienced at UK airports in November and December of 2010.

Thomson Airways wishes to record its thanks and appreciation to the many hundreds of workers who struggled in to work at airports, along with those that stayed on to work additional hours to provide assistance to reopen the airports, also to those who spent hours assisting passengers in very difficult circumstances across the country.

It is fair to say that despite the January 2010 disruption, because of adverse weather, UK airports and local infrastructures were not prepared to cope with the severe weather we experienced in November and December last, as a result we were constantly playing catch-up. In reviewing our own response to the weather situation we have looked at Infrastructure resilience, Communications, Pre-planning and Operational resilience and we will address those areas in this submission.

INFRASTRUCTURE RESILIENCE

1. As has already been stated, generally UK airports were unprepared and ill equipped to deal with the extreme conditions that were experienced, this ranged from insufficient runway snow clearing equipment to predominantly insufficient equipment to clear aircraft parking stands. In some instances airports claimed that it was the responsibility of the airline or its ground handling agent to clear apron and parking stand areas. Airlines pay significant sums to airports for landing and parking charges and we see the provision of snow and ice clearance for all airport runways, taxiways and apron areas as the sole responsibility of the airport authority.
2. Understandably airports place major effort into clearing the runways and taxiways as their initial priority, however equal priority needs to be placed on clearing apron and parking stands, as otherwise airlines will not be able to move their aircraft when the runway and airport does reopen. We have attached 5 photographs of the apron and aircraft stands, taken at Birmingham airport, where it appears evident that the aircraft would not be able to manoeuvre; yet the airport had just declared itself "open".
3. The Minister for Transport has stated that she will look at what needs to be addressed in the forthcoming Aviation Bill to ensure that airports are able to cope with extreme weather conditions. We would support such a move that included provisions giving clear and unequivocal responsibility that the airport authority is responsible for clearing runways, taxiways, apron and parking stand areas of the airport and that equal priority and resources should be provided to that end.
4. The main problem experienced at airports was that of surface access, particularly at Gatwick where public transport effectively ground to a halt. Thus even when the runway was opened, we could not get aircrew and duty staff to or from the airport, either because the roads had not been cleared or no public transport was operating. Around many of the regional airports the situation was similar in that direct access roads were kept clear, but smaller roads were not cleared.
5. There were instances of airports laying on bus transfer services between a central point and the airport, this assisted to some degree, but we believe more needs to be done to ensure local surface access resilience to and from airports. Maybe considering the need for priority for "reserved occupations", such as aircrew, airport fire crews, snow teams etcetera.

COMMUNICATIONS

6. It was in the area of communications that proved to be the most problematic, but also in other areas the most effective. The media were at times making it very difficult for us to run our operations as they were making general sweeping statements about flight cancellations at a number of airports, whereas we wanted passengers to turn up as our flights were not cancelled. The message needs to be that passengers should either check with the airport or with their airline.

7. Some airports set up their crisis communications cells, and these generally worked well with good communications and telephone conferences with stakeholders to give updates on the latest situation, especially airport reopening times. Whilst some may criticise decisions of Gatwick to announce a closure for 24 hours, given the nature of the disruption caused, this was probably a good call, and gave our airline and tour operator planners the ability to manage the flight programme and disruption. At the opposite end of the scale were airports that give operators two hourly updates that end up with creeping delays, where from a passenger's perspective these are the worst of all worlds.
8. The main areas of concern were around the ability of surface transport operators to state what services and when they were running. Headlines run on Sky News of "cancellation of all flights from airports" are not helpful to anyone.
9. Some airports, particularly Gatwick were using a variety of communication methods including text messages with status updates to our duty teams, these were very well received.
10. In hindsight, more communication between airports and stakeholders could have been made once weather forecasts were known and the potential consequences of disrupted operations known. Better coordination of the implementation of snow plans and steps being taken by airports to prepare for the expected conditions could have assisted with our own planning.

Pre-planning

11. We believe that it became evident that those airports that had carried out sufficient pre-planning were better placed to cope with the weather situation and to place members of staff on standby for de-icing and snow clearance duties. We question whether sufficient thought had been given to clearance of aprons and parking stands and also to surface access issues that were likely to arise.
12. We also question how robust the liaison and pre planning with the local authority councils responsible for road clearance at the UK's airports has been over the last year. Whilst accepting that transport planners need to give priority to access to hospitals and major trunk routes, we believe that priority should be given to transport hubs such as airports. If that is already the case, this was not evident at many of the UK's airports during the weather disruption.
13. Some airports had not made sufficient planning for storage of winter equipment leading to water vehicles with frozen pipes and de-icing equipment unserviceable due to low temperatures. One instance of the airport closing at Doncaster, because the Fire Engines had frozen overnight, despite the weather forecast showing that extremely low temperatures were highly likely. A contingency to run the engines at regular intervals should have been put in place. Better provision of heated equipment storage areas would have prevented these preventable instances, along with the consequential delay for passengers.
14. It is inevitable when the two busiest London Airports are both closed flights will divert to other UK, and continental airports. Such diversions are to be expected, yet airports appeared either unprepared for diversions or would not even accept diversions. We had instances of passengers being held on the aircraft on the ground before they could disembark because of staff shortages at the airport.
15. At Birmingham airport we encountered delays of 6 hours, with crews running out of operational duty hours, because the airport had accepted so many diversions it was unable to manage the normal traffic of its incumbent carriers. We believe that any review of airport regulation should specify minimum service levels for incumbent carriers and for diverted flights.

Operational Resilience

16. Some of the issues that arose during the weather disruption were around the operational resilience of the infrastructure, including lack of surface access, which lead to a large number of airports being heavily congested with arriving passengers who were unable to travel onwards to their destinations. This was particularly the case at Gatwick, Manchester, Doncaster, Birmingham and Glasgow all of which became very overcrowded.
17. We have already mentioned the problems of equipment failure due to poor pre-planning, but we had concerns relating to insufficient manpower specifically to clear apron and parking stand areas, and wonder if this is an area where airports might be required to provide certain levels of service as part of their duties under the upcoming aviation bill, or whether limited use of the armed services might be drafted in to assist in a "national or local emergency".
18. The one area that Thomson Airways did not suffer during the recent weather disruption was that of insufficient aircraft de-icing fluid, where lessons from January 2010 had been learned.
19. For our own part the operational readiness state of the airline was elevated to "red" and the Thomson Airways Crisis Management Centre was active for a period of two days from the morning of 1 December to the evening of 3 December. This we believe assisted us to manage the situation and provide the best possible service to our customers on delayed flights. Our crisis management centre was also re-activated between 17 and 23 December to manage the weather delays during that week leading up to the main Christmas travel period. By contrast we had no communication from the Department for Transport throughout the whole period of the disruption to our flight operations.

20. Thomson Airways recognises that any flight disruption is distressing to our passengers and we have trained Special Assistance Teams (SAT) on call H24 across the country to report to airports and assist with passenger welfare issues. During the significant weather disruptions we were unable to deploy the number of SAT teams because of the surface transport issues highlighted earlier in this submission.

Conclusion

The weather conditions of late November and December 2010 were unusual, but given that we had experienced similar weather at the start of 2010, it was particularly disappointing that more airports were not prepared and ready to meet the challenges that we faced in November and December2010. An airports authority is generally very poor at clearing the aprons and stands which in turn reduces the ability of the airport to become fully operational again. Thomson Airways has been able to identify some best practice, for example the communications emanating from Gatwick at an operational level through their activation of their crisis cell.

By far the biggest obstacle to resumption of normal operations was that of surface access to airports, where we faced particular difficulties in getting our colleagues to and from the airport, particularly aircrews and consideration should be given to prioritising airport access in similar situations. Similarly our passengers were either unable to get home, or get to the airport.

We believe that airport regulation should be strengthened to ensure airport resilience in the case of adverse weather conditions particularly around a clear statement of the airport authorities' responsibilities whilst also ensuring that flight diversions are managed in a way that minimises disruption to incumbent carriers yet provides a proficient service to any diverted flights.


RYANAIR

January 2011

Written evidence from the Met Office (AWC 04)

SUMMARY

— Winter conditions came early and hard to the UK in 2010—with the average temperature for December in the UK being over 5° colder than normal at −1°C. Nationally, this has been the coldest December in a data series starting in 1910 and the whole period was characterised by at least nine major snow events.

— This prolonged period of finely balanced weather conditions provided a real challenge for the Met Office's forecasting capability. Overall, we performed well not only in forecasting the key hazards but in providing consistent, timely and useful advice to Government, customers, the emergency response community and the public.

— However, we did learn some valuable lessons, particularly with respect to further developing the National Severe Weather Warning Service. We are taking these forward in 2011 to ensure that our Public Weather Service remains in step with what users need and expect from a national weather service consistently placed in the top three operational forecasters in the world.

— Accurate regional forecasts on a monthly scale have proven to be useful in mitigation planning and we are committed to developing the cutting edge science employed in monthly and seasonal forecasting so that these forecasts become as relevant and useful as our short term forecasts and longer term climate change predictions**.** The extent and speed of this development is, of course, dependent on the availability of resources—particularly in supercomputing power to enable modelling to incorporate new science and understanding.

WHAT WE DID

1. The Met Office is the UK's National Met Service and as such is funded by Government to provide a range of weather forecast services to enable the public to make informed decisions in their day to day activities. A critical element of this service is our National Severe Weather Warning Service (NSWWS),[4] set up to provide advance warning of extreme weather to the public, business community, emergency responders and Government to help protect life, property and infrastructure. The NSWWS is designed to advise on the potential for disruption across a region but it cannot give specific detail on, for example, a particular road or rail network. The warnings, coming from a single and consistent source, are, however, useful to end users familiar with the local infrastructure to help them mitigate the impacts of severe weather.

2. Climatologically, we define winter as covering the months of December, January and February, though it should be noted that others will naturally apply differing timescales according to their operations, responsibilities and interests. In 2010 winter conditions began early with an intense period of cold weather and some notable snow events towards the end of November. This continued into December with further snowfall and sub-zero temperatures and, until the Christmas period, we experienced only a few days respite from the intense cold around the middle of the month. Nationally, this has been the coldest December in a data series starting in 1910 and the whole period was characterised by at least nine major snow events.

3. Vital as early warnings of severe weather are, rapidly evolving and complex situations require expert and immediate interpretation so that ongoing advice, through direct and full discussion, is provided to end-users. In this way emergency responders and Government can make the best decisions possible in deploying resources to ensure speedy, efficient and targeted response. The Met Office team of PWS Advisers was set up to specifically work alongside the emergency response community to assist both during a severe weather event and in the following recovery period. This is particularly effective when multiple hazards threaten life and infrastructure. We also routinely provide advice based on robust science directly to CCC and COBR.

4. We embedded an experienced forecaster within DfT from 17 to 23 December to offer additional short and medium term contingency planning support during the traditionally busy travel period in the run up to Christmas. The forecaster was able to add value to input to Ministerial briefings and field questions on the spot from officials within DfT and the Secretary of State's office. Our forecaster also worked closely with Salt Cell during this period and continued to brief the meeting from Exeter after returning to Met Office headquarters.

5. This approach of embedding experts within other Departments and organisations during an emergency has shown great value in the past—with the Institute of Animal Health and DEFRA during the foot and mouth outbreak of 2001, and hosting an EA hydrologist during the floods of 2007, for example. It's an approach that also works for business as usual operations—for the last few winters, for example, we have had experienced weather forecasters embedded in the Highways Agency's National Traffic Control Centre (NTCC) supporting their operations from there.

[4] Significant improvements were introduced to the NSWWS following the 2007 flood events to provide better clarity and longer lead times for getting information to end users. The warnings issued under the NSWWS fall into three categories: Advisories, issued daily as routine and showing our changing confidence in the potential for extreme weather; Early Warnings, issued when confidence reaches 60% and the Flash Warning which is issued at a confidence level of 80%.

6. Although a seemingly small change, there is no doubt that, whether in emergency situations or supporting business as usual problems, both parties benefit from this type of direct access and we are working with DfT to consider how we may continue this level of support in the future.
7. As well as operating the NSWWS and generating regional and national 1–5 day forecasts, we provide forecasts out to 30 days to the public. This latter service was established as a direct result of feedback in which we were told that long-range probabilistic forecasts over a wide region are of little use to the public and that a more deterministic forecast on a shorter timescale would be of greater benefit. Our 30 day forecasts did indeed prove useful in accurately highlighting the cold weather from early November.
8. In order to lessen the burden on the UK taxpayer, the Met Office also operates in a highly competitive commercial arena and bids for contracts in the same way as other suppliers of meteorological services. In the context of winter services to the transport sector in England and Wales, we currently provide services to a number of local authorities and commercial aviation operators, London Underground, First Scot Rail , Eurotunnel and to BAA. In December we were asked to provide input to the daily teleconference run by NATS.

How We Did

9. The Met Office faced enormous challenges during November and December, especially when required to forecast at the limit of our capability for a prolonged period of finely balanced conditions: to provide accurate forecasts, particularly of snow amounts and pinpointing where this would fall; to consistently communicate the key hazards to all audiences—from Government and emergency planners and responders, to the public—across the widest range of media possible. Especially important was the timescale of our warnings—the emergency response community typically require one to two days lead time for effective mitigation planning.
10. In assessing our performance during the severe weather, we wanted to take not just a quantitative approach but to look at the quality of our warnings and services with respect to relevance and usefulness. We set out to collate evidence in terms of: did we forecast what happened, did we communicate this effectively and did our forecasts and warnings add value to the end user?
11. The combination of a more traditional empirical verification of forecasts and warnings, feedback from customers and a public survey gave good evidence that we performed very well in accuracy of forecasts, consistency, clarity of information and advice and in providing the warnings on useful timescales. We also learned some good lessons which we intend to take forward to inform a review of the NSWWS.
12. We provided the Cabinet Office with a routine update to the rolling 3 month long range forecast and a specific update on the chances of early onset weather conditions on 25 October. At this point we highlighted an increased risk of a cold and early start to winter conditions and from then we provided Cabinet Office and DfT with our Chief Forecaster daily briefings. These were also shared with BAA from late November. At the beginning of November our website gave the first indications to the public of the onset of a cold spell from the end of that month.
13. The first of the advisories issued under the NSWWS went out on 22 November. Over the entire period we issued three Emergency Flash, or Red, warnings alongside numerous warnings and advisories on a daily basis for both snow and ice. Our entire team of Public Weather Service Advisors were mobilised and worked closely with local authorities and the emergency response community. Regular briefings were supplied to Minsters and Officials and key customers and stakeholders. A key element in the feedback we received is the fact that the forecasts provided to customers, the warnings disseminated through the NSWWS to the public and the emergency response community, and the 30 day outlooks are all generated from a single source and are backed up by authoritative and consistent advice.
14. Feedback from responders and public surveys indicate that we were successful in the clarity and relevance of our messages. In surveys conducted this winter through the Central Office of Information (COI) by GFK, over 90% of the general public who said they received Met Office warnings found them both useful and accurate.
15. We were also able to maintain a heavily trafficked web and mobile platform during the period which saw 145 million page views in December from nearly 13 million visitors. Our own weather desk took over 16,000 calls in the month before Christmas—an answer rate of over 95%.

Going Forward

16. Although evidence shows we performed well in modelling and applying expert interpretation to produce accurate forecasts for a sustained period over the entire UK, and our communication of these hazards was good—we are committed to using the experience to ensure our services develop in line with user requirements:
17. We are working with DfT to consolidate and build on the embedded forecaster service we provided during this period of severe weather to ensure a robust service is in place to support any future emergencies.

18. Seasonal forecasting in the UK, although still in its infancy, already provides a useful planning tool to Government and to those sectors who are experienced in routinely managing risk based on a probability of outcomes. We are committed to building on the encouraging successes evidenced in some areas of the world, notably in forecasting the hurricane season and in climate vulnerable areas such as Africa, in developing this cutting edge science so that these forecasts become as relevant and useful as our short term forecasts and longer term climate change predictions.
19. The extent and speed of this development is of course dependent on the availability of resources—particularly in supercomputing power to enable modelling to incorporate new science and understanding.
20. We have provided, through the Government's Chief Science Advisor, Professor John Beddington, an initial assessment of the likelihood of severe winters in the next 20–30 years. We are now working closely with leading scientists in academia across the UK to expand on this research in order to provide a fuller and more comprehensive assessment.
21. We are planning further development to the NSWWS. The current method of providing colour coded states at differing lead times was introduced shortly after the floods of 2007. They have proved themselves to be much more comprehensive for end users and provide a valuable planning tool for emergency planners and responders as they can monitor increasing or decreasing risk over a longer lead time.
22. However, these warnings still focus on what weather is coming, where and when. During December 2010, we became acutely aware of the need for warnings in a complex and finely balanced situation, as this was, to be expressed more in terms of impacts—ie to close the gap a user may have between us highlighting a risk of extreme weather and them understanding how that will affect their lives/planning/response etc. Throughout this period, warnings reflected impacts as much as possible and in particular media broadcasts highlighted the expected impacts. We intend to take this forward during 2011, thereby ensuring that our Public Weather Service remains in step with what users need and expect from a national met service consistently placed in the top three operational forecasters in the world.

Annexes

Annex A: breakdown of the major snow events, with comments on our warnings for each.

Annex B: chart showing the comparison of December 2010 across a national series from 1910.

Annex C: background paper exploring the causes behind the severe weather experienced not just in the UK but globally in 2010, written by our Chief Scientist and freely available on our website.[5]

Annex A

SUMMARY OF SNOW EVENTS AND WARNINGS

24–25 November 2010
First blast of snow showers, mainly affecting Scotland, North East England and Northern Ireland. Up to 20 cm on the East Pennines by the end of Thursday.

Advisory issued two days in advance and warnings on 23.

26–27November 2010
Polar weather system brought further widespread snow to most parts of the country including the South West and Wales. Further snow everywhere on Saturday.

Advisories for Heavy Snow issued two days in advance (Wales) and one day in advance (SW England), followed by Flashes.

28 November 2010
Record minimum temperatures giving the coldest November night on record in Wales and Northern Ireland. More snow in the North and East.

Warnings issued during previous day and updated throughout event

29 Nov-3 December 2010
Relentless snow showers over much of the North and East giving 20–30 cm of lying snow in South Yorkshire and around 40 cm in Lincolnshire.

Advisories well in advance (four to five days) with Emergency Flash warnings issued day before and updated throughout.

3 December 2010
A brief, milder spell began in most places.

[5] Not reprinted here. Available online at http://www.metoffice.gov.uk/news/in-depth/severe-weather-2010

6–8 December 2010
The snow and cold returned in northern and eastern areas. There was snowfall across the Central Lowlands of Scotland, causing major problems for the transport network that lasted several days.
Forecasts and Warnings:
Initial indications were for no significant problems in Central Scotland but forecasts and warnings were updated throughout the weekend.
5 December 16:01. PWS Advisor updated for risk of snow expected to affect the central belt between 0600 and 0900 on Monday 6 December.
5 December 20:41. Flash warnings for Heavy Snow and Ice issued for Central Scotland.
6 December 07:43. Flash warnings for Heavy Snow issued for Scottish Borders.

9 December 2010
Widespread disruption in North West England as slightly warmer air resulted in rain showers falling onto frozen ground, just before the morning rush hours.
Models indicated North Wales most at risk from showers and warnings issued. However, the area impacted was incorrect with a narrow band of showers developing over the Irish Sea then moving into Northwest England.

16–17 December 2010
Arctic blast from the north starts the second long phase of cold weather with very heavy and frequent snow showers for Scotland, Northern Ireland and Norfolk.
Warnings issued in advance, Northern Ireland updated to Emergency Flash.

17 December 2010
More significant snow for Northern Ireland, along with parts of Wales and the South West.
Advisories issued three days in advance, Early Warnings issued on 16 December and warnings subsequently updated.

18 December 2010
The snow affected southern areas, with significant falls around London leading to airports being closed.
Warnings issued previous day with Emergency Flash for London area.

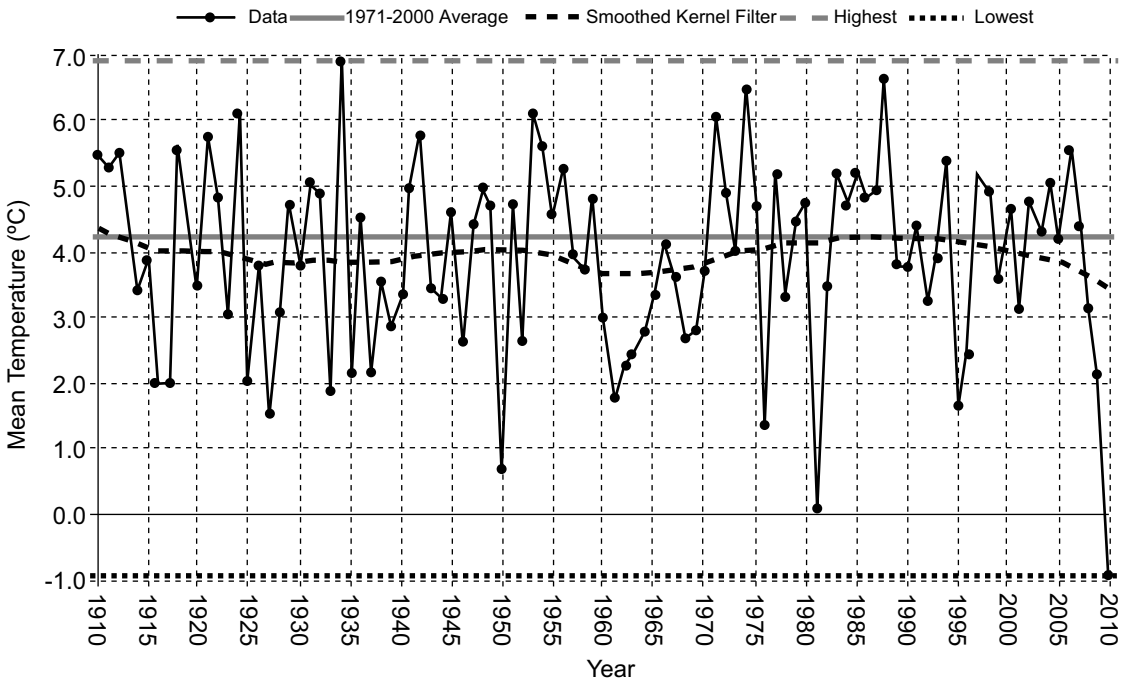
20 December 2010
An intense band of snow moved across South West England, giving an extra 15–25 cm in places.
Warnings issued including Emergency Flash for Devon, Dorset and Somerset.

22 December 2010
The system that caused problems on 20 December re-activated across the Midlands and East Anglia, with 10–15 cm in places.
Warnings issued previous day.

26–27 December 2010
A marked change to milder weather pushed across the UK from the west preceded by rain falling on frozen surfaces.
Advisories for ice and snow issued three days in advance for western UK, followed by Flashes. Early Warning for ice/snow issued on 26, valid for central and eastern areas on 27. Subsequent Flashes issued for ice/snow and freezing rain.

Annex B

UK MEAN TEMPERATURE FOR DECEMBER



February 2011

Written evidence from the AA (AWC 06)

1. Summary

1.1 Winter 2010–11 was the third successive "bad" winter to hit the majority of Britain. Out of the last three winters it was undoubtedly the worst, in terms of very low temperatures, snowfall and its early arrival. Weather forecasters' early seasonal predications for winter 2010–11 appeared to be in conflict which meant that the exceptionally harsh conditions were a surprise to many. It was suggested by Roger Harrabin in the Radio Times that Met Office predictions for an exceptionally cold start to winter had not been made public because of potential embarrassment caused by the unreliability of long range forecasting.

1.2 The impact of winter 2010–11 on the roads was particularly bad with many areas snowbound for many days. There were instances of massive congestion and disruption, even on motorways, and many people were trapped in cars overnight. The impact on the national economy was very significant with companies suffering diminished workforces and shops and businesses devoid of customers.

1.3 The AA's roadside assistance services were in huge demand and it experienced its busiest period for breakdowns in its history—the previous record having been set in winter 2009–10 when between mid December 2009 and mid January 2010 it attended 544,000 breakdowns. In addition to its large number of regular patrols, the AA deployed its mobile Special Operations Teams (SORT) to the worst affected areas—using "kinetic tow ropes" these patrols managed to free a large number of heavy lorries, including a snow plough, which were stuck on the A57 between Sheffield and Worksop. The SORT teams also rescued motorists and carried out a number of mercy missions. Getting to our members was difficult at times, particularly on minor roads which were largely not cleared of snow and ice.

2. Winter Road Service—Policies

2.1 The AA supported amendments to legislation requiring highway authorities in England and Wales to do all that is reasonably practical to prevent snow and ice becoming a hazard on highways. This mirrored the requirement already in force in Scotland. The AA accepts that not all roads can be included in salting and snow clearance routes. It is accepted that highway authorities must devise a hierarchy of routes for winter operations.

2.2 Most authorities publish clear guidance to the public about their local winter service routes. However, the AA does not accept a "post-code lottery" whereby some highway authorities include more roads in their winter road service arrangements than others. This means drivers do not receive a consistent level of service and may be at risk if a neighbouring authority has a less extensive winter service road network.

2.3 It is essential that the value for money aspects of winter road service is given more weight when both local and national government are reviewing their levels of investment. It is estimated that even in an average winter the down-time of the road network, due to snow and ice, may cost the economy as much as £1 billion. Over the last decade between 500 and 1,000 people are killed or injured each year in accidents on roads affected by snow and ice. Hospital admissions also increase because pedestrians fall on icy roads and pavements.

3. The Issue Of Salt Supply

3.1 There is no doubt that following a period of mild winters (prior to the last three) many highway authorities reduced their salt stocks and storage arrangements. It is estimated that there were 250,000 tonnes less in stock at the start of winter 2009–10 than a decade before. To some extent this can be mitigated by more effective use of salt through new techniques and improved weather monitoring but the "shortage" in winter 2009–10 led to very serious problems.

3.2 Prior to winter 2009–10 the AA President wrote to the Local Government Association warning that salt stocks would be insufficient to cope with a bad winter and this concern was largely proved correct. In many places salt stocks became critically low, but fortunately the weather relented at the 11th hour.

3.3 The AA was concerned that the UK still appeared vulnerable to supply problems at the start of winter 2010–11. There were rumours of salt re-supply orders not having been fulfilled by the start of winter. Many highway authorities were still dependent on contracted "just-in-time" deliveries but as the AA has highlighted these deliveries will probably all be required at the same time in a harsh winter such that the supply chain cannot cope. "Salt Cell", once activated, has also re-directed some of those re-supply orders. This was recently highlighted in an Early Day Motion 1358 (27 January 2011) (see annex).

4 The Views of AA Members

4.1 The AA Populus panel is Europe's largest dedicated motoring opinion panel. It comprises 170,000 AA members who take a monthly poll. Response rates vary between 15,000 and 20,000 per month.

4.2 AA Populus conducted a poll on 12–15 January 2010 to establish satisfaction levels with local authority snow and ice clearance during the bad weather in winter 2009–10. 20,109 AA members responded. The results are as follows:

4.2.1 *Minor roads*

75% of AA members said their local authorities had not done very well (26%) or not very at all (49%) in gritting minor roads. Only 2% said the councils had done very well.

