# **Sustainability Committee**

SC(3)-12-07 (p.1): 6 December 2007

# National Assembly for Wales Sustainability Committee Inquiry into Carbon Reduction in Wales: Submission by the Association of Train Operating Companies (ATOC)

### Purpose

1. This paper is the Association of Train Operating Companies (ATOC) response to the Committee's request for evidence as part of its Inquiry into Carbon Reduction in Wales, specifically on the second sub-topic 'carbon reduction by transport'.

2. The Committee is encouraged to note that the most important role rail can play in reducing carbon emissions from transport is to carry a greater share of the national traffic. In support of this, rail operators are committed to an Emissions Reduction Policy comprising three key elements:

**First**, rail has a substantially lower carbon footprint (CO<sub>2</sub> per passenger kilometre) than car or domestic air rail and has reduced this by 25% in the last ten years. Having made this improvement, the railway will go further. It will complete a detailed strategy to reduce further the carbon footprint of rail travel and next year will set a long term target for cutting its carbon emissions per passenger kilometre.

**Second**, the railway will do what is in its power to be the backbone of an easier to use, more integrated system of public transport to draw people out of their cars. This will be achieved not by one grand scheme, but by consistent delivery of hundreds of local and national initiatives which the railway will support.

**Third**, given its increasing environmental advantages, the best thing the railway can do to support Britain's carbon reduction strategy is to carry a greater share of national traffic. Train operators will attract passengers onto the railway if the capacity is there. We therefore support the long term ambition of the Secretary of State to double today's level of passenger traffic and we want to see detailed planning to bring this about.

#### Background

#### **Rail's environmental performance**

3. As providers of a sustainable form of transport we strongly believe that modal shift to rail from more carbon intensive forms of transport can help reduce (or limit the growth in) overall emissions from transport. Alongside this we also acknowledge the need to further reduce rail's own carbon footprint.

4. Recent work undertaken by ATOC has confirmed rail's continuing carbon advantage over competing modes:

On a per passenger kilometre basis, rail emits approximately half the CO<sub>2</sub> of car and a quarter that of domestic air.

Rail has reduced its carbon footprint ( $CO_2$  per passenger kilometre) faster than other modes - by 5% in the last year and by 25% over the last decade. In comparison, cars have seen a 9% reduction over the last ten years while domestic air has worsened, increasing by 11%.

Rail can carry additional traffic with a minimal carbon impact. In the long term we believe rail can provide additional capacity at a marginal carbon intensity of about half the current figure.

The rail industry is taking steps to reduce its carbon footprint still further. For diesel operation - the predominant form of traction in Wales - these measures include in-service trials of biodiesel and re-engining of High Speed Trains.

5. Looking ahead the industry will set itself a clear target to reduce carbon emissions per passenger kilometre during 2008. Operators are in the process of putting together a detailed strategy for achieving this.

6. Given rail's relative carbon advantage there is a significant opportunity to tackle carbon emissions from transport within Wales through modal shift from road to rail. Road transport emissions currently comprise over 14% of Welsh  $CO_2$  emissions and are the third largest source of  $CO_2$  after power stations and iron/steel. Emissions from this source have grown by over 9% since 1990. Modal shift to rail, where practicable, can therefore help to reduce (or limit the growth in) overall carbon emissions from transport.

## Improving capacity and integration

As regards existing service provision, rail currently performs four critical functions in Wales:

Supporting significant commuter flows in/out of Cardiff and the surrounding areas (particularly the Valley Lines);

Linking key towns and cities in Wales with each other and with Cardiff;

Providing fast links to London as well as connections to other major cities such as Birmingham, Manchester and Liverpool and;

Providing important social links to rural/remote communities within Wales. These are particularly important for those without access to a car.

Overall, estimates suggest Welsh rail demand could grow by as much as 35% by 2016, and possibly more on some parts of the network e.g. on the Valley Lines into Cardiff. Similarly rail trips between Wales and England currently make up around a third of the Welsh passenger market and these types of journey are predicted to grow considerably.

8. Two important conclusions flow from this:

First, there is a clear need to increase rail capacity to meet anticipated growth in demand. Committed schemes such as the Cardiff Area Resignalling Renewal Scheme are welcome however improvements need to encompass not only infrastructure but also rolling stock; it is hoped the DfT's forthcoming rolling stock plan in Jan 2008 will clarify the plans to replace both Pacers and Sprinters.

Second, rail must be at the heart of an easy to use, effective integrated public transport system. Operators are committed to improvements to station facilities - the £150m National Station Improvement Programme will cover a number of Welsh stations - as well as joint ticketing arrangements with other transport providers (e.g. the Wales Flexi Pass covering rail and buses). ATOC is also pursuing the Station Travel Plans concept, in conjunction with DfT and other stakeholders, which is designed to identify the most cost-effective and environmentally beneficial package of options for improving access to stations.

9. Overall, improvements to capacity and better integration with other forms of public transport should help encourage greater use of rail at the expense of more carbon-intensive modes. This in turn will help to tackle CO<sub>2</sub> emissions from transport overall. Thus, any targets that might be set on carbon emissions from rail need to recognise that the overall level of service operated (and consequently emissions) will increase, even though emissions per passenger km will reduce.

Summary and recommendations

10. Rail has a demonstrable - and improving - carbon advantage over competing modes. Modal shift to rail, particularly from road, is a key mechanism for reducing overall carbon emissions from transport. This is particularly important given the significant (and increasing) level of  $CO_2$  emissions from Welsh road transport. In light of this, the single most important role rail can play in reducing carbon emissions is to carry a greater share of the national travel demand.

11. In closing, we make the following recommendations:

Rail's significant carbon advantage over other modes should be fully reflected in Welsh Assembly Government transport policy and plans to deliver carbon reduction in Wales;

Rail capacity improvements in Wales must take account of the potential for higher than expected growth over the coming decade;

Rail should continue to be at the heart of an integrated Welsh public transport system and;

Consistency is required between any targets set by the Welsh Assembly Government and UK Government given the high level of cross border services operating to and from Wales.

Members of the Committee may be interested in the ATOC Energy and Emissions statement which is attached at Annex A.