OFFICE OF RAIL REGULATION

CONSULTATION REVIEW

FINAL

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APPENDICES

1. LIST OF RESPONDENTS

2. SUMMARY OF RESPONSES

1. BACKGROUND

1.1 Aims

In exercising its functions in Part 1 of the Railways Act 1993, the Office of Rail Regulation (ORR) must discharge certain duties including the following in relation to sustainable development:

♦ To contribute to the achievement of sustainable development; and

♦ To have regard to the effect on the environment of activities connected with the provision of rail services.

ORR wishes to understand how it can best discharge these duties, particularly taking into account the principles/priorities stated within the UK Sustainable Development (SD) Strategy, which in summary are the following:

Guiding principles:

1. *Living within environmental limits*

2. *Ensuring a strong, healthy and just society*

3. *Achieving a sustainable economy*

4. *Promoting good governance*

5. *Using sound science responsibly*

Priorities:

1. *Sustainable consumption and production*

2. *Climate change and energy*

3. *Natural resource protection and environmental enhancement*

4. *Sustainable communities.*

ORR has issued a consultation document to stakeholders, outlining proposed policy options for discharging its SD duties. This report aims to summarise the responses to the consultation and provide recommendations to ORR. The report does not aim to comment on the success or quality of the consultation in terms of response rate.

Twenty-nine responses were reviewed by Enviros (those organisations/individuals who responded are listed in Appendix 1).

2. METHODOLOGY

Our approach to reviewing the responses made to the consultation has been based on an attempt to identify areas where there are commonly held views amongst the consultees, and to take these forward in recommendations to ORR, as objectively as possible. Our approach has involved three main elements, described below.
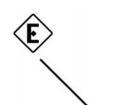
2.1 Summary of Responses

The first element, which forms the main output of the review, has been to create a comprehensive summary of the responses received (Appendix 2). Specifically, this has required working through each response in turn, extracting and summarising as far as possible the key comments made by respondents. The content of the responses has varied widely in format, detail, language used, and quantity of information. The degree to which respondents have directly answered the 16 questions posed by the consultation document has also varied greatly. However, an effort has been made to ensure that, whilst comments have been condensed in order to create a useable summary, key messages have been reflected.

2.2 Identifying Key Issues

The second element of our approach has been based on a need to provide an objective view of the commonly held views of respondents. This has been achieved by reviewing the summary of responses (above) to identify and highlight key themes. Where possible, recurring (ie expressed by more than one respondent) themes have been identified, representing shared views.

2.3 Making Recommendations

By attempting to systematically identify areas of consensus, we have aimed to recommend issues which ORR should address in response to the consultation exercise. In addition, we have identified areas where further consultation is required with individual respondents.

3.   RESULTS & RECOMMENDATIONS

3.1   Summary of Consultation Responses

This section aims to summarise the responses received during the consultation and identify themes common to more than one respondent, indicating where there is agreement.. Appendix 2 provides a comprehensive 'face value' summary of all key comments made by respondents – upon which this section is based. It should be noted that, for reasons of practicality, all comments have been recorded in Appendix 2 in précis form to create an 'at a glance' table.

Responses to the consultation document were invited in the form of specific responses to a series of questions about various aspects of policy proposed or discussed by ORR in the document and in the form of additional comments on any aspect of the document.

3.1.1   Responses to the Individual Questions

"Consultees are invited to comment on our proposed objectives and to say whether we should adopt any additional objectives in developing our role (paragraph 2.12)."

Comments received were wide-ranging, including both specific responses to the question and more general but relevant comments.   Seventeen respondents specifically answered this question.

In relation to agreement or otherwise with ORR's proposed objectives, roughly one third of comments recorded specifically support ORR's objectives. In relation to the adoption of additional objectives, specific suggestions include adding objectives on: promotion of a sustainable rail system; ensuring industry contributes to governmental objectives on SD; and requiring that ORR's role is facilitative with regard to SD in the rail industry.

Themes on which a number of respondents agreed were:

◆   Ensuring that ORR's objectives reflect or are in line with the UK Government's SD objectives (four respondents made comments to this effect); and

◆   Ensuring that ORR adopts a 'communication' role, including external promotion of rail's green credentials and internal explanation of key issues (four respondents).

"Consultees are also asked for their views on our prioritisation of the three pillars, and to provide their thoughts on the specific issues that they consider need to be addressed (paragraph 2.13)."

In relation to views on the prioritisation of the pillars, there is limited agreement with ORR's prioritisation, with more respondents who specifically commented saying that each should be viewed equally (although other comments variously cited economic and social issues as requiring primary focus).   Fourteen respondents specifically answered this question.

Specific issues which respondents consider need to be addressed include the following:

◆ Energy use/efficiency (and associated issues);

◆ Carbon emissions;

◆ Leadership on innovations;

◆ Working with other rail bodies;

◆ Closure policy; and

◆ Encouraging modal shift.

Themes on which a number of respondents agreed were:

◆ Addressing all three pillars together: balancing economic, environmental and social considerations (six respondents).

"Consultees are asked to comment on the proposals outlined in chapter 3, and also on whether there are any others that we could add in order that ORR as an organisation can contribute as fully as possible to the achievement of the key sustainable development principles (paragraph 3.12)."

This question resulted in a disparate range of responses, possibly due to its general nature (a number of the proposals outlined in chapter 3 are addressed more specifically in later questions). A number of comments (such as communicating the benefits of rail transport) in effect repeat those made in earlier questions. However some themes were repeated in respondents comments. Twelve respondents specifically answered this question.

Themes on which a number of respondents agreed related to:

◆ Inter-modal issues (including consideration of inter-modal context and encouraging modal shift to rail) (four respondents).

Consultees are invited to comment on whether the publication of KPIs would be beneficial in both encouraging environmental improvements across the industry and promoting the benefits of rail travel to the general public. Are there any other specific KPIs additional to those listed in chapter 3 that should be considered? In populating these KPIs, do consultees consider that the information that might be required is already available (to be produced either on a quarterly or annual basis) (paragraph 3.24)?

This particular question attracted a considerable number of comments in comparison with others in the consultation. Twenty-one respondents specifically answered this question.

Generally, responses were in favour of the use and publication of KPIs (with various qualifications), however there was limited response with regard to their specific value in promoting benefits of rail to the public.

Whilst some respondents felt that those KPI areas listed in the document were suitable, a number either suggested additional indicators or, conversely, stressed the importance of focusing on only a few important ones. Additional KPIs suggested were:

◆ Investment in environmental projects;

◆ In situ noise and vibration;

◆ Static/dynamic loading;

◆ Removal of litter;

◆ Affordability; and

◆ Carbon footprint (of TOCs).

Themes on which a number of respondents agreed were:

◆ KPIs chosen should be applicable throughout the rail industry (four respondents);

◆ Use should be voluntary (four respondents);

◆ Will require considerable work to fully identify/implement (four respondents);

◆ Must add value and not pose additional cost (six respondents);

◆ Should be comparable with other modes to be of value (eight respondents);

◆ Should be externally verified (two respondents); and

◆ Should be a small number of key indicators only (six respondents).