4.2.3 *Main roads*

81% of survey respondents said the treatment of these roads was acceptable (26%), carried out reasonably well (29%) or very well (26%).

4.2.4 *Pavements*

86% of respondents were in some way critical of councils' efforts. More significantly, 65% of the 20,000-strong sample said local authority efforts were not very good at all.

4.2.5 *Regional variation*

Drivers in the South and the North West were the most unhappy with their councils. Respectively, 82% and 83% of respondents in those areas said councils did "not very well" or "not at all well"Q with the gritting on minor roads. The same areas were also least impressed with local authority efforts on main roads. However, Northern Ireland showed 92% satisfaction.

Local authorities in northern counties were most criticised for the state of the pavements during the bad weather with 90% of respondents in the North West and 89% in the Yorkshire and Humberside area saying that councils did "not very well" or "not at all well". The South and West Midlands were close behind on 88%.

4.3 Further AA Populus winter driving/gritting surveys were undertaken between 26 November and 3 December 2010 (15,927 responses) and 23 December 2010 and 4 January 2011 (15,199 responses). The results are as follows:

4.3.1 *Gritting*

A small majority of AA members (51%) expected road gritting in winter 2010/2011 to be better than last year. However, in the latter survey (after the most recent bad weather) this had dropped by 19% to 32% who thought gritting had actually been any better.

41% expect gritting to be about the same and 7% expected it to be worse. In the latter survey (after the most recent bad weather) 39% said it was about the same but 4 times more (28%) said it was actually worse than expected.

It probable that the views expressed in the later survey were influenced by the severity of the weather.

4.3.2. The 26 December to 3 December 2010 poll also asked what respondents had done to prepare for winter driving, what the government and authorities should do to keep the UK moving when it snows and how willing people are to "self help":

4.3.3 44% of drivers had done nothing to prepare for severe conditions.

4.3.4 Of those that had prepared for winter:

- 39% put a shovel, blankets etc in the car.
- 19% bought a sturdy pair of walking boots.
- 6% made arrangements to stay with friends/colleagues if the weather suddenly turns bad.
- 4% bought all season tyres.
- 3% bought winter tyres.
- 1% bought snow chains.
- 12% took other measures.

4.3.5. In terms of what the government and local authorities should do to keep the UK moving:

- 14% support mandatory winter tyres.
- 23% support restricting HGV's in icy conditions.
- 17% support removing motorway central barriers to free trapped vehicles.
- 39% support need for more signs warning of road closures.
- 56% support police stopping traffic joining blocked motorways.
- 20% support setting up emergency teams to help with motorway blockages.
- 56% support formation of local snow clearance teams (farmers/contractors etc).
- 36% support use of the Army.

4.3.6. With growing interest in the "Big Society" ethos the AA Populus panel were asked whether they would be prepared to help clear the road where they lived if salt/grit was deposited at the end:

- 88% said they would definitely or probably help clear the road.
- 9% would probably or definitely not help.

5. The Impact of Ice and Snow Late 2010

5.1 AA/TrafficMaster analysis of traffic incidents during November and December 2010 indicate that snow and ice alone (not accident/incident due to snow) resulted in approximately 406 hours of significant disruption on major roads and this includes 237 hours of road closures. These statistics should be viewed with some caution as road closure monitoring during the period of most severe weather was subject to some disruption.

5.2 The longest duration problems noted during November and December 2010 were:

A40 at Raglan, South Wales disrupted for 19 hours 24 minutes.

A68 at Jedborough closed for 18 hours 56 minutes.

M9 Scotland closed for 16 hours 46 minutes.

A2 Kent (eastbound) closed for 9 hours 57 minutes at Cobham.

There were many other closures of more minor roads which are not listed. There was also a very significant two day closure of the M8 in Scotland on 6–7 December and many other localised incidents.

5.3 Whilst the weather can sometimes overwhelm the best snow clearance operations the AA believes that it is important to prevent grid lock and "recover" roads much more quickly than has been experienced recently. The AA has said:

- More volunteers, and even the army, should be ready for assisting when exceptionally bad weather strikes which blocks major arteries.
- Farmers, civil engineering firms with plant and equipment, landscaping firms and any firm with useful services should be registered and paid a bounty for stepping in during severe winter emergencies.
- Highway authorities should make greater efforts to prevent snow compaction on motorways and trunk roads which cause paralysis when an ice slab forms—road closures must be effected more speedily.
- Traffic officers and the police should escort snow ploughs and gritters, under blue lights, to worst affected areas—in grid locked conditions snow ploughs and gritters are often stuck in the queues.
- There should be strategic stockpiles of liquid de-icing agents which can deal more effectively with slab ice on motorways and trunk roads.
- Provision of travel/traffic information should be improved both on-road, through variable message signing—preventing traffic from joining blocked roads—and on-line for more reliable journey planning before setting out.

— For a second winter running both road and rail travel information websites struggled at the time they were most needed.

— Innovative techniques to free people and vehicles which are trapped must be developed eg kinetic ropes.

— There is a need to identify and develop remedies to lorry "blockage hot-spots", the places where they commonly lose traction and block complete carriageways.

— Snow fall severity can often be very localised and random for example, at one stage Croydon was paralysed by snow but 10 miles away conditions were fine—there is no reason why additional mobile resources (regardless of local authority or operational territory) cannot be rapidly deployed to the worst hit places if they are not needed in their own area.

5.4 Aside from the periods of exceptional snowfall the AA remains concerned about a number of incidents which occurred during "marginal" weather conditions. In numerous parts of the UK there have been several incidents where pre-salting appears to have not been carried out or not carried out properly and roads became icy causing accidents, often in the early morning. This leads us to believe decision makers could be making judgements to preserve salt stocks rather than considering the risk of temperatures dipping lower than predicted. This occurred widely in the south of England on the mornings of 9 and 10 January 2011. This resulted in the closure of the M3 in Hampshire and a spate of accidents (see annex).

6. AA Operations

6.1 The AA experienced its busiest day ever on Monday 20 December 2010 when 28,000 breakdowns were dealt with. The majority were weather related, in particular battery problems. AA patrols did their best to reach members who were off the treated routes but numerous roads were treacherous or impassable in many parts of the UK.

The AA's diary of breakdown operations and areas worst affected can be found via the link in the appendix*.

6.2 On Monday 20 December AA Insurance received 100% more motor insurance claims than normal with 71% of callers saying their accident was due to snow and ice.

Annex

Early Day Motion 1358 (27 January 2011)

That this House considers the Department for Transport's actions in managing and prioritising salt supplies by stealth whilst insisting that there is no crisis, denying that it is putting pressure on salt mines and suppliers to withhold supplies properly negotiated and ordered by some local authorities, whilst prioritising orders from other local authorities, to be disingenuous; and calls on the Department for Transport to publish immediately open and transparent details of the meetings of SALTCELL, which it considers to have been re-named to avoid questions from hon. Members on these issues, along with details of the local authorities prioritised, and the tonnage supplied to such authorities and to take immediate steps to prioritise salt supplies to local authorities such as Durham County Council which, having learnt lessons from the previous winter, increased its salt reserves, properly ordered appropriate levels of salt in advance, increased storage facilities, increased winter maintenance vehicles and equipment, sourced salt globally, and which still finds itself crucially short of salt due to the actions of the Department for Transport.

http://www.bbc.co.uk/news/uk-england-hampshire-12145766

http://www.oxfordmail.co.uk/news/8779943.Black_ice_causes_spate_of_crashes_on_roads/

http://www.bbc.co.uk/news/uk-england-berkshire-12146107

http://www.bbc.co.uk/news/uk-england-devon-12146111

Crashes cause A1 misery
Evening Chronicle (Newcastle Upon Tyne), 21 January 2011, p 7, Unattributed
Icy road conditions led to three cars skidding off the A1 (M) near Chester-le-Street, County Durham, leading to a section of the road being closed. An AA spokesman added: "The accident caused a lot of congestion and traffic was slow in both directions".

* http://www.theaa.com/motoring_advice/news/breakdown-update-snow-and-ice-late-november-2010.html

February 2011

Written evidence from the Manchester Airports Group (MAG) (AWC 07)

1. Introduction and Executive Summary

1.1 This is the submission of the Manchester Airports Group plc (MAG) to the Call for Written Evidence issued by the House of Commons Transport Committee in connection with its inquiry into the impact on transport of the recent adverse weather conditions.

1.2 MAG is the UK's second largest airport operator and comprises the airports of Manchester, East Midlands, Humberside and Bournemouth. MAG handled nearly 24 million passengers in 2009–10, with Manchester alone accounting for over 18 million passengers travelling to around 200 destinations.

1.3 MAG is publicly owned by the ten local authorities of Greater Manchester. These shareholders require us to grow the business profitably, to enhance the value of the business; and to maximise the economic and social contribution to the regions it serves.

1.4 The main points of this submission are as follows:

(i) Manchester Airport and the MAG-owned East Midlands Airport both coped well in the snow crisis of 19–20 December and maintained operations throughout the period. A number of diversion flights were accepted from other airports.

(ii) There was some disruption to air traffic arising from the closure of destination airports and the fact that aircraft were often "out-of sequence" due to disruption elsewhere and therefore not available to fly planned services from our airports.

(iii) Generally, stranded passengers at our airports were treated well and there were no disputes about passengers' entitlements under the relevant legislation in respect of denied boarding and delays. There were, however, considerable practical difficulties arising from the fact that airlines and their handling agents seemed ill-prepared to cope with the various passenger requirements in the form of booking alternative flights, providing onward transport and hotel accommodation.

(iv) In respect of operations by MAG, the lessons learnt from the previous winter's experience (which we put to the Quarmby Review), were put into practice and acted on, and contributed to our success in dealing with this winter's challenges.

2. Winter Operations at Manchester Airport in 2010

2.1 Manchester Airport experienced snowfall on several occasions between late November and Christmas. Snow clearance teams were called in when snow was forecast and were deployed once inclement weather reached Manchester in accordance with the Manchester Airport Winter Operations Plan.

2.2 The Airport was able to remain open continuously during November/December, although on several occasions runway operations were suspended, for up to two hours, to permit snow clearance/anti-ice treatment to be undertaken. This is normal and necessary.

2.3 Over the period 17–22 December there was considerable disruption to flights to/from Southern/Eastern England and parts of Europe (France, Germany, Netherlands, Belgium and Ireland). Numerous flights to UK and European destinations were cancelled or delayed by the weather at destination airports.

2.4 Manchester was willing to accept diverted flights provided that the core operation would not be significantly compromised ie:

— There was space on the airfield to accommodate additional aircraft (airport stand capacity was reduced due to the impact of snow and some areas needing to being set aside for "snow dumps").

— There was terminal capacity to handle flights (inbound and outbound).

— There was sufficient Airport Security and Control Authority resources to handle the additional outbound traffic.

— The airline's handling agent(s) were willing and able to facilitate handling of the additional flights (including making arrangements for onward road transportation or hotel accommodation).

2.5 Manchester Airport made use of the following:

— SMS "Call Informer" text messaging to keep airlines, handling agents, and service partners updated.

— Updates on the Manchester Airport Website.

— Updates to media and the public via the Press Office, including social media.

— Additional staff deployed to assist customers with enquiries and to handle additional flights through the security process.

— Provision of additional temporary seating for delayed customers.

— A management call-out roster for Christmas week in case disruption persisted.

2.6 Following the previous year's difficult winter, Manchester Airport took steps to substantially improve our ability to respond to adverse winter weather conditions. We informed the Quarmby Review of these steps, which included:

- MA invested in new and additional snow clearing equipment, particularly small snow sweepers capable of clearing areas underneath aircraft on stand. We intend to purchase a significant amount of new equipment later this year.
- Storage areas for both road salt and anti-icing materials were doubled in size and increased supplies obtained.
- Improvements were made to procurement processes so that greater security of supply could be assured.
- Improvements were made to both our crisis management systems, resourcing plans and to media networks to keep passengers and airlines informed.
- Changes were made to the weather forecasting information obtained so that more accurate forecasts allowed us to predict and react to local weather conditions.

3. Issues Arising During this Year's Operations

3.1 The Handling Agents (contracted by the airlines to handle their ground operations) struggled to assist the volumes of passengers unable to catch their intended flights from Manchester. This resulted in lengthy queues of passengers awaiting rebooking at ticket desks within the terminals. Although there were no problems regarding passengers entitlements under denied or delayed boarding legislation, there were considerable practical difficulties that arose. Hotels quickly became full and some passengers chose to remain within the airport buildings in order to ensure they were "first in line" the following morning.

3.2 The strain on handling agents was compounded by additional traffic diverting to Manchester when other Airports (in particular Heathrow and Gatwick) closed due to weather conditions.

3.3 It would appear that, despite poor weather being forecast, few airlines had instructed their handling agents to put in place contingency plans or roster additional staff to cope with the anticipated increased workload.

3.4 A shortage of local hotel accommodation and coaches to transport diverted passengers down to London became a critical issue on the weekend of 18/19 December. Coach operators were unwilling or unable to transport passengers to London—due to a combination of high demand, treacherous driving conditions and road congestion. (It in understood that some passengers had to be coached as far away as Blackpool).

3.5 On 18 December passengers were held on board long-haul flights diverted into Manchester for a number of hours whilst airlines decided whether to terminate flights or to try and fly into London if/when the airports re-opened. When the decisions were eventually made to terminate flights there were difficulties sourcing onward transport and/or hotel accommodation.

3.6 Communication to passengers held on diverted aircraft at Manchester was sometimes misleading leading to increased dissatisfaction for the passengers held onboard.

3.7 As a result of issues encountered on 18 December, and in order to protect the integrity of the core operation, the airport took steps to ensure that the airlines/handling agents for all diverted flights had to provide assurances that they were in a position to handle the flights satisfactorily before diversion acceptance was granted. Diversion requests were considered on a case-by-case basis.

3.8 Significant volumes of hold baggage failed to arrive into Manchester Airport on delayed flights from major hubs such as Heathrow, Paris CDG, Brussels, Frankfurt and Amsterdam. The impact of this was felt through into the New Year with large volumes of baggage being forwarded and requiring sorting and delivering to passengers. Airlines/handling agents appeared under-prepared to cope with the upsurge in baggage being mishandled and calls being made by customers seeking information.

4. Learning/Action Points Arising from the Experience of Manchester Airport

4.1 Enhanced contingency planning is required between the airlines and their handling agents to cope with weather disruption (eg handling delayed/cancelled flights and additional diverted traffic).

4.2 Improved communication is required between airlines and their handling agents to establish what diverted traffic can be handled to a satisfactory standard (this includes taking account of road transport and/or hotel accommodation availability.) This information should then be shared with airport operational staff.

4.3 Better adherence to Manchester Airport's Diversion Procedures is required by airlines/handling agents—particularly in terms of following correct communication channels. We, in turn will review/refine our Diversion Procedures to improve clarity and emphasise the above points.

4.4 In future weather disruption situations, we intend to issue a daily operational update report, outlining the airport's resource plans, availability of equipment and supplies, and to include the current position of Airlines, service partners and Control Authorities to handle the flight schedule changes.

4.5 Airlines (and their handling agents/baggage enquiry call handling centres) need to develop robust plans for dealing with significant volumes delayed/mislaid luggage, which is invariably a consequence of weather disruption at large airports.

5. MAG Comments on Other Proposals for Dealing with Adverse Winter Conditions at Airports

5.1 We do not support the proposal that snow clearance equipment from airports less affected by snow should be capable of being "commandeered" or directed by Government to serve airports more severely affected. We oppose this for the following reasons:

- Weather in the UK typically affects many airports at the same time. Over the weekend of 19–21 December, all UK airports were affected by snow. If one airport is affected lightly on one day, for example, it is possibly that it may experience heavy snowfall the following day and require rapid recall of the equipment. The task of prioritising requests would be cumbersome and inevitably inaccurate and could neither cope with any situation where all major airports were affected or where constantly changing weather patterns rapidly changed which airports were affected worst.
- The task of transferring snow clearance equipment many miles would be difficult, requiring many low loaders (such equipment cannot travel along public highways under its own power). A stock of low loaders for this purpose would have to be obtained by individual airports. Road conditions on the approaches to badly affected airports would be difficult and the arrival of the equipment might be delayed.
- The possibility of "borrowing" such equipment from well-provisioned airports might encourage others to under-invest in same. Such equipment is costly and yet is only used on a few occasions each year. Those airports who do adequately resource in terms of equipment would see such intervention as a penalty for good business decisions; conversely the inefficient and imprudent would be apparently rewarded.
- Problems would inevitably arise over the appropriate level of recharges for the loan of such equipment.
- A number of practical considerations would further limit the use of one airport's equipment at another, including:
  - The base frequencies of the equipment not being set to the same frequencies of the "receiving" airport.
  - Who would be responsible for providing the staff needed to operate the equipment? If it were the receiving airport, their staff might not be familiar/trained to operate the equipment. If it was the "donating" airport, this would raise significant safety concerns re familiarity with the layout of the receiving airport, their processes and procedures. This would be a major consideration during periods of low visibility (which tend to occur during snow events).
  - Insurance requirements would cause complications and possibly delays.

5.2 MAG would not support the similar suggestion of sharing stocks of anti-icing or road clearance materials. We are however, more supportive of central government creating and holding strategic stockpiles of such material, to be allocated on a prioritisation basis during any such emergency.

5.3 We think it unnecessary that additional conditions be imposed on airports on any size under the proposed reforms to the system of airport economic regulation. Any sanctions imposed under such regime could only meaningfully take the form of financial penalties. Airports do not need such "incentives" imposed on them: the loss of income and additional costs imposed through times of closure are significant in themselves (Manchester Airport lost some £1.4 million in terms of increased costs and reduced incomes even though it coped well with the snow crisis). It also presumes that airport operators, and their inability to deal with adverse weather conditions, are the parties responsible for delays arising. As we have indicated above, our experience has shown that the actions or inactions or others involved in the aviation supply chain, can also be responsible.

5.4 We are mindful of the suggestions for European action on this matter. Bearing in mind our comments made above, in relation to other parties, we would support any move to strengthen the powers of airports to insist on minimum service standards being delivered to passengers by both airlines and their appointed handling agents. This would require amendment to the 1997 EU Ground Handling Directive.

5.5 Currently, the EU public procurement processes apply to airports, regardless of ownership and competitive position. The processes impose additional time on the procurement processes which, when combined with the typical manufacturing time for snow clearing equipment, means that the arrival date of such equipment sought soon after one severe winter is highly unlikely to be in time for the following year's winter. MAG would urge the Government to argue the case in Brussels for airports (or at least airports subject to effective competition—as is the situation in most of the UK) to be exempt from the requirements of the public procurement Directive.

February 2011

Written evidence from Flybe (AWC 08)

Flybe welcomes the opportunity to submit a response to the Transport Select Committee inquiry into the Impact of Adverse Weather on Transport in the UK and the four key areas outlined below:

- Impacts the road and rail networks in England and Wales.
- Impact on the UK's airports, including the extent to which lessons were learnt from winter 2009–10.
- The provision of accurate weather forecasts to transport providers in advance of the bad weather.
- The recommendations of the Quarmby reviews into the resilience of England's transport systems in 2010.

Of these four areas to be investigated, we will restrict our comments to the impact on the UK's airports, including the extent to which lessons were learnt from winter 2009–10.

Introduction to Flybe

1. Headquartered in Exeter, Flybe is Europe's largest regional airline and the UK's number one domestic airline. Employing nearly 3,000 staff, we currently operate 68 aircraft on 215 routes from 39 UK and 34 European airports in 13 countries and carried more than 7 million passengers in 2010. The airline began life in 1979 as Jersey European Airways, later renamed British European in 2000 and was then re-launched as Flybe in July 2002.

2. Flybe has established a regional route network and spread of airports is intended to offer customers a convenient point-to-point network operating from regional airports which we believe are a preferable alternative to having to travel to more distant major hub airports. In addition, the domestic route network is structured with the aim of minimising the competitive threat from alternative forms of surface transport (alternative road or rail options give journey time of four hours or less.) Not only is the average flight time of a Flybe flight less than one hour, our route network attracts passengers in locations which are more dependent on air transport such as Northern Ireland and other locations where surface transport may be a less attractive option, such as Inverness, Newquay and Aberdeen.

3. Flybe focuses its route selection on higher passenger volume regional routes that require high frequency services. However, it also operates regional routes with low-to-medium passenger volumes (typically, those with the passenger volumes of less than 50,000 per annum), including a number of single daily rotations.

4. Since October 2008 Flybe has also operated a franchise arrangement with the Scottish airline Loganair, under which 16 Loganair aircraft fly using the Flybe brand across 28 franchise routes between 18 airports throughout the UK.

5. Because we operate from significantly more UK airports than any other airline, we feel particularly able to offer comment and comparison following December's disruption.

Impact on Flights of December's Bad Weather

6. During the month of December 2010, Flybe had scheduled to operate more that 12,000 flights but, due to airport closures resulting from the poor weather conditions we cancelled 1,980 or 16% of our programme, disrupting more than 100,000 passengers. The financial impact caused by the weather disruption to the company was a minimum of £6 million. In comparison, during December 2009 we suffered just 273 cancellations.

Airports

7. There are a number of points we would wish to make that are applicable to all airports.

8. The first was the lack of a robust plan for handling severe weather disruption. If airports are requested to prepare such weather disruption plans, they need to be prepared in consultation with airlines and handling agents rather than in a vacuum. There are too many examples around the UK where this hasn't happen.

9. A second problem was where airports declared themselves "open", when in fact only the runway was operational. While other important areas such as aircraft stands and passenger walkways have not been cleared of snow and ice and therefore are un-accessible, in practical terms the airport is closed. This obviously leaves passengers frustrated when they arrive at an "open" airport that is evidently not operational and where significant delays lead to cancellations. Flybe would respectfully suggest this as a key area for the Committee's deliberations.

10. Thirdly, the area around the aircraft needs to be safe before the preparation for departure can begin. Tasks including; aircraft cleaning, toilets pumped out, catering and luggage loaded, refuelling and line engineer inspections all have to be completed before passengers can board and the aircraft is de-iced and pushed back ready for take-off. To assist in the aircraft preparation for departure, better storage areas (preferably covered) for aircraft service vehicles, in particular toilet/water trucks would be a major step forward, as there were a number of occasions when the vehicles themselves froze and could not be used, thus causing further delays.

11. Over the past few years, there has been a significant change in ownership of a number of UK airports, often for very substantial amounts of money. These new owners are under pressure to provide a return for their investment which, at a time of recession, is an increasingly challenging requirement. They bring a new model of ownership to the market—one that could be described as less attuned to the needs of the communities they purport to serve—and there is concern within the industry that this has led to an under-investment in equipment that could provide European levels of service in times of bad weather.

12. We are happy to expand upon this theme at any verbal session.

Overcrowding in the Terminal

13. When flight departures are suspended the flow of passenger also stops and the number of people in the terminals increases. To help overcome this shortage of space we would suggest a temporary change of use. Most airports have a larger airside (post security) area than landside and when severe delays occur, passenger facilities landside quickly become overstretched. One suggestion to help better manage the situation would be the declassification of some or all of the airside facilities to improve the passenger experience.

Geographically Competing Airports

14. Competitive advantage, rather than passenger prioritisation unfortunately came into play between airports within a driveable proximity. In at least one example, a British airport, despite being inoperable, would not declare themselves closed if a nearby rival was open. Such actions do not paint the industry in a good light.

Diversionary Airports

15. As airports close, airlines will seek to divert to an alternative which is still operational. This enables airlines to meet their duty of care and transport there passengers to their original destination—usually by road—rather than return to their original airport from mid-air or not take off in the first place.

16. Such diversionary airports soon become congested which in turn creates additional pressures on their limited facilities. One particular airport in the north of England took a number of Flybe diversions one evening due to a near neighbour being closed due to the snow. Having diverted aircraft to this airport, our passengers were able to complete their journey by surface transport. However, they then advised us that they would not be de-icing our diversionary aircraft the next day as their de-ice fluid stocks were low and that they were saving the fluid for their other, scheduled commercial flights. Flybe therefore had five aircraft stranded until the following afternoon whilst the airport awaited their next delivery of de-icing fluid. In future, we are less likely to divert to that airport for fear our aircraft will be marooned. This will inevitably mean more disruption and delay.

De Icing Fluid

17. Supplies of de-icing fluid became very short as the freezing weather continued and airports found it difficult to get their stocks replenished. We would recommend that the Committee focus on a national strategy for the distribution of de-icing fluid as has more recently happened on the provision of gritting salt for the road network.

Communications

18. In the case of industrial action, airlines receive advance warning of impending disruption to our operation. Whilst undesirable, it does at least mean we are able to re arrange our day's operation and informing passengers of their revised travel plans, prior to their departure for the airport. We also give them the option of changing their travel arrangements to another day or receiving a full refund.

19. As soon as our operations are disrupted and we have to cancel flights we immediately contact the passengers and post the information on our website. Having clear information to share with our passengers was very difficult during this period of a number of reasons, namely the flow of information from airport operators when their airfields were open or closed; not knowing how many flights could be handled per hour, weather conditions improving or deteriorating at the departure or arrival airports coupled with de-icing regimes and the standard issues related to departure procedures.

Impacts the Road and Rail Networks in England and Wales

20. Flybe's staff, as well as our passengers, had difficulties getting to work due to the icy road conditions. As a result the airline accommodated flight deck cabin crew and other key members of staff in airport hotels to ensure their availability to operate aircraft the following day. At a local level, staff with four wheel drive vehicles were used to ferry other staff members to work who would have been unable to reach the airport by any other means. The disruption caused by volcanic ash crisis earlier last year showed the importance of aviation to the country's economy and how crucial aviation is in the movement of goods and people. The snow merely brought this home to the travelling public and Flybe strongly recommends that access to airports by road and rail are given as high a priority as any other form of public transport.

In Conclusion

21. Flybe would like to see closer working relationship between airports and their customers, airlines and handling agents in pre planning for major weather disruption. There should also include an industry agreement of what "open" means for an airport to manage the passengers' expectations for travel. Airlines need as much notice as possible to re schedule their flying programmes to accommodate any reduction in aircraft movements. They then need to inform all passengers that will be impacted by these changes. Due to the prolonged period of bad weather many passengers experienced multiple changes to their travel plans.

22. We would like the Committee to consider relationships airports have with one another during periods of major disruption to encourage best practice towards airlines and thence to the travelling public to facilitate the end to end journey. On the wider issue of the condition of the road and rail network they need to be accessible to support general travel needs of the individual but keep delivery of vital supplies and goods to market. Flybe accepts that in the initial period of heavy snow services will be suspended but it is the speed of recovery that is most important and to achieve this all agencies need to work together.

February 2011

Written evidence from the Board of Airline Representatives in the UK (BAR UK) (AWC 09)

1. Introduction

The Board of Airline Representatives in the UK (BAR UK), representing 85 scheduled airlines, welcomes this inquiry and is grateful for the opportunity to contribute to it.

