

**First Group Response to ORR Consultation Document –  
“ORR’s Sustainable Development and Environment Duties” -  
published October 2006**

First Group welcomes this consultation and looks forward to working with ORR on the important issues of Rail’s sustainability and environmental impact. Rail is inherently a sustainable form of transport and we believe that its benefits are increasingly being recognised by policymakers, although work is still needed to improve its energy efficiency and reduce its environmental impact still further.

The comments below represent the combined views of First Great Western, First Capital Connect, First Transpennine, First Scotrail and GB Railfreight.

- (a) We believe that the ORR’s proposed objectives should be put within the context of what is presumed to be government’s policy of improving the overall sustainability of all forms of transport between locations in the UK. The most effective way to achieve this overall objective may well be by encouraging modal shift from less sustainable forms of transport to more sustainable forms, such as rail. Objectives for improving the sustainability of rail should therefore be viewed against the context of improving the sustainability of transportation as a whole.
- (b) Giving priority to environmental factors is a reasonable approach, provided that this is not progressed for rail in isolation from consideration of other transport modes and the potential for modal shift. If, as we believe should be the case, environmental impact is measured in a normalised form (e.g. mg of emissions per passenger/tonne kilometre for passenger and freight services respectively), then there must surely be an argument that the greatest contribution that rail can make to sustainability is by increasing volumes by achieving modal shift from less sustainable forms of transport. Issues that we believe need to be addressed are:
- Reducing energy consumption by:
    - a. Energy efficient driving and staff awareness of energy conservation
    - b. Reviewing train diagrams and regulation to minimise the number of red signals to reduce energy wasted accelerating trains
    - c. Planning to reduce the quantity of permanent, temporary and emergency speed restrictions to enable trains to maintain more constant speed profiles
    - d. Upgrading infrastructure to enable maximum use of regenerative braking
  - Providing incentives to procure new trains that are lighter and more energy efficient. Care will be required to avoid increasing the running costs for existing trains and hence inhibiting modal shift to rail.
- (c) We believe that this is covered elsewhere within our response.

- (d) We agree that publication of KPIs would be beneficial, subject to them being comparable with those produced for other modes of transport. As results are unlikely to change rapidly over short timescales, we believe it would be appropriate to publish these KPIs annually.

We believe that data should be gathered and owned by the rail industry. A voluntary process has already been shown to work effectively for the production of NFRIP fleet reliability data and it is recommended that a similar approach should be adopted in this case. We believe the rail industry should be allowed to develop a solution in this case.

- (e) In general, we believe that the quantity of KPIs is probably excessive, at least in the short term. We would recommend prioritising those KPIs that enable comparisons to be made across the transport sector, ensuring clarity and consistency in relation to the units of measurement used and methods of collection. A clear definition of each KPI is required; for example, clarifying what is classed as an “environmental incident” and “noise impact”. Wherever possible, these KPIs need to be normalised against a measure of traffic volume (passenger kilometres for passenger services or tonne kilometres for freight) in order that they may be directly comparable to other transport modes.
- (f) We have no comments regarding these proposals.
- (g) We would fully support this proposal. As train designs (other than in the long term) and station calling patterns are largely “givens”, the most significant factors that can be influenced are driving techniques/ staff energy consciousness and unscheduled slowing /stopping of trains. Whilst train mass is a significant factor in determining energy consumption, its significance is heavily dependant on the number of occasions that a train is required to accelerate. Hence, improved train pathing and regulation and reductions in the quantity of speed restrictions have a significant part to play; probably greater than that of driving technique. Network Rail’s Business Plan and the RUS process needs to take account of this.
- (h) We do not believe there is any need to change the environmental provisions as set out in the current Network Code. We do not consider that there are any inconsistencies in the way costs are allocated, the principle being that the infrastructure provider should ensure that the network is capable of containing the routine discharges from normal operations. This is equivalent to arrangements applying to the road and sewage networks. If changes were made to the existing provisions this would compromise the clear distinction of roles between operator and infrastructure provider, with operators being required to ensure that the network is capable of dealing with the small quantity of discharges that arise from normal operations. This is highly likely to import substantial additional costs to the industry.