"Consultees are asked to comment on the proposed ways of ensuring that appropriate KPI information is gathered, and provide suggestions of any possible alternatives. Who do consultees believe should collate and publish this information (paragraph 3.25)?"

A number of responses to this question overlapped with those provided to the previous question (for example on the issue of whether provision of information should be mandatory or not, and the use of inter-modal indicators). However, in general opinion is divided as to whether ORR or RSSB should have the responsibility of collecting and publishing data (although National Rail Trends was cited by a number of respondents as a suitable vehicle for publication). Limited specific suggestions were made regarding mechanisms for ensuring information is provided apart from opinions on desirability of a voluntary/mandatory approach. Fourteen respondents specifically answered this question.

Themes on which a number of respondents agreed were:

◆ ORR should gather/publish (five respondents);

◆ RSSB should gather/publish (four respondents);

◆ Use existing data (rather than creating additional work) (three respondents); and

◆ Provision of data should be voluntary (four respondents).

"Do consultees agree that the scope of the current ORR environmental guidance document should be widened to encompass sustainable development? Are there any additional issues to those set out in paragraph 3.27 that the revised guidance should cover? Are there any areas of the current licensing regime that are proving to be an impediment to sustainable development, and in particular environmental issues, being taken forward (paragraph 3.29)?"

Fifteen respondents specifically answered this question. In general, there were a greater number of responses to this question agreeing with the proposal to widen the scope of the guidance than disagreeing. Regarding specific areas which should be included, little information was provided. More specific comments were made, however, in relation to the licensing regime in general, including:

◆ Ensuring licensing does not impede SD progress;

◆ Operators should be required to rank vehicles in terms of emissions etc;

◆ Avoid introduction of KPIs in licensing requirements;

◆ No need to include annual reporting in licence agreements; and

◆ Franchise arrangements may stifle longer-term environmental investment.

Themes on which a number of respondents agreed were:

◆ Guidance should be widened to include SD (ten respondents);

◆ Guidance should not be widened to include SD (two respondents); and

◆ Requirement for encouraging/regulating SD in construction (two respondents).

"Do consultees agree with our proposals to ensure that Network Rail's Business Plan and the RUS process takes appropriate account of sustainable development issues (paragraph 3.35)?"

Seventeen respondents specifically answered this question. The majority of responses recorded agree with this question. No particular recurring themes were apparent, however it should be noted that a number of respondents made comments against these proposals, including:

◆ Network Rail was best placed to comment on this question (it should be noted that Network Rail commented that the rail industry's SD aims and objectives should inform its Business Plan and the RUS);

◆ Efficiency objective of the current RUS already addresses SD issues;

- Proposals should not act against development of network capacity/capability; and

- Network Rail's burden should not be increased.

"Consultees are asked to comment on any specific issues that they consider should be included within the revised Part E of the Network Code (paragraph 3.40)."

Comments recorded against this question are wide ranging including various very specific issues which should be viewed individually within Appendix 2. Fourteen respondents specifically answered this question. However, in general a number of concerns are raised in relation to this question. In summary, these include:

- No need to change – infrastructure provider should make sure that the network can contain routine discharges;

- Strongly disagree with changing Part E – polluter pays principle is consistent with current Part E;

- Very concerned about proposed changes to Depot and Station Access Conditions with regard to an 'environmental landlord';

- Clarification required regarding application of Part E to one-off events versus day to day operation;

- Opposition to introduction of new charges through Part E; and

- Must take into account wider charging arrangements in the industry (to avoid double payments being made).

Consultees' views are sought on whether there is a requirement for greater ORR involvement in sustainable development research and, if so, whether the industry would be willing to fund this through the safety levy and/or licence fee (paragraph 3.48).

In general, the responses to this question which support greater involvement of ORR in research are outweighed by those which are against. A number of responses refer to the existing RSSB research programme, and suggest that this is the most appropriate vehicle. A further number of responses indicate that there is a related role for ORR in supporting innovation, spreading good practice based on existing research and collaborating with RSSB in determining direction of research. Sixteen respondents specifically answered this question.

Themes on which a number of respondents agreed were:

- No requirement for ORR to be involved in research (seven respondents);

- Requirement for use of existing research (demonstration, dissemination of best practice) (five respondents); and

- Not willing to fund (through licence fee or otherwise) (five respondents).

"Consultees are asked to comment on the effectiveness on the aspects of the current incentives framework and structure of access charges that encourage positive environmental decision-making and wider sustainable development goals. Consultees are also asked to identify any areas where the current incentives framework or structure of access charges prevent decisions being made that would encourage sustainable development (paragraph 4.13)."

Fifteen respondents specifically answered this question. Again, the question resulted in a wide range of disparate responses, including many very specific issues which do not necessarily relate directly to the question asked. However, most respondents appear to view incentives in general as positive with various qualifying concerns or provisions, including the following:

◆ Incentives require a sound evidence base built from the KPI regime;

◆ Incentives must lead to environmental improvements and not perverse behaviours;

◆ Incentives should be positive (rather than using penalties); and

◆ Incentives (particularly cost related) should not disadvantage rail compared with other modes.

Various specific comments were made relating to current incentives/access charge arrangements, including the following:

◆ Short-life franchise terms make whole-life costs hard to account for;

◆ Variable access charge regime may lead to pathing problems (which could increase costs and energy use);

◆ Current incentives can have perverse effects on innovation; and

◆ Should reduce freight access charges to allow better competition with road haulage.

Themes on which a number of respondents agreed were:

◆ Important to incentivise emissions reduction (three respondents);

◆ Reduce freight access charges (two respondents);

◆ Ensure charges to rail industry are comparable with other modes (four respondents); and

◆ Incentives/charges must not result in perverse behaviour (two respondents).

"Consultees are asked: (i) to suggest which KPIs e.g. those areas set out in paragraph 3.17 or otherwise, might usefully form the basis for a financial incentive; and (ii) to comment on the design of such an incentive, and whether any additional considerations should be included (paragraph 4.19)."

Fourteen respondents specifically answered this question. Again, responses recorded indicate a split in opinion as to the value of this approach, with a number of comments stating that such an approach is either unnecessary or premature,

whilst others are willing to suggest specific KPIs which could be used. Suggested KPIs include the following:

◆ Energy consumption/efficiency;

◆ Reduction of carbon footprint;

◆ Loading;

◆ Noise;

◆ Vibration; and

◆ Emissions.

Themes on which a number of respondents agreed were:

◆ Premature to implement (experience of gathering data from KPIs is required first) (four respondents); and

◆ Important that such incentives do not create perverse behaviour or have negative effects (three respondents).

"Consultees are asked whether a further financial incentive is needed to encourage the use of lower mass vehicles (paragraph 4.20)."

A range of comments were recorded, however a reasonable proportion appear to express an opinion that mass should not necessarily be the main focus, rather factors such as train efficiency and track quality. Eighteen respondents specifically answered this question.