2. Background

(a) There was heavy snowfall at Heathrow on 18 December, and it is readily acknowledged that the airport would require a period of closure whilst snow clearance took place. However, what my airline members cannot reconcile is why this single snow occurrence caused the extended period of drastically restricted flight operations between 18–22 December 2010.

(b) This led to totally unacceptable delays and cancellations to hundreds of thousands of passengers, and aircraft out of position that could not be used elsewhere. Subsequently, the conditions that passengers had to endure were simply not acceptable.

(c) Our comments below are of a broad nature, with a view to highlighting the major issues that come to mind. These same points can be expected to be raised with the forthcoming enquiry to be chaired by Professor David Begg.

3. Communications

(a) There is a well-tested and strong history of cooperation between Heathrow Airport Ltd and the Airlines during crises.

(b) However, it is questionable whether the airport's own communications procedures are as efficient and robust as they should be. There is a strong reliance by the airport operator on just teleconference calls and, sometimes, e-mails. This is inadequate; up-to-date situation reports are required not just by those on the scene, but also by airline decision-makers in head offices overseas.

(c) BAR UK suggests that Heathrow Airport Ltd be guided by the facility that NATS instigates at such times. They provide a dedicated website for contingency events. It is available to authorised users anywhere in the world, and provides instant confirmation of updates and related NOTAMS and other instructions.

4. Clarity of Communications

Whilst communications were issued on a regular basis, some of the content was imprecise eg the airport being closed "until further notice". This open-ended terminology meant planning was put in abeyance, and was a particular problem for long-haul airlines that operate flights of 8–14 hours into the UK. They were in the invidious position of not knowing whether Heathrow would be open at the due time of arrival.

5. Terminal Closures

The issue of closing terminals to passengers requires examination.

Some airlines have reported that, despite snow falling outside, and no accommodation or shelter being available, passengers were going to be evicted from Terminal 1. This created very understandable pressures and reactions from passengers, and was simply a totally unacceptable decision in the first instance.

6. Sheer Scale of the Closure

(a) The pictures seen on television are possibly the best evidence of the chaotic situation that prevailed at Heathrow.

(b) Information was scant and the sheer volume of passengers and baggage crammed into terminals made effective and good passenger care well nigh impossible.

(c) Under such conditions, it is easy to realise that the range of available hotel accommodation would be inadequate for the needs of the thousands of passengers who travel arrangements had been disrupted.

7. Night Flights Dispensation

The current process is outdated and ill-serves the needs of all parties at times of force majeure events.

Currently, the airport operator has almost to go cap in hand to the Department for Transport and seek their approval.

This is an unnecessary impediment and most probably denied the opportunity to operate a number of flights, thereby exacerbating the situation on the ground.

BAR UK believes that the airport operator should be granted the powers to authorise additional night flights at such times, and then report them to the DfT as part of a properly-policed audit system.

8. Costs of Airport Closures Imposed on Airlines

(a) BAR UK wishes to express its concerns to the Committee that the greater costs of the airport's lack of performance fell on the airlines and not the airport.

(b) For example, and despite not being designed with force majeure events in mind, airlines have to bear the costs imposed by EU Regulation 261/2004, popularly known as the Denied Boarding Regulation. This imposes, without any time limit or reference to the costs of tickets, duties of care assistance, accommodation or refunds during times of cancellations and delays.

(c) Airlines were forced to divert their aircraft to other airports. There were the passenger costs associated with such diversions (as per paragraph 8b above) plus those of the crews as well. At the same time, the use of the aircraft itself was denied elsewhere on the network of the airlines concerned, so leading to delays and cancellations elsewhere in the world.

(d) Without prejudice, BAR UK invited Heathrow Airport Ltd to mollify the situation by treating airlines as customers, and offer financial rebates to airlines in the form of reduced airport fees over a set period of time. This it has steadfastly refused to do.

9. Cargo

(a) Heathrow is a key port for the UK economy.

(b) Whilst not close to what the effects were for freight customers, BAR UK suggests that the Committee may wish to explore what adverse effects were imposed on imports and exports.

10. Runway De-icing Media

There is a lack of clarity as to how much de-icing media existed for the clearance of runways and taxiways. Was this the reason that, whilst technically not running out of such stock, only one runway was able to be cleared until 22 December?

11. Snow Clearance Equipment and Training

(a) The announcement that Heathrow Airport Ltd was to spend an additional £10 million on snow clearance equipment strongly suggests that its current inventory is inadequate.

(b) The additional requirement raises the question of what resources are available to operate it in the times ahead, and what training is given.

12. Summary

(a) The snow closure, and restrictions that followed, at Heathrow in December created very unacceptable conditions for passengers and airlines.

(b) The results were:

- huge disruptions for all parties;
- great emotional costs for passengers;
- huge financial penalties for airlines; and
- airline reputations tarnished by the failures of the airport.

(c) It is timely to examine the failures so that future ones are prevented.

BAR UK remains readily available to the Committee to provide any additional information that may be required.

February 2011

Written evidence from Durham County Council (AWC 10)

Introduction

The severe weather, experienced in November and December 2010, gave rise to a number of issues that require further consideration. Following the Quarmby Report into 2009–10 winter, Durham prepared itself well and these are highlighted in the first part of the submission. However, there are still challenges that need to be addressed that are outside the control of the local authority and rely on Central Government intervention in relation to winter damage to highways and salt procurement.

Lessons Learnt from 2009–10

- Winter Service Plan has been updated in line with Overview and Scrutiny recommendations and current best practice.
- Real time communications have been improved in terms of website information, press releases, winter maintenance information put out to the whole of the population of County Durham either by leaflet or newspaper and SMS text service.
- Much work has been carried out in setting up partnerships with nine Town and Parish Councils and initiatives with the volunteer sector.
- Salt utilisation and best practice has been discussed regionally with Operations Work Groups. As a result we now use only ABP salt (treated) which allows us to cut our spread rate by 30%.
- North East Regional Winter maintenance Group has been set up (all 12 Local Authorities participate) and meet regularly and this includes participation by Civil Contingency Unit.
- Regular monitoring of salt stocks is carried out within each local authority and shared across the region.

Weather Forecasting

The current weather forecast provider for Durham (Meteogroup) has provided accurate and timely information relating to 24 hour and a two to five day trend. A 30 day forecast is available which accuracy is not guaranteed. This gives temperature trends and whilst periods of intense snowfall would be of great benefit, it has to be questioned whether this is possible to the degree of accuracy required.

Road Condition—Potholes

At the end of the winter of 2009–10, the worst for some 30 years (at that time), an analysis of related data including highway claims, highway safety inspection reports and customer relationship management service requests was undertaken. This suggested, as a result of the severe winter weather during the last quarter of 2009–10, there had been an increase of up to 2.5 times the normal levels of reported problems in the condition of the highway network in Durham.

From the above information, it was estimated that £2 million of additional funding would be required during 2010–11 to deal with the more urgent cases of highway defects based on priority, and to ensure the safety of the travelling public as well as to protect the highway infrastructure from more serious deterioration. It should be noted that he annual highway maintenance spend on revenue patching/remedial repair works is usually around £1 million.

This national problem, which was well-documented last year was also recognised in last year's Budget announcement which confirmed £100 million of additional revenue grant funding (£84 million for England) would be allocated to Local Authorities to tackle the issue. In this regard, Durham County Council received £1 million of grant contribution from the Government towards the cost of winter damage repairs.

As a result of the more recent severe winter weather during late 2010; the coldest December for 120 years, and following on from the previous year's severe winter; highway networks across the county have again been left with highways in a seriously deteriorating condition blighted by potholes. In response to this reported highway damage, it has been necessary to deploy additional potholing and patching gangs who have been working across the County to tackle these urgent remedial works on the highway network.

It is estimated that to deal with only the more urgent priority cases of highway defects which have materialised during November and December 2010, a further £250,000 of additional funding will be required this financial year (2010–11). It should be noted that the current requirement for additional funding only relates to the worst winter damage caused during November 2010 and December 2010. There will no doubt be further remedial works and associated additional funding requirement over the coming months due to continuing deterioration and damage.

Without exception, the results of customer surveys on highway maintenance both local and national, through the DCC Citizens Panel, National Highways and Transportation Survey and more recently the DCC Residents Survey have confirmed that the top priority for the public in relation to the highway is road repairs and maintenance and the associated need for greater investment in this service. Yet, to date, no additional grant has been offered by the Government to address the current situation.

Salt Stocks

You will be aware of the effects of the winter of 2009–10 in respect of salt stocks. Due to the shortages at that time most authorities ended that winter period with empty salt barns, something that is not usually the case.

Summer restocking by the suppliers was not finally completed until November, not helped by the fact that some authorities, such as Durham, heeded Quarmby's advice and increased resilience. The effect of this was that suppliers had no reserves above ground to deliver restocking throughout the winter period.

Given the severity of the recent winter, significant amounts of salt were used which depleted stocks held by local authorities. With no winter restocking taking place (Durham received its first delivery on 10 January 2011) and offers of assistance from the National Strategic Salt Store rejected (Durham received its first delivery in the latter half of January 2011) NE authorities agreed to cut back on salt usage to preserve stocks from 25 December 2010 and agreed to procure additional salt from overseas.

It should be noted that in the past year there seems to have been a lack of transparency with regard to the National Strategic Salt Store. Whereby local authorities have been submitting large amounts of data to DfT however there has been much rumour and conjecture as to whether Salt Cell has been in operation or not, if the mines have been told or advised with regard to deliveries to local authorities. In previous years DfT have shared the national picture with all authorities which is useful. There is also still the issue of speed of response with data being provided Monday and decisions not explained until Wednesday of the same week and then deliveries following a week after the initial submission.

The picture going forward is that many salt barns across the country are likely again to be empty or near empty at the end of the winter season March/April 2011. Suppliers still have no reserve so we may be entering winter 2011–12 in exactly the same position as 2010–11. In order to resolve this problem, suppliers should procure sufficient salt, from overseas if necessary to enable a reserve sufficient for the needs of their salt clients over winter. The costs of this will be borne by all clients, rather than those who are committed to securing sufficient salt for their winter service.

Central Government should therefore:

— lend support or pressure salt suppliers into maintaining a salt reserve prior to winter 2011–12; and

— procure sufficient salt for the Strategic Salt Stock before winter 2011–12.

Summary

Winter 2010–11 has been severe and created much the same problems as in 2009–10. The Winter Resilience Review has made local authorities think more about the service that should be delivered and how that should be done. However, in reality, all that has been achieved is that the reserve salt stocks have transferred from the mine head to local authorities. It follows that given two severe winters on the trot, there is insufficient salt being produced or in stock, to deal with the demand that such winters dictate. It is essential that headroom is provided by the suppliers importing more salt during the summer periods.

More so in this period of austerity, damage due to the freeze/thaw action of very cold temperatures is causing damage beyond which the highways maintenance revenue budgets can cope with. Where we have periods of intense cold, as the 'the worst winter for 30 years' or "the coldest November/December since records began" then offers of financial assistance from Government are essential.

February 2011

Written evidence from London TravelWatch (AWC 11)

1. Introduction

London TravelWatch is the official body set up by Parliament to provide a voice for London's travelling public, including the users of all forms of public transport. Our role is to:

— speak up for transport users in discussions with policy-makers and the media;

— consult with the transport industry, its regulators and funders on matters affecting users;

— investigate complaints users have been unable to resolve with service providers, and;

— monitor trends in service quality.

Our aim is to press in all that we do for a better travel experience all those living, working or visiting London and its surrounding region.

2. The Inquiry

London TravelWatch welcomes the House of Commons Transport Committee's further inquiry, which will build on its previous work, and will consider:

— Impacts the road and rail networks in England and Wales.

— Impact on the UK's airports, including the extent to which lessons were learnt from winter 2009–10.

— The provision of accurate weather forecasts to transport providers in advance of the bad weather.

— The recommendations of the Quarmby reviews into the resilience of England's transport systems in 2010.

London TravelWatch's board received a report on the impact of the adverse weather in November and December 2010 at its board meeting on the 1 February 2011.

This report covered the broad areas that the committee are seeking to investigate with the exception of air travel which is outside the remit of London TravelWatch. The contents are reproduced below.

3. Background

This paper builds on the previous reports to the London Travelwatch board (10 February 2009 and 26 January 2010), and on the scrutiny report of the London Assembly Transport Committee of March 2009. The Department for Transport commissioned an independent audit of the resilience of English transport systems from David Quarmby to which London TravelWatch contributed. This is referred to as the Winter Resilience Review.

It should be noted that through the period of weather disruption London TravelWatch staff undertook constant monitoring of the situation on a day to day basis, by observation, by responding to phone calls and emails from passengers and also by conversations on face to face, telephone and email with operators and authorities. This enabled London TravelWatch to respond immediately to the Winter Resilience Review, contributing directly to some of that review's detailed recommendations.

Severe disruption has occurred, principally to the rail network, as a result of snow and cold weather that began on 30 November 2010. This paper seeks to explore whether recommendations regarding previous weather events in 2009 and 2010 have been implemented or were successful. Previously it has been stated that as London and the south east is not used to such extended periods of cold weather it is not clear that the railway network could have done substantially more to avoid service disruption.

London TravelWatch's concerns therefore focus on the communication of information to rail users and the speed of service recovery by specific train operators.

4. Buses

This year's snowfall started at the beginning of a working day in London. Snow had been well forecast. This was unlike February 2009 when snow fell overnight. Clearly traffic movements, particularly bus services, contributed to maintaining the roads in a passable state this year. This year, unlike in 2009, the TfL website was able to handle the increased volumes of enquiries to the transport information. However, where diversions or curtailments of services were put in place, especially at short or no notice, the information contained on the website seemed to be dependent on the efficiency of operators reporting such service perturbations to TfL.

Unlike in 2009 there were no reports of buses being unable to leave their garages.

5. Streets

Again we observed side streets and footways were the last to be cleared. However, there was some evidence to suggest that local authorities and others were better prepared than in previous years.

6. Croydon Tramlink

Croydon Tramlink was able to keep itself operational throughout the period of adverse weather and carried substantial numbers of passengers displaced from other disrupted modes of transport.

7. London Underground

London Underground faced relatively little disruption to services in its core area of zones 1 to 6 in comparison to the National Rail network. Disruption did occur but it did not result in wide scale closures of the network and while some delays were experienced, most journeys remained possible.

In the following hours and days, London Underground's network recovered from the disruption caused by the snow fall.

8. Network Rail

The performance of Network Rail in a number of key areas of operation gives serious cause for concern. These were:

— Failure of the Integrated Train Planning System (ITPS) to cope with the need to update and implement contingency timetables. This system feeds all other Customer and Passenger Information Systems (CIS and PIS) as well as websites operated by National Rail Enquiries (NRES) and individual train operators.

— Failure to have in place sufficient resources to de-ice tracks and conductor rails and to clear snow and other line blockages.

— Failure of Uninterrupted Power Supply back up equipment to deploy at least one location.

The performance of individual train operators was largely dependent on the ability of Network Rail to deliver a railway on which their trains could operate. However, there were a number of individual areas where performance could have been substantially improved such as:

— The ability to switch easily to a contingency timetable.

— To fit pre-heating devices to fuel lines on diesel trains.

— To clear snow and ice from stations, not just from platform edges and approach roads but also from the centre of platforms to allow easy passenger circulation.

— To have in place emergency arrangements with local authorities in the entirety of the operation area of each train operator, including contact with smaller local authorities.

— Management of crowds and queuing at major terminals.

Examples of failures by the rail industry included the following:

— Failure of train operators to successfully upload their contingency timetables to ITPS.

— Train operators succeeded in uploading a contingency timetable to ITPS but the normal timetable was not removed by Network Rail and so information systems showed both contingency and normal timetables running together.

— Insufficient de-icing units and clearance trains being available for deployment at the appropriate times and locations.

— A new passenger train fleet that included a "de-icing" capability, but was not able to be deployed for a number of days as the "de-icer" fluid had not had regulatory approval to be used.

— Incomplete installation of heated conductor rails and points. The former are a new innovation since 2009, and the ones that had been installed worked very well, but often led to displacement of disruption to other locations.

— Failure of Network Rail to de-ice parts of the network which had been subject to an engineering possession prior to handing back for operational use.

— Failure of alternative power supply units at a Service Delivery Centre (Signal box/Control) when a power cut occurred on the main supply.

— Some operators had difficulty in running their contingency timetables because their staff live in places served by other train operators who were experiencing greater operational difficulties.

— Failure of some diesel units when temperatures fell below freezing, and so trains became either trapped or were unable to leave stabling points.

— Inconsistency of clearance of platforms between train operators at stations eg in some instances only platform edges were cleared and piles of snow remained extant for some weeks afterwards in the centre of some platforms at major stations.

— Failure to have in place contact arrangements with local authorities in the event of trains and passengers being stranded in particular locations—in this case the London boroughs.

Following the disruption to transport in London from heavy snow in 2009 and 2010 we made a number of recommendations for dealing with incidents such as this in future.

The main conclusion of these reports was the key vulnerability of the rail system in London is the direct current third rail power system which is found predominantly south of the Thames. When the conductor rail is covered with snow, it causes poor contact between the conductor shoe and the rail itself. This can result in the train becoming immobilised or suffering damage to its electrical systems. In February 2009 this was the key reason why most disruption was faced south of the river whereas on the overhead electrified AC lines more services were able to operate. Since then a number of locations have been fitted with heated conductor rails and more point heaters have been installed. These installations worked in keeping the rails concerned free of snow and ice. However, as noted above this often transferred problems to other locations. So it is recommended that the installation of such heated equipment is adopted as a standard feature of third rail systems. The Winter Resilience Review has recommended an industry wide review of the technical alternatives to the third rail system.

The 2009 and 2010 reports recommended that a reduced service that operates was far preferable to a full scale cancellation of all trains. This recommendation was largely adopted by most train operators in the London TravelWatch area, and this appeared to work very well when adopted—except as noted above where the ITPS

system failed. Southeastern adapted their previous emergency timetable to run a much later evening service on their London metro services following previous feedback from passengers and stakeholders.

9. Eurostar Services

Following previous problems in 2009 and 2010 Eurostar had implemented a major review of its preparedness and although they did have some major difficulties, particularly following on from another operators train blocking a high speed route in France, the disruption was on a much smaller scale than previously.

10. Compensation Arrangements

One additional item that has been raised with us through casework is that compensation arrangements vary between individual train companies depending on when their franchise was let, and whether they think they can afford any compensation. This related to the arrangements in place with Southeastern, who compensated only those passengers who were trapped on trains overnight, as required by their 2004 franchise, and not others who otherwise had their journeys disrupted. Other operators whose franchises were let later than 2004 had much more generous compensation conditions and obviously put those into effect. In the case of network wide events it would seem not unreasonable on the grounds of equity that there is a case for a central direction by the government to make such arrangements more uniform.

11. Our Conclusions

The transport system in London and the south east has faced the most sustained period of cold weather and snow since the early 1980s. The system has not been tested with a sustained period of cold weather for at least 20, on a repeated basis. The impact has been mainly felt on the railways with most operators facing considerable disruption.

Given the scale of the cold weather and snow, it is not surprising that train services suffered disruption as London and the south east are not used to such conditions. Most operators had to put in place emergency timetables and this considerably disrupted passenger journeys. However, for most companies the disruption was relatively quickly brought under control and localised, but as concluded by the Winter Resilience Review there are a number of key areas where the rail industry in particular needs to perform at a much higher level.

The area of information is the most important as far as passengers are concerned and it is regrettable that the ITPS failed on a number of counts at the critical moment. The Winter Resilience Review agreed with our overall conclusion that in many cases the transport industry has become over dependent on electronic information systems controlled from a central point, and that a thorough review of technologies and processes is required. Given the consistency between our submission and the eventual conclusion of the Winter Resilience Review it is fair to say that the review attached significant weight to our submission.

Passenger compensation regimes also need to be modernised and made more consistent. London TravelWatch, in-conjunction with Passenger Focus and First Group, is currently undertaking research into passenger expectations on compensation arrangements. The results will be reported at a later date.

The rail industry needs to have a concerted technical drive to improve standards in the event of such weather emergencies in future. In particular the ITPS system—a failure in which can result from a variety of causes not just snow and ice, needs to be much more capable of being able to cope with the need to introduce emergency timetables at short notice.

12. Recommendations to the Committee

London TravelWatch believes that whilst undoubtedly there was a considerable improvement in late 2010 in the response to the adverse weather conditions compared to earlier in 2009 and 2010 there are areas where transport operators, infrastructure providers and transport authorities could still improve their response to adverse weather conditions. In particular the issue of information flow needs to be addressed, as this is one areas of principle concern to transport users, especially relating to the electronic information that is governed by and routed by Network Rail's ITPS train planning system. It is also recommended that there should be a review of emergency planning arrangements, including whether smaller local authorities could combine nor coordinate their resources and responses to such weather events.

February 2011

Written evidence from Dome UK Ltd (AWC 14)

1. I have been a Director of Dome UK Ltd for three and a half years. Dome UK have built 130 timber salt stores across the UK since 1992. Prior to this was Commercial Manager for Salt Union Ltd at the Winsford Mine for 12 years. Previously Speciality De-Icers Business Manager with BP Chemicals. In total 20 years experience in the UK winter maintenance industry. I was a founding member of the National Winter Salting Research Group and remain active as part of the industry technical advisors group to this organisation.

2. In March 2009 we made a submission to the Select Committee investigating the winter of 2008–09. We stand behind the proposals we made at that time specifically around the need for increased salt stocks closer to the point of use.

3. With severe weather events 09/10 and December 2010 and the detailed study by Quarmby having accurately quantified the shortfall from indigenous production we would suggest that the level of this strategic stock be raised to at least 450,000 tonnes across the UK to ensure a robust supply chain.

4. It is also now clear that it is highly unlikely that this shortfall between demand and supply in snow conditions will be met by an increase in local production and that the UK is dependant on imports with long lead times and inflated prices to fill the gap.

5. With current delivered prices for imported salt at three times historic levels, payback on these facilities would be under a year.

6. We suggest that these strategic stocks are managed by the Highways Agency, Transport Scotland and the Welsh Assembly Government. Weighing and web based stock management systems are now available to monitor multiple users and keep an overview of stock levels.

7. We would recommend that purpose built salt barns like those supplied by ourselves that offer longevity, low maintenance, environmental protection and safe working conditions are used for these facilities.

8. We would welcome the opportunity to contribute further to the committee's investigation.

February 2011

Written evidence from the Institute of Highway Engineers (IHE) (AWC 15)

Final Report of the Independent Review of Winter Resilience *Recommendation*	*Institute of Highway Engineers* *Response*
Recommendation 1: That for the forthcoming winter the need for a strategic reserve stock of salt for England's highway authorities be recognised, if the resilience to handle the risk of its being as severe as last winter is to be secured, and given the projected shortfall of UK production against the possible demand; and that the Highways Agency should be tasked, on behalf of the Secretary of State, to acquire by import, store and make available on terms to be agreed an initial reserve stock of some 0.25 million tonnes of salt for "last resort" use by local highway authorities and for itself; and that the DfT at the end of December should formally lead the consideration and review (using information and forecasts then available) of whether further additional reserve stocks should be secured for the remainder of the winter.	The availability of a strategic stock was clearly not adequate to deal with the number of requests received from local authorities who faced low levels of stock as they approached the Christmas period. The criteria for the release of supply were so defined that local authorities would be at near critical/emergency levels before any supplies could be released. It was clear that the location of the stock also affected the possible release of emergency supplies. There were no supplies north of Humberside for example. Local authorities were also unable to determine from DfT the amount of salt being released under this process.
Recommendation 2: A systematic year-round process of collecting data, monitoring salt stocks and movements and disseminating the findings should be put in place by DfT, to give advance warning of any issues affecting prospective salt supplies and availability, and to provide the basis for regular strategic overviews of the salt supply chain and any necessary decisions by them or other parties. This should be independent of any need for the operation of Salt Cell in "allocation" mode.	Salt stocks at 1 October 2010 were adequate in many local authorities and in many cases in excess of the total volume of salt used during the 2009–10 winter. However, once it became apparent that salt was being used in considerable quantities, the amount of salt reserves and capacity of the manufacturers lead to an inability to obtain further supplies. The year round monitoring process which is supported should include the quantities of salt available in all reserves arrangements and at manufacturers' bases.

Final Report of the Independent Review of Winter Resilience *Recommendation*	*Institute of Highway Engineers* *Response*
Recommendation 3: The vulnerability and lack of resilience of the salt supply chain as currently configured should be recognised; that some targeted intervention needs to be designed which will substantially improve the resilience of the supply chain with minimal impact on the normal functioning of the salt market in the UK; and to note that the development and evaluation of proposals for this is a key part of the Review's stage two work, which will be presented in the Final Report in the autumn.	There is still some way to go before there is an adequate reserve of salt supplies as a result of the past winter requirements. In order to rebuild that reserve supply, consideration should be given to obtaining stock from outside the UK as clearly the current UK market is unable to satisfy demand.
Recommendation 4: DfT should consult with the Scottish and Welsh authorities about the implications for Scotland and Wales of these short term recommendations for the salt supply chain.	Scottish authorities recognised at an earlier stage that there were supply problems and made appropriate arrangements.
Recommendation 5: Every local highway authority should have a robust winter service plan, and should regularly review the key elements of it, including network coverage, operational procedures and standards and appropriate salt stockholding to meet defined resilience standards, all in line with current best practice.	There are areas of good practice within local authorities regarding robust review. Many rural type authorities have made substantial efforts to increase resilience to winter situations but this is less true for some urban authorities where little review has taken place.
Recommendation 6: Consultation on treated networks should be broadly drawn to include business representatives, passenger and freight transport operators and local communities, as well as health and education service providers; and to help manage public expectations should be followed by clear and comprehensive communications of winter service plans, supported by good real-time communications through media and on-line when winter conditions arrive.	Authorities should be required to produce and publicise their winter plans and consult residents and businesses on the contents- such plans should also be part of local resilience arrangements.
Recommendation 7: As many local highway authorities already do, authorities should collaborate with and support lower-tier authorities to help ensure that maximum practical winter support can be given in areas and communities beyond the treated networks, including possibly the treatment of key footways and pedestrianised areas.	There has been an increase of collaboration but this needs further work in some areas. Particular attention should be given to local priorities and such decisions are best made by the local community
Recommendation 9: Professional bodies and the Local Government Association should encourage the more widespread dissemination and adoption of best practice in the preparation and delivery of winter service plans.	IHE intends to support a national standard of competence for local highways staff engaged in the decision process and in service delivery. Authorities should consult and work together on supporting those smaller authorities as well as seeking to see similar standards of delivery than having different arrangements across authority boundaries.

