SEPA
Scottish Environment Protection Agency

Our Ref: JM/JA/DR/FL/ ORG13-A2703
Your Ref:

Rail2014
Transport Scotland
Buchanan House
58 Port Dundas Road
Glasgow G4 0HF

17 February 2012

By email: Rail2014@transportscotland.gsi.gov.uk

Dear Sir/Madam

Rail 2014 – Public Consultation

Thank you for providing the Scottish Environment Protection Agency (SEPA) with the opportunity to comment on the above consultation document.

In Scotland, SEPA regulates activities that may pollute water, land and air; the storage, transport and disposal of waste; and the keeping and disposal of radioactive substances. SEPA, in carrying out its duties, is aware of the pressures placed on the environment by transport choices, in particular we are concerned by the increasing greenhouse gas (GHG) emissions and local air quality impacts attributable to transport.

SEPA believes the overall objective of transport policy should be clearly directed towards the reduction of overall fuel consumption in conjunction with an increase in efficiency of the fuel being consumed. Whilst measures to green the sector are welcomed, such as the development and introduction of alternative fuel technologies, significant behavioural changes are also needed in order to manage the environmental impact of transport. For instance, there needs to be a reduction in the need and frequency of journeys taken and the use of public and active modes of transport should be maximised.

The Scottish Government's report "Scottish Greenhouse Gas Emissions 2009" (2011) indicates that in 2009, 21 per cent of greenhouse gas emissions in Scotland were from transport (excluding international aviation and shipping). The transport sector as a whole has a significant role to play in terms of helping Scotland realise its ambitious carbon reduction targets. In general, rail has a less adverse effect on the environment than other modes of transport. In particular it offers a marked efficiency advantage in terms of greenhouse gas contributions over road and air transport. A low carbon and fuel efficient rail network that offers an integrated, punctual, reliable, affordable and comfortable service could help attract passengers from their cars and aeroplane seats and freight from roads.

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Whilst managing GHG emissions from transport is a key consideration, it is also necessary to mitigate the wider impacts of transport on air quality, water quality, biodiversity, and waste management. Additionally, measures designed to secure reductions in GHG emissions from the transport sector should not have a detrimental affect on other environmental indicators. For instance, rail, buses and other public transport options should use technologies and fuels that secure both greenhouse gas (GHG) **and** air pollutant reductions.

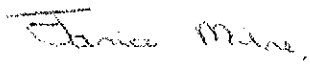
SEPA supports the intention to encourage existing passengers to use more rail services and to attract new passengers to rail, so as to reduce journeys by less environmentally sustainable modes of travel. Facilitating a modal shift to rail of passengers and freight in conjunction with a greening of the rail service and network itself should go some way to helping reduce the overall environmental impact of transport.

SEPA staff make regular use of the rail network for both personal and work related travel. This response reflects SEPA's wider views on transport and the environment, as well as the views of users of the rail service in Scotland.

SEPA's response to the specific points raised in the consultation is incorporated within the Respondent Information Form.

As a public body committed to openness and transparency, SEPA feels it is appropriate that this response be placed on the public record. If you require further clarification on any aspect of this correspondence, please contact Duncan Roebuck, SEPA Corporate Office, at the address shown below.

Yours faithfully



Janice Milne
Head of National Operations

Enc

Rail 2014 – Public Consultation

Respondent Information Form and Questions

Please Note this form **must** be returned with your response to ensure that we handle your response appropriately

1. Name/Organisation

Organisation Name

Scottish Environment Protection Agency (SEPA)

Title **Mr** ☐ **Ms** ☑ **Mrs** ☐ **Miss** ☐ **Dr** ☐ ***Please tick as appropriate***

Surname

Milne

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Janice

2. Postal Address

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Postcode FK9 4TR	**Phone** 01786 457700	**Email** consult@sepa.org.uk

3. Permissions - I am responding as…

Individual ☐ / **Group/Organisation** ☑

Please tick as appropriate

(a) Do you agree to your response being made available to the public (in Scottish Government library and/or on the Scottish Government web site)?