Themes on which a number of respondents agreed were:

◆ In some cases, mass is governed by issues such as safety requirements (three respondents);

◆ Development issues are important (incorporating sustainability/efficiency in design, ensuring opportunity for demonstration, some mass-reducing technologies may be too expensive, development lead times are long) (three respondents);

◆ Importance of track condition (three respondents); and

◆ Difficulty in varying existing stock due to long asset life/lease commitments (two respondents).

"Consultees are asked to comment on the idea of an environmental charge and in particular to identify variables that might be used as the basis for the charge, and to say whether they agree that environmental charges should not be implemented in CP4 (paragraph 4.24)."

Nineteen respondents specifically answered this question. Responses were mixed, however a considerable number of comments recorded expressed concerns over any disadvantage to rail which may arise if other modes are not subject to equivalent charges, leading to adverse modal shift.

With regard to implementation in CP4, of those who expressed a specific opinion, the majority are against this.

Themes on which a number of respondents agreed were:

◆ If not applied across the transport industry, could disadvantage rail (nine respondents);

◆ Costs would be passed on (to passengers or factored into franchise bids) (two respondents);

◆ A charge would require further consideration and design of an appropriate mechanism (four respondents); and

◆ Should be cost neutral (two respondents).

"Consultees are asked whether they consider on-train metering as a practical option, and, if not, to explain what obstacles exist and how these might be overcome."

Responses are split between those who see on-train metering as necessary and those who do not. However, with regard to practicality, the main issue cited is that of retro-fitting to existing stock, and the difficulty or cost of doing this. Fifteen respondents specifically answered this question.

Themes on which a number of respondents agreed were:

◆ Practical for new stock, may not be so for existing stock (four respondents);

◆ Would encourage adoption of energy efficiency measures eg driver practices (three respondents); and

◆ Consideration of funding implementation is required (three respondents).

"Consultees are also asked to identify any impediments to the further development of regenerative braking across the network (paragraph 4.32)."

Twelve respondents specifically answered this question. Again, a range of responses were recorded including a large number which may be considered only indirectly relevant to the specific question asked. However, particular impediments identified by the respondents include the following:

◆ Lack of cost-effective technology;

- Transmission losses through the network;

- Apparently no incentive for Network Rail to invest in the required infrastructure;

- Requires renewal of entire traction system in existing trains; and

- Expensive to retro-fit.

In addition, whilst not directly relevant, a number of respondents offered suggestions with regard to energy use, for example avoiding multiple accelerations from locations remote from sub-stations.

Themes on which a number of respondents agreed were:

- Expensive/difficult to retrofit (three respondents); and

- Consideration of funding requirements is necessary (five respondents).

"Consultees are asked to identify other areas where our incentives framework and structure of access charges could promote positive environmental decision-making (paragraph 4.34)."

Ten respondents specifically answered this question, however a diverse range of comments were received with no particular themes evident. Many comments reflect those made in earlier questions. The full summary of comments is provided in Appendix 2.

3.1.2   Additional Comments

As requested, a large number of respondents made wide-ranging and extensive comments not specifically in response to the 16 questions asked. Where a comment had strong relevance to one of the 16 questions, an effort was made to incorporate this alongside that question in Appendix 2. Otherwise comments are recorded, in précis, in a separate section within Appendix 2 and should be viewed independently.

3.2   Recommendations

In summary, it is our recommendation that ORR –

1. Further considers those themes on which there is agreement among respondents (as outlined in section 3.1), and takes action where appropriate (discussed further in section 3.2.2); and

2. Considers further discussion with particular stakeholders on certain issues raised in responses.

3.2.1   Areas for Further Consideration

The following table summarises those areas, based on section 3.1, on which there was agreement between more than one respondent on particular issues. The table also indicates the extent to which those issues which are within ORR's control (and therefore further action could be taken). In some cases, collaborative decisions may be required with other industry bodies such as RSSB, Network Rail etc. In

other cases, ORR may have a role in promoting activity but implementation would be by others such as TOCs, manufacturers etc.

Table 1   **Summary of Areas of Agreement**

No.	Issue	Within ORR's Control
1	Ensure that ORR's objectives reflect the UK Government's SD objectives	✓
2	Ensure that ORR adopts a 'communication/promotion' role (external and internal) in relation to SD in rail and rail's sustainability credentials	✓
3	Address all three SD pillars together: balancing economic, environmental and social considerations.	✓
4	Consider inter-modal context (in policies, decisions etc) in relation to SD	✓
5	SD KPIs chosen should be applicable throughout the rail industry	✓ (in collaboration with others)
6	Use of SD KPIs should be voluntary	✓ (in collaboration with others)
7	Further work required to fully identify/implement SD KPIs	✓ (in collaboration with others)
8	SD KPIs should not pose additional cost	✓ (in collaboration with others)
9	SD KPIs should be comparable with other transport modes to be of value	✓ (in collaboration with others)
10	SD KPIs should be externally verified	✓ (in collaboration with others)
11	Should be a small number of key SD indicators only	✓ (in collaboration with others)
12	ORR should gather/publish data for SD KPIs	✓
13	RSSB should gather/publish data for SD KPIs	✗
14	KPIs should use existing data (rather than creating additional work)	✓ (in collaboration with others)
15	ORR's Environmental Guidance should be widened to include SD	✓
16	There is a requirement for encouraging SD in rail-related construction	✓
17	There is no requirement for ORR to be involved in SD research	✓
18	There is a requirement to better use of existing research	✓ (in collaboration with others)
19	Not willing to fund research (through licence fee or otherwise)	N/A
20	It is important to incentivise emissions reduction	✓
21	Reduce freight access charges	✓
22	Ensure charges to rail industry are comparable with other transport modes	✓
23	Incentives/charges must not result in perverse behaviour	✓

24	Premature to implement financial incentives based on SD KPIs (experience of gathering data is required first)	✓
25	In some cases, vehicle mass is governed by issues such as safety requirements	N/A
26	Vehicle development issues are important (ensuring sustainability/efficiency in design; ensuring opportunities for demonstration; some high costs of mass-reducing technologies; long development lead times)	✓ (indirectly through others)
27	Track condition is an important factor in vehicle mass reduction	✓ (indirectly through others)
28	Difficulty to change stock (to lower mass) due to long asset life/lease commitments on existing stock	✓ (indirectly through others)
29	If not applied across the transport industry, environmental charge could disadvantage rail	✗ (ORR may be able to influence)
30	Costs of environmental charging would be passed on (to passengers or factored into franchise bids)	✓
31	Environmental charging would require further consideration and design of an appropriate mechanism	✓
32	Environmental charging should be cost neutral	✓
33	Environmental charging should not be implemented in CP4	✓
34	On-board metering would be practical for new stock, may not be so for existing stock	✓ (indirectly through others)
35	On-board metering would encourage adoption of energy efficiency measures eg driver practices	✓ (indirectly through others)
36	Consideration of funding for implementation of on-board metering is required	✓ (in collaboration with others)
37	Expensive/difficult to retrofit regenerative braking	✓ (indirectly through others)
38	Consideration of funding for implementation of regenerative braking is required	✓ (in collaboration with others)

3.2.2   Commentary on Further Action

This section aims to provide comment on the merit of issues listed in Table 1 in terms of appropriateness and practicality.