Final Report of the Independent Review of Winter Resilience *Recommendation*	*Institute of Highway Engineers* *Response*
Recommendation 10: While recognising that the resilience of salt supply is being addressed as a nationwide issue, local highway authorities can support this and should: — all participate fully in the year-round systematic information collection and monitoring of salt stocks and movements which we are recommending should be adopted by DfT; — ensure their own planning of salt stocks and supply is sound and carried out in accordance with best practice, and supported by practical measures to improve salt utilisation; — put in place (or confirm where existing) mutual aid with neighbouring authorities to help address localised shortages.	An example of good practice exists in the North East of England. The 12 local authorities and the Highways Agency have set up a working group to consider — Mutual aid and salt supply resilience — Best practice inn service delivery — Best practice in communications both to and with the media and general public
Recommendation 11: Local highway authorities should treat their winter service planning as an integral part of wider general resilience planning for civil contingencies, bringing to the development of winter service plans the benefits of processes and disciplines associated with resilience planning, together with the culture of constructive challenge and validation.	Greater effort should be made to include civil contingency teams in dealing with winter problems. Their methodology and planning can be used to greater effect than operational winter crews can manage to deal with any social, medical or welfare arrangements.
Recommendation 12: The Highways Agency should be commended for the research-based measures it has put in place to improve its salt utilisation. It should: — continue to research and monitor the efficiency of its practices and strive to improve the cost-effectiveness of its winter service operation; — share best practice, research and knowledge with other highway authorities.	At the beginning of the snow event in November it was suggested that salt supplies were more than adequate to deal with the conditions and it is clear with hindsight that, at that time, salt was being used in an ineffective manner. The guidance issued by the NWSSG just before Christmas was a useful reminder to authorities about the correct material—either salt or grit—and should be included in the codes of practice Further work should be carried out to ensure that, wherever possible, salt and grit is spread through mechanical methods rather than hand spread as this can also lead to significant overuse of salt/grit.
Recommendation 13: There should be a comprehensive, authoritative review of technical standards and guidance relating to both the treatment and the spread rates of salt, based on research and evidence as necessary, leading to the production of practical guidance for practitioners as well as at a policy and planning level. This should be led by the UK Roads Liaison Group (see next recommendation).	There are sufficient standards and guidance available but they not well publicised. More effort should be made to demonstrate good practice and the UKRLG should disseminate such good practice more effectively.
Recommendation 14: The valuable initiative and work of the National Winter Service Research Group should be brought under the wing of the UK Roads Liaison Group, who should take responsibility for and set the strategy for its work programme, including its contribution to the comprehensive review of technical standards and methods.	Agreed.

Final Report of the Independent Review of Winter Resilience *Recommendation*	*Institute of Highway Engineers* *Response*
Recommendation 16: We note and commend the generally high quality and accuracy of short term (0–5 days) weather forecasting now available to support the operational decisions of highway authorities and their contractors, and recommend that the weather forecasters continue to develop their capabilities both for 15–30 day forecasting to meet the resource planning needs of highway authorities, and for longer term seasonal forecasting.	The availability of accurate and high quality weather information has increased There are, however, still problems with what is termed marginal nights where the forecast is for around zero degrees Centigrade. The confidence in such forecasts and the timeliness of changes still needs to be improved.
Recommendation 17: Given that the probability of next winter being severe continues to be relatively small but that severe winters are still possible despite the warming trend, we recommend that winter resilience planning—and the securing of greater resilience in the supply of salt—should continue on the basis of dealing with winters of a severity similar to that of 2009–10.	As Recommendation 3 above
Recommendation 23: The review of best practice and technical standards recommended in the Interim Report as a task for the UK Roads Liaison Group should be given added urgency, focusing on research which would underpin recommendations for the adoption of lower salt spread rates as a strategic initiative to improve resilience of the salt supply chain; together with a timescale for adoption in early 2011.	Agreed
Recommendation 24: The two main UK suppliers should be encouraged to continue their current initiatives to increase their throughputs:	As recommendation 3 above
Recommendation 25: A new resilience benchmark of 12 days/48 runs should be adopted for pre-season stockholding for English local highway authorities; they should then review their history of usage and mutual aid or other arrangements to consider: a) whether there is a case for increasing capacity towards 48 runs if it is currently less than this, in addition to filling the capacity they have; or b) at what level to stock—at or above the 48 runs level—where the capacity exists to do so.	Agreed. As stated in response to Recommendation 1 above, the current threshold is too close to critical supply levels.
Recommendation 26: To ensure optimum resilience of the supply chain through a nationally severe winter, achieving benchmark resilience levels across Britain by the beginning of November should be treated as the key priority, facilitated where necessary by imports. The year-round monitoring system being put in place will analyse and overview this process and enable any future shortfall to be addressed.	As Recommendation 3 above
Recommendation 27: Building on the UK Roads Liaison Group Report of July 2009, that the *Well-maintained Highways* code of practice continues to be regarded as best practice by local highway authorities for winter service policy and planning, as modified and reinforced by the specific Recommendations of this Review.	Code of Practice should include increasing the competency of decision makers and operational staff and to agreed national standards of competence.

Final Report of the Independent Review of Winter Resilience Recommendation	*Institute of Highway Engineers Response*
Recommendation 28: Local highway authorities should, in their winter planning and consultation, consider the extent of treatment of footways, especially in relation to bus stops, railway stations and other public transport interchanges as well as to town centres, business premises, schools and health facilities.	As indicated in Recommendation 6 above, consultation on local priorities should include such facilities. Where local people are able to support their local community by snow clearance, good neighbour contact, and assistance with medical and social needs, their actions should not be hindered by unnecessary health and safety and insurance matters. Advice from UK Government as with the Snow Code should be given to support such involvement

February 2011

Written evidence from Passenger Focus (AWC 17)

1. Introduction

1.1 Passenger Focus is the official, independent consumer organisation representing the interests of rail users nationally and bus, coach and tram users across England outside London.

1.2 Passenger Focus welcomes the opportunity to submit evidence to the Transport Committee's investigation into the impact of the recent adverse weather. Our submission focuses in particular on the provision of information to rail and bus passengers during times of disruption.

2. Passenger Attitudes and Priorities

Rail

2.1 As part of its input into DfT's High Level Output Specification (HLOS) process Passenger Focus commissioned research into passenger priorities for improvement. Around 4000 passengers were asked to rank 30 different aspects of rail travel.[6] The work was repeated in 2009.[7]

2.2 The table below shows the top 10 priorities in 2009 compared to 2007. It also shows the relative importance of each attribute ranking relative to punctuality—the higher the score, the greater priority passengers assign to that service aspect. This demonstrates the importance passengers attach to the provision of information in general and especially during times of disruption.

Service Improvement Preference	*2007*	*2009*	*2009 score*
Price of train tickets offer excellent value for money	1	1	1.08
At least 19 out of 20 trains arrive on time	3	2	1
Sufficient train services at times I use the train	2	3	0.98
Passengers are always able to get a seat on the train	4	4	0.86
Company keeps passengers informed if train delayed	5	5	0.79
Information on train times/platforms accurate/available	7	6	0.75
Maximum queue time no more than 2 mins	6	7	0.69
Trains consistently well maintained/excellent condition	8	8	0.69
Seating area on the train is very comfortable	9	9	0.67
Station staff whenever required	17	10	0.67

2.3 The National Passenger Survey (NPS) conducted by Passenger Focus consistently shows that passengers do not believe disruption is well-handled by train companies. In the Autumn 2010 wave of research,[8] for instance, only 40% of passengers were satisfied with the way the train company dealt with delay. Multivariate analysis of the dissatisfaction scores reveals that the way in which the industry manages delay is the biggest driver of dissatisfaction.

2.4 To understand why scores are so low and what practical steps could be taken to improve them, Passenger Focus established a "disruption panel" to obtain accounts from passengers of how their train company handled disruption. The panel consisted of regular rail travellers who provided a short report of their experiences whenever disruption occurred, together with their thoughts about what might have been handled better. The panel ran from November 2009–November 2010 and some 2,000 reports were received. The final report[9] was published in December 2010.

[6] Passengers' priorities for improvements in rail services. July 2007
[7] Passengers' priorities for improvements in rail services. March 2010
[8] National Passenger Survey (NPS). Passenger Focus. Autumn 2010.
[9] Delays and Disruption, Rail Passengers have their say. Passenger Focus. December 2010

2.5 The report highlighted the following key themes:

- Many passengers who experience disruption feel that the rail industry shows too little respect for them, both as customers and as human beings. The impression is given that train companies treat disruption as a purely logistical challenge to be overcome before normal running resumes—that is, divorced from what passengers are thinking and experiencing in the meantime.
- Too many passengers experience patchy, inaccurate or conflicting information—and some get none at all. It shines through that having accurate, consistent information is vital, irrespective of the information channel used, whom you ask or where you ask.
- That the rail industry is poor at helping people through incidents once they have become caught up in them. Indeed, passengers cite actions that made things worse and lack of action that would have made the disruption more bearable. This manifests itself in two main ways: failure to provide accurate estimates of delay or incident duration; and failure to proactively help passengers understand what they should now do, whether it be specific advice or a range of options.
- That there is considerable scope to help passengers avoid disruptions in the first place, prevention being better than cure. Many passengers have the option to take a different route, travel from a station on a different line, or delay their journey to avoid getting caught up in disruption.
- That when train companies behave "considerately", in particular when accurate information is shared in a proactive, timely way, passengers are often quite forgiving, even when the delay is lengthy.

2.6 The panel was reactivated briefly to provide some additional information on passengers' perspectives on how train companies handled the poor weather in early December. Many passengers acknowledged the difficulty faced by the industry and accepted that delays were inevitable. However, the need for accurate and timely information was magnified at such times, especially prior to leaving home. The decision on whether to try to get to work in the first place can be based on the information provided by the industry.

Bus

2.7 In March 2010 Passenger Focus published research setting out bus passenger priorities for improvement.[10] Over 3,800 bus passengers in England (outside London) were asked what their priorities for improvement were. The following table sets out the top-15 (out of 30) criteria.

Improvement	*Rank*
More buses are on time or within five minutes of when they are scheduled to arrive	1
Buses run more frequently at times when you want to use the bus	2
All passengers are able to get a seat on the bus for the duration of their journey	3
Tickets and passes are available that entitle you to travel on all bus services in your local area, not just those operated by a specific bus company	4
Buses go to a wider range of destinations in your local area	5
Bus fares, tickets and passes offer better value for money	6
All bus drivers are helpful and have a positive attitude	7
Accurate timetable and route information is available at all bus stops	8
Tickets and passes are available that entitle you to travel on all types of public transport in your local area, not just buses	9
All bus stops have a well-maintained shelter	10
Personal security while waiting for the bus is improved through the use of CCTV cameras at all bus stops	11
Electronic displays showing the correct length of time until the next bus is due to arrive are available at all bus stops	12
Personal security onboard the bus is improved through the use of CCTV cameras on all buses	13
The correct route number and destination is clearly displayed on the outside of all buses	14
All buses drive at an appropriate speed and are free from jolting	15

2.8 More punctual buses is passengers' top priority but information again features prominently—with the provision of basic information at bus stops being 8th and electronic "count-down" information being 12th.

2.9 This research also looked at the extent to which passengers' expectations were being met by the bus services they used. We found that passenger expectations were being met for the majority of attributes at the bus stop, with the exceptions being information on fares and electronic displays showing the waiting time until the next bus.

3. Response to Disruption in 2010 and 2011

3.1 Passenger Focus gave evidence to the initial Winter Resilience Review (chaired by David Quarmby CBE). In this we recognised the efforts made by the rail industry in keeping services running under extreme

[10] Bus passenger priorities for improvement. Passenger Focus. March 2010

conditions—though we felt both opening hours and services had been cut back too far in Kent in early January 2010.

3.2 We supported the use of contingency rail timetables (providing they are properly planned and of benefit to passengers rather than just adding extra time to existing timetables in order to ease punctuality figures). However, we want these contingency timetables to be more consistent across the network and well communicated. We were concerned that information was not always available to passengers, either nationally or locally. Our top priority was for Network Rail to get the revised timetables and train-running information onto the industry's data systems in time to help travellers.

3.3 Following further disruption in late 2010, David Quarmby was invited to carry out an audit of his previous report. As part of this Passenger Focus monitored the quality of information available to rail and bus passengers across England. This subsequent report[11] found that:

3.3.1 For rail:

- The National Rail Enquiries (NRE) website appears to have coped well with very high volume. However, the online real-time journey planner on the NRE website did not show correct information for some train operating companies (TOCs).
- The online journey planners on TOC and third-party websites did not generally reflect the contingency timetables in operation.
- Tickets continued to be available for sale online for many trains that would not run.
- Station displays appear to have reflected formal contingency timetables.
- Station displays and online Live Departure Boards did not always keep pace with events.
- The NRE call centres appear to have provided good information, but queuing times of 11or 12 minutes were common.

3.3.2 For Bus:

- The major national journey planning websites (Traveline and Transport Direct) provided varying degrees of disruption information and passenger advice, with the journey planning systems themselves returning information from the normal timetables. [NB systems do not provide a "live" journey planning service]
- Bus operators' websites generally provided advice, assuming you persevered to locating details which applied to your specific journey. However, even within the large owning groups the situation varied from subsidiary to subsidiary and journey planning systems returned information from the normal timetables, irrespective of the disruption.
- Passenger Transport Executive (PTE) websites also provided reasonably comprehensive advice. However, journey planning systems again returned information from the normal timetables, irrespective of the disruption.

4. Lessons Learnt and Further Action Required

4.1 The recent weather-related disruption showed, in our opinion, that progress is being made in the way the rail industry handled delays. For example, the National Rail Enquiries website functioned normally, despite very high usage.

4.2 It also highlighted, again, weaknesses in information provision and that, while excellent examples have been reported, a culture of looking after passengers when things go wrong is not yet second-nature across either industry. In many ways this demonstrated what our research (as set out in section 3) found.

4.3 We believe there are six areas in which the rail industry should concentrate effort in the next 12 months:

- There must be maximum commitment to the project to use the national real-time database, Darwin, as the data source for station Customer Information Systems (CIS). Having a single data source will help ensure a consistent message.
- There must be maximum commitment to compliance with the industry's Approved Code of Practice (ACOP) on passenger information during disruption (PIDD) ACOP—the spirit and not just the letter.
- The industry must carefully consider the cultural and process implications of our finding that passengers want greater respect, recognition of their plight and action to look after them when something has gone wrong. This is an area about which current initiatives are, we believe, largely silent.
- The industry must routinely measure and report the standard of information that is ultimately presented to passengers—quantitatively and qualitatively. If this does not happen, the industry will not know whether it is making progress; and it will not understand the remaining deficiencies.

[11] Passenger information during snow disruption. Passenger Focus. December 2010

— The industry must move to a system in which amendments to the timetable, whether for "today", "tomorrow" or any subsequent day show in downstream systems shortly after the train company and Network Rail have agreed them—that is, moving away from a single overnight download. At present there is a 12 hours plus delay between a train company making a decision about what it will run "tomorrow" and that information showing in real time journey enquiry systems. In the short term, the industry should set a goal that journey planners will be correct for the following day from 2100—ie in time for passengers to check their morning journey before going to bed.

— That third parties offering interactive journey planning systems, which are invariably linked to ticket booking engines, must in future "return" options based on real time running information. This should be the case whether they are provided on behalf of a train company or as a stand-alone business. Not doing so means that passengers will continue to be provided with inaccurate information and passengers will continue to buy tickets on trains that do not exist.

4.4 It is harder to come up with generic recommendations for bus travel given its far more local/regional structure. However, there are a number of areas that we feel could usefully be addressed:

— *Potential over-reliance on local media*
Many people were advised to listen to local TV and radio for announcements. However, in our experience these focussed on rail and roads rather than bus. While this is perhaps understandable given the sheer amount of detail involved, consideration might be given to how such information can be provided to media outlets or, at least, to relaying a contact point where further details can be found.

— *Websites*
Our experience with websites was very "hit and miss". Some were up to date and helpful while others simply reflected the normal service provision. There is scope for the sharing of best practice here—even if only company-wide to begin with.

— *Explore the potential of new media*
Bus and train companies have increasingly been turning to social media (facebook and twitter) to provide details of service changes or significant delays. Our "mystery shopping" found various examples of important information being provided through these channels—eg Diamond Buses in the Midlands informed passengers that services would cease from 10pm one particular evening. The same mystery shopping also found London Midland and Chiltern train companies making good use of twitter and facebook.

February 2011

Written evidence from the National Winter Service Research Group (NWSRG) (AWC 18)

Introduction

The National Salt Spreading Research Group (NSSRG) was set up in 2001 in order to provide good practice advice and recommendations to highway authorities regarding salt spreading during winter conditions. Principally, this was to assist them in achieving best value, to ensure effective winter road treatments and to provide an understanding of winter risk and its mitigation. This was achieved through a planned programme of research and practical trials.

In 2009, the Group widened its remit to cover the highway winter service in its entirety and to allow a better alignment with new Government policies, including *Towards a Sustainable Transport System* (TaSTS). The Group was also renamed as the National Winter Service Research Group (NWSRG) to reflect these changes.

The NWSRG comprises organisations, individuals and groups from both the public and private sectors involved in the provision of winter service upon the highways of the United Kingdom, including UK national and local highways authorities, and consultants and contractors that supply winter service. Industry Associates to the Group provide technical expertise and other resources to assist delivery of the Group's aims and objectives. The aims of the NWSRG are:

1. To undertake applied research in the field of highway winter service to further the prevention, and aid the removal, of ice and snow from the highway network. The aims of the research include the identification and development of efficient and effective winter service methodologies.
2. To provide research findings and best practice advice to Group Members.
3. To maintain, on a national basis, a long-standing research group to further advance the understanding and delivery of effective highway winter service.

The Production of Practical Guidance on Winter Service Operations

Towards the end of 2009, the NWSRG Steering Group commenced the production of a new "Practical Guide for Procurement and Delivery of Winter Service Operations". During 2010 guidance has been prepared on topics such as salt storage, spreader calibration and performance, spread rates for precautionary treatments and

treatments for ice and snow. It is estimated that authorities should be able to achieve salt savings of at least 20 per cent by following such guidance.

The importance of the NWSRG was acknowledged within the "Quarmby" Winter Resilience Review that was published in October 2010, and following which it was concluded that the NWSRG work should be made available to all UK highway and road authorities involved in delivering Winter Services through the UK Roads Liaison Group, within which it will soon sit.

The Lessons Learnt and the Need for Future Investment

Many NWSRG members have been at the front-line in supplying winter services during the recent cold weather, and the work already undertaken by the NWSRG has helped to improve the delivery of its services. Our members have learnt from their recent experiences that there remains a need for comprehensive practical guidance on dealing with problems on the UK's roads caused by snow and ice, whilst seeking efficiency savings and value for money. At present the NWSRG is one of the few organisations in the UK that is able to bring together private and public sector organisations in such a way that knowledge and ideas can be openly exchanged, and new research commissioned into topics that will improve the performance of the UK's winter service provision.

Much of the work required includes the production of further guidance on topics such as:

- Salt storage and salt moisture content.
- Salt spreader calibration and performance monitoring.
- Spread rates for precautionary treatments.
- Treatments for ice and snow.
- Road weather information systems.
- Decision making based on weather forecasts.
- Selecting routes to treat.
- Treatments for extreme weather (including low temperatures).
- Treatment of footway and cycle facilities.
- Preparation of business cases for investment.

This work is paramount to the development of a more comprehensive and effective means of forecasting and dealing with snow and ice on our roads and preventing the type of disruption that has impacted on our economy as a result of the severe weather in November and December 2010.

The NWSRG, in its new role within the UK Roads Liaison Group, is ideally placed to lead with the production of such guidance, and its members are keen to continue to provide funding. To address the full scope and urgency of the needs of winter service providers, we will however need support and investment from both local and national government.

February 2011

Written evidence from the Office of Rail Regulation (ORR) (AWC 19)

1. The Office of Rail Regulation (ORR) is the independent safety and economic regulator for Britain's railways.

2. Recognising that Network Rail and train operators will be submitting evidence to your inquiry, both written and in person, we have sought to avoid duplicating that material here. We have provided a brief overview of the issues from our independent regulatory perspective. We would, of course, be happy to expand on this if the Committee requires.

Train Service Performance

3. Rail passengers and freight operators suffered serious levels of disruption to their services during the recent severe winter weather. The UK was not alone in this; services were disrupted in Germany, Denmark (where half of all trains were delayed in the week over Christmas), Sweden (40% of trains delayed or cancelled in December), Finland, the Netherlands and even Switzerland (20% of SBB trains were delayed during December). Snow and ice conditions across Europe were unusually difficult, as well as occurring exceptionally early in the season.

4. We recognise that great efforts were made by people right across the railway to keep services running, sometimes in the most hostile conditions, and great credit is due for this. Lessons from previous periods of severe winter weather enabled a better response in many ways: improved protection of key depots and access to fuel supplies; the implementation of "key route strategies" to focus resources on keeping the most important services running; and steps had been taken to improve the resilience of key fleets of rolling stock. But there

will be more lessons to be learned and we believe this must happen quickly; any practical steps which can improve the way further such conditions this winter and next are handled must be taken now.

5. Train performance statistics for the period must be interpreted with care. Some operators chose to continue to operate a full timetabled service; a sound approach where all relevant routes were open, volumes of passengers remained high and many of them had pre-booked on specific trains. The punctuality of these trains was poor by normal standards but under the circumstances, most passengers were content just to be able to travel; indeed many diverted to rail from other modes. Other operators introduced amended timetables, reflecting restricted access to minor routes or exceptional speed restrictions, to give their passengers the clearest indication possible of the expected pattern of services.

6. It is now clear that, mainly as a result of this disruption, and of worse than expected performance during the autumn "leaf-fall" period, Network Rail is unlikely to meet a number of the operational performance requirements we established for 2010–11 as part of the 2008 periodic review. These represent reasonable requirements of its customers and any such failure must therefore be considered a potential breach of the network licence.

7. We are therefore asking Network Rail whether it can provide robust evidence that it has been operating the network in accordance with its licence obligation. To the extent that it considers that failure to meet performance requirements is due to circumstances beyond its control, it will need to provide clear evidence of this, and that it has nonetheless taken all reasonably practicable steps in accordance with best practice to achieve the required levels of performance. We will do what is necessary to ensure that lessons for the future are learned and actions taken to respond to them, where possible, before next winter.

8. For the longer term, as noted in David Quarmby's reports, the experience of recent winters raises questions about whether there should be investment in the railways to make them more resilient in the face of very severe weather. We have asked the rail industry to set out what can sensibly be done, and we and government will be considering this as part of our review of Network Rail funding for 2009–14.

Information to passengers

9. While overall train service performance seems to have been creditable, the quality of information provided to rail users during this disruption was variable. There were certainly important improvements compared with the disruption earlier in the year, notably where amended (contingency) timetables were adopted in good time and loaded into passenger information systems. However in places information was again very poor. This was particularly disappointing given the work of the "PIDD" (Passenger Information During Disruption) project over the course of 2010. The diversification of information and retail channels has increased the challenge of providing consistent and accurate information in a changing environment, but passengers are entitled to expect this and the industry must continue to plan more thoroughly and implement more consistently until it is able to meet these expectations. We are also aware of concerns about the quality of passenger information raised by Passenger Focus even before the most recent disruption.

10. Working through the industry's National Task Force (NTF) we have commissioned Arup, in their capacity as independent expert reporters (advisers) to ORR and Network Rail, to conduct selected back-checks on the industry's compliance with the procedures and code of practice developed by PIDD, in the first instance to ensure that teething problems with new arrangements are identified and ironed out across the network as quickly as possible. The first set of findings was presented to NTF at its January meeting and further audits will take place up to the end of March. We look for a rapid and positive response to the findings of Arup's audits. We welcome the decision by NTF to take direct ownership of a strengthened PIDD programme during 2011 and a full remit for this is now being worked up.

11. We have told the industry through NTF that we expect the problems highlighted by the winter disruption to be addressed vigorously and effectively. If we are not fully convinced that the industry is moving quickly to deliver significantly better results on its own initiative, we are prepared to take regulatory action to secure improvement, in the interests of all those using the railway.

February 2011

Written evidence from the Air Transport Users Council (AUC) (AWC 21)

Introduction

1. One of the core functions of the Air Transport Users Council (AUC) is to help passengers with enquiries or complaints about air travel. It will do so in relation to any problem. But is it also formally designated by Statutory Instrument to handle complaints that fall within the scope of Regulation EC261/2004. This Regulation covers passenger entitlements in the event of flight cancellation and delay, or of being denied boarding to a flight that operates.

2. One of the requirements of Regulation EC261/2004 is that airlines give information to passengers at the time of disruption to their flight. The information must include details of their rights under the Regulation and

contact details for the designated body for complaints. The AUC thus receives regular feedback from passengers throughout the year about their experience of flight disruption.

3. This regular contact with passengers helps the AUC to understand how airlines handle routine disruptions to their own services as well as major events such as the recent adverse weather conditions. Much of this passenger feedback is anecdotal. But the AUC also takes up complaints with suppliers on behalf of passengers, which can provide an opportunity to get both sides of the story and to understand better what actually happened.

4. Major disruptions are not new. But in little over12 months passengers have endured the winter of 2009–10, the impacts of the eruption of the Eyjafjallajökull volcano in April, and the snow of December 2010.

5. The Quarmby review, to which the Committee refers in its call for evidence for this inquiry, gave a clear insight into the complicated operational structure of air travel, and into the difficulties inherent in bringing together all of the parts to recover from major disruption. It also described the measures that airlines and airports adopt to deal with it, as well as lessons that they say they have learned from winter 2009–10. The volcanic eruption the following April and the snow in December 2010 provided early opportunities for industry to put any changes into practice.

6. This memorandum from the AUC aims to provide the Committee with:

- feedback on what passengers have told AUC staff about their experience during the December 2010 snow disruption, and
- commentary on how airlines' performance in looking after their passengers this time around compared with winter 2009–10 and the aftermath of the eruption of the volcano.

Passengers' Experience of the December 2010 Snow Disruption

7. A consistent theme in calls to the AUC's telephone advice line was problems of communication. Passengers wanted to know two things:

- what is going on?
- what does it mean for me?

8. They needed to know what was happening to their flight. And, if the flight was cancelled, they needed to know what their options were and how could they exercise them. They told the AUC that they had encountered:

- lack of information;
- conflicting information; and
- slow provision of, or out-of-date, information.

9. Passengers complained of not being able to get through to their airline on the telephone, and of websites not working when they tried to re-book their flights or to claim a refund on-line. A number of passengers told the AUC that a recorded message referred them to the airline's website, which then referred them back to the telephone number that they had just called. Some complained about conflicting advice between airline and airport websites.

10. There were also some examples of impractical advice—such as to use surface travel from Scotland to Heathrow in place of a cancelled flight. Road and rail were of course also badly affected by the weather.

11. Some passengers said that they had been given a telephone number to call, but that that line was not open at the time of day that they had been given the information. Others complained that they had been told that they could re-book their flights only via the airline's website, but that they did not have access to the Internet.

12. Many passengers complained of the absence of staff or information at the airport. They were not told about alternative flights or refund options, or about any arrangements for meals or hotel accommodation. Few were told that these were their entitlements under Regulation EC261/2004.

13. However, some passengers told us that they had been given clear information about what was happening to their flight, and about arrangements for hotel accommodation and meals.

14. In the weeks after the disruption, the AUC has been receiving complaints about delays in refunds for cancelled flights and in reimbursement of other expenses.