Please tick as appropriate ☐ **Yes** ☐ **No**

(b) Where confidentiality is not requested, we will make your responses available to the public on the following basis

Please tick ONE of the following boxes

Yes, make my response, name and address all available ☐

or

Yes, make my response available, but not my name and address ☐

or

Yes, make my response and name available, but not my address ☐

(c) The name and address of your organisation ***will be*** made available to the public (in the Scottish Government library and/or on the Scottish Government web site).

Are you content for your ***response*** to be made available?

Please tick as *appropriate* ☑ Yes ☐ **No**

(d) We will share your response internally with other Scottish Government policy teams who may be addressing the issues you discuss. They may wish to contact you again in the future, but we require your permission to do so. Are you content for Scottish Government to contact you again in relation to this consultation exercise?

Please tick as appropriate ☑ **Yes** ☐ **No**

Rail 2014 – Public Consultation

Consultation Questions

The answer boxes will expand as you type.

Procuring rail passenger services

1. What are the merits of offering the ScotRail franchise as a dual focus franchise and what services should be covered by the economic rail element, and what by the social rail element?

Q1 comments:

A single franchise may offer a more consistent service that ensures the network is integrated across the country, both rural and urban. A single franchise may allow the more profitable services to support the less profitable parts of the network. Offering separate franchises may threaten some services, such as the rural and sleeper services, as they may be viewed as less commercially attractive. In rural areas, where public transport may be limited and restrictive, it is important that the service retains the same high standard expected in the urban areas, as the rural service still acts as vital commuting alternative for both residents and tourists. The importance of a service is not necessarily determined by its profitability and SEPA supports the objective of incorporating positive private sector attributes with public sector ethos in the provision of rail passenger services in Scotland. Therefore, a single dual focus franchise, as proposed in the consultation document, may present a good way to ensure a high standard of service is maintained across the entire network.

2. What should be the length of the contract for future franchises, and what factors lead you to this view?

Q2 comments:

The length of the contract should be optimised in such a way as to ensure a level of investment that maximises the customer experience and facilitates a modal shift to rail of passengers and freight. It is also important to secure a level of investment which helps reduce the climate change and wider environmental impacts of rail.

3. What risk support mechanism should be reflected within the franchise?

Q3 comments: n/a

4. What, if any, profit share mechanism should apply within the franchise?

Q4 comments: n/a

5. Under what terms should third parties be involved in the operation of passenger rail services?

Q5 comments: n/a

6. What is the best way to structure and incentivise the achievement of outcome measures whilst ensuring value for money?

Q6 comments: n/a

7. What level of performance bond and/or parent company guarantees are appropriate?

Q7 comments: n/a

8. What sanctions should be used to ensure the franchisee fulfils its franchise commitments?

Q8 comments: n/a

Achieving reliability, performance and service quality

9. Under the franchise, should we incentivise good performance or only penalise poor performance?

Q9 comments:

Existing customers have indicated that the reliability and punctuality of the rail service are priorities. The performance option that best secures a good customer experience should be sought. Reliable, punctual and more frequent passenger services may attract new customers and result in fewer car journeys, with multiple benefits for the environment.

10. Should the performance regime be aligned with actual routes or service groups, or should there be one system for the whole of Scotland?

Q10 comments:

Scotland needs a fully integrated and efficient rail service and network that can provide a viable alternative to both air and car travel (internal and cross boundary) and contribute to Scotland's environmental targets. A consistent standard of service across the whole rail service is essential. It is important that rural services are reliable and punctual as they provide a vital commuting route for residents and support tourism and other industries. Rail users may have other modal connections at the end of their rail journeys; therefore, punctuality and reliability are important across the service.

11. How can we make the performance regime more aligned with passenger issues?

Q11 comments: n/a

12. What should the balance be between journey times and performance?

Q12 comments:

Surveys results quoted in the consultation document suggest that for current non-users of rail, journey times are of importance. This therefore suggests that shorter journey times could increase patronage. Existing customers on the other hand place an emphasis on reliability and punctuality. Therefore, timetable adjustments could be made to increase journey times which would allow more flexibility and thereby improve train performance levels, increasing the proportion of punctual trains. However, as pointed out in the consultation document, increasing journey times may result in a reduction in the number of train services that can be provided. Increasing journey times should not be seen as the only option for ensuring punctuality targets are more readily met. In addition, a balance needs to be struck between satisfying the expectations of existing customers whilst at the same time attracting new ones. SEPA would support an option that helps reduce the climate change and wider environmental impact of the transport sector as a whole.

