9

GREATER MANCHESTER INTEGRATED TRANSPORT AUTHORITY

REPORT FOR INFORMATION

COMMITTEE:	**Rail and Metrolink Networks**
DATE:	**5th February 2010**
SUBJECT:	**Rail and Metrolink Service Performance during Adverse Weather**
REPORT OF:	**Interim Bus and Rail Director and Metrolink Director, GMPTE**

PURPOSE OF REPORT

To inform Members of the impact of the recent adverse weather on Rail and Metrolink services.

RECOMMENDATIONS

Members are invited to consider the report and to:

- Note the performance of Rail and Metrolink services during the recent adverse weather.

BACKGROUND DOCUMENTS

Information held on file in GMPTE offices.

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1. Executive Summary

1.1 During week commencing 4th January 2010, Manchester experienced some of the worst weather the city has ever seen. Prolonged snow fall and sub-zero temperatures affected all modes of transport. This report provides information on the impact of the severe weather on Rail and Metrolink services from 5th January to 13th January 2010 inclusive.

2. Rail

2.1 After a relatively good period of performance over the Christmas and New Year period, heavy snowfall on 5 January and several subsequent days of further snowfall and below zero temperatures had an adverse effect on train services.

2.2 In the Greater Manchester area services provided by all train operators were subject to delay and cancellation at various times but there were no significant line blockages or infrastructure failures which interrupted the service on any particular route for a significant period.

2.3 Measures put in place by Network Rail to keep key junctions and other essential infrastructure functioning efficiently were generally successful.

Northern Rail

2.4 The heavy snowfall on 5 January affected all parts of Greater Manchester. This resulted in major difficulties for Northern in maintaining the advertised level of service. In addition to the general disruption to travel by road which affected staff availability, the number of trains available to use on the network was reduced as a result of snow blocking points at a number of depots. However, Northern maintained a service on all routes on this day and throughout the period.

2.5 By the following day matters had improved but as the week progressed the persistent sub zero temperatures began to affect the reliability of train equipment. The Class 323 fleet of electric trains used on the south side suburban services was particularly seriously affected. Reduced availability of these trains impacted on services on the Glossop/Hadfield, Stoke, Crewe and Manchester Airport lines.

2.6 As a result, Northern Rail decided to implement a contingency plan with effect from Friday 8 January to avoid a situation where passengers were subjected to the uncertainty of unplanned service cancellations. Whilst it was necessary to reduce the level of service on some routes, the suspension of all strengthening enabled a residual service to be provided by substituting diesel trains for some electric trains.

2.7 As the availability of the local electric train fleet improved it was possible to restore services in stages from 11 January and increase strengthening to other services as diesel units were released. However, disruption caused by the adverse weather gave rise to a maintenance backlog and this delayed the full restoration of strengthening.

2.8 The PPM (Public Performance Measure) figures for the affected days, shown below, reflect the impact of the issues outlined above. PPM is the railway's nationally applied standard which represents a combination of the two performance measures: trains that were not cancelled and those that run less than five minutes late. The table below also shows the PPM calculated on the basis of trains that were not cancelled and those that ran less than 10 minutes late. The final column shows the number of trains that actually operated.

Day	PPM (trains not cancelled and those that ran less than 5 minutes late)	PPM (trains not cancelled and those that ran less than 10 minutes late)	% trains not cancelled
Tuesday January 5th	55.95%	68.39%	85.90%
Wednesday January 6th	79.74%	88.66%	96.70%
Thursday January 7th	41.76%	55.27%	78.02%
Friday January 8th	56.07%	68.90%	85.81%
Saturday January 9th	87.48%	93.56%	97.78%
Sunday January 10th	85.67%	94.67%	97.00%
Monday January 11th	90.41%	97.16%	99.53%
Tuesday January 12th	89.38%	95.02%	98.34%
Wednesday January 13th	85.03%	92.02%	98.45%

2.9 Bearing in mind the extreme and unusual conditions under which public transport has been operating during the adverse weather, train services have performed very well. Throughout the period, Northern Rail management and staff made great efforts to maintain as good a level of service as possible in the extreme conditions. There were few instances of staff absence. GMPTE was kept fully informed of the weather impact on services and the measures Northern Rail were adopting to mitigate the situation. However, an area of concern was the relatively poor level of platform, car park and station access ramp snow and ice clearance. This

matter is being discussed further with a view to improving the performance of Northern Rail when similar periods of adverse weather prevail in future.

TransPennine Express

2.10 TPE services were similarly disrupted during the period. Some services, particular north of Carlisle and north of Newcastle were suspended for periods due line blockages. The sustained period of below zero temperatures caused many of the trains used on TPE services to develop defects.

2.11 The reduced number of serviceable units meant that a contingency timetable applied during the period from Friday 8th to Saturday 16th January. This involved the temporary suspension of the Manchester Airport/Newcastle service and services to Glasgow from Manchester Airport. The number of strengthened services was also reduced.

2.12 As conditions improved and units were repaired, services were restored in stages and fully restored by Saturday 16th January.

Other Operators' Services

2.13 Other operators serving the Greater Manchester area also had their services disrupted by the adverse weather. The periods of disruption tended to reflect periods of heavy snowfall in other parts of the country.