Commentary

15. The scale of the disruption caused by the snow, and the numbers of passengers affected, posed huge problems for all parties. Airlines and airports will no doubt explain to the Committee their operational efforts to deal with and recover from the disruption. In many cases, because of the snow, staff would have been unable to get to the airport to help out or to put in place elements of the operators' contingency plans. Those who were there would have been directed to the most important task, or to where they personally could have greatest impact. And, at some point, staff need to sleep.

16. Meanwhile, the AUC acknowledges that it tends so see only the negative side of the passenger experience at such times. And the number of passengers that contact the AUC is a very small proportion of the total number that are affected. However, this feedback contributes to a general picture of what goes on.

17. To some extent, the feedback from passengers about communication initially appeared to be at odds with what the AUC understands of industry practices, and with what airlines themselves have told the AUC. In particular, e-mail and mobile telephone technology has enabled airlines to communicate very quickly with all of their passengers (albeit that these media are not infallible—for example, if messages do not get passed on by third parties who may have booked flights on behalf of someone else).

18. However, complaints about communication related in particular to difficulties in responding to a message from the airline, and to inadequate provision of updates. The AUC realises that operators also sometimes find themselves in an information vacuum at times of crisis. But they should consider advising passengers about the timing of their next update, even if that update merely confirms that they have no further news. That would help to alleviate passengers' anxiety about missing out through not knowing what was happening. And it ought to result in fewer repeated calls to overwhelmed airline call centres.

19. In addition to concerns about timeliness of information and problems in communication, passengers' feedback to the AUC raises concerns about whether or not airlines tell passengers of their rights under Regulation EC261/2004. This is not merely a legalistic or bureaucratic interest: the Regulation deals with the very practical problems that passengers face at the time of disruption.

20. For example, the Regulation states very clearly that when a flight is cancelled the passenger can choose to have a refund rather than wait for alternative transport arrangements. That is particularly important information at the time of major disruption: it gives passengers at least some control over their own situation—but only if they know about it.

21. At the time of previous disruptions, the AUC found that airlines were putting limitations on passengers' rights that it believed were incompatible with the Regulation. For example, many said that new flights had to be taken within a short period of the cancelled flightwhereas the Regulation gives the passenger the options of "at the earliest opportunity" or "at a later date at the passenger's convenience".

22. Separately from the Regulation, the AUC had felt, in previous disruptions, that airlines kept passengers hanging on too long before telling them if their flight was cancelled. It is understandable that airlines would not want to give refunds to large numbers of passengers at the very time that they were incurring significant additional operational costs. But the uncertainty was very hard on passengers. And the AUC had wondered whether offering the early opportunity for a refund might also help the airlines because it would leave them with fewer passengers to re-accommodate once they resumed operations.

23. In both cases (limiting rights and early refunds), the AUC had contacted individual airlines to urge them to adopt a more passenger-friendly approach. Its impression, from passenger feedback and from its own website research and contacts with airlines, is that they were indeed more accommodating this time around. Different types of carrier responded according to their business models, but the different approaches had their merits.

24. A number of major carriers had adopted approaches that gave passengers control over whether and when to cancel their reservations at an earlier stage than previously. Many set out clearly arrangements on meals and accommodation. Where a carrier made an early decision on cancellations, it may not have pleased all passengers, but many would have welcomed the certainty against which they could make alternative plans.

25. The AUC expects to receive large number of complaints in the coming months from passengers who were affected by the disruption and who have not been satisfied with their airline's response to their subsequent complaint. As well as dealing with the individual complaints, it will use the data from them as feedback for discussion with operators, the Civil Aviation Authority (CAA) and the Department for Transport, as appropriate.

26. Following other recent disruptions, many passengers were out of pocket even after airlines had reimbursed expenses according to their own assessments of claims. Airlines were slow to process refunds even where there was no dispute as to the sum that the passenger was due.

27. Many of these claims fell within the scope of Regulation EC261/2004. The extent to which passengers face similar problems this time around, or to which airlines honour their obligations under the Regulation more generally, is something that the AUC will wish to monitor. The AUC will pass on data on this as appropriate to the CAA, to assist it in its role as the UK's nominated body for enforcement of the Regulation.

Conclusion

28. The AUC's tentative conclusion is that airlines and airports are very well aware of the impact of disruption on air passengers. They do indeed work hard to learn from each individual episode and to mitigate those impacts for the next time. But passengers' experience of the snow of December 2010 suggests that there may be some way to go in taking forward those lessons before it might be reasonable to conclude that bad

weather happens, and that airlines and airports have done all that could reasonably be expected of them under the circumstances.

February 2011

Written evidence from the Institute of Transport and Tourism (AWC 22)

SUMMARY OF PRELIMINARY RESULTS FROM SURVEY OF WINTER WEATHER AND TRAVEL

1. The on-line survey was launched on 6 December and was circulated to the users of as many organisations concerned with travel that we could contact. It was closed on 20 January with 1,089 responses, reporting 791 trips which were affected by the weather.

2. *Respondents*

There were responses from all regions of the UK, although the response was very uneven. Figure 1 gives the proportions.

Figure 1

RESPONDENTS' REGIONS

	Numbers	*% of Valid Responses*
London	81	8
Scotland	87	8
Wales	41	4
Northern Ireland	16	1
North West	324	30
North East	38	4
Yorkshire and Humberside	204	19
West Midlands	17	2
East Midlands	35	3
East Anglia	63	6
South West	108	10
South East	65	6
Total	1,079	100
Region not given	10	0
	1,089	100

For every region the problems reported by most people were "icy", "extreme cold" and snow, with varying degrees of heaviness (light, medium and heavy).

3. *Modes used*

The survey covered journeys by all modes. Figure 2 indicates the number of journeys the percentage of trips using each mode. The percentage exceeds 100% as it includes trips using more than one mode. The following sheets summarise some of the data for trips by different modes.

Figure 2

MODES USED

Mode	*Numbers using mode*	*% of journeys*
Walk	142	18.0
Car	403	50.9
Bus	133	16.8
Train	216	27.3
cycle	92	11.6
Coach	2	0.3
Plane	31	3.9
Taxi	7	0.9
Other	16	2.0

4. *Mode data*

These sheets give information about trips made by different modes. Cycling, coach and taxi travel has not been included because of the small numbers of journeys reported

Most of the terms are self-explanatory. Others are explained here:

Mode: Number of trips using that mode, including multi-modal trips

Minimum number of trips disrupted: Respondents were asked how many of their trips had been disrupted, with a multiple choice answer (1, 2, 3, 4, 5, more than 5). This figure is obtained by multiplying the numbers of trips by the number of respondents and using six trips for those replying "more than 5".

Inconvenience and Distress Caused Index: Respondents were asked how much inconvenience/distress did this cause you/other people with the possible answers: None, Very Little, Some, A Great Deal. Giving these numerical values (1, 2, 3 and 4) allows us to work out an average, which is reported here.

Mode: Walk **Number of Trips reported**: 142 **Minimum number of trips disrupted**: 505 **Looked for information before journey**: 75%

		% of total trips for walking
Main Journey Purposes	Shopping	4
	Getting to education	6
	Getting to work	72
Most Important problems	Public Transport unpredictable	14
	Difficult driving/walking conditions	18
	Dangerous pavements	31
Main Consequences	Used a different travel method	28
	It was cancelled	38
	It took longer	64

Inconvenience and Distress Caused Index

Inconvenience to Self?	*Inconvenience to other people?*	*Distress to self?*	*Distress to other people?*
3.06	2.78	2.35	2.21

Mode: Car **Number of Trips reported**: 402 **Minimum number of trips disrupted**: 1,118 **Looked for information before journey**: 83%

		% of total trips for mode
Main Journey Purposes	Business travel	7
	Visiting/Meeting Friends and Relations	11
	Getting to work	62
Most Important problems	Blocked roads	8
	Difficult driving/walking conditions	28
	Dangerous roads	35
Main Consequences	It was cancelled	29
	Didn't travel	39
	It took longer	52

Inconvenience and Distress Caused Index

Inconvenience to Self?	*Inconvenience to other people?*	*Distress to self?*	*Distress to other people?*
2.87	2.69	2.22	2.17

Mode: Bus **Number of Trips reported**: 133 **Minimum number of trips disrupted**: 411 **Looked for information before journey**: 85%

		% of total trips for bus trips
Main Journey Purposes	Shopping	4
	Reaching health care	4
	Getting to work	71
Most Important problems	Public Transport unpredictable	18
	Public Transport delayed	22
	Public Transport not running	31
Main Consequences	It was cancelled	23
	Used a different travel method	26
	It took longer	66

Inconvenience and Distress Caused Index

Inconvenience to Self?	*Inconvenience to other people?*	*Distress to self?*	*Distress to other people?*
3.05	2.81	2.29	2.18

Mode: Train **Number of Trips reported**: 216 **Minimum number of trips disrupted**: 633 **Looked for information before journey**: 93%

		% of total trips for mode
Main Journey Purposes	Visiting/Meeting Friends and Relations	9
	Business travel	17
	Getting to work	59
Most Important problems	Public Transport unpredictable	19
	Public Transport not running	23
	Public Transport delayed	31
Main Consequences	Used a different travel method	29
	It was postponed	34
	It took longer	61

Inconvenience and Distress Caused Index

Inconvenience to Self?	*Inconvenience to other people?*	*Distress to self?*	*Distress to other people?*
3.13	2.95	2.40	2.29

Mode: Plane **Number of Trips reported**: 31 **Minimum number of trips disrupted**: 50 **Looked for information before journey**: 81%

		% of total trips for mode
Main Journey Purposes	Business travel	19
	Visiting/Meeting Friends and Relations	23
	Holiday or day out	32
Most Important problems	Public Transport delayed	2
	Other	5
	Runways blocked	20
Main Consequences	It took longer	45
	It was delayed	45
	It was postponed	48

Inconvenience and Distress Caused Index

Inconvenience to Self?	*Inconvenience to other people?*	*Distress to self?*	*Distress to other people?*
3.45	3.16	3.03	3.00

5. The majority of respondents said they looked for information before travelling. Plane travel disruptions appear to cause the most distress and inconvenience to both the traveller and other people, disruptions to car travel appear to cause the lest inconvenience and distress.

6. *Opinions*

Respondents were given statements about the winter weather and asked to indicate their opinion. On the following scale:

Disagree Strongly, Disagree. Neutral, Agree, Agree Strongly and Don't know.

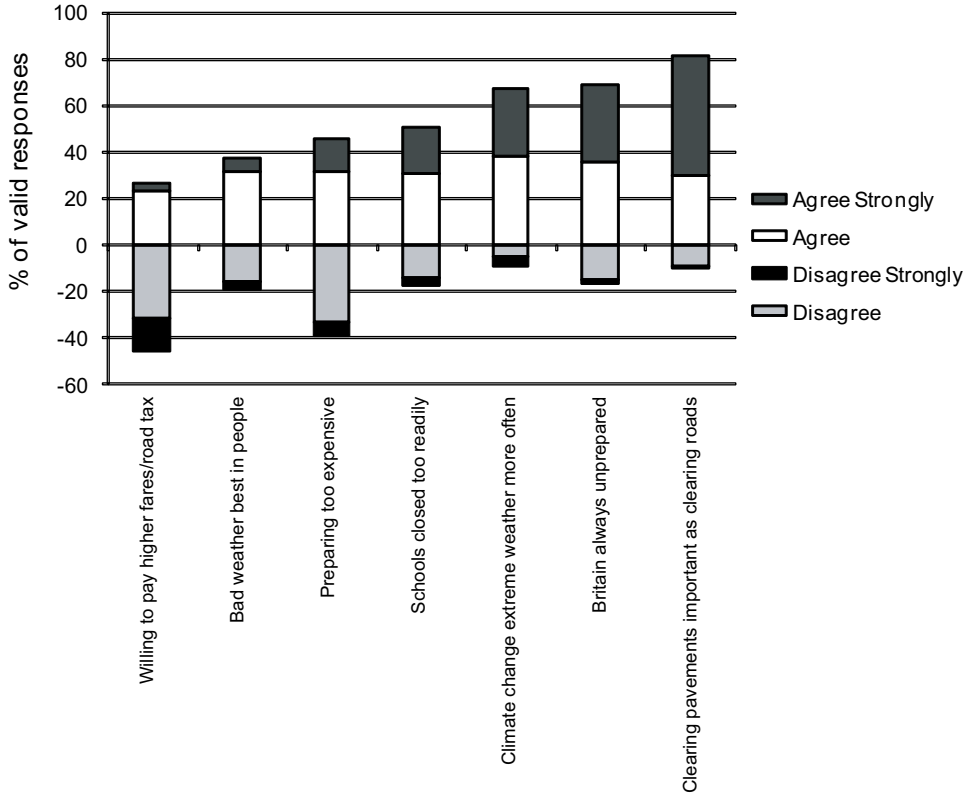
The statements were:

1. Britain always seems unprepared for bad weather.
2. Preparing for weather that only occurs a few days a year would be too expensive.
3. I would be willing to pay higher fares/road tax for better preparation.
4. Clearing pavements of snow and ice is as important as clearing roads.
5. Climate Change means we can expect more extreme weather more often.
6. Bad weather brings out the best in people.

Figure 3 shows the percentage of valid responses agreeing and disagreeing with each statement. The columns below the line represent the percentage of people disagreeing and disagreeing strongly to the statement, those above, the percentage who agreed or agreed strongly to the statement. The responses of people who said they were neutral or did not know have been included in the percentages, but not shown on the chart.

Figure 3

OPINIONS



This indicates that over 80% of valid responses agreed that clearing pavements of ice and snow was as important as clearing roads. Most people disagreed that they would be willing to pay more in road tax or higher fares to be more prepared for bad weather, although nearly 70% of valid responses agreed that Britain always seemed unprepared. Opinion was most closely split on the question of whether it would be too expensive to prepare for conditions which might only last a few days a year with 46% of valid responses agreeing with the statement and 39% disagreeing. There were statistically significant differences between the answers from different regions and genders for some of the questions.

7. *Conclusions*

This is a short summary of the survey findings, much of the analysis remains to be completed. It illustrates how the scale and scope of the disruption varies with the local weather, the journey purpose, frequency and length. We hope soon to have more findings about the consequences of the disruption, including people who found they could not make journeys because of the closure of facilities such as schools requiring them to care for others or because of cancellation of events or closure of destinations.

February 2011

Written evidence from the Freight Transport Association (AWC 23)

1. The Freight Transport Association is one of Britain's largest trade associations, and uniquely provides a voice for the entirety of the UK's logistics sector. Its role, on behalf of over 14,000 members, is to enhance the safety, efficiency and sustainability of freight movement across the supply chain, regardless of transport mode. FTA members operate over 200,000 goods vehicles—almost half the UK fleet—and some 1,000,000 liveried vans. In addition, they consign over 90% of the freight moved by rail and over 70% of sea and air freight. FTA works with its members to influence transport policy and decisions taken at local, national and European level to ensure they recognise the needs of industry's supply chains.

BACKGROUND

2. The freight industry is heavily reliant on the transport infrastructure that it uses performing to a consistently high standard. Distribution networks, delivery routes and schedules have been designed to achieve availability of sufficient goods at the point of consumption by business or consumers without the need for extensive and expensive stock holding. Operators build resilience into their operational planning to accommodate regularly encountered journey time unreliability and seasonal changes in network performance.

However, distribution systems suffer significant disruption when severe weather (high winds, snow and ice, flooding) affects the performance of the transport network.

3. The disruption caused by the snow and ice in December 2010 was particularly acute and much more widespread and enduring than the severe winter weather in January 2010. In January 2011, FTA surveyed members to establish the impact of the two periods of winter weather[12] Only 17% of members reported no backlog to deliveries in December 2010, compared to 28% reporting no backlog following the January 2010 snow. The average backlog was just over three days in the winter weather in December 2010 compared to just over two days in January 2010. Sixteen per cent of operators surveyed had backlogs of over five days in December 2010, compared to 8% in January 2010.

4. Fifty-two per cent of operators surveyed said that the disruption to scheduling and routeing of vehicles in the December 2010 snowfall was significantly greater than January 2010. A further 40% said that the disruption to scheduling and routeing was slightly more in December 2010. The greater operational impact of the snow in December 2010 was compounded by the snowfall occurring in the busy run-up to Christmas.

Impacts on the Road and Rail Networks in England and Wales

Motorway and trunk road network

Disruption to the UK's National Trade routes

5. The Highways Agency generally kept the motorway and trunk road network running during the period of snow in December 2010. However, operators reported that, in their experience, gritting operations were less effective than in January 2010. A balance of 18% of respondents believed that gritting of motorways was less effective, and a 29% balance said gritting of trunk roads was less effective.

6. There were several occasions in the December 2010 snowfall when the motorway network in England faced extensive problems. These occurred on M25/M20 (junction 3) and M5/M42 (junction 4a). There were common factors affecting both incidents. In both cases there was a large amount of snowfall on an exposed stretch of road, which had compacted into ice. This made it difficult to clear. Both involved long hills towards the junction and then long slip roads, creating the potential for loss of traction over long distances. As a result, jack-knifed lorries were a key element to the traffic disruptions. Questions have been raised by the Scottish Government, following the disruption to motorways in the central belt of Scotland caused by the December 2010 snowfall, as to what more the industry can do to prevent lorries jack-knifing or losing traction and the extent to which winter tyres could be used by operators during periods of severe winter weather.

7. In January 2011, FTA undertook a survey of its members to establish the extent of incidents where hgvs have lost drive axle traction or lost control of the vehicle.[13] Responses were received from 82 operators, the results of which are summarised below:

Vehicle type	*Number of incidents of loss of driver-axle traction*	*Number of incidents of jack-knifing*	*Number of other incidents involving loss of control (skilled etc)*
Rigid up to 12t gvw	572	n/a	115
Rigid over 12t gvw	570	n/a	110
Artics	5,155	10	96

8. Members reported that where jack-knifing incidents did occur, a key contributory factor was poorly treated road surfaces. Any additional focus by industry in tackling this problem needs to be supported by a mapping exercise by Highway Agency that identifies areas of the network which present the greatest risk of articulated vehicles jack-knifing, and the appropriate levels of gritting and ploughing needed to maintain those sections in an operable condition.

9. Of those members responding to the survey 7% currently use winter tyres in their operations. Most only fit these tyres to the vehicle's drive axle. Members reported that winter tyres cost around 20% more to purchase. Of those who currently do not fit winter tyres, the main factors preventing their use are fitting costs (downtime for swapping tyres over) and storage costs of tyres not in use and greater tyre wear rates for winter tyres. FTA believes that it should remain an operational decision on whether to fit winter tyres, rather than it being required under legislation. In Germany, where winter tyre legislation is in place, a winter tyre order was invoked on 4 December.[14] Dealers quickly ran out of stocks, pushing up winter tyre prices and creating disruption for operators over and above that resulting from the snow.

10. The Scottish Government also suggested banning hgvs from the road network during periods of severe winter weather as a way of reduction disruption. FTA opposes such an approach. If, as a result of snow and ice, a stretch of road is unsuitable to traffic, then it should be unsuitable for all traffic, not just hgvs. As noted

[12] FTA Quarterly Transport Activity Survey, January 2011
[13] Survey of winter related incidents and use of winter tyres, January 2011
[14] David Quarmby Audit, December 2010

in paragraph 13, of this submission, hgvs can have a positive effect of winter maintenance activities by grinding the salt into the road surface and improving its effectiveness.

Disruption to regional trade routes

11. Operators reported problems passing stretches of motorway, such as the M58, which are lightly trafficked. This resulted in the Highways Agency closing a lane in each direction to ensure sufficient traffic on the remaining open lanes in order to effectively grind the salt. FTA believes that the Highways Agency's operations management team responded effectively when these problems were identified.

12. On several stretches of exposed trunk road, the Highways Agency considered using convoys of lorries to assist with the clearance of the road. Under this scheme, Highways Agency incident support vehicles (including ploughs and salting vehicles) would convoy hgvs. The heavy vehicles would then be able to grind the salt into the snow making surface treatment more effective. Such an approach was considered, but not implemented on the A1 and A30 (Dartmoor). FTA members would be prepared to support the Highways Agency in trialling such an approach in future where vehicles are available.

Local roads

13. Similar to motorway and trunk roads, members reported that the gritting operations on roads controlled by local highway authorities were less effective in December 2010 than in January 2010. However, the balance of respondents reporting a deterioration was much greater, at 49%. As was the case in the snowfall in January 2010, the main problem encountered by operators in December was that the relatively short stretches of road connecting depots to the motorway and trunk road network did not receive sufficient priority in local authority gritting plans.

14. Whilst local authorities had sufficient salt, the early snowfall compared to recent winters meant they did dot have sufficient resources (people and equipment). When the local roads frequently used by hgvs were finally gritted, their recovery period was slow as the snow had compacted to ice in the sustained period of freezing temperatures.

Impact on the UK's Airports, Including the Extent to which Lessons were Learnt from Winter 2009–10

15. Airport ports are key modal interchange points for high value, time-sensitive freight carried either in the belly holds of passenger aircraft or dedicated "freight only" aircraft. Relatively few airports are key freight hubs, the principal ones in UK being Heathrow and East Midlands. FTA concurs with the view of David Quarmby's Audit that individual airports operators will make their own business decisions about the resource that is made available to maintain services during severe weather. However, this does not absolve local highways authorities from their responsibility to prioritise gritting on local roads that provide access to the motorway and trunk road network. Furthermore, Government needs to consider contingency plans for critical airfreight, such as drugs, in the event that major air freight gateways are snowbound.

16. David Quarmby remarked in his Audit that comparisons with resources available in countries more prone to heavy snowfall are no guide to what is economic or sensible for the UK. This is a principle that can be applied to all aspects of transport resilience in winter weather in the UK.

The Provision of Accurate Weather Forecasts to Transport Providers in Advance of the Bad Weather

17. Currently the Highways Agency provides a specific, route-related advisory service for HGV operators when high winds are expected and experienced. A clearly documented chain of events is in place:

- *Stage 1*: Potential for high winds from accurate weather forecasts identified.
- *Stage 2*: Amber Alert warning issued providing operators with information about where the winds are expected, and routes where traffic is at risk from high winds. Alerts are timely and relevant allowing operators to take pre-emptive operational decisions regarding the routeing and scheduling of HGV movements.
- *Stage 3*: Red Alert warning issued to drivers and operators urging vehicles to be parked up.

18. FTA believes that the Highways Authority should be in a position to adopt a similar approach to incidents of snow and ice. This will involve the Agency mapping its network in the light of case history to identify "critical spots" when disruption is likely because of the exposed nature of the road or the geometry of key junctions. As with high winds, alerts must be timely and relevant for operators. In the case of timing, alerts for overnight operations need to be issued by lunchtime and for morning operations by the end of the previous working day, otherwise operators will be committed to schedules. Information on snow and ice will help an operator make informed decisions and may reduce journeys in extreme conditions.

THE RECOMMENDATIONS OF THE QUARMBY REVIEWS INTO THE RESILIENCE OF ENGLAND'S TRANSPORT SYSTEMS IN 2010

Interim and final reports

19. In many cases, it is too early to say whether actions linked to the recommendations of the Quarmby reviews will prove sufficient. The tone of David Quarmby's audit of progress, published in December 2010, suggests that the response of the authorities has generally been in line with what was needed. Certainly in the case of the problems of congestion at the salt mines in Cheshire, FTA had no reports of operational problems during the December 2010 snowfall. Similarly, FTA understands that the Highways Agency and local highways authorities were able to manage salt supplies effectively. However, the December 2010 snowfall did identify new problems such as the lack of operational preparedness to wintery weather so early on in the winter.

20. Recommendation 6 of the Interim Report argues that consultation by local highways authorities on treated networks should be broadly drawn, including business representatives and freight transport operators. Whilst industry has sought to influence winter service plans through Freight Quality Partnerships, there has been little proactiveness by local authorities to engage in the consultation process.

21. Recommendation 15 on the Interim Report encouraged the Department for Transport to develop a code setting out good practice for members of the public, including business owners, in clearing snow and ice from footways. The "Snow Code" is now available on the Direct Gov website, however, this one page document is focussed on the public and is not what industry was expecting. More advice is needed on self-help for industry and providing guidance on issues such as liability for accidents on property affected by snow. As part of this, Government needs to consider innovative use of private resources such as agricultural machinery that can be commissioned when dedicated snow clearing equipment is overstretched.

Other areas of FTA evidence

22. Drivers' hours relaxations are crucial during a period of prolonged snow and ice to ensure that goods linked to critical sectors could be delivered during, and particularly post, the worst of the snow and ice. The snow in January 2010 highlighted several supply chains which are put under intense stress, namely:

- distribution of road salt;
- distribution of animal feed from animal feed manufacturers to farms;
- distribution of de-icer products direct to airports;
- distribution of heating oil and liquid petroleum gas (LPG); and
- distribution of bulk milk in tankers.

23. FTA was highly critical of the Department for Transport's overly cautious approach to EU Drivers' Hours Rules and Working Time relaxation in its evidence to David Quarmby. The means of gaining the relaxations were tortuous; often the notification of relaxation was piecemeal and was poorly timed (with little time for operators to implement to best effect). Furthermore the timescale of relaxation was too short in the first instance, requiring subsequent relaxations to be made to provide sufficient time for operators to catch up on deliveries.

24. Lessons learnt from the January 2010 snow meant that once the scale of the likely disruption caused by the snow in December 2010 was evident, the Department for Transport was far more pragmatic about the need for Drivers' Hours rules and Working Time relaxation. In particular announcements were prompter, the duration of the relaxations was longer—allowing operators time to readjust schedules, and the nature of the changes in relation to Working Time were far more closely aligned to industry's needs.

February 2011

Written evidence from the Association of British Travel Agents (ABTA) (AWC 25)

1. ABTA—The Travel Association was founded in 1950—and is the leading travel trade association in the UK with over 14,000 members. Our members range from small, specialist tour operators and independent travel agencies through to publicly listed companies and household names, from call centres to internet booking services to high street shops. ABTA members provide 90% of the overseas air package holidays sold in the UK, as well as selling millions of independent arrangements for travel both overseas and in the UK.

2. We welcome the opportunity to contribute to your inquiry. Our comments are focussed primarily on the two December snowfalls and impact on passengers flying from UK airports.

3. We share the concern of Government that Heathrow was closed for as long as it was following the 18 December snowfall particularly as it dented consumer confidence with thousands of passengers having their holiday plans disrupted. We appreciate the snowfall was unprecedented but feel that the length of closure could have been reduced and disruption circumvented if BAA had adopted a different approach to the snow.

4. We have welcomed the BAA's Winter Resilience Enquiry under the chairmanship of Professor David Begg, have made a submission directly to the panel and look forward to hearing the outcome.

5. Gatwick put the lessons learnt from its closure at the beginning of December to good use and was able to open after only a few hours before Christmas.

6. Priority was given at both airports to clearing the runways and taxiways. However, the stands and aprons were not similarly cleared which meant operations could not resume as quickly as might have been hoped, unreasonably raising passengers' expectations. Equally, the icy roads and reduced surface transport to airports, over which we recognise airports have little control, meant that for some it was just not safe to travel to the airports. The passenger's journey starts at their home, not just at the airport.