13. Is a Service Quality Incentive Regime required? And if so should it cover all aspects of stations and service delivery, or just those being managed through the franchise?

Q13 comments: n/a

14. What other mechanisms could be used for assessing train and station quality?

Q14 comments: n/a

Scottish train services

15. Can better use be made of existing train capacity, such as increasing the permitted standing time beyond the limit of 10 minutes or increasing the capacity limit? What is an acceptable limit for standing times on rail services?

Q15 comments:

Consideration should perhaps first be given to increasing capacity, for instance using additional carriages for specific services. Any measures introduced beyond this should not negatively affect the passenger experience resulting in rail users choosing alternative modes of transport with greater environmental impact.

16. Should the number of services making use of interchange stations (both rail to rail and rail to other modes) be increased to reduce the number of direct services? What would be the opportunities and challenges of this?

Q16 comments:

SEPA supports the view that the franchisee will need to offer an attractive service to customers, with journey times that are competitive with other modes of transport. If the rail service is to compete with car and air travel then it

should provide direct services where feasible. Increasing the number of changes required by passengers on some routes may make the service less attractive and less likely to encourage modal transport shift from car and air to rail.

Consideration should also be given to the potential impact on accessibility. Increasing the number of interchange stations with the result of two or more trains being required to complete a journey could introduce a level of difficulty and stress to the travel experience for some customers.

Interconnectivity with other modes of transport is key to providing an integrated public transport service that facilitates modal shift and helps Scotland meet its environmental objectives. SEPA welcomes the intention to develop timetables with workable connections and agrees that future franchise contracts should stress the importance of securing good connectivity with other modes of transport.

17. Should Government direct aspects of service provision such as frequency and journey time, or would these be better determined by the franchisee based on customer demand?

Q17 comments:

A high level of service should be delivered across the network with the needs of rural and urban communities being adequately met.

18. What level of contract specification should we use the for the next ScotRail franchise?

Q18 comments: n/a

19. How should the contract incentivise the franchisee to be innovative in the provision of services?

Q19 comments: n/a

Scottish rail fares

20. What should be the rationale for, and purpose of, our fares policy?

Q20 comments:

Rail fares need to be competitive with the actual costs associated with running a car, as well as with budget airline prices in order to encourage modal shift. Rail fares should reflect the smaller externalised costs to the environment. Additionally, fares need to be simple and flexible to ensure that they can complete with the flexibility offered by the car and convenience offered by online airline booking services. Facilitation of integrated transport ticketing is also required, i.e. through tickets which allow travel across different modes of public transport.

21. What fares should be regulated by government and what should be set on a commercial basis? Do your recommendations change by geographic area (the Strathclyde area example), or by type of journey (for example suburban or intercity)?

Q21 comments: n/a

22. How should we achieve a balance between the taxpayer subsidy and passenger revenue contributions in funding the Scottish rail network? At what rate should fares be increased, and how feasible would it be to apply higher increases to Sections of the network which have recently been enhanced?

Q22 comments: n/a

23. What should the difference be between peak and off-peak fares? Will this help encourage people to switch to travelling in the off-peak?

Q23 comments: Work patterns are often not flexible so caution should be taken to prevent excessive fares at peak times which could result in commuters returning to their cars. The fare structure should not penalise commuters who have no choice but to travel during the peak. The capacity of peak trains should be increased to avoid over-crowding. Overcrowded and uncomfortable travel during the peak may result in the perception that the rail service does not deliver value for money.

Scottish stations

24. How should we determine what rail stations are required and where, including whether a station should be closed?

Q24 comments: Some local authorities recognise that long distance car travel is a significant source of greenhouse gas emissions, and some local plans now contain a commitment to promote residential development in areas that are well served by public transport – and this includes a reliable commuter rail service. As access to public transport is a factor considered within the planning system, caution should be taken to ensure that the closing of a station or the reduction in service provision does not have a negative social and economic impact on communities that have developed around a public transport modal route. Additionally, caution should be taken to avoid negatively impacting the tourism market. Alternatives to closing a station could include making it a request stop or diversifying the station to ensure that the buildings are providing additional income and services and providing a greater focal point for a local community.