SD Policy (Issues 1 to 4 in Table 1)

Enviros would suggest that it is reasonable to expect ORR to take action in line with the comments made, and indeed steps have already been taken in a number of areas. ORR has already considered the Government's SD Strategy (and that of the European Union) in its policy development work to date and has stated its intent to reflect the three SD 'pillars' in its policy statement. The consideration of the inter-modal context is likely to be applicable to activities relating to specific issues (such as implementation of KPIs and incentives), rather than general policy development. However, ORR may wish to indicate that this will be an important consideration within any policy statement produced.

Key Performance Indicators (Issues 5 to 14)

Further discussion within the rail industry is required before an appropriate set of SD KPIs can be implemented, however the work already in progress by RSSB is likely to provide a sound basis for such implementation. Enviros would suggest that making use of a small number of indicators, and where possible using existing information and collection mechanisms, is likely to assist in creating a workable approach which will be acceptable within the industry. However, whilst data provision could be voluntary during a trial period in order to develop appropriate mechanisms, Enviros would suggest that mandatory collection is likely to be necessary in order to ensure useful, high quality data in the longer term. Independent verification will be particularly important at a later stage once reporting against KPIs becomes a mandatory requirement or related to incentives. However, even in the short term it may be useful as part of the process of developing robust data.

Environmental Guidance (Issues 15 and 16)

Enviros would suggest that aspects of ORR's Environmental Guidance should be developed to more broadly encompass SD issues (for example in SD policy preparation and reporting), within the limits of what can reasonably be expected of operators in accordance with the current licensing regime.

Research (Issues 17 to 19)

If it is agreed that RSSB's current research programme is sufficient to meet the industry's requirements, then it would be reasonable not to expect the industry to fund additional research activities by ORR. ORR may wish to consider restricting its research-related activities to assisting with decisions on the direction of the RSSB programme and ensuring that existing research is made use of (for example in demonstration projects).

Incentives and Charges (Issues 20 to 33)

Incentivising emissions reduction (in particular from the perspective of climate change) would seem to be a reasonable approach should further incentives be introduced to encourage improved SD performance. Concerns raised by respondents about issues such as perverse activities resulting from incentives aimed at reducing environmental impacts or modal shift away from rail due to increased costs from environmental charging would seem valid should such possibilities not be taken into consideration. However, ORR has indicated that it recognises the need for caution when considering measures. As indicated above, a period of ensuring robust data collection against relevant KPIs would be prudent in advance of any move to link these with incentives, and further consideration and design of appropriate mechanisms should reasonably be expected.

On-board Metering and Regenerative Braking (Issues 34 to 38)

The technical nature of these topics precludes comment by Enviros on the appropriateness of most of the issues listed without further discussion with ORR. However with respect to funding, if there are cost issues with implementing measures across the industry which aim to ensure widespread sustainability benefits, then it would be reasonable to expect consideration of possible arrangements for funding support.

3.2.3　Areas where Further Discussion is Required

A number of respondents provided detailed information on specific technical areas in response to the consultation. ORR may wish to hold further discussions with these respondents on the subjects raised, in order to gain clarification and further information.

These include the following:

1. Technical discussion of on-train metering, regenerative braking and system losses – a detailed description of these issues was provided by Mr David Bradley (independent).

2. Specific discussion of electrification and the application of renewables was provided by Mr J L Lean (independent) in response to an article "Regulator offers green carrot and stick", published in *Railnews.* This includes some questions and concerns on issues (such as placing of windmills at stations) which are not directly in response to the consultation.

3. Asset Management Consulting Limited (AMCL) provided a detailed discussion on leadership and organisational relationships within the rail and wider transport industry.

4. Pre Metro Operations Ltd provided a detailed discussion on the benefits and application of 'lightweight rail' systems.

5. Mr Martin Dover provided several specific comments (including technical suggestions) in relation to the question "consultees are asked to identify other areas where our incentives framework and structure of access charges could promote positive environmental decision-making (paragraph 4.34)".

It is also suggested that additional discussion is held with Network Rail. Firstly, Network Rail has provided very specific comments on both KPIs and the revision of Part E of the Network Code. Secondly, because of the particular relationship between ORR and Network Rail, and the fact that Network Rail is the subject of various aspects of the proposals made in the consultation, individual discussion is likely to be necessary.

APPENDICES

1. LIST OF RESPONDENTS

Respondents to the Consultation –

Asset Management Consulting Limited (AMCL)
ATOC
David N Bradley
Defra
East of England Regional Assembly (EERA)
English Welsh & Scottish Railway (EWS)
First Group
Freightliner Limited
GMPTE
GNER
Go Via Limited
HSBC Rail
Ken Livingstone, Mayor of London
Lloyd's Register Rail
Martin Dover
Merseytravel
Mr J L Lean
National Express Group Trains Division (NEG)
Natural England
Network Rail
Northern Rail
Passenger Focus
Pre Metro Operations Ltd
Rail Freight Group (RFG)
Rail Safety & Standards Board (RSSB)
Railway Industry Association (RIA)
Sciotech Project
South West Trains Limited
Transport Scotland

2.   SUMMARY OF RESPONSES

Summary of Responses

(a) Consultees are invited to comment on our proposed objectives and to say whether we should adopt any additional objectives in developing our role (paragraph 2.12)	Agree with ORR (*GNER*)
	Achieving objective (d) will require true leadership and a target to aim at (AMCL)
	As industry leader, ORR must quickly disseminate key issues and provide perspective (AMCL)
	ORR is best placed to lead innovation (Network Rail, TOCs, RSSB and rolling stock providers have no mandate/incentive) (Martin Dover)
	Each objective is appropriate; should add objective on promotion of a sustainable rail transport system (Martin Dover)
	Should explore possibility of strengthening legislation (RSSB)
	Agree with ORR (Govia Limited)
	Agree that industry should better understand its SD performance (RSDG should help this) (Transport Scotland)
	As economic regulator, ORR can set economic incentives following identification of metrics (Transport Scotland)
	Agree that ORR needs to set and adopt polices and practices to further UK SD at reasonable cost to industry (Transport Scotland)
	Objectives should be viewed in context of government objectives to improve overall transport sustainability (First Group)
	Objective C is too woolly – modify to 'ensure' (rather than 'promote') (GMPTE)
	Add objective to ensure industry contributes to government objectives on SD (GMPTE)
	Action plan for achieving a sustainable railway network is required; ORR should lead (Sciotech)
	Content with the objectives (Passenger Focus)
	Proposed objectives are supported (Ken Livingstone, Mayor of London)
	Objectives are reasonable, however comparisons must be made with other modes to recognise rail's advantage (Freightliner Limited)
	Welcome proposed objectives (Northern Rail)
	Largely content; could link SD in rail with government SD objectives (Merseytravel)
	Agree, but overarching objective should require that ORR's role is facilitative (Network Rail)
	Regulation can result in perverse incentives; ORR should operate light touch regulation informed by research (HSBC Rail)
	ORR should not duplicate efforts (RSSB, DEFRA etc) but add value (ATOC)