7. We are pleased that Heathrow and Gatwick have since invested in additional equipment and airside operations to bolster winter resilience. We appreciate that airports need to be prudent in terms of investment and spending limited funds and acknowledge there is a balance to be struck in terms of investment in this equipment.

8. Although we appreciate that we have not seen weather as bad as this winter's for many years and the UK's climate is unpredictable at best, a repetition of the scenes we saw at Gatwick in early December and at Heathrow before Christmas must be avoided at all costs as it is seriously damaging to both airports' reputations and the travel industry as a whole.

Communications

9. In any disruption, ABTA believes that effective and clear communications with the travelling public and with the travel industry are a priority. Thousands of passengers had their holiday plans disrupted in the run-up to Christmas severely denting consumer confidence. Good, effective, regular and clear communications can significantly ease pressure and consumer sentiment towards such occurrences.

10. There was some confused messaging with passengers unclear as to whether they should attempt to travel to the airport or not. It is essential that the airports liaise with their airline partners to ensure that all are giving the same message and that this is replicated on the airport and airline websites. ABTA's line has always been that customers should call their operator or airline and this was our message during the many media appearances ABTA's Communications team made during the closure. We are able to liaise quickly with our member travel agent and tour operator members to ensure that they are giving the same message.

11. We have offered to both airports the opportunity for greater interface with their communications team in times of crisis to ensure that future messaging does not conflict and communications with our mutual customers are efficient and accurate. This would also avoid the need for the airports to have to communicate directly with all the tour operators carrying passengers.

12. A useful parallel is how ABTA works with the Foreign Office on overseas crises. Our specialist Destinations & Sustainability team maintains close dialogue sharing information, intelligence and communication lines in order to present as seamless and united a front as possible to the travelling public. ABTA, in turn, works closely with travel agents and tour operators on crisis management including disruption to travel infrastructure, in the UK and overseas, whether it is as a result of snow or other weather conditions, to minimise the disruption to passengers. We believe we could forge a closer working relationship with both Heathrow and Gatwick to our mutual benefit and we would welcome the Committee making a recommendation in this regard.

Resilience

13. As an island nation, the UK is very dependent on having adequate air capacity. ABTA has long supported additional runway capacity in the South East, particularly at Heathrow and Gatwick, to allow for long-term growth. We were very concerned at the Government's announcement ruling out further runways at Heathrow, Gatwick and Stansted and its intention to make these airports better and not bigger. Furthermore, mixed mode operation for Heathrow has been rejected.

14. This begs the question as to what can be done to increase capacity overall and, more importantly, to allow the airports to recover after any incident.

15. With both airports operating at already peak capacity there is no spare capacity spare to allow for recovery from weather related situations, such as experienced during the December snowfalls and the April 2010 volcanic ash cloud. A further example is when an accident such as BA's Boeing 777 crash landed just short of Heathrow's 27L runway in January 2008, closing it fully for 24 hours concentrating all arriving and departing traffic on the one remaining runway. Spare capacity is not only essential for jobs and growth but also for efficient management of incidents and delays, however they are caused.

16. Contrast this with the continental airports at Paris Charles de Gaulle, Amsterdam Schiphol, Frankfurt and Madrid all of whom have substantially more runways with the capacity to recover quickly. This gave our continental competition a speedier recovery time meaning less flights were delayed or cancelled and fewer passengers disrupted. In essence, their capacity reduced the impact on the airport and the wider economy as a result.

17. We feel that it is essential that this additional capacity is forthcoming and we will be pushing for it to be part of the Government's Aviation Policy Framework. Pending this, we would urge some formal relaxation of the rules both on mixed mode operations at Heathrow and on night flying at Heathrow and Gatwick.

18. Thank you for taking our comments into consideration. We would welcome the opportunity to contribute further or expand upon any of the above points.

February 2011

Written evidence from the RAC (AWC 26)

Summary

RAC believes that it is imperative that the major urban and inter-urban roads remain open and useable through periods of adverse weather. Although we appreciate that our rescue vehicles will encounter challenges travelling on minor roads that do not command a priority for gritting, we advocate that as many of the minor roads as possible are kept passable. This occurs at the start and finish of a service call and would enable our vehicles to access our customers as quickly and efficiently as possible to ensure the roads are not blocked by broken down vehicles.

To address these challenges, we believe that the Government should:

A. Require local authorities to adopt a more consistent approach in order to ensure that roads are accessible during adverse weather conditions. RAC believe there needs to be a consistency both:
   - — Nationally in the approach to prioritising routes and
   - — Regionally in terms of the severity of the situation and therefore the "level" of the response.

B. Ensure that motorists and motoring organisations are informed as far in advance as possible of impending adverse weather. Accurate forecasts are required a minimum of two and ideally four to six weeks ahead of adverse weather to fully align resources to demand for roadside assistance.

C. Implement David Quarmby's Winter Resilience Report recommendations prioritising a minimum of 12 days salt stock for all local authorities.

RAC Background

- — With around seven million customers, RAC is one of the UK's most progressive motoring organisations, providing services for both private and business motorists. RAC aims to meet motorists' needs through providing roadside assistance, insurance, vehicle inspections and checks, legal services and up-to-the-minute traffic and travel information.
- — RAC attends almost 2.6 roadside breakdowns per year on behalf of our 2.3 million individual members and approximately four million members to whom we provide services through corporate contracts.
- — RAC was the top-named breakdown organisation in the July 2009, January 2010, July 2010 and January 2011 half-yearly UK Customer Satisfaction Index from the Institute of Customer Service. RAC also achieved a "Best Buy" status for breakdown in August 2010 in the annual Which? motoring survey.
- — RAC is part of Aviva, the world's sixth largest insurance group, serving 50 million customers across Europe, North America and Asia Pacific.

Impact on Transport of Recent Adverse Weather Conditions

Our submission will focus on three points of the inquiry.

1. Impacts on the road networks in England and Wales.
2. The provision of accurate weather forecasts to transport providers in advance of the bad weather.
3. The recommendation of the Quarmby reviews into the resilience of England's transport systems in 2010.

Background Statistics

A. During the four weeks from 17 December 2009, RAC attended an average of 10,000 service breakdowns per day at the roadside. This is approximately 40% greater than the daily attendance averaged over 12 months. In January 2010 we attended 9.1% more incidents than the average for the four previous Januaries. As the majority of this extra volume arose during the first two weeks of January, the like-for-like comparison is nearer 20% for the first two weeks. These figures are national (UK) averages but locally the picture was far more extreme. At peak times, we were receiving a call for assistance every 1.2 seconds.

B. During the four weeks from 25 November 2010, RAC attended an average of 9,300 service breakdowns per day at the roadside. This is approximately 35% greater than the daily attendance averaged over the last 12

months. At peak times we were receiving a call for assistance every 2.3 seconds with Monday 20 December proving our busiest day.

1. *Impacts on the road networks in England and Wales*

1.1 RAC's particular difficulties delivering service to our members with our fleet of rescue vehicles arose from three factors:

A. Demand was unusually high because of typical cold weather problems affecting members' vehicles (flat and faulty batteries, damage to wheels and tyres, general vehicle electrical problems, frozen engines, road traffic accidents etc). Batteries, either non-serviceable or flat, were our two highest faults from customers in this latest four week period of snow and ice last December.

B. The condition of the roads made it particularly difficult for our patrols and contractor partners to reach customers. We suffered the same problems as other motorists when the roads became impassable. Even if main roads are salted and remain open, a high proportion of our demand comes from people at home, at work or in other locations off the main roads. A strategy that keeps main roads open is therefore valuable but still leaves us with very difficult conditions on local roads at the start and finish of a service call.

C. Our RAC staff manning "in-house" activities (breakdown assistance call taking, resource deployment, customer liaison, tactical resourcing, technical support etc) also have difficulty reaching their place of work (Stretford in Manchester and Bescot in Walsall).

1.2 RAC owns a limited number of 4x4 vehicles. In December 2009 and in December 2010 we hired additional 4x4s to ferry staff between their homes and the offices in Stretford and Bescot but Stretford was particularly badly hit. Never the less, we recently installed an IP based telephony system which was part of an Aviva-wide system. This enabled us to "borrow" in-bound capacity (ie more lines) from other parts of Aviva UK. We were also able to filter out calls from people at home and route these to other colleagues around the business to increase the number of call takers.

1.3 During the summer of 2010, following our experiences in January 2010, RAC also invested in snow socks for a number of our patrol vehicles and subsequently we ordered snow chains for a number of our vehicles.

1.4 In these testing weather conditions, the roadside assistance industry runs out of capacity. Motoring organisations have a limited number of patrols and our contractor partners are also trying to handle the surge in demand from those service providers who rely totally on contractors (eg Green Flag, Britannia, Europ Assist etc.). RAC operated a triage process so that those who were safe at home took a lower priority than those at risk at the roadside. Attendance times stretched on average to 60–65 minutes as compared to a more typical 45–50 minutes from receiving the initial telephone call to reaching our customers stranded at the roadside. This was due to a combination of demand and our ability to reach customers. Vehicles that breakdown, have been involved in an accident, or have simply been abandoned by the driver at the roadside, add to the problems of congestion making it more likely that other vehicles will get stuck and the road will become impassable.

1.5 Our experience in terms of our ability to travel varied greatly from area to area. Generally, we felt that the Highways Agency did a good job in keeping the motorways open. They seemed to have learnt lessons from 12 months earlier and had adequate salt stocks (though they had to apply measures to conserve stocks). Patrols kept each other informed of particular problems on local roads and helped each other out. This not only applied to our own patrols but there were a number of instances where AA and RAC patrols helped each other out.

1.6 RAC observed that there did not appear to be a uniform approach adopted by local authorities to keep the roads clear. There needs to be a consistency both:

— Nationally, in the approach to prioritising routes; and

— Regionally, in terms of the severity of the situation and therefore the "level" of the response.

1.7 The Salt Cell arrangements seemed to work well at Dept for Transport and Transport for London but all they could do was to optimise the use of the stocks available. There is a fundamental bottleneck in that the mines cannot produce and distribute salt at a rate that matched peak demand. Therefore if stocks were inadequate or were used up locally without effective prioritising and rationing, the Salt Cell could optimise the use of remaining stocks but little else. The importing of additional stocks was the only opportunity to supplement local supply arrangements and this was obviously not an immediate solution.

1.8 The key question is "what levels of stock should local authorities be required to maintain?" It is understandable that authorities may claim that it is not a good use of tax payers money to tie up and house large stocks of salt that may not be required more than once in 10, 20 or even 30 years. The cost/benefit analysis does not seem to adequately reflect the cost to business, individuals and the nation as a whole if supplies run short. For example, in 2009–10 the Association of British Insurers advised that their members paid out £395 million to 268,400 insured motorists who had accidents on the slippery roads. This compares to the annual spend in England quoted in the UK Roads Liaison Group Report of a total of £160 million on winter services.

1.9 The UK Roads Liaison Group recommended six days stock should be held in the UK. RAC understands that the Highways Agency increased stocks to 13 days after experience in the winter of 2008–09. RAC's experience showed that 13 days stock proved adequate and the six days did not. RAC therefore supports David Quarmby's Winter Resilience Report recommendations of a benchmark minimum of 12 days stock (48 gritting runs) for all local authorities.

1.10 Although road maintenance may lie outside the immediate terms of reference of the enquiry, RAC wishes to note concern regarding the time it is taking to repair some of the damage to our roads arising from the severe winter weather. The subject of potholes has already received much publicity and it is reassuring that both the former and current Governments have acknowledged the problem. Some local authorities have struggled to fix the problem and as a result, motorists are still doing damage to wheels, tyres and suspension on their vehicles as a result of unexpected and unwelcome encounters with potholes. Research for the RAC 2010 Report on Motoring reported—when asked what the top motoring spending priority for the new Government should be, motorists placed "improving the quality and condition of the roads" at the top of their list. As local authorities face financial challenges, it is likely that the state of the roads will be low on the list of spending priorities and therefore the condition of local roads will further deteriorate. RAC would welcome national accountability for the local authorities to ensure the main roads are all maintained to a similar standard to those maintained by the Highways Agency.

1.11 RAC provided reminder checklists and endeavoured to encourage our members and all motorists to maintain their vehicles to a high standard and ensure they are prepared for adverse weather conditions when leaving home.

1.12 The following RAC research is relevant to the inquiry.

- Last November our RAC survey indicated that 10 in 11 rural councils questioned[1] have not completed repairs required after last winter's severe weather.
- Shortages in funding and higher levels of damage are highlighted as the main reasons why repairs have not been carried out and spending cuts of up to 40% mean the UK faces years of poorly maintained roads and winter pothole damage.
- A straw poll of 20 UK councils by RAC indicated that roads in rural areas have been hardest hit by last winter's severe weather, with councils still struggling to deal with the backlog of repairs ahead of this winter.
- Many councils were concerned by the implications for the road network of the Comprehensive Spending Review, where transport budgets will be reduced, as part of local government budget cuts, by up to 40%. They fear this will result in a spiral of deteriorating road conditions which could be both damaging and potentially dangerous for the UK's motorists. While this is a worry for councils in all areas, it is particularly of concern for rural councils where the road network is often the only means of transport in more remote areas.
- Ten out of the 11 rural councils[2] questioned reported that not all necessary road repairs had been carried out since the "Big Freeze" last winter, while 75% of urban councils say this is the case. Of the councils whose repairs had not been completed at the time of the survey, just over 20% expected the repairs to be completed by the start of this winter.
- The research also showed many councils had budget deficits as a result of road spending due to last winter's damage, with individual shortfalls of up to £10 million. They fear they are running out of time to make repairs before another winter, leaving the road network vulnerable to further structural weakening.
- The results of this survey highlight the views of motorists from the 2010 RAC Report on Motoring[3] with 88% believing their local roads are getting noticeably worse.

2. *The provision of accurate weather forecasts to transport providers in advance of the bad weather*

2.1 For organisations such as RAC, the problems were compounded by inaccurate long range weather forecasts. RAC rotas annually for 12 months from 1 April based on historic demand. Capacity is adjusted to respond to the latest forecasts thorough the deployment of "reserve hours". These are overtime hours purchased in advance which are rostered according to agreed rules. Reserve hours are allocated for a calendar month typically two weeks in advance of the start of a month. Tactical adjustments are made on a weekly, and even a daily basis right up to "the day before" but such arrangements are dependent on patrols being willing and able to alter their plans at short notice and whilst the vast majority are very responsive, particularly in response to bad weather, there is no substitute for accurately forecasting demand at a minimum of two and ideally four to six weeks in advance.

2.2 RAC uses weather forecasts made available by the Met Office and BBC. Short term weather forecasts were generally accurate and allowed us to respond tactically with some certainty on a day to day basis. However, longer term forecasts failed to forecast the cold spell in time for rosters to be fully optimised.

2.3 RAC would welcome actions by Government to ensure that motorists and motoring organisations are informed as far in advance as possible of any adverse weather.

3. *The recommendation of the Quarmby review into the resilience of England's transport systems in 2010*

3.1 RAC gave evidence to the Quarmby Winter Resilience Enquiry and regards the report as both thorough and relevant. We support all of the recommendations but particularly believe that recommendations 1, 5, 6, 9, 10, 11, 16 and 25 are particularly relevant to the concerns and needs of our members and our ability to deliver service to them.

These recommendations are:

Recommendation 1: That for the forthcoming winter the need for a strategic reserve stock of salt for England's highway authorities be recognised, if the resilience to handle the risk of its being as severe as last winter is to be secured, and given the projected shortfall of UK production against the possible demand; and that the Highways Agency should be tasked, on behalf of the Secretary of State, to acquire by import, store and make available on terms to be agreed an initial reserve stock of some 0.25 million tonnes of salt for "last resort" use by local highway authorities and for itself; and that the DfT at the end of December should formally lead the consideration and review (using information and forecasts then available) of whether further additional reserve stocks should be secured for the remainder of the winter.

Recommendation 5: Every local highway authority should have a robust winter service plan, and should regularly review the key elements of it, including network coverage, operational procedures and standards and appropriate salt stockholding to meet defined resilience standards, all in line with current best practice.

Recommendation 6: Consultation on treated networks should be broadly drawn to include business representatives, passenger and freight transport operators and local communities, as well as health and education service providers; and to help manage public expectations should be followed by clear and comprehensive communications of winter service plans, supported by good real-time communications through media and on-line when winter conditions arrive.

Recommendation 9: Professional bodies and the Local Government Association should encourage the more widespread dissemination and adoption of best practice in the preparation and delivery of winter service plans.

Recommendation 10: While recognising that the resilience of salt supply is being addressed as a nationwide issue, local highway authorities can support this and should:

- all participate fully in the year-round systematic information collection and monitoring of salt stocks and movements which we are recommending should be adopted by DfT;
- ensure their own planning of salt stocks and supply is sound and carried out in accordance with best practice, and supported by practical measures to improve salt utilisation;
- put in place (or confirm where existing) mutual aid with neighbouring authorities to help address localised shortages.

Recommendation 11: Local highway authorities should treat their winter service planning as an integral part of wider general resilience planning for civil contingencies, bringing to the development of winter service plans the benefits of processes and disciplines associated with resilience planning, together with the culture of constructive challenge and validation.

Recommendation 16: We note and commend the generally high quality and accuracy of short term (0–5 days) weather forecasting now available to support the operational decisions of highway authorities and their contractors, and recommend that the weather forecasters continue to develop their capabilities both for 15–30 day forecasting to meet the resource planning needs of highway authorities, and for longer term seasonal forecasting.

Recommendation 25: A new resilience benchmark of 12 days/48 runs should be adopted for pre-season stockholding for English local highway authorities; they should then review their history of usage and mutual aid or other arrangements to consider:

(a) whether there is a case for increasing capacity towards 48 runs if it is currently less than this, in addition to filling the capacity they have; or

(b) at what level to stock—at or above the 48 runs level—where the capacity exists to do so.

References

[1] In depth research of a geographical spread of 20 councils in England, Wales and Scotland (11 rural and nine urban) undertaken in September 2010 by Wriglesworth Research on behalf of RAC. The 20 councils represent 10% of the 206 councils nationwide.

[2] Rural councils defined as those with no cities.

[3] 2010 RAC Report on Motoring: in total, 1,150 British motorists were surveyed (ie those who hold a current driving licence and drive at least once a month).The survey was conducted in March 2010.

February 2011

Written evidence from Piers Corbyn (AWC 27)

I have evidence which may be of interest to the Transport Committee's investigation into the crisis consequent on the extremely harsh December 2010 weather most of which I have also made available to the Mayor of London Boris Johnson just after the closure of Heathrow in December due to snow.

The point I would make through this enclosed information and any committee appearance—which I would be happy to do if so asked—is that Extreme weather which is hazardous to the UK public and the economy is forecastable at a high level of skill, detail and applicability many months ahead and what is likely to develop in terms of year on year weather, cycles of extremes and climate over the next 25 years is also now forecastable to a high level of skill and confidence.

Use of our forecasts by Government, local authorities and emergency services can, through better forewarning, reduce transport and other suffering via road, rail and air, save cost to the economy and save lives.

I attach:[15]

1. WeatherAction initial forecast note issued May 2010 for snowy December.
2. WeatherAction Essence of winter sponsored forecast issued Nov 2010.
3. WeatherAction Dec2010 detailed forecast for an extremely cold and snowy December—"probably coldest December in 100 years" (which was confirmed) issued Nov 2010.
4. For current interest our prediction of the simultaneous superstorms in USA & Australia end Jan / start Feb.
5. Background info Presentation PowerPoint 6mb pdf of wider issues covering our solar-lunar forecasting process and likely ongoing cooling of World and UK climate for coming 25 years.

www.weatheraction.com carries further information including independent verification of our high level of forecasting skill.

February 2011

Written evidence from the Civil Aviation Authority (AWC 28)

1. Context

1.1 December 2010 was the coldest month in the UK since records began according to the Met Office[16] with heavy snowfall during late November and December causing significant disruption to air transport. At Heathrow, this disruption was felt particularly heavily between 18 and 22 December, when heavy snow caused extensive disruption for several days, with significant disruption also occurring at a number of other UK airports. (Annex A contains a breakdown of major UK airports' annual passenger numbers and snow-related closure time).

1.2 The Civil Aviation Authority (CAA) is the UK's independent specialist aviation regulator. It regulates air safety; enforces legislation designed to protect passengers; economically regulates Heathrow, Gatwick and Stansted airports; and sets airspace design.

1.3. In the submission below, the CAA comments on the passenger experience during the disruption, the limited ability of the current system of economic regulation to prevent unnecessary airport closures along with what might be done to improve it, and the regulation of aerodrome safety during and after snowfall. During disruption to aviation caused by severe weather, the CAA's primary focus is on public safety—at no time during any of the disruption in November and December were the CAA concerned that safety was being compromised.

1.4 A number of separate but linked workstreams have recently begun to consider how the aviation sector responded to the December disruption. At the systemic level there is work from the Government's South East Airports Task Force (SEAT), where a CAA-led sub-group examining how to improve delay and resilience performance is considering a number of issues relating to extreme winter weather, including how best to manage capacity reduction in such conditions and then ensure an efficient and timely return to full service. Furthermore, at the level of individual airports there is for instance David Begg's Heathrow Winter Resilience Inquiry, on which the CAA is sitting as an independent observer.

1.5 The CAA is also undertaking its own work to consider the passenger experience during the disruption, examining what worked well for passengers as well as what failed to meet their needs The aim is to feed this intelligence into the work outlined above, and preparation for the forthcoming price control process at Heathrow and Gatwick. More information about this workstream is detailed below.

1.6 Although the CAA's work is at a very early stage, information requested from airports and airlines immediately following the disruption has revealed several issues that will be closely considered as part of our work:

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[15] Attachments made available in the Parliamentary Archives

[16] http://www.metoffice.gov.uk/news/releases/archive/2011/cold-dec

— Airlines' performance in meeting their passenger rights obligations was highly variable, with some evidence that carriers with a strong local presence performed better.

— Preliminary evidence suggests that, in some instances, a lack of effective communication between airports and airlines and other airport stakeholders exacerbated the passenger impacts of the disruption.

— Road and (especially) rail disruption compounded problems at airports—even when airports reopened there were problems with staff and passengers getting to the airport.

— At Heathrow, there was an initial over-optimistic view taken about when flights would resume, which unduly raised expectations.

2. Passenger Experience During Disruption

2.1 The CAA has a range of responsibilities that work towards improving choice and value for aviation consumers. An important part of this role is to protect consumers when things go wrong with their journey, both in terms of ensuring that passengers' rights are respected, and that all service providers at airports work effectively together to minimise the extent of any disruption and mitigate the inconvenience caused to passengers.

2.2 Against this background, the CAA identified a need to investigate passengers' experiences at the UK's airports, with a view to understanding whether there are lessons that can be learned to improve future performance and to inform the CAA's enforcement of Denied Boarding Regulations (see Section 3 below). This work will bring together evidence from airports, airlines and, importantly passengers. The CAA is gathering information from the travelling public about their experiences through an online survey.

2.3 The survey aims to help the CAA better understand passengers' views of how airports, airlines and other companies operating at UK airports, met, or failed to meet, their expectations. For instance, the CAA is interested in finding out how well passengers were kept informed about the disruption and whether people were told about their rights to assistance by airlines.

2.4 The CAA is keen to hear from as many people who experienced disruption as possible to try and build the best possible picture of what worked well and what did not, so it can work with industry to improve the situation in case of future disruptions. The survey work will be followed by a series of focus groups and / or seminars in March, followed by the publication of a report on our findings around Easter.

2.5 Consumers' responses from the survey will feed into further work with Government, airlines and airports after Easter, as well as informing the development of the CAA's regulation and enforcement priorities.

3. Passenger Rights

3.1 When disruption occurs airlines are required under the terms of EC Regulation 261/2004[17] to provide passengers with assistance if they are denied boarding (essentially if flights are overbooked), if their flights are cancelled at short notice, or if they experience a long delay. This includes refreshments and, if appropriate, accommodation in proportion to the length of delay, together with access to communication and, if necessary rerouting. Passengers who make their own arrangements in such circumstances, perhaps because an airline is not in a position to do so, are entitled to reimbursement of reasonable expenses from the airline concerned. Package holidaymakers have similar rights to assistance under the Package Travel Directive.[18]

3.2 In addition, passengers may also be entitled to financial compensation if they are denied boarding, if their flight is cancelled without sufficient pre-notice, or they are subject to a long delay, unless the carrier concerned can demonstrate that the cause of such cancellation or delay was due to "extraordinary circumstances that it could not have avoided even if all reasonable measures had been taken".[19] Although there is no exact definition of "extraordinary circumstances", the Regulation cites adverse weather, security risks, flight safety shortcomings, strikes and air traffic control as examples.

3.3 In the UK, the enforcement of the Regulation is undertaken by the CAA under the terms of an agreement between the CAA, the Department for Transport (DfT), and the Air Transport Users Council (AUC). Under the agreement, the AUC's role is to manage individual complaints and seek to secure a satisfactory resolution in cases where the Regulation is not being applied, and the CAA's role is to investigate and consider enforcement action where it determines that there is, or may be, collective detriment to consumers.

3.4 Failure to comply with the requirements of the Regulation is a criminal offence that, upon conviction, is subject to a maximum fine of £5,000 per offence. However, such criminal sanctions are by nature a blunt instrument, which require a high evidence threshold. The CAA also has access to powers under Part 8 of the Enterprise Act 2002 allowing it to seek formal undertakings or an Enforcement Order from the Court to mandate changes in behaviour. In addition, the CAA's role as the licensing authority for UK airlines offers informal routes to address identified deficiencies in policy and practice. The nature of the UK compliance

[17] http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32004R0261:EN:HTML
[18] http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31990L0314:EN:HTML
[19] Section 12: http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32004R0261:EN:HTML

structure allows passengers to pursue a claim directly through the small claims track of the County Court should they wish to do so.

3.5 In parallel with its work with the AUC, the CAA undertakes its own active monitoring of the experience of air passengers through reviews of the media, consumer websites, complaints and ad hoc airport inspections. During the period of disruption the CAA monitored what assistance major airlines provided to passengers and undertook two inspections at Heathrow.

3.6 Some airlines clearly made significant efforts to look after their passengers in difficult circumstances. For example, with hotel rooms in short supply, a number of airlines hired conference rooms for use as dormitories. In contrast, some airlines apparently failed to meet their obligations to passengers, either inadequately explaining their rights to them or not providing sufficient assistance. Where deficiencies were identified, the CAA took compliance action, but the scale of the disruption meant that it was extremely difficult to obtain timely information to allow such intervention to comprehensively address all of the issues affecting passengers.

3.7 The situation was further complicated by the uncertainty about when airports would reopen and by the constraints on the ability of airlines to provide rerouting, particularly on routes not regularly served, for the volume of passengers whose flights were disrupted. The time of year meant that passengers were more determined to travel than at other times, and even when airlines did their utmost to meet their obligations, the level of disruption inevitably causedfrustration.

3.8 The CAA will work closely with the AUC to analyse complaints received following the disruption, in order to identify areas which may require compliance action.