25. What are the merits or issues that arise from a third party (such as a local authority or local business) being able to propose, promote and fund a station or service?

Q25 comments:

Any opportunity to increase the utilisation of rail buildings and assets would be welcomed.

26. Should only one organisation be responsible for the management and maintenance of stations? If this was the franchisee how should that responsibility be structured in terms of leasing, investment, and issues relating to residual capital value?

Q26 comments: n/a

27. How can local communities be encouraged to support their local station?

Q27 comments: n/a

28. What categories of station should be designated and what facilities should be available at each category of station?

Q28 comments:

The rail network is able to provide a viable alternative to long distance commuting in private cars. However, private car parking may be a limiting factor at some smaller stations. Consideration should be given to the possibility of increasing the availability of car parking at those stations where a need has been identified, particularly in rural areas where public transport may be limited.

Cross-border services

29. Should cross-border services continue to go north of Edinburgh? In operating alongside ScotRail services, how do cross-border services benefit passengers and taxpayers? And who should specify these services, the Department of Transport or the Scottish Ministers?

Q29 comments:

Alongside the financial considerations for the Scottish Government and the franchisee, the customer experience is also key. Passengers are likely to prefer cross-border services that continue north of Edinburgh. Changes at Waverley may increase the chances of delays and extend journey times making travel times less competitive with other modes of transport. Continuous cross-border rail journeys north to Inverness and Aberdeen may be the only viable alternatives to air travel from London for these cities. Ceasing these routes north may result in customers choosing to fly rather than travel by rail and may impact ease of access to the north of Scotland.

Consideration should also be given to the potential impact on accessibility. For instance, requiring a change at Edinburgh may introduce a level of difficulty and stress into the travel experience for some customers.

30. Or should the cross-border services terminate at Edinburgh Waverley, allowing opportunities for Scottish connections? And if so, what additional benefits would accrue from having an Edinburgh Hub?

Q30 comments: Please see answer to question 29 above.

Rolling stock

31. What alternative strategies or mechanisms could be used to reduce the cost of the provision of rolling stock?

Q31 comments: n/a

32. What facilities should be present on a train and to what extent should these facilities vary according to the route served?

Q32 comments: Consideration should be given to increasing the capacity and lessening the stringency of rules for bicycles on passenger trains, as this may contribute to the improvement and development of a more integrated inter-modal transport network for Scotland.

Passengers – information, security and services

33. How should we prioritise investment for mobile phone provision and / or Wi-Fi type high-bandwidth services?

Q33 comments: Introducing wifi onto buses and trains could have the advantage of attracting commuters out of their cars and onto public transport. Lothian Buses currently provides free Wi-Fi on its new buses (service 10 and the AIRLINK) and East Coast Trains, which provides some continuous services north of Waverley, also provides a wifi service. Wi-Fi and other high-bandwidth services could help attract professionals out of their cars, as it would offer valuable working time during commutes.

34. How should we balance the need for additional seating capacity and retain the flexibility of a franchisee to offer first-class services if commercially viable?

Q34 comments: n/a

35. What issues and evidence should be considered prior to determining whether or not to ban the consumption of alcohol on trains?

Q35 comments: Cross border and sleeper services often provide dinning facilities. Dinning and drinking restrictions on these journeys could have a negative impact on

the comfort and attractiveness of these longer rail services. However, for shorter journeys, such as those in the central belt, restricting the consumption of alcohol may in fact improve the experience for customers overall.

36. How can the provision of travel information for passengers be further improved?

Q36 comments:

Caledonian Sleeper

37. Should we continue to specify sleeper services, or should this be a purely commercial matter for a train operating company?

Q37 comments:

A reduction in this service could negatively impact accessibility in and out of the Highlands for residents, businesses and tourists alike. The sleeper provides an alternative to air transport for those accessing the Highlands. Air travel generates more GHG emissions per passenger than rail and a reduction, or removal of the service could result in a modal shift away from rail.