We are very concerned about proposed changes to environmental provisions set out in the Depot and Station Access Conditions. Under the current arrangements the responsibilities of both parties are clearly set out and each party cross indemnifies the other for environmental loss if they

fail to meet their obligations. A recent suggestion has been to create an “environmental landlord” in the Depot Access Conditions. The legal implications of this are that the onus will be on the operator to demonstrate that no recent contamination has occurred. Practically, using the analytical techniques currently available, it is not possible to demonstrate that no new contamination has taken place and so any contamination will become the responsibility of the operator. More importantly this would also mean that there would be no incentive on the landlord to provide a fit for purpose depot that complies with relevant environmental standards as the operator will effectively be responsible for cleaning up any contamination from defective infrastructure (e.g. drainage systems or fuelling aprons) which the landlord is responsible for providing.

- (i) We do not believe there is a requirement for ORR to become involved in commissioning research. This is clearly defined as the role of RSSB and, given the stakeholder involvement in prioritising RSSB’s research activities, we believe this is the most appropriate body to progress these issues.
- (j) As discussed in (g) above, avoiding unnecessary changes in train speed is a significant contributor to reducing energy consumption. We believe there is a potential for the variable access charge regime to provide an incentive for Network Rail to provide additional train paths; potentially introducing trains with a wide range of performance characteristics. This may well result in pathing problems leading to more adverse signals and increased energy consumption. Whilst the revenue from additional variable access charge payments passes to Network Rail, costs (in terms of increased fuel or traction electricity consumption) fall to train operators.
- (k) We believe that the use of KPIs as a basis for a financial incentive scheme would be highly premature and could easily create perverse incentives and additional costs that would adversely impact on the competitive position of rail. In many cases, as illustrated in (g) above, a KPI can be influenced by more than one party within the industry and current understanding of the various factors is far from fully developed. Whilst some forms of incentive scheme may be appropriate at some point in the future, we believe they would represent a serious error at this stage.
- (l) As has been stated in 4.18, financial incentives to reduce train mass already exist in the form of traction electricity and variable usage charges. Whilst the introduction of additional incentives is clearly a possibility, we believe it is essential to ensure that such a scheme creates a true incentive, rather than just an additional cost. In reality, trains have a very long asset life (circa 30 years) and there is very little surplus supply in the rolling stock market. This inevitably means that most operators will have no practical choice other than to primarily continue leasing existing trains whose weight is effectively a given. Increasing charges for these trains just increases costs and these costs can only be recovered from either fares (and hence causing modal shift from less sustainable forms of transport) or Government through franchise agreements. We would suggest that this achieves nothing in terms of improving sustainability. The only effective point at which an incentive to reduce train weight can be introduced is prior to procurement. At this stage, any incentive/charge can

be factored into a whole life cost model and hence influence the train design selected. A clear implication of such an approach is that, given the long asset lives involved, it is imperative any charging/incentive schemes should remain stable in the long term. If this is not seen to be the case it will undermine the case for factoring such schemes into the whole life cost model.

(m) We would argue that an environmental charge could only be effective to the extent that it modifies the actions of those who are subject to the charge. As has been outlined above, train operators are faced with a number of factors that would influence such a charge:

- Driving techniques/operational practices, maintenance/ – all largely within the control of the train operator
- Design of new trains – able to be influenced by the train operator
- Existing train design – largely a given for the train operator
- Train pathing/regulation – not controlled by the train operator
- Speed restrictions – not controlled by the train operator

With such significant factors outside the control of the train operator, combined with the inability to measure the influence of each factor on total energy consumption, we believe that an environmental charge will simply become another cost that will be factored into future franchise bids, hence defeating its purpose.

(n) We are aware that on-train metering is one of the subjects for discussion by the EC4T Working Group, on which ORR is represented. Our understanding is that this Group has yet to reach any conclusions in this regard and we do not, therefore, feel able to offer an opinion on this.

(o) Regarding regenerative braking, our policy is to ensure that any new electric trains procured for operation by First will be capable of regenerative braking. Providing this capability for existing trains would effectively require renewal of the entire traction system and is not, in our judgement, practicable. We are not in a position to comment on impediments to extending regenerative capability across the infrastructure network.

(p) We are unable to offer any further suggestions as to where incentives could promote positive environmental decision-making.