4. Current Regulatory Powers and Future Improvements

4.1 The CAA is responsible for the detailed economic regulation of airports "designated" by the Secretary of State. Heathrow, Gatwick and Stansted are the only UK airports that are currently designated, and together handle more than half of UK passengers. The CAA's role in economic regulation is very narrowly defined, does not include the flexible set of tools provided to other economic regulators, and limits the CAA's ability to intervene during the five-year price control periods. This can prevent the CAA from acting in a timely manner, or as circumstances evolve, and restricts the ways that the CAA can intervene to address poor performance at these three airports.

4.2 The CAA can (and does) provide incentives to invest in facilities and equipment—including that which contributes to resilience—and to encourage the airport to raise standards. However, this form of (incentive-based) regulation is most suitable for influencing outcomes in normal operational circumstances.

4.3 In the Queen's speech the Government proposed legislation to update the statutory framework surrounding the CAA's work to regulate the UK's major airports. The government's proposed reforms would provide the CAA with more flexible tools to regulate airports, which would strengthen the CAA's ability to protect passengers and improve aviation resilience. In particular, the Government has proposed introducing economic licences, which would allow more proactive regulation, not just monitoring a five-yearly settlement.

4.4 The Government has also proposed giving the CAA powers to impose a much more robust set of obligations on the airport operator, backed with a credible enforcement regime. Whilst licence conditions can be no guarantee of resilience, they do provide a mechanism for the regulator to set clear expectations of the licence holder, incentivise delivery of these and offer a locus for intervention if there is systemic failure to deliver. For instance:

- Passenger experience: There could be a requirement to have in place a resilience plan approved by the regulator, ensuring that licensed airports take due account of the wider impacts of adverse weather events (eg impacts on wider transport networks that might keep staff away from work, or prevent customers arriving or leaving).
- Integration: The licence could require the airport to develop much clearer governance arrangements, specifying the rights and obligations of airports, airlines, groundhandlers and other stakeholders and provide a clear basis for co-ordinated action.
- Information: Lack of information to passengers caught up in operational problems is a particular concern because it creates anxiety and anger, perhaps even more than the underlying disruption. Licence conditions on airport operators provide a direct means for the regulator to ensure that any best practice is rolled out across the airport.

5. Aerodrome Operations

5.1 At all times aviation safety is of paramount importance. During the period of heavy snow, the CAA remained in close contact with the aerodromes involved. At no time during the period was the CAA concerned that safety was being compromised, and there is no intention that additional future regulations will impact on the CAA and industry's safety priority.

5.2 The CAA issues requirements and guidance to airport and aircraft operators regarding the safety of aircraft operations during winter conditions. Following disruption during winter 2009–10, the CAA convened

a number of cross-industry "Winter Wash Up" meetings to assist the industry and the CAA in learning what worked and what did not, and to share best practice. These meetings were well attended from all areas of industry and identified that there are often differing expectations of service levels from different stakeholders: for example airports, airlines, ground handlers, Air Traffic Control, pilots, and passengers. Best practice methods of sharing and promulgating information to stakeholders were also discussed.

5.3 From a safety regulation perspective, the overriding message was that irregular reporting of the actual runway condition by aerodromes and ATC was the most pressing issue to be resolved.

5.4 As a result, the CAA formed the Winter Information Group (WIG) in summer of 2010, consisting of a smaller number of representatives from industry (Prestwick, Edinburgh, Birmingham & Stansted Airports, British Airways, easyJet, Thomas Cook & NATS). Based on sound science and work that has been ongoing for a number of years at the International Civil Aviation Organisation (ICAO) and the European Aviation Safety Agency (EASA), the WIG drafted guidance to aerodrome operators[20], aircraft operators[21] and air traffic controllers[22] on information to be passed to pilots regarding runway conditions. During November and December's disruption, the WIG's work assisted in ensuring that accurate and relevant information was available to flight crews.

5.5 Tactical decisions concerning continuing aerodrome operations during adverse weather, including closure for snow clearing and re-opening criteria, must be left for aerodrome operations duty staff at the time. UK aerodromes have for many years operated a "back to blacktop" policy (ie clear snow from the movement areas such as runways and taxiways), which is a goal supported by the CAA. However, although this is the usual policy, there may be circumstances where it is possible to keep the runway open with some contamination. In such circumstances the need for accurate measurement and promulgation of information is emphasised.

5.6 Some airlines and other stakeholders question why some countries allow operations on snow contaminated runways whilst others, such as the UK, do not. The main issue is whilst friction can be measured with a degree of accuracy on compacted snow and ice, and thus aircraft braking action predicted, this is not the case on wet snow and slush—the precipitation typically experienced in most of the UK. Temperatures must be well below freezing for considerable periods in order to give an estimated braking action of Medium to Good on compacted snow and ice.

5.7 The CAA has been working in conjunction with ICAO, FAA, EASA, aircraft manufacturers, airlines, aerodromes, friction experts and other manufactures for a number of years to resolve braking action and information promulgation issues. A trial is being conducted this winter at six UK aerodromes evaluating a method of estimating braking action using actual runway conditions. The trial is based on an FAA trial conducted in 2010 and 2011. Results from the UK trial should be available in July.

6. The Quarmby Review

6.1 Following the disruption caused to the transport system by harsh weather during winter 2009–10, the then Government commissioned a review of the situation by David Quarmby in March 2010. In October last year, Quarmby's final report on the Resilience of England's Transport System in winter was published. The Report contained one recommendation to the CAA, that:

— Recommendation 22: That the Civil Aviation Authority considers how it might develop its currently published performance data to improve the presentation, commentary and interpretation of airline performance information, to inform passengers and the market and encourage improvements across the industry.

6.2 Since the report was published, the CAA has made statistical information on the CAA website easier to locate and has also published a simple guide for consumers explaining how they can obtain punctuality information on their flights. The CAA is already undertaking market research to identify which information passengers find valuable, including aspects of service quality. Additionally, the SEAT subgroup on resilience will make recommendations on the topics of Punctuality, Delay and Resilience which will inform any further improvements to the presentation of punctuality data. However, without the ability to require information from airlines and airports, the amount of comparative data the CAA is able to publish is limited. This type of Information Power is proposed as part of the Government's reforms to the CAA's regulatory framework. In anticipation of this, a project is underway to refresh the CAA website and market research is being carried out to scope what information is of most use to consumers.

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[20] http://www.caa.co.uk/docs/33/srg_asd_NOTAL201009.pdf
[21] http://www.caa.co.uk/application.aspx?catid=33&pagetype=65&appid=11&mode=detail&id=4382
[22] http://www.caa.co.uk/application.aspx?catid=33&pagetype=65&appid=11&mode=detail&id=4273

Written evidence from the British Air Line Pilots' Association (BALPA) (AWC 29)

About BALPA

1. Over 80% of the UK's commercial pilots are members of BALPA and we are recognised as the main partner in 26 airlines covering all major UK operations. In addition over 1,000 commercial pilots have joined us even though their airline has no partnership agreement with BALPA and this includes a swath of Ryanair pilots.

2. BALPA was formed in 1937 following the antics of the CEO of Imperial Airways who was forcing professional pilots to operate when it was not, in the professional judgment of those pilots, safe to do so. This led to the Cadman report. Those origins remain a key feature of our DNA today and which is why our vision as an association is still "to make every flight a safe flight". It is also perhaps why a recent public poll by YouGov found that airline pilots belonged to one of the most trusted professions. It is a responsibility we take seriously.

BALPA's Position

3. Although the Committee's frame of reference is the impact of the adverse weather on all transport sectors BALPA's response will be with regard to air travel.

4. Any discussion around adverse weather operations needs to start from the stand point of making sure that any operation is safe. However, we believe it is possible to run a safe, economically-viable winter operation out of UK airports, as it is elsewhere in Europe and around the world. Pilots' experiences and advice should form part of the discussion about how to make sure last year's situation does not happen again and how to ensure that winter operations are safe.

5. Pilots are a valuable resource for regulators, the industry and government—a resource we believe is not sufficiently well used.

Facts

6. Adverse weather during the winter led to the closure of Heathrow's southern runway, the closure of Gatwick for significant periods of time, the cancellation of 2,000 flights, disruption to thousands of passengers and hugely negative impacts on the UK economy.

7. Heathrow, Britain's biggest airport meanwhile had just 46 specialist vehicles to clear the snow. On the normally busiest weekend before Christmas it closed both runways and only reopened the second runway two days later, with just 30% of scheduled flights operating.

Remote vs On-stand De-icing

8. During cold weather and at times of snow, aircraft must be de-iced to ensure wings are not contaminated with ice and snow. Contamination of aircraft wings and other surfaces degrades lift and has in the past been the cause of serious fatal accidents. De-icing and anti-icing of aircraft is carried out by spraying a glycol solution across the wings, tail and fin of the aircraft, and the fuselage too if snow has accumulated there.

9. The severity of the weather and volume of precipitation (rain, snow, freezing fog, etc.) affects the "holdover" time. Holdover time is the maximum time between the start of the de-icing/anti-icing process and the start of the take-off roll. In weather such as that experienced during this winter holdover time can be less than 20 minutes in some circumstances. Note that holdover time begins when the glycol application starts, not when it ends.

10. De-icing can take place either on-stand or (as is the case in many overseas airports) remotely at special de-icing areas, usually close to the end of the runway. UK airports employ on-stand de-icing and do not have the facility for remote de-icing. BALPA believes that on-stand de-icing procedures contributed significantly to the problems experienced this winter.

11. On-stand de-icing, which may last 30 minutes or more, blocks up parking stands, so arriving aircraft cannot off-load their passengers. At Heathrow during the snow in December, aircraft were landing and then waiting on the taxiways, with passengers and cargo still on board, for periods of four hours or more. This is not acceptable.

12. Many more de-icing rigs are required to run an on-stand de-icing operation, because the de-icing rigs have to drive around the airport. Compare this to a remote de-icing facility where the entire de-icing operation can be carried out by a small number of static de-icing vehicles.

13. With on-stand de-icing, the mobile de-icing rig operation has to be rigidly controlled. Rather than remaining static and waiting for aircraft to come to them for de-icing, the rigs have to be directed by radio to drive around the airport, from stand to stand, to get to the next aircraft to de-ice which can result in long waits.

14. De-icing rigs have to keep returning to their base to fill up with fluid. Time spent driving back and forth is time spent not de-icing aircraft.

15. Correct timing of on-stand de-icing is difficult. Ideally the de-icer should be ready to start the procedure exactly 20 minutes before the flight's Air Traffic Control slot to maximise holdover time. If this calculation is wrong there is a possibility of missing the slot and of holdover time expiry.

16. On-stand de-icing causes the apron (parking stand) to be awash with fluid overspray. We are extremely concerned about the health and safety implications of creating hazardous conditions for ramp staff and pilots. Aprons should be cleared and gritted, not swimming in de-icing fluid. (See paragraph 20 below.)

17. After de-icing, aircraft have to push back, start engines, and taxi out to the runway. If holdover time expires, and snow is accumulating on the aircraft, it must be de-iced all over again. On-stand de-icing significantly increases the likelihood of aircraft having to return to stand for repeat de-icing because of holdover time expiry, compared to a remote de-icing operation which takes place close to the runway.

18. On-stand de-icing wastes de-icing fluid as the rigs have to spray excess quantities of fluid, and with a far more concentrated mix, in order to maximise hold-over time. Excess fluid cannot easily be captured and recycled with on-stand de-icing. Remote de-icing facilities can have in-built sumps for capturing, filtering and reclaiming over-sprayed fluid. On-stand de-icing, therefore, in comparison to remote facilities, damages the environment and wastes resources.

19. Most airports with colder climates, such as those in Scandinavia, have remote de-icing facilities, where winter operations are usually harsher for longer than in the UK. However, even Madrid-Barajas Airport in Spain, which has higher average temperatures than London, maintains remote de-icing facilities. It is fair to say that remote de-icing facilities are the norm at busy overseas airports, including those with significantly warmer winter weather than the UK.

20. We are also concerned about personal safety on the ramp. Our interest has been especially driven by two very serious injuries which occurred to pilots whilst carrying out pre-flight departure walk-rounds (aircraft external inspections). Both occurred during winter operations, after de-icing procedures on stand had been under way for a few days. Both incidents led to broken bones, hospitalisation and long recuperation periods after surgery, following slips on surfaces which were contaminated by de-icing fluid residue.

Wider Infrastructure Problems

21. The Committee will be looking at the impact of adverse weather across all transport sectors. This is vital because the ability of a UK airport to operate during adverse weather is impacted upon by the ability of staff to get to the airport.

22. More attention must be paid to staff access to and around the airport as well as on the runways and taxiways. This includes making sure landside and airside roads and staff car parks are kept clear so that staff and operational equipment can move around the airport with reasonable safety.

Comparisons with Other Countries' Airport Operations

23. Chicago's O'Hare Airport has 440 staff, 400,000 gallons of de-icer, 21,000 tons of salt and nearly 200 pieces of snow removal equipment for car parks and public roadways. In a crisis they can call on up to 600 drivers and almost 163 pieces of snow equipment to clear the gate, ramp and cargo areas.

24. Charles de Gaulle, France's biggest airport, spent £24 million on their snow-clearing equipment. 74 machines, including snowploughs, snow-blowers and de-icers, and plans to further increase their budget. Paris' climate is comparable to London's.

25. Stockholm's Arlanda airport has never closed and boasts the world's fastest snow-clearing team and a fleet of 17 Plough, Sweep and Blow (PSB) machines designed by Volvo. Nine machines are driven alongside each other, clearing the runways in less than 10 minutes.

26. While international competitors clearly spend millions keeping airports open, Spanish-owned BAA, which runs Heathrow, spent just £500,000 on upgrading its snow clearing equipment staff training in 2010, and had just 46 vehicles available for snow clearing this winter, despite expected pre-tax profits of nearly £1 billion.

27. UK airports need to effectively compete especially against European hubs for traffic. This is not just about making travelling easier for the British public, as important as that is, it is also about ensuring that passengers do not make a conscious effort to avoid UK airports in favour of those in the rest of Europe to make connections.

Conclusions

28. Pilots want to be able to operate during adverse weather conditions, but must do so safely. We believe this must be just as possible in the UK as it is at overseas airports.

29. De-icing procedures are just one of the many areas that must be covered in a pilot's preparations for take-off. The additional pressure of arranging for the correct level of de-icing at the correct time, being conscious of holdover times and the commercial pressure to make the flight's ATC slot, all add to a pilot's workload and

stress levels. Added to this we have the additional effects of pilot fatigue, which will be made much worse under the currently tabled proposals from EASA. We believe remote de-icing facilities provide for a much less stressful operation for pilots which in turn contributes to the safe operation of an aircraft.

30. Remote de-icing areas should be constructed at all busy UK airports. Heathrow and Gatwick in particular must be provided with such facilities if the December 2010 experience is not to be repeated.

31. The infrastructure has to be put into place to ensure all staff have access to and around the airport in order to ensure a winter operation can be successfully mounted.

32. Pilots have been pointing out the deficiencies in UK airport infrastructure for many years. We are only too aware of the gaps in the UK operation, because we fly all over the world, and see at first-hand how things are achieved elsewhere. Many of the points we have raised have also been made in evidence to and in support of the Winter Resilience Review.

33. Now is the time to act. BALPA offers its overwhelming support to ensuring a safer and a more efficient UK Commercial Aviation winter operation and would gladly make our Flight Safety experts available if further information or support is needed to achieve this.

February 2011

Written evidence from Virgin Trains (AWC 30)

Introduction

1. Virgin Trains operates services on the West Coast Mainline, serving London, the West Midlands, North West, Scotland and North Wales. In 2009–10 were carried 26 million passengers.

Summary

2. The second period of severe weather in December was without precedent during Virgin Trains tenure of the West Coast mainline (1997 to date).

3. As an operator where many customers reserve seats we believe that adhering as far a possible to the standard published timetable during severe weather avoids confusion.

4. Our approach maintains the usual day-to-day baseline against which punctuality is measured, rather than recording punctuality against a slimmer emergency timetable.

5. Virgin Trains operates a learning culture: lessons were learned from previous periods of severe weather and we have identified new actions to take forward.

Our General Approach During Severe Weather

6. As the biggest operator of long-distance services in Britain, Virgin Trains has markedly increased the number of customers booking in advance and reserving seats. Half our customers now reserve a seat when buying a ticket and this has a significant influence on operational decisions taken at times of disruption.

7. Our starting point during the extended period of bad weather is that "emergency" timetables should be introduced on the West Coast Mainline *only* when there is no alternative, as such a timetable can make it very difficult for customers to understand the correct train for their reserved seats.

8. Maintaining advertised services is also important as we need to connect to local services. These local services are planned around our timetable in many instances, and a change to our core timings has significant impact on the customers of other train operators, such as Transpennine Express, Northern Trains, London Midland and ScotRail.

Our Approach During December's Severe Weather

9. Virgin Trains therefore ran a standard advertised timetable throughout most of the bad weather, although this inevitably had a detrimental impact on performance statistics, as shown below. Other train operators had differing issues to contend with but, in the case of Virgin Trains, we are clear that while running an emergency timetable would undoubtedly have improved those statistics, it would have led to a poorer and more confusing service for our customers.

10. Despite the severe weather, Virgin Trains sold record numbers of seats in the run-up to Christmas and it was essential to put the customer first in planning any changes to timetables.

11. A key issue during the second spell of bad weather from 18–24 December was to ensure that sufficient services were available for two of the busiest travel days of the year, 23 and 24 December, when many customers travel for their Christmas breaks.

12. Therefore on three days (20–22 December) Virgin Trains made some pre-planned cancellations—on the most frequently-served routes to minimise waiting times—to ensure that repairs to trains damaged by ice could

be made ahead of the pre-Christmas rush. These changes reduced services from three services each hour to two each hour on the Birmingham and Manchester routes, but less frequent services to other destinations were protected.

13. This contingency plan meant that the large numbers of customers travelling immediately before Christmas on 23 and 24 December were accommodated, including many additional customers who had transferred from airlines.

14. On many occasions, staff assisted customers stranded by airport closures and major disruption on other rail and road services. Virgin Trains worked closely with the Scottish Government to add services to ensure that customers unable to fly were able to reach Scotland for Christmas. In addition, almost 300 airline customers diverted to Edinburgh airport from Gatwick travelled by train to London free of charge. Some train services were altered to enable extra trains to serve those destinations most affected by airport closures ie Glasgow and Holyhead (for ferry travel to and from Ireland).

15. During the two periods of heavy snow, we faced varying weather conditions on different sections of our route. While conditions in Scotland and northern England were poor throughout most of the period, conditions elsewhere were less predictable. For instance, especially severe weather affected services in Anglesey, Lanarkshire and London on successive days, making advance planning difficult.

16. In such fluctuating circumstances, creating an emergency timetable was not the best solution for Virgin Trains and our core aim was to maintain services as close to the advertised service as possible. This approach also minimised the risk of conflicting information appearing through different information channels.

17. Our services were supported by a wide variety of customer communications via National Rail Enquiry Service and through our own website, customer relations department, calls centres and stations, as well as through social media, as described below.

18. Overwhelmingly, customer reaction to the fact that our staff maintained services to all destinations remained positive, and Virgin Trains is proud that its staff and partners in the rail industry ensured that services were operated to all destinations throughout the period in very difficult conditions.

Maintaining Services

19. As explained above, Virgin Trains did not introduce emergency timetables, despite the beneficial effect that this step could have had on our Public Performance Measure (PPM) statistics.

20. There were two periods of heavy disruption caused by the snow.

21. From 29 November to 8 December inclusive there were 204 full cancellations[23]—6.4% of the 3170 trains that should have run under the standard timetable. There were 131 trains (4.1%) which were part-cancelled.[24] The Public Performance Measure (PPM) was 52.1%.

22. From 18 December to 24 December inclusive there were 419 full cancellations—19.8% of the 2120 trains that should have run under the standard timetable. There were 126 trains (5.9%) which were part-cancelled. PPM was 13.3%.

23. The full cancellations were largely the structured reductions to two trains per hour on the London to Birmingham and Manchester routes, on three days. These days were chosen as days of lower passenger demand, to enable repairs to trains to be completed to run a full service on the busiest days immediately before Christmas.

Customer Communications

24. Following previous experience, we have subjected our website to some severe testing—up to five times the level of the peak experienced during previous bad weather. We were therefore confident that our website was robust, and this proved to be the case.

25. During the periods of disruption there was a significant increase in visits to virgintrains.com, with site performance unaffected by this additional traffic. From 29 November to 8 December, visits rose by 16% and between 18–24 December by 35% on previous weeks. Monday 20 December was the busiest day, with 104,347 visits to the site, an increase of 103% on the previous week.

26. Due to the significant increase (749%) in visits to the "Updates" page providing travel information, it is clear that customers were using the website to gather information. The website was regularly updated throughout these periods with a prominent alert message on the homepage.

27. The Virgin Trains Facebook page, launched in May last year, proved an invaluable tool for communicating with customers in real-time, through a number of regular "status post" updates on travel information. The page recorded a 66% increase in logged-in users, being checked over 28,000 times, demonstrating that customers have turned to social media channels for information in times of disruption.

[23] Trains which ran for less than 50% of scheduled route mileage.
[24] Trains which ran for less than their full scheduled mileage, but more than 50% of it.

28. We used twitter updates at regular intervals.

29. All available station staff provided updated information to customers, and posters were produced detailing services.

30. Train Managers have been issued with blackberry handsets. This has significantly improved our ability to disseminate information to train crews, allowing better reception than pagers and the ability to send more detailed messages.

31. Our customer relations team tend to deal with more complex enquiries but there was a much lower volume of calls than during the bad weather of 2009–10, suggesting that the provision of easily accessible information had answered many queries.

Preparation for Severe Weather

32. Informed by lessons learned during disruption during the winter of 2009–10, Virgin Trains and its rail industry partners took specific action to minimise disruption during the recent poor weather. Close attention was paid to particular incidents that had occurred the previous winter, in particular the events surrounding the suspension of Eurostar services. The following items are examples of this learning:

Contingency equipment supplies

33. Additional supplies of windscreens and side windows were ordered in advance to ensure full supply during extended bad weather.

Overhead wire performance

34. During the summer a programme of overhead wire inspection was carried out by Network Rail, identifying equipment at risk of failure in low temperatures, and these were replaced.

35. Network Rail and Virgin Trains jointly invented an overhead wire monitoring system, which was attached to the pantographs of two Pendolino trains to ensure the wire remained in good condition.

36. Only one incident of overhead wire failure occurred, in stark contrast to the winter of 2009–10. Network Rail also ran locomotives during the night to prevent build-up of ice on wires, which had not been done before. In addition, we used rear pantograph operation on Pendolino trains, which reduced the amount of ice from overhead wires damaging train windows; this was also a new approach.

Depot/station clearing

37. Round-the-clock work was carried out to ensure all paths and at-risk areas of depots were kept clear for easy access to trains overnight when temperatures were at their lowest. Similar overnight attention was paid to station platforms and approaches and to station car parks to prevent customer accidents.

Evacuation preparation

38. Learning from the investigation into problems experienced on Eurostar trains in 2009–10, Virgin Trains spent considerable time training and preparing for the risk of evacuation in poor weather. A new training vehicle based at Crewe enables staff to be trained in evacuation procedures. The result was that a train stranded in a remote part of Cumbria was evacuated in less than an hour.

Fuel supplies

39. Close work with Network Rail and local authorities ensured that roads serving depots were kept clear to enable fuel supplies.

40. Additional fuel storage tanks were provided at the Polmadie depot in Glasgow to ensure that supplies of diesel could be obtained for more than 48 hours.

Additional staff

41. Members of staff worked overtime and on days off to ensure spare cover for drivers and train managers unable to reach work. Hotel accommodation was also provided for train managers and catering staff to help them start early shifts.

Christmas working

42. Virgin Trains covered the cost of additional staffing at major depots so that the backlog of train repair work could be carried out on Christmas Day and Boxing Day. This ensured a rapid recovery in January this year, when services quickly operated at 90% punctuality.

Track preparation

43. Network Rail worked tirelessly to ensure that the northern part of the network remained open in extremely difficult circumstances. In addition, ballast height was kept low to prevent widespread damage to trains caused by ice and ballast.

Future Improvements

44. The weather conditions during December 2010 were unprecedented during the period that Virgin Trains has operated and inevitably they showed up areas that require further improvement.

45. Virgin Trains is reviewing its performance during the period, and working closely with partners in the industry to established improved procedures.

46. Some initial ideas for improvement are listed below, but we will also take account of the findings of reviews such as the inquiry by the Commons Transport Committee.

(a) Network Rail recently created an Integrated Train Planning System (ITPS) which is central to ensuring that timetable changes are made the day prior to any changes. However, there were mixed experiences and some information could not be loaded onto the system, or in some cases both the original timetable and amended timetable were shown to the public, causing confusion. Virgin Trains believes this system does need to improved urgently in order to ensure that there is clear and reliable information available to customers at times of disruption. There is a need for more regular uploading of information so that decisions on amended timetables can be made to take into account late changes in weather conditions. The integration of timetable information systems needs to be brought under the auspices of ATOC and enhanced so that all systems use the same timetable data which can be uploaded smoothly.

(b) Additional miniature snow ploughs would be useful in future to help cope with the threat of drifting snow in high winds. It would also help to have more Network Rail "snowmen" stationed near vulnerable parts of the network to deal quickly with points failures, rather than be dependent on reaching remote spots by roads which became impassable.

(c) The vulnerability of Heathrow airport was again clear, and a contingency plan involving train companies and other public transport operators could be developed by the Department for Transport, for use in the event of future closures.

(d) Virgin Trains will continue to work closely with our train manufacturers, Alstom and Bombardier, and learn from their global experience of working in harsh weather conditions.

February 2011

Written evidence from Transport for London (AWC 32)

1. Introduction

1.1 Transport for London (TfL) welcomes the opportunity to contribute to the Committee's inquiry into the recent adverse weather conditions.

1.2 TfL provided evidence to the independent review conducted by David Quarmby CBE, on behalf of the Government, in December 2010. The *Winter Resilience Audit* was published on 20 December.

1.3 In the report, David Quarmby referred to the lessons learned by TfL and other agencies from previous experiences of severe weather who had developed elements of good practice which could be replicated by other agencies. There were no specific recommendations directed at London, though the report noted that London's resilience arrangements were a model for others to consider.

1.4 For the purposes of this submission, TfL's evidence focuses on its response to the snowfall which fell on London and South East between Tuesday 30 November and Friday 3 December.

2. Preparing for Severe Weather

2.1 In London, a host of agencies including TfL, the emergency services and the Capital's boroughs work closely together in preparing for, and responding to, severe weather conditions.

2.2 Following the previous two severe winters, these arrangements are now well rehearsed. There are, however, always lessons to be learned. In spring 2010, the London Authorities Panel set objectives for a London Winter Service Review Steering Group, comprising of representatives from the London boroughs, the *London Technical Advisers Group (LoTAG), t*he Emergency Services and TfL.

2.3 Their work took place throughout the spring and summer months, including organising a Winter Service workshop, attended by representatives of all 32 London boroughs, the City of London and TfL, as well as key stakeholders, including the Metropolitan Police, London Fire Brigade, the Met Office and the Department for Transport.