2.14 Virgin West Coast services have performed particularly poorly with significant delays and the 20 minute interval service frequency between Manchester and Euston reduced to two trains per hour from Thursday 7th to Saturday 16th January. This planned service reduction arose from a shortage of trains owing to weather related defects.

2.15 Arriva Cross Country services were also disrupted for a time following heavy snowfall in the Midlands.

2.16 The services of these long distance operators were affected by periods of adverse weather conditions which prevailed in different parts of the country on different dates.

Further Details of Service Performance

2.17 The paragraphs above reflect an early assessment of performance during the period commencing 5 January. At the next meeting of the Rail and Metrolink Networks Committee Members will be provided with a more comprehensive report covering the impact on rail service performance during periods 10 and 11.

3. Metrolink

3.1 The Operator, Stagecoach Metrolink, operated services running throughout the period. However, due to the unprecedented weather, some disruption was inevitable and services did suffer from delays as a result of failed trams and frozen points.

Services

3.2 Best efforts were made to run a 12 minute service between Bury and Altrincham services via Piccadilly, complemented by direct services when there was sufficient availability of trams. The service was subject to delays and widely varying frequency when a number of trams failed.

3.3 As a result of compacted snow in points and on the road, services on the Eccles line did not operate on 5th January 2010 until the evening peak. Thereafter, the service continued to operate although the frequency did vary widely as a result of failed vehicles.

Effect on trams

3.4 The extreme weather caused a high number of trams to fail in service, the main cause of failures being related to traction motors and compressors

3.5 Gritted roads on the Eccles line particularly, caused many trams to accumulate a salty slush composition within the motor, causing short circuits to occur. The Operator has secured a robust supply chain to ensure that repaired traction motors are being delivered to the depot in the shortest possible time.

3.6 The cold weather led to several compressor failures resulting in faults with the suspension, brakes and door opening mechanisms thereby rendering the vehicle unfit for operation. The compressor supplier has been working alongside the Operator at the depot to provide assistance to identify faults and replace faulty compressor units, enabling a fast repair of these vehicles.

3.7 The Operator secured additional technical resources from its depot in Sheffield to support the removal and fitment of failed components. Trams are being returned to service as quickly as they become available, however at the time of writing a number of repairs are yet to be complete. The effect on service provision is being minimised by careful management of the trams available.

Infrastructure

3.8 To minimise the impact on the service, points heaters were kept on all night and the points were operated every 20 minutes. Additionally the Operator deployed signalling and telecommunication technicians at key locations during peak times in the event that points failed.

3.9 The Operator deployed a team to remove snow and ice from stops, ramps, stairwells and platforms on the Bury line, while an external team of contractors addressed the Eccles and Altrincham lines. Access areas were prioritised at each stop to ensure, that as a minimum, one safe access was provided at all stops. A programme was then developed to ensure all access was cleared at all stops over the next few of days.

3.10 Constant monitoring of the stops was undertaken during the adverse weather and removal teams were kept on call throughout.

3.11 The Operator ran trams throughout the night to ensure that the overhead line equipment and track were kept clear of snow and ice.

Provision for passengers

3.12 Keeping customers informed of the service being provided was of paramount importance. Rolling announcements were made over the public address system informing passengers of the expected delays and alternative transport options available. In light of the disruption to services, passengers were able to use Metrolink tickets on the 135 / 98 (Bury), 33 (Eccles) and 263 (Altrincham) bus services at various times. Travel Safe Officers were deployed in key areas to provide customer care. Increased staffing was provided in the control room to make bespoke announcements however, the number of announcement required to cover the system and the limitations of PA system resulted in passengers commenting that the frequency of announcements could be improved.

3.13 Both the GMPTE and Metrolink websites were updated frequently with the latest information available from the Metrolink Control Room and in liaison with operators in the case of bus services. GMPTE's updates were published on the Manchester Evening News live Traffic and Travel webpage. A temporary Severe Weather homepage was created on GMPTE's website to deal with capacity issues cased by up to 92,000 hits on the site – ten times the normal peak number of visitors.

3.14 Throughout the period, meetings and conference calls were held between the PTE and the Operator to review the service being provided and to review the status of mitigation actions in place. Additionally, PTE staff were out on the system monitoring the service levels together with the status of the exercise to clear snow and ice from the tram stops.

3.15 As the thaw set in GMITA issued a press release quoting the Chair praising operators and passenger for their efforts and forbearance during the severe conditions:

"Operators have worked hard to keep Greater Manchester moving as much as possible, and to get people to work in conditions that the region has rarely experienced before.

"Some disruption was inevitable in a prolonged period of extreme weather like this, but despite heavy snowfall, exceptionally low temperatures and icy conditions, most of Greater Manchester's main road bus services have been running and train cancellations have been kept to a minimum.

"Bus station staff have also been working hard to keep bus stations as clear of snow as possible to keep the traffic moving.

"The Metrolink system was facing conditions like this for the first time in its history, but still managed to provide a service.

"We look forward to seeing that level of commitment carry on as the weather improves, and we expect operators to be vigilant as the thaw begins, which could in itself bring challenges.

"We would also like to thank passengers for their continued understanding of the difficulties the current weather conditions can cause."

Lessons Learnt

3.16 GMPTE and the operators will be carrying out a review of the procedures in place to manage the service during adverse weather conditions taking into account the lessons learnt from the last two weeks.

4. Recommendations

See front sheet for recommendations

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