	ORR's SD duties should focus on encouraging greater use of rail and not increase costs to Industry (EWS)
	ORR should adjust policies which are likely to diminish use of rail (EWS)
	Put jargon filled policies in drawer and focus on promoting rail's environmental performance (EWS)
	Should highlight shortcomings of Stern and Eddington reports (EWS)
	If not required to produce an SD policy, then should not do so (EWS)
	Can add value by championing the industry and highlighting its green credentials (EWS)
	Concerned about adverse impacts on freight of ORR's approach (Freightliner Limited)
	Must not distort any measures already in place to protect environment (cross modal) (Freightliner Limited)

(b) Consultees are also asked for their views on our prioritisation of the three pillars, and to provide their thoughts on the specific issues that they consider need to be addressed (paragraph 2.13)	Agree with ORR (GNER)
	Prioritisation is a red herring; all three must be considered in decisions (eg on service options, fuel types etc) (AMCL)
	No proposal as to leadership on serious innovations (Martin Dover)
	The pillars are inter-related (environmental cannot be viewed distinctly) and ORR should maintain balance between each (RSSB)
	Energy use and carbon emissions are highest priority (RSSB)
	Agree with ORR; however should keep in mind other impacts (Govia Limited)
	ORR could align its prioritisation with that of the RSDG (Transport Scotland)
	Reasonable approach as long as viewed in context of other transport modes (First Group)
	Key issues include energy efficient driving/staff awareness; minimising red signals; planning to reduce speed restrictions; infrastructure upgrade to enable maximum use of regenerative braking (First Group)
	Incentives required to procure lighter trains (First Group)
	Should define good SD in terms of relative importance of the pillars (for rail) (RIA)
	Concerned that the three pillars are being 'shared out' between departments – should be in one place (ORR) (RIA)
	Agree with prioritisation, although all interlink so ORR must work with DfT and Transport Scotland (Passenger Focus)
	Each should be given equal importance (Ken Livingstone, Mayor of London)
	ORR could place greater SD obligations on Network Rail through charges/incentives (Ken Livingstone, Mayor of London)
	DfT can contribute to social aspects (fares, disabled access, encouraging modal shift etc) (Ken Livingstone, Mayor of London)
	Must balance environmental and social with economic (ie risks posed by increased charges and modal shift) (Freightliner Limited)
	ORR should review closure policy, fares, ticketing and service levels in context of SD, and strengthen closure policy to account for social pillar (Northern Rail)
	Provide guide to which elements rail has control over, and how improvements will link into pillars (Merseytravel)
	Pillars are of equal importance (Network Rail)
	ORR has greatest power in area of economics (to encourage modal shift) (EWS)
	ORR should focus on primary efficiency/effectiveness duties and leave environmental matters to others (EWS)
	Success depends on decisions which balance economic, environmental and social effects (Lloyd's Register Rail)

(c) Consultees are asked to comment on the proposals outlined in chapter 3, and also on whether there are any others that we could add in order that ORR as an organisation can contribute as fully as possible to the achievement of the key sustainable development principles (paragraph 3.12)	Role for ORR in ensuring SD efforts are not duplicated in the industry (GNER)
	Consider inter-modal transport (GNER)
	Enhanced communication of benefits of rail transport (GNER)
	Embodied energy may be as significant as vehicle emissions (AMCL)
	Achieving statutory duties alone will not achieve required change; ORR doesn't indicate how change will be achieved (Martin Dover)
	ORR could identify relative priorities for each SD principle (RSSB)
	Supportive of RSSB KPI work (Govia Limited)
	Alternative fuel sources are already being addressed within the industry (Govia Limited)
	ORR should publish a formal policy statement (Govia Limited)
	ORR should make conditions favourable and provide economic incentives to encourage industry participation (Transport Scotland)
	Support ORR's encouragement to RSSB's cross-industry work (RIA)
	Pleased that consultation tackles short, medium and long term (investment) issues (Passenger Focus)
	ORR should consider measures to incentivise positive modal shift (Freightliner Limited)
	Must recognise issue of long asset life in relation to short term procurement to improve environmental efficiency; should incentivise future procurement only not penalise current assets (Freightliner Limited)
	ORR should have expertise in social aspects of SD (Northern Rail)
	Importance of accessibility to all population sectors (Northern Rail)
	ORR should support modal shift and integration (Northern Rail)
	Franchise agreement is silent on social aspects (Northern Rail)
	Support proposals and KPIs (Merseytravel)
	Network Rail should produce energy plans (Merseytravel)
	Need to understand SD in context of other modes including internationally (Network Rail)

(d) Consultees are invited to comment on whether the publication of KPIs would be beneficial in both encouraging environmental improvements across the industry and promoting the benefits of rail travel to the general public. Are there any other specific KPIs additional to those listed in chapter 3 that should be considered? In populating these KPIs, do consultees consider that the information that might be required is already available (to be produced either on a quarterly or annual basis) (paragraph 3.24)?	KPIs should be developed and reported (GNER)
	Broadly agree with those listed (GNER)
	Make future work on KPIs accessible to al (GNER)l
	Provide clear reporting guidance (GNER)
	Expand and include SD in RSSB Strategic Safety Plan and SMIS (GNER)
	KPIs should be appropriate to all industry organisations (GNER)
	This is an area where ORR licensing would not be appropriate (Martin Dover)
	KPIs may require financial incentive (Martin Dover)
	Management time required for KPIs would be disproportionately high for level of performance change achieved (Martin Dover)
	KPIs should allow a basic level of industry reporting and facilitate monitoring of all rail companies (RSSB)
	Should provide meaningful information, accurately reflecting and allowing comparison of progress (RSSB)
	Review RSSB's industry-wide KPI work to assess suitability for use at a disaggregated level (RSSB)
	Should allow comparison with different modes (and avoid meaningless comparisons eg energy efficiency of suburban against intercity trains) (RSSB)
	Should not impose unnecessary burden on the industry, and must add value (RSSB)
	KPIs are necessary (Transport Scotland)
	Beneficial if comparable to other modes (First Group)
	Publish annually (First Group)
	Data should be gathered and owned by rail industry voluntarily (GMPTE)
	Should be compulsory and externally audited (GMPTE)
	Benefical; comparison with other modes is necessary (Natural England)
	Indicator on Network Rail's PSA for SSSIs (Natural England)
	Over time, inclusion of indicator on Network Rail's Biodiversity Plan and rail industry investment in environmental projects (Natural England)
	Yes, indicators should be consistent with wider DEFRA indicators and comparable with other modes (Sciotech)
	DfT are producing data on in situ noise and vibration for roads, however reluctance in rail to do similar in spite of efforts such as the Footprint Project (Sciotech)
	Without putting appropriate data in the public domain, difficult to establish indicators to enable