3. London's Performance

3.1 Heavy snowfall in London commenced on Tuesday 30 November and fell across the Capital until Friday 3 December. South east London (especially the Boroughs of Bromley, Croydon and Sutton) was worst hit, and experienced more than 30cm of snow in places.

3.2 Significant snowfall continued predominantly in South East London until 2 December. Temperatures fell to as low as −11 degrees and significant sub-zero night time temperatures had been experienced throughout.

3.3 London's benchmark salt stock level (based on 48 runs of 20g/m2) is 69,797 tonnes. To ensure London was prepared TfL developed a strategic salt store by doubling its stock from 9,000 to 18,000 tonnes. Across the Capital, the amount of salt being purchased by the boroughs increased the benchmark figure to 72,000 tonnes.

3.4 During this period of extreme weather, working in close collaboration with the boroughs, TfL's contractors deployed all their 39 gritters, equipped with snow ploughs, and ten quad bikes to treat TfL's network and to assist with treating access to bus stations and garages and key bus routes.

3.5 On the bus network, and on the worst affected day (2 December), 98.5% of fleet vehicles remained in service in London during the morning peak before recovering to more than 99% by the afternoon. On the other affected days (1 December and 3–4 December), over 99% of the bus fleet was in operation.

3.6 On average, nearly 95% of London Underground (LU) services, over half of which operate above ground, were in operation over the course of the severe weather conditions. This is broadly the same level of service LU would operate on a normal weekday and was the result of strategies such as running de-icing trains every 10–15 minutes overnight to keep conductor rails free of ice and snow.

3.7 The DLR and the London Tramlink operated a good service across all routes. On London Overground, services operated across the vast majority of the network but delays occurred on services to and from West Croydon and Crystal Palace, due to ice on tracks managed by Network Rail.

3.8 David Quarmby's report highlighted the need for the rail industry to proactively provide other transport providers, particularly bus operators, with detailed information. The report noted the difficulty that Network Rail/TOC customer information systems had in keeping up with the developing service situation during severe weather-related disruption and that this "made it impossible for other transport operators, especially TfL, to give any accurate information to passengers they were feeding onto the south London network". We endorse this recommendation and will work with Network Rail to develop resilience in this area.

4. 18 and 19 December

4.1 Although the second spell of severe weather from 16 December caused significant disruption to other transport operators, particularly to UK airports' operations, well rehearsed resilience plans between TfL and London's boroughs were already in place to cope with a second wave of heavy snowfall.

4.2 Despite a strike on the Bakerloo line on Saturday 18 December and on one of the busiest shopping weekends of the year, over 85% of Tube services ran over the weekend with broadly the same levels on each of Saturday and Sunday.

4.3 Over 99% of the bus fleet was in operation with only minor curtailments taking place on taking place in outer London, predominantly in the south east.

5. Public Information

5.1 TfL's information systems proved resilient in the face of significant demand. It is worth noting the level of demand TfL experience on its communication channels when bad weather has an effect on punctuality and reliability across the network. In the period 18–23 December there were three million visits to the TfL website, over a million visits to our live travel news page, over six million Journey Planner page views and close to two million page views on our mobile site.

5.2 In his review, David Quarmby said: "*A particular feature on the Underground is the strong commitment to passenger communication and briefing; on the TfL website, through the telephone enquiry services and particularly in-journey. 'Rainbow boards' giving line status at every station, extensive use of public address throughout the network to advise current conditions as a supplement to the electronic platform indicators, and helpful information by train drivers if services are delayed or halted, all add to the confidence passengers have about using the system. While recognising the differences in scale and resources, there are lessons to be learned and applied, particularly about information, for the national rail network.*"

5.3 TfL's travel information is updated in real-time, giving customers the confidence that any changes they make to their travel plans are arrived at using highly accurate data and have resilient and high capacity hosting infrastructure to ensure that our online services are constantly available.

5.4 We are currently looking for ways to improve our information provision and resilience and to make our raw data available free of charge to developers so that they can produce apps and other innovative products which our customers might find helpful.

6. Conclusion

6.1 TfL continues to work closely with colleagues in the boroughs and via the London Local Authority Coordination Centre (LLACC) as we monitor London's ability to respond to future severe winter conditions, as well as reporting our state of resilience to the Government.

6.2 TfL's response to this winter's adverse weather conditions has been significantly improved by the action that has been taken to implement recommendations made in previous inquiries.

February 2011

Written evidence from the British Air Transport Association (BATA) (AWC 34)

1. The British Air Transport Association (BATA) welcomes the opportunity to submit evidence to the inquiry entitled *"Impact on Transport of Recent Adverse Weather Conditions"*, being undertaken by the House of Commons Transport Select Committee.

2. BATA is the trade body for UK registered airlines. Our eleven members cover all sectors of the airline industry—including freight, charter, low fare, regional operations and full service. In 2009, BATA members directly employed over 76,000 people, operated four fifths of the UK commercial aircraft fleet and were responsible for some 93% of UK airline output, carrying 121 million passengers and 1 million tonnes of freight.[25]

3. We are aware that a number of BATA's member airlines will be making their own, detailed submissions to this inquiry by the Transport Select Committee, highlighting their own experience and setting out their individual positions and recommendations.

4. BATA has therefore attempted to provide a short, high level response to the Committee, after consultation with and input from our member airlines.

5. We focus on the most relevant area, as identified in the inquiry's Terms of Reference , for our industry and members; namely the impact on the UK's airports, including the extent to which lessons were learnt from winter 2009–10.

6. We note the adverse weather that the UK experienced in December 2010 has been reported as the being coldest in 100 years.[26] The cold temperatures, combined with heavy snowfall over short periods of time will of course cause some disruption and we appreciate that the conditions in the UK during December could fairly be described as exceptional or unprecedented.

7. The UK was not alone in experiencing problems and a number of airports across Europe and indeed in the USA had to close due to snow and ice.

8. We also note that the response to the adverse winter weather was far from consistent at UK airports, and would strongly urge that examples of good practice should be considered and learnt from.

9. However, we believe that as a general rule, airports could have undertaken much more rigorous and better planning for such an event and consulted much earlier in their planning process and development of their contingency or crisis management plans with airlines and handling agents.

10. There were also problems in ensuring the delivery of up to date, real time, clear and accurate information by airports to airlines and the public during the periods that the weather affected operations.

11. Clearing a runway of snow and ice does not make the airport itself operational. Aircraft stands, aprons and other areas need to be cleared in order to be able to safely facilitate operations. At some airports, improved storage areas for the varied ground vehicles (especially ones that involve water) required to service aircraft and allow an airport to operate would help prevent delays in a similar bad weather scenario. It is apparent to us that that the airport operator is and must be held responsible for clearing these areas.

12. Although we have focused on the impact of the weather on airports in this short submission, we would also like to emphasise that aviation is reliant on the rest of the transport system and that ensuring surface access to airports should be considered a priority by authorities.

13. A lack of spare capacity and space, notably at Heathrow, also caused problems for airlines and passengers and meant that the airport took longer to recover than might otherwise have been the case. Pressures on space were compounded by misleading or incorrect information being given out by the media, flight diversions and restricted surface access, resulting in terminal buildings at some airports becoming overcrowded on occasion.

14. BATA would be pleased to provide oral evidence to expand on the points made in this submission.

February 2011

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[25] CAA "UK Airline Statistics: 2009—Annual", tables 1.6, 1.14 and 1.11.2.

[26] Met Office Press Release: http://www.metoffice.gov.uk/news/releases/archive/2011/cold-dec

Written evidence from the Institution of Civil Engineers (ICE) (AWC 35)

1. The Institution of Civil Engineers (ICE) is a UK-based international organisation with over 75,000 members ranging from professional civil engineers to students. It is an educational and qualifying body and has charitable status under UK law. Founded in 1818, the ICE has become recognised worldwide for its excellence as a centre of learning, as a qualifying body and as a public voice for the profession.

Background

2. Transport infrastructure is vital to the nation and its economic well-being. This complex system of infrastructure is fragile and affects the nation's resilience, as demonstrated in recent times by the impact of the severe winters of 2009 and 2010. The economic performance of the UK depends to a great extent on the movement of goods and people around the country.

3. This was highlighted when the Office for National Statistics (ONS) reported a 0.5% contraction in the economy in the fourth quarter of 2010, with the severe weather conditions attributed by many to be the main cause of this setback to the UK's economic stability.

4. The ICE consulted with its Regional departments located in England and Wales, to obtain a regional perspective on how the recent spell of adverse weather impacted upon transport networks.

Impacts on the Road and Rail Networks in England and Wales

Roads

5. The biggest risks to road condition are freezing weather and limited winter salt supply. The UK Roads Group, in their Winter Service Guidance for Local Authority Practitioners, stated that it was usually impractical to spread sufficient salt to melt freezing rain or more than a few millimetres of snow. Therefore, in advance of forecast snow or freezing rain, salt is spread to provide a de-bonding layer so that:

- Compacted snow and ice are more easily dispersed by traffic.
- Snow is more readily removed by ploughing.

It is very difficult to remove a layer of compacted snow or ice that is bonded to the road surface, so precautionary treatments are essential before heavy snowfall (UK Roads, 2009).

6. The majority of winter service treatments (and salt spread) in the UK are precautionary treatments in response to predicted frost conditions. In these, commonly marginal conditions, significant salt savings can be achieved using the rates given in this guidance when using salt which has been stored in good conditions, and using good equipment which has been properly calibrated (UK Roads 2009).

7. One of the key messages to emerge from the ICE's 2010 State of the Nation (SoN) report on UK Infrastructure, was the need to improve the condition of the local road network through good asset management and adequate funding (ICE, 2010). The SoN report highlighted that local roads were generally in poor condition and there was a huge backlog of maintenance work.

8. In 2009, the harshest winter in a generation created a 40% increase in the number of potholes, but there was also an underlying funding problem. Local authorities estimated then that it would take £11.6 billion to bring local roads up to a reasonable condition (ICE, 2010).

Movement on the road network

9. The road network in England and Wales, in many parts, was quite badly affected by the adverse weather. Conditions worsened quickly causing gridlock on roads up and down the country.

10. In Wales, the M4 and other Trunk roads were badly affected by the severe weather. This winter, a tanker caught fire, which caused the M4 to be blocked in both directions for many hours and severely compounding the delays to travellers. This was a clear example of how Wales suffers from having just one motorway route in and out of England across the Severn Bridge—an example of critical infrastructure.

11. In the North East, the longest disruption was clearly on the lower classified routes, rural areas and housing estates. There was severe disruption to bus services which were suspended at times (mainly on the worst affected routes in rural areas but also in a more widespread manner through early close down of services in the evenings) and timetables were severely affected by delays. The general disruption affected people's ability to attend work, education and other services and reduced retail activity.

12. The North East region reported that all available plant and labour, including private sector contractors, appeared to be utilised. Therefore in terms of significant future mitigation of disruption for a similar event it would appear that there would need to be increased investment in plant and equipment and the trained staff resources to utilise it. The costs of this would need to be balanced against the likelihood of similar events recurring, which is always the imponderable with winter maintenance.

13. In the West Midlands, a principle problem was that bus routes were suspended "ad-hoc" by drivers finding that they couldn't access steep routes or gain safe access in narrow streets. The result was that

passengers were often stranded without notice. This information was not collated or circulated; only the local radio appeared to be able to keep tabs on the situation.

14. There could also be some further contribution to the effectiveness of the response through further improvement in co-ordination of resources and training of front line staff on different scenarios and operations, but it is not easy to really replicate these emergency situations on a desk top basis. Perhaps further work on competency standards for decision makers and operatives was needed here.

15. What was apparent was that Local Authorities and the Highways Agency needed to consider how they could accommodate for adequate recovery times on the road network. When bad weather was approaching, people's natural reaction was to attempt to get home, which impacted greatly upon congestion on the road network and its ability to recover, as everyone was attempting to travel at the same time. Therefore, consideration should be given as to how these situations could be managed.

Salt stocks and supply

16. Throughout England and Wales, there was reference made to the use of the national salt reserves, where the DfT stockpiled 500,000 tonnes of salt and offered this to Local Authority bids at a price more than double the normal rate. This came at a time when the Salt Union were not fulfilling call off order obligations and were about to start their Christmas shutdown.

17. The resulting effect of limited salt stocks, and increased costs to access the reserve supply meant that some authorities reduced their normal salting network and operational response. Some local authorities cut back on the amount of salt that was being used in an effort to preserve stock for the remainder of the winter.

18. The availability and use of strategic stock piles of salt still appears to be a work in progress, with local authorities having the choice of either paying excessive amounts for additional salt supply, or not applying the correct operational response.

19. In Wales, the severe winter in early 2010 reported a real lack of road resilience was in relation to freezing weather and limited winter salt supply whilst there was an ongoing concern about the M4. These problems continued, and its ability to cope with poor weather seemed to worsen. Gritting and ploughing appeared to be sporadic, which was alleged to be either a conscious decision to retain stock or a result of mis-management. Whatever the reason, it subsequently caused many areas to be cut-off for days.

20. In the North East, in November 2010, it may have been felt that salt supplies were more than adequate to deal with the conditions and it appears with hindsight that at that time salt was in some places being used in a more generous manner than was prudent given the potential for a long period of winter weather. Once it became apparent that salt was being used excessively, the amount of salt reserves and capacity of the manufacturers led to an inability to obtain further supplies. Again, this meant that some authorities had to reduce their normal salting network and operational response.

21. In the East Midlands, treatment of the unclassified road network was in places less effective due to light traffic loads and very low temperatures. Many drivers were discouraged from using these routes due to inexperience of driving in snow conditions. This led to criticism of the routes not being treated when they had been.

Public expectations

22. If it were not possible to grit and plough the entire road network, which it is not, the ICE would like to see messages sent to the public, informing them that they could not expect to continue their journey as normal, and needed to revise their expectations and adjust their travel patterns during periods of severe adverse weather to accommodate and adapt to the situation.

23. Many media reports were unhelpful and misleading to the public. Often citing that other countries were far better at dealing with these conditions, which is not entirely the case. The local authorities and Highways Agency cannot clear roads of snow if there is nose to tail traffic sat on them.

24. The ICE would like to see an increase in the public taking greater responsibility to use their own initiative to clear frontages and paths, rather than expecting Local Authorities to do it for them. It was noted in some areas that salt from salt bins provided on the public highway had been available, but there was little evidence of it being used to clear the adjacent public highway.

25. There were some reports of bins being emptied into containers and taken away on vehicles. Some national publicity around the responsible use of salt bins would be helpful.

26. Leicestershire County Council collaborated with their District Councils to provide an effective treatment of town centre footways at no additional cost except for salt used, which was widely supported by the local media (District Councils made available at no extra cost their staff and contractors who were not able to undertake their street cleaning or parks operations in the conditions, County provided salt for use of public footways). They operated snow warden schemes with local Parish Councils to clear footways in village centres.

Flexible travel and reducing the need to travel

27. The ICE would like to stress the importance of the preparedness to adjust its 9–5 work routine, especially during poor weather conditions. Most employers will have business continuity plans in place, but they can often only refer to situations that affect the work-place. These plans should include home working, changes to shift patterns, alterations to Distribution Centres and ultimately reducing the need to travel.

28. A good example of travel pattern adjustments we received from the East Midlands, was that Schools were advised and many of them used a late start to the day (typically 9.30) rather than complete closure for the day. This was very effective and reduced the impact on other services and employers from the transport disruption.

Premature deterioration of the Road network

29. Successive years of severe weather conditions have exacerbated damage to the road infrastructure, and reduced its structural life. To adequately maintain the UK's road network, improved resources are urgently required to get the UK's roads back up to the appropriate standard and reduce the severe backlog of required works.

30. Somerset County Council reported to us that the severe winter weather experienced in the County during February 2009 caused premature deterioration of the network and loss of structural life. They predicted this deterioration to be valued at £11.5 million of loss of structural life due to the sever winter of 2008–09.

31. In Wales, trunk roads are the responsibility of the Welsh Assembly Government; these are managed via the three Trunk Road Agencies. The vast majority of roads in Wales are the responsibility of the twenty two Unitary Councils. Welsh drivers rely more heavily on the local roads maintained by local authorities and the number of potholes on Welsh roads has been exacerbated by the snow and ice in 2010. This is compounded by the very large backlog of work required to address the poor condition of the roads in the first place.

Rail

Movement of Rail

32. Throughout England and Wales, rail services were impacted upon by the severe weather conditions. It should be pointed out that many rail services were able to operate on a reduced timetable, but there were some rail services that faced severe delays and cancellations.

33. In the South East, South Eastern trains failed to run trains on some lines for over three and possibly four days. The combination of the third rail combined with over-sensitive computer controlled trains is a major problem. Apparently the computer control disables the train if certain faults materialise, and the driver is unable to override this.

34. For the South West region, cold weather certainly impacted on trains as much as other travel. Particular fragility and limited options in the South West is an issue. The Cornwall floods also impacted upon the region with road and rail links severed before the snow in December 2010.

35. Drivers and conductor rostering was the cause of some cancellations. The absence of a driver acquainted with the route, means the absence of the train. Some need a fully functioning road network to be able to get to the depot.

Third rail power supply

36. When there is significant snowfall it is often the parts of the network with third rail power supply rather than overhead electrical supply that suffer the most. The current Multi-purpose Vehicles (MPV) used was not sufficiently robust. The responsibility for operating and maintaining the de-icing vehicles could be passed to the Train Operating Company, so that a single organisation is responsible for clearing the way for its rolling stock. In addition some redundant vehicles could be converted so that conductor rails are scraped as well as sprayed with de-icer. Apparently the MPVs only spray de-icer.

37. Older electro-mechanical units, while they could be defeated by the snow, were not nearly so sensitive. With ice able to form on conductor rails within minutes, it would seem necessary for ordinary rolling stock to be able either to cope with arcing and interrupted power supplies, or to have some add-on device so that they can deal with snow and ice, just as they have sanding gear to address poor adhesion.

February 2011

Written evidence from the British Vehicle Rental and Leasing Association (BVRLA) (AWC 36)

BONA-FIDES—BVRLA, THE INDUSTRY AND ITS MEMBERS

— The BVRLA is the trade body for companies engaged in the leasing and rental of cars and commercial vehicles. Its members provide rental, leasing and fleet management services to corporate users and consumers. They operate a combined fleet of 2.5 million cars, vans and trucks, buying nearly half of all new vehicles sold in the UK.

— Through its members and their customers, the BVRLA represents the interests of more than two million business car drivers and the millions of people who use a rental vehicle each year. As well as lobbying the Government on key issues affecting the sector, the BVRLA regulates the industry through a mandatory code of conduct. www.bvrla.co.uk

LEASING MEMBERS

In general, vehicle leasing is an arrangement where the user simply hires the use of the vehicle and assumes operational responsibility for a predetermined period and mileage at fixed monthly rental from the owner (the leasing company). Legal ownership is, in the majority of cases, retained by the leasing company.

SHORT TERM RENTAL MEMBERS

Rental Members offer hourly, daily, weekly and monthly rental of vehicles to corporate customers and consumers. As explained above, rental members are the owners of the vehicle.

KEY RECOMMANDATIONS

1. BAA should ensure it makes available equitable remedies to its clients and customers, such as our members, who have suffered as a consequence of BAA's failings.

2. BAA should carefully review its information/communication provisions to ensure that they are sufficiently robust to notify rental companies of all emergency situations where flights in and out of the airport have been severely disrupted.

3. BAA should invest and enhance the existing communication process for all dependent businesses. There should be a critical update' email address/phone line where our members are regularly sent information on all situations which may adversely impact both flights and passengers using the airport.

SPECIFIC COMMENTS

1. The key area of concern for our members related to the lack of communication and information provided to them by BAA during the period Heathrow Airport was adversely impacted in December 2010. The lack of information had meant that our members were unable to manage their operations efficiently or deliver their normally high level of service to their customers. As a direct consequence of this our members have suffered a high level of financial losses, which our members are taking up separately with BAA. These financial losses relate to, but by no means are exclusive to, operational matters such as having to keep vehicles available for customers who had pre-booked, continue to circulate staged courtesy buses at all terminal buildings, and having to ask their employees to be at their post at the all rental locations.

2. We would therefore suggest that the committee makes recommendations to BAA to ensure it makes available equitable remedies to its clients and customers, such as our members, who have suffered as a consequence of BAA's failings.

3. We would hope that by ensuring BAA is held to account for its failings it will put in place the level of protection and preventative procedures to help assure our members of business continuity and delivery of the service our members would expect from any class leading airport operator.

4. Our members, with operations at Heathrow airport were inundated with rental customers contacting them enquiring as to what the current situation was with flights and the operation of the airport. Our members could only advise customers to call their airlines for the latest information.

5. With our members' customers not knowing if and when they could travel; this created immense difficulties for our members as this caused severe disruption with fleet planning. This was not helped by the exceptionally high number of customers not turning up for the pre-booked vehicles, the so called 'no shows'. Even when the airport started to resume back to "normal" operation, our members' customers, who had pre-booked, were turning up two or three days after their pre-booked date, expecting their rental vehicle still to be made available, especially as they felt they should not be penalised for the problems associated with the disruption at the airport.

6. The complete lack of any authoritative and useful information had also severely impacted the operation of our members' courtesy buses and staff planning. There were a number of days where the flight times were extended for arrivals right through the night. As a result, our members had to continue to operate their courtesy buses throughout the night just in case there were more customers arriving.

7. We would therefore suggest that one of the key recommendations the committee makes would be for BAA to ensure it carefully reviews its information/communication provisions to ensure that they are sufficiently robust to notify rental companies of all emergency situations where flights in and out of the airport have been severely disrupted.

8. While we understand that there is a communication process in place, it would seem that during the period the airport was disrupted, this communication process failed. It is therefore vital that the committee understands the reasons for this failure and that as part of its recommendations ensures that BAA is required to have in place a fail safe and robust mechanism whereby regular alerts and vital information is routinely provided to our members, who are then able to proactively manage their respective businesses by ensuring business continuity where possible and importantly enable them to deliver good customer service to airport passengers.

9. If any lessons can be learnt from this incident, the single and most critical area would be for BAA to invest and enhance the existing communication process for all dependent businesses. This should attempt to be all embracing by encompassing all situations which may adversely impact both flights and passengers using the airport. This for example, would include road closures or when the tubes stop running. This could also be enhanced to take into account the more severe events and also what is being planned in the future that will impact on the car rental business and their customers. (runway closures, night flights etc).

10. It remains unclear to us what communication plan currently exists that is shared with other key stakeholders, such as catering suppliers who load the aircraft, the management of baggage, or bus operators who move the crew/staff etc around airside, who would require up to date information. If such information does exist then we see no justifiable reason why this information could not be shared with rental firms and other dependent companies operating at the airport.

11. In essence, we believe that our members should be treated on an equal footing to other ground transportation and other suppliers working on airside and that this information should be fed into a "critical update" email address/phone line where our members can cascade appropriately within their operations.

March 2011

Written evidence from William Bethell (AWC 38)

TERMINAL 5—HEATHROW AIRPORT 17–18 DECEMBER 2011

13:30—There had been a light dusting of snow but it was extremely cold, aggravated by the wind chill factor. We boarded our BA flight to Atlanta and once settled were told that there was a slight engine problem reported by the incoming crew that was being looked at by maintenance engineers and as not due to delay our flight. An hour later we were told that the engine had the all clear and that we were in a queue of twenty planes waiting for de-icing. Glasses of water and crisps were circulated until they ran out. The crew did not want to serve a meal because in the eventuality of us taking off they would not have a meal to serve in flight. At 19:30 the pilot apologised and said that the crew would not be able to fly, even if the de-icer arrived and the flight was cancelled. On leaving the aircraft every passenger was handed one sandwich in a plastic wrapper.

(In a case of this type of delay a hot meal ferried out to the plane would have been greatly appreciated)

20:00—We were ferried, by coach, to the terminus building and herded into baggage reclaim to collect our luggage which was being unloaded from the aircraft. There were about three to four hundred passengers in baggage reclaim and the absence of BA staff was very noticeable. Every now and again a young male member of BA staff would appear from an office and shout out that "Baggage from such and such a flight should appear o Carousel number—". This would generate a surge of passengers towards the numbered carousel. I found myself conversing with an American and a Canadian passenger who were both in transit on their way back to their respective countries. They were both perplexed at the lack of organisation and did not know what they were going to do now that their flights had been cancelled.

20:30—Luckily my search of all carousels found my two cases. A tannoy announcement then told all the passengers in the baggage hall that it was going to close. Those that had not found their baggage could collect a claim leaflet on their way out of the baggage hall. At this stage there were still bags arriving. I felt so sorry for the transit passengers who were desperately searching for their luggage. I left the hall with my two cases and was given a claims form (copy attached).[27] I then went to join my partner, through immigration, on the third floor in the re-ticketing area.

21:00—Chaos, absolute chaos. I managed to find my partner on the third floor. By this stage I would estimate some five to six hundred passengers on this floor. I discovered that the BA staff employed to assist passengers had finished their days work and were walking away from the crowded desks. I heard all different languages and at one point a voice with an American accent shouted "Is there a senior BA member here to take charge?" ... silence. I was lucky. My partner had overhead a lady in the queue, obviously in the travel trade, booking herself two tickets over the phone. This lady very kindly booked us a flight with Virgin Atlantic from Gatwick. She also very kindly booked us into a hotel in Ruislip, which we were unable to take advantage of. I managed to collar a female member of BA staff who was on her way home and she kindly validated our tickets. We were then discussing what we should do as BA had not booked us a hotel for the night or offered us any refreshments apart from the sandwich when we left the aircraft. People were beginning to sit in queues waiting for the checkout desks to reopen the following morning. We began to make our way towards the exit on the ground floor pushing past men, women and children.

[27] Not printed here

22:30—The tannoy announced that Terminal 5 was being closed and everyone had to vacate the terminal which would reopen at 5:30 the following morning. Where were these people supposed to go? BA and BAA expected them to stand outside Terminal 5 in a bitterly cold night for six hours whilst they cleaned the building? People were just herded out. We heard that the taxi queue was taking two hours. We were alright as we managed to get a Heathrow/Gatwick National Express coach, but was of the transit passengers just abandoned outside?

This has been my worst travel experience and I would ask the following questions:

— What contingency plans did BA/BAA have for these conditions? They knew how many aircraft they had waiting to fly but requiring de-icing before leaving. They knew that de-icing would take a while (I am told it was thirty minutes an aircraft). They must have been aware that there would be flight cancellations. How were they going to feed their delayed customers? Who was arranging hotels for each flight and transport to get them there? BA/BAA owed a duty of care to their passengers which they completely abrogated.

— They had enough time to print out the attached document[28] to advise passengers that they were closing the terminal for the night, that they had not booked any hotel accommodation, and that reimbursement would be considered on production of receipts. His would seem to be the only contingency plan in place which was of very little assistance to passengers.

— Why was there not a senior executive at Terminal 5 to take charge of the situation? He could have cancelled the closure of Terminal 5 so that passengers had somewhere warm to wait.

April 2011

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[28] Not printed here