38. Should the Caledonian Sleeper services be contracted for separately from the main ScotRail franchise? Or should it be an option for within the main ScotRail franchise?

Q38 comments:

A single ScotRail franchise, which includes the Caledonia Sleeper contract, may allow the more profitable services to support the less profitable ones.

39. We would be interested in your views in the level and type of service that the Caledonian Sleeper Services should provide. Including:

- What is the appeal of the Caledonian Sleeper Service, and if there were more early and late trains would the appeal of the sleeper services change?
- What is the value of sleeper services to Fort William, Inverness and Aberdeen and are these the correct destinations, for example would Oban provide better connectivity?
- What facilities should the sleeper services provide and would you pay more for better facilities?

Q39 comments:

In order for the sleeper to serve as lower carbon alternative to air travel, it needs to be financially competitive, comfortable and reliable. An appeal of the sleeper is that it provides a travel option which does not cut into valuable holiday and business time. Earlier and later train services won't necessarily

provide the same level of comfort that is sought by many passengers travelling at night.

Environmental issues

40. What environmental key performance indicators should we consider for inclusion in the franchise agreement or the High Level Output Specification?

Emissions to air

In general, rail has a less adverse effect on the environment than other modes of transport. In particular it offers a marked efficiency advantage in terms of greenhouse gas contributions over road and air transport. However, there is still scope for the rail service and network to lessen its emissions to air of GHGs and air pollutants, as well as reduce noise emissions.

Greenhouse gases

Good interconnectivity of differing modes of active and public transport are key in establishing an integrated transport service that meets customer expectations, supports modal shift and delivers significant GHG reductions. A rail service that is better interconnected with other modes of transport could help make the service more attractive to new customers; therefore, supporting wider GHG emissions reductions.

In terms of the GHG footprint of the rail service and network, consideration should be given to further electrification. The UK electricity grid will lessen in greenhouse gas intensity over time as a greater proportion of renewable generation capacity is included in the mix.

An increased transition of freight and passengers to rail transport could increase total emissions of GHGs from rail in the short to medium term. However, the GHG emissions per passenger for rail tends to be lower on average when compared to travel by car and plane and with a move to greater electrification of the rail network, the average GHG emissions per passenger using rail in Scotland should drop still further.

The use of sustainably produced biofuels, where both direct and indirect impacts land use change impacts have been taken into account, may present an opportunity to reduce the carbon footprint of rail. However, their use may not offer the co-benefit of reduced air pollutant emissions.

The introduction of new vehicles into the rolling stock fleet could present an opportunity to reduce the weight and improve the fuel efficiency of new trains. Consideration should be given to the principles of ecodesign, such as the introduction of regenerative braking. From a resources point of view, the use of recycled materials, as well as designing for reuse, repair, upgrade and recyclability are important considerations.

Air pollutants and noise

A modal shift from road to rail of passengers should see an easing of traffic congestion in urban areas with benefits for air quality and human health. Consideration should be given to further identify and promote incentives to move greater volumes of freight from roads to rail to reduce Greenhouse Gas emissions per unit of freight. This action could also help realise benefits for urban centres where heavy goods vehicles (HGVs) have been identified as contributing significantly to local air quality concerns.

With respect to the direct environmental impact of rail, Section 12 of the consultation document contains 4 key environmental issues (carbon, waste, biodiversity and sustainability). However it does not include a reference to air quality and noise, even though these issues are highlighted in Section 2.4. Poor air quality and certain levels and types of noise, such as rhythmic low frequencies produced by stationary diesel locomotives, can have a detrimental impact on human health.

Both short-term and long-term exposure to ambient levels of particulate matter (PM) are consistently associated with respiratory and cardiovascular illness and mortality as well as other ill-health effects. PM derives from both anthropogenic and natural sources with the biggest anthropogenic sources in the UK being stationary fuel combustion and transport. The Committee on the Medical Effects of Air Pollution (COMEAP), published a report on the Mortality Effects of Long-Term Exposure to Particulate Air Pollution in the UK (2010), which presented the results of calculations of mortality in 2008. The burden of anthropogenic particulate matter air pollution (specifically PM2.5) was estimated to be an effect equivalent to nearly 29,000 deaths in the UK during that year.