	debate(Sciotech)
	KPIs should also include static/dynamic loading, audible noise, vibration, emissions (RIA)
	Good KPIs should be beneficial, however not simple (eg comparing modes) (RIA)
	Establish a small number which could be used in benchmarking (Passenger Focus)
	Publication is helpful for holding industry to account (Passenger Focus)
	Removal of litter KPI(Passenger Focus)
	A KPI should encompass affordability (fares relative to disposable income) (Ken Livingstone, Mayor of London)
	ORR should support RSSB work investigating KPI for noise per unit of transport (Ken Livingstone, Mayor of London)
	May be a case for establishing a carbon footprint for each TOC (Ken Livingstone, Mayor of London)
	Difficult to set relevant KPIs; must be responsive to stakeholders concerns (National Express)
	Support work being carried out by RSSB (National Express)
	KPIs must be measurable across modes and must not involve charging which does not equally apply to other modes (Freightliner Limited)
	KPIs must work at a company as well as industry level (for benchmarking against best practice) (Northern Rail)
	Data collection should not be onerous (Merseytravel)
	Externally verified (Merseytravel)
	Should produce a positive impact and result in positive shift (Merseytravel)
	May cause perverse behaviour (Merseytravel)
	RSSB KPIs are a good start but should not be linked to incentives yet (Network Rail)
	Draft KPIs should be developed and agreed before using publicly (Network Rail)
	Should be simple at the highest level (Network Rail)
	Suggested KPIs provide a good framework (Network Rail)
	Require further clarity on purpose of these proposals (Network Rail)
	Must align with our corporate reporting requirements (Network Rail)
	Energy – require better understanding of the purpose of these (Network Rail)
	Noise – premature (prior to Environmental Noise Directive and noise mapping exercise) (Network Rail)
	Greenhouse gases and pollutants – should be normalised (Network Rail)
	Transport comparison by mode – more detailed specifications required (Network Rai)
	Favour a few key KPIs to minimise reporting burden (Rail Freight Group)

	KPIs should be comparable with other modes/published alongside data from other modes (Rail Freight Group)
	ORR should coordinate publication of industry-common KPIs, restricted to five or six (HSBC Rail)
	Develop a 'significant few', focusing on the really big issues (ATOC)
	Collect and publish using respected National Rail Trends mechanism, voluntarily (ATOC)
	Important to have focused metrics, avoiding complexity (South West Trains Limited)
	Always question the reporting costs and benefits metrics bring (South West Trains Limited)
	KPIs should be labelled SDIs (Sciotech)
	Responsibility for SD performance lies with industry members (EWS)
	ORR's role should be to publish KPIs as part of promoting rail's SD credentials(EWS)
	Absolutely reject mandatory production of information (EWS)
	Welcome plans to collect more data (DEFRA)

(e) Consultees are asked to comment on the proposed ways of ensuring that appropriate KPI information is gathered, and provide suggestions of any possible alternatives. Who do consultees believe should collate and publish this information (paragraph 3.25)?	Encouragement to participate, not mandate (GNER)
	Logical for RSSB to collate (GNER)
	KPIs are not relevant to construction and manufacturing activities (these are often one-off contracts) (Martin Dover)
	Adoption of a best practice code as part of contract may be effective (Martin Dover)
	Operators should gather/a cross-industry organisation should collate (as per present safety data model) (RSSB)
	Could be published through National Rail Trends (Govia Limited)
	Avoid bureaucracy of publishing a wide range of KPIs; focus on emissions, energy and health and safety (Govia Limited)
	Use existing data effectively (energy, service performance) (Govia Limited)
	RSSB could collate (Govia Limited)
	Publication should be compulsory to ensure full industry representation, with a prescribed format to enable benchmarking, and collation by a body such as ORR (with appropriate funding issues addressed) (Transport Scotland)
	Prioritise those KPIs which enable comparison across transport industry (First Group)
	Ensure clarity and consistency and normalise where possible (First Group)
	RSSB should gather (currently leading the SD initiative) (RIA)
	Decision should await outcome of RSSB's work in 2007, however logical that ORR gather (already publishes National Rail Trends) (Ken Livingstone, Mayor of London)
	Collection should be by the industry (as important to running a business) (National Express)
	Inter-industry indicators would achieve DfT aim to encourage modal shift of freight (Freightliner Limited)
	Table (3.19) is too narrow and does not reflect role in social and economic regeneration (Northern Rail)
	Supports RSSB KPI work (Northern Rail)
	KPIs should use available data (not create more work) (Northern Rail)
	Recommend voluntary approach (Northern Rail)
	ORR should take this forward (Merseytravel)
	Voluntary reporting by industry; collation and publication by ORR (Network Rail)
	Presentation of data should meet customers' requirements (Rail Freight Group)
	Data should be collected through existing processes (Rail Freight Group)

(f) Do consultees agree that the scope of the current ORR environmental guidance document should be widened to encompass sustainable development? Are there any additional issues to those set out in paragraph 3.27 that the revised guidance should cover? Are there any areas of the current licensing regime that are proving to be an impediment to sustainable development, and in particular environmental issues, being taken forward (paragraph 3.29)?	Agree with ORR (GNER)
	Franchise arrangements stifle long-term investments in environmental projects (GNER)
	Relevant regulations and technical requirements are needed for sustainable construction (Martin Dover)
	ORR should update and widen guidance (RSSB)
	Licensing regime should be reviewed for its potential to impede sustainability progress (RSSB)
	Policies should be critically reviewed to ensure these support improved SD performance (RSSB)
	A process must be established to ensure robust data (RSSB)
	Current licensing regime is appropriate; no need to expand guidance (Govia Limited)
	Yes, widen scope to encompass SD (as interlinked with environment) (Transport Scotland)
	Welcomed (Transport Scotland)
	Extend to include SD, but proposal for operator statement of SD principles may not be sufficient (Sciotech)
	Operators should be required to rank vehicles in terms of SD factors (loading, noise, emissions etc) (Sciotech)
	Wary of introducing KPIs in duty holder requirements (environmental problems would appear too late in indicators; diversity of operations would lead to perverse incentives) (RIA)
	Appropriate to widen to include SD issues (to be consulted on publicly) (Ken Livingstone, Mayor of London)
	Licence holder obligations should include SD (Ken Livingstone, Mayor of London)
	ORR's actions must not compromise fulfilment of operators' obligations under existing legislation (Ken Livingstone, Mayor of London)
	Unsure as to the need to broaden guidance (National Express)
	No need to incorporate annual reporting in licence agreements (National Express)
	Better not to be prescriptive about KPIs and these should not be mandatory (National Express)
	ORR's role should be to clearly define and communicate the responsibilities of all industry parties (National Express)
	Decisions on incentives to cover eg fuel switching may rest with the Treasury rather than ORR (Freightliner Limited)
	Should review guidance to cover SD; review licensing exemptions versus environmental exemptions; consider funding constraints in wording of enforcement issues and content of annual reporting (Northern Rail)
	Supports TOC specific KPIs (Northern Rail)

	Network Rail and TOCs should be encouraged to consider SD in station design (Northern Rail)
	Make redundant assets available to not-for-profit organisations (Northern Rail)
	Makes good sense (Merseytravel)
	Should refine guidance but little benefit in widening licence conditions (Network Rail)
	No impediments in current obligations (Network Rail)
	Review of policy statements should concentrate on gathering information on what operators are already doing (ATOC)
	Question value of producing annual report on operators' SD activities and monitoring against KPIs (ATOC)
	Reject proposals to widen licence obligations for SD (EWS)

(g) Do consultees agree with our proposals to ensure that Network Rail's Business Plan and the RUS process takes appropriate account of sustainable development issues (paragraph 3.35)?	Agree with ORR (GNER)
	Perfect place for Network Rail to pull together achievements of the leadership role (AMCL)
	Principle should be that all parties must take account of SD at the highest level available (RSSB)
	Largely an issue for Network Rail to comment on (Govia Limited)
	Through efficiency objective of the current RUS, it already addresses many SD issues (Govia Limited)
	Yes, would ensure SD is part of mainstream business (Transport Scotland)
	Fully support; need to take account that improved pathing, reduction in quantity of speed restrictions and driving technique are more significant than eg train mass (First Group)
	Publication of an externally audited report is important (GMPTE)
	Should consider impact on SD indicators (Sciotech)
	Should only be brought forward if they show that these will make transport more sustainable (Sciotech)
	Yes (RIA)
	To not include SD would leave industry open to criticism (Passenger Focus)
	RUS should set out SD impacts of proposed strategies, and guidelines should be changed to formalise this (strongly agree with para 3.34) (Passenger Focus)
	Yes (Ken Livingstone, Mayor of London)
	Agree with need to take account of SD, in particular energy efficiency, noise, diffuse pollution and adaption to weather changes (National Express)
	Agree with ORR (Northern Rail)
	Unreasonable not to address SD in business plan; many RUSs are underway – SD could be picked up in next round (Merseytravel)
	Industry SD aims and objectives should inform RUS process and Business plan (not for these to determine industry SD policy) (Network Rail)
	SD should be considered further in Business Plan; this must align with industry and government policy on SD (Network Rail)
	Proposals relating to the sustainability of RUSs should not act against development of capacity/capability (Rail Freight Group)
	ORR should press Network Rail to take more account of SD in business cases, and benchmark against international efficiency measures (HSBC Rail)
	Require further clarity in accounting for SD in RUSs (HSBC Rail)

	Publicly support the 'big freight railway' (Ken Livingstone, Mayor of London)
	Do not agree; Network Rail's admin burden should not be increased (Ken Livingstone, Mayor of London)
	Supportive of placing greater SD obligations on Network Rail and use of charges/incentives (Ken Livingstone, Mayor of London)

(h) Consultees are asked to comment on any specific issues that they consider should be included within the revised Part E of the Network Code (paragraph 3.40)	Must be with full co-operation of TOCs (GNER)
	A revised Part E is unlikely to force necessary improvements (Martin Dover)
	A requirement to collect relevant data (RSSB)
	Any proposals to help industry better manage its obligations are welcome (RSSB)
	Not appropriate to change; Network Rail is responsible for ensuring containment of routine discharges; polluter pays applies (Govia Limited)
	Could make each industry player responsible for its own environmental performance (as per Railways and Other Guided Transport (Safety) Regs 2006) (Transport Scotland)
	No need to change; infrastructure provider should ensure network is capable of containing the routine discharges (First Group)
	Very concerned about proposed changes to Depot and Station Access Conditions around 'environmental landlord' (First Group)
	All track access applications should take account of traction source (GMPTE)
	New stock should be electro-diesel or easily changeable (GMPTE)
	Network Rail should be required to measure, to allow SD indicators to be compiled by ORR (Sciotech)
	Strongly disagree with need to change environmental provisions in Network code; polluter pays principle is consistent with current Part E requirement (National Express)
	Very concerned about proposed changes to Depot and Station Access Conditions around 'environmental landlord' (National Express)
	Environmental clauses are already built into track access contracts (Freightliner Limited)
	Clarify whether Part E applies to one-off events or day to day operating (ie is this an 'environmental condition') (Northern Rail)
	Track access applications should account for traction source (Merseytravel)
	Consideration for new stock to be diesel-electric should be made (Merseytravel)
	Revise Part E with respect to dealing with ongoing problems where all parties are compliant with their obligations (Network Rail)
	Firmly opposed to introducing new charges through Part E (eg ballast) (ATOC)
	Deeply concerned about environmental landlord proposal (ATOC)
	Part E should be abolished (EWS)
	Any changes to Part E must take account of wider charging arrangements in the industry (avoid

	double payments) (ATOC)
	Part E should only apply to damage when not a consequence of normal operation (ATOC)
	Clarity required on the elements of normal operation covered by the range of access charges (so point of application of Part E is clearer) (ATOC)

(i) Consultees' views are sought on whether there is a requirement for greater ORR involvement in sustainable development research and, if so, whether the industry would be willing to fund this through the safety levy and/or licence fee (paragraph 3.48)	No requirement for extra funding at present (GNER)
	Role for ORR to support optimum economic environment for innovation rather than additional funding (AMCL)
	May need support for collection and reporting on KPIs (AMCL)
	Sufficient research already; what is needed is development and execution of systems etc (Martin Dover)
	ORR should have role in shaping the RSSB-managed cross industry research programme (RSSB)
	Best conducted through RSSB's current remit (Govia Limited)
	Should continue via RSDG, however funding should be addressed (Transport Scoltand)
	No need; clearly defined as RSSB role (First Group)
	ORR should collaborate with TOCs to collate existing research and spread good practice (GMPTE)
	Yes, ORR should liaise with Network Rail to decide lead on particular research pieces (Sciotech)
	Current RSSB programme excellent for basic research; support for demonstration projects needs attention (RIA)
	ORR should undertake safety research providing no overlap/conflict with RSSB work (Ken Livingstone, Mayor of London)
	ORR should investigate scope for applying wider best practice to rail industry and report concerns to DfT (Ken Livingstone, Mayor of London)
	Unwilling to contribute new funding since comparable expense is not levied on road competitors (Freightliner Limited)
	Mechanism required to allow RSSB/ORR to fund research where existing knowledge does not transfer to rail (Northern Rail)
	Should be funded by government (Merseytravel)
	Support more research, but should not be funded through licence fee (rather through the established review process) (Network Rail)
	Further safety research Is not a priority (Rail Freight Group)
	ORR and RSSB should be aware of research in other sectors (Rail Freight Group)
	Do not think ORR has a role in research, and would not be willing to fund (EWS)