Waste

The vision of the Zero Waste Plan and associated regulations describes a Scotland where resource use is minimised, valuable resources are recycled through the economy, and most waste is sorted into separate streams for reprocessing, leaving only limited amounts for residual waste treatment.

In practice, any future Scotrail franchise needs to take cognisance of the above targets and forthcoming regulatory measures across passenger and infrastructure operations.

It is recommended that targets (table 1) and requirements (table 2) are factored into future waste management contracts and agreements.

Table 1: Zero Waste Plan, June 2010, set the following applicable targets:

Target	**Year**
70% reuse / recycling of construction & demolition waste	2020
70% reuse / recycling / composting of all waste	2025

Table 2: Supplemented by the Policy Statement Zero Waste Regulations, Oct 2011, which outlined the following duties:

Regulatory measures	**Implementation**

	date
All businesses to present dry recyclables (eg. glass, metal, plastic, paper & card) for source segregated collection	31/12/2013
Medium to large businesses (involved food production, food retail or food preparation) to present food waste for source segregated collection	
Ban on biodegradable material to landfill	31/12/2020

The Scottish Government is keen to see the number of 'Recycling On The Go' facilities increase across public infrastructure. Such facilities can have a positive affect on normalising recycling behaviour and divert valuable resources from landfill.

On-train separation of recyclates may be facilitated by using two clear bags; one for dry recyclates (newspaper, cans, plastic bottles, etc.) and the second for litter, as currently collected while passing through carriages. The recyclate collected can be passed through a 'clean' materials recycling facility (MRF) to sort and bulk material for reprocessing. The litter component or residual waste can processed through various types of waste treatment facilities to extract further recyclates and recover energy.

Business support tools and best practice information are available on the Zero Waste Scotland website (http://www.zerowastescotland.org.uk/). Zero Waste Scotland are also developing a zero waste pledge[1] for companies to sign up to and which may be built into a comprehensive waste management contract.

In summary the following environmental key performance indicators should be considered for inclusion in the franchise agreement or the High Level Output Specification:

- Compliance with the requirement for the business to separate the key dry recyclables (glass, metal, plastic, paper and card) at source by 31 Dec 2013.
- Waste management contract conditions that comply with the ban on biodegradable waste to landfill by 2020 and achieve 70% recycling by 2025.

SEPA understands that the Scottish Government intends to set targets for preventing waste and recommends that, when available, these are also included in the performance framework for the new rail franchise.

Biodiversity

It is a statutory requirement under section 1 of the Nature Conservation (Scotland) Act 2004 for all public bodies in Scotland, in exercising any function, to further the conservation of biodiversity, consistent with the proper exercise of the function. SEPA recommends that that an audit of the

[1] Page 35 of the 2011 SNP manifesto

biodiversity resource of the rail network should be undertaken and the information used to develop a Scottish rail network biodiversity action plan. A similar approach has been adopted previously for the Scottish trunk road network. Future rail contracts and agreements should be required to deliver in ways consistent with the objectives and targets of that network action plan. It is recommended that policies for managing vegetation, including trees, should be assessed to see where improvements for biodiversity can be brought about. Contracts for grass-cutting and for the spraying of invasive non-native species within the curtilage of the track area are also important considerations. There exists an opportunity to work in partnership with the Local Biodiversity Action Plan projects and partnerships covering the areas of mainland Scotland served by the Scottish rail network, particularly in respect of identifying local and regional biodiversity priorities for a network biodiversity action plan.

Sustainability

The 'Sustainability' theme could include consideration for the wider environmental and social benefits. For example these may include:

- Improved and more frequent passenger services may attract more customers with the benefit of fewer single occupancy car journeys
- Better connectivity and timings of rail services and with different transport modes may increase the attractiveness of rail transport
- Improved freight hubs and increased services to more destinations
- More dialogue and improved industry/user forums to identify and agree further improvements and national benefits

SEPA
February 2012