(j) Consultees are asked to comment on the effectiveness on the aspects of the current incentives framework and structure of access charges that encourage positive environmental decision-making and wider sustainable development goals. Consultees are also asked to identify any areas where the current incentives framework or structure of access charges prevent decisions being made that would encourage sustainable development (paragraph 4.13)	On-train metering for EC4T (GNER)
	Schedule 8 should reflect brake wear and energy consumption due to adverse signals and temporary speed restrictions(GNER)
	Would require a sound evidence base built from the KPI regime, and understanding of price change effects between modes (RSSB)
	Incentives framework should be rebalanced to give SD sufficient weight (RSSB)
	Operators should be incentivised to work together (RSSB)
	Short-life franchise terms make whole-life costs hard to account for (RSSB)
	Proposed ATOC changes regarding traction electricity would improve overall incentive (Govia Limited)
	Insufficient detail provided on current incentives framework to allow comment (Transport Scotland)
	Variable access charge regime may lead to pathing problems and increased energy consumption, and cost to operators (First Group)
	Currently little incentive to improve environmental performance; important that climate change and pollution are related to passenger miles (GMPTE)
	Any charge should be comparable with similar for road (consistent with 2006 EU transport white paper) (Sciotech)
	Current incentives regime can have perverse effects on innovation; otherwise, areas already proposed are those where work is required (RIA)
	Welcome incentives for electricity efficiency and lower emission diesel use (Ken Livingstone, Mayor of London)
	Measures should incentivise quieter equipment and practices (Ken Livingstone, Mayor of London)
	Any changes must lead to improved environmental performance and not create perverse incentives (National Express)
	Incentives based regulation of Network Rail must include SD within 'required outputs' (Northern Rail)
	Long term price stability required if electricity is to be principal traction energy (Northern Rail)
	Current EC4T wash up provisions do not influence TOCs in energy saving
	Metering is essential (Northern Rail)
	Drive for lighter trains should be government led (access charges take into account heavier trains and operators have little choice regarding units used) (Merseytravel)
	No obvious distortions within the existing framework (Network Rail)
	Keep the system simple (Network Rail)

	Focus on whole life/system approach (Network Rail)
	If SD is to be valued above other outputs, consider in context of HLOS and review (consider procurement of green energy, onsite renewables, sustainable buildings etc) (Network Rail)
	Rail must not be exposed to full environmental costs when other modes are not (HSBC Rail)
	Need for caution in use of price signals for environmental externalities (ATOC)
	Better to use a multi-modal approach to internalisation of externalities (ATOC)
	Reduce freight access charges in conjunction with DfT (Freightliner Limited)
	Reflect on whether increasing charges will achieve ORR's aims (Freightliner Limited)
	Only use charges to increase use of rail (EWS) (Freightliner Limited)
	No reason why incentives can't improve CO2 and local air quality (Freightliner Limited)
	Incentives are required (DEFRA) (Freightliner Limited)
	Incentives not penalties are required (Freightliner Limited)
	The one thing ORR should do is to reduce freight access charges to allow better competition with road (Freightliner Limited)

(k) Consultees are asked: (i) to suggest which KPIs e.g. those areas set out in paragraph 3.17 or otherwise, might usefully form the basis for a financial incentive; and (ii) to comment on the design of such an incentive, and whether any additional considerations should be included (paragraph 4.19)	No need for new KPIs; already incentives in place to institute SD (GNER)
	Need to discuss facilitation of KPIs over life of more than one franchise (GNER)
	Decision should be collective (AMCL)
	Should be applicable to all industry areas without exception (AMCL)
	Energy consumption/efficiency; others are of marginal impact (i) (Martin Dover)
	Force operators to measure energy consumption (no financial incentive required) (ii) (Martin Dover)
	Will emerge as KPI regime is established (RSSB)
	Existing KPIs should be reviewed for potential to cause negative effects (RSSB)
	Incentives should recognise high costs of doing nothing (RSSB)
	Incentives should encouraged development of systems and trains which reduce whole-life carbon footprint (RSSB)
	Additional incentive should be funded by government and should be positive (Govia Limited)
	Premature to implement before gaining experience from collating data (Govia Limited)
	Highly premature at present; could create perverse incentives (First Group)
	Network Rail needs funding/incentive for SSSI related works (which are a statutory requirement) (Natural England)
	Any charge should be related to SD indicators suggested (static/dynamic loading, audible noise, vibration, emissions) (Sciotech)
	Not helpful to propose KPIs in this way; the required effort has been demonstrated by existing work in this area (RIA)
	Energy consumption and efficiency and energy efficiency of vehicles (Ken Livingstone, Mayor of London)
	Development of a noise KPI (Ken Livingstone, Mayor of London)
	Some KPIs (train reliability and performance) are already incentivised (Northern Rail)
	KPIs must be TOC specific (Northern Rail)
	Would like further comment on likely incentive effect of KPIs (Northern Rail)
	Care required to ensure incentives do not result in perverse behaviour (Merseytravel)
	More information is required to understand the KPIs so far identified (Network Rail)
	Only once embedded can these be used with financial incentives (Network Rail)

(l) Consultees are asked whether a further financial incentive is needed to encourage the use of lower mass vehicles (paragraph 4.20)	Higher quality track required (GNER)
	Investment in lower mass vehicles would require certainty on access charging (GNER)
	Investment plan to benefit all parties which could be supported by private finance (AMCL)
	Could be partly incentivised through energy metering (Martin Dover)
	Level playing field with diesel trains needed, plus sufficient incentive so traction costs remain advantageous compared to road (Martin Dover)
	Social and economic implications of mass should also be viewed (safety, accessibility etc) (RSSB)
	Design cross industry incentives to optimise mass/track quality relationship and whole-life costing (RSSB)
	RSSBs sustainability research programme is developing an SD decision-making framework which may help (RSSB)
	No changes should be made to existing charging; model already has effect of charging heavier vehicles more; some aspects of weight are governed by safety, accessibility etc (Govia Limited)
	Could reduce access charges and leasing fees for lighter vehicles at procurement stage (difficult for TOCs to vary existing stock due to lease commitments) (Transport Scotland)
	Review rolling stock strategies (Transport Scotland)
	Long asset life of trains will mean that increased charges for heavier trains will be passed to the customer as most operators will have to continue leasing existing trains (First Group)
	Incentive would only be effective at procurement stage, and must remain stable to allow factoring of whole life costs (First Group)
	Low mass vehicles are essential (GMPTE)
	Incentive should be given to decreasing tare mass of vehicles (Sciotech)
	Essential to understand the incentive to optimise mass (some technologies may reduce mass, but at high costs – not the optimum for sustainability) (RIA)
	Essential to address track access/delay costs of demonstration/work to enhance reliability (RIA)
	Must take into account development lead times and availability of new vehicles (Ken Livingstone, Mayor of London)
	Increased weight is in part due to added safety and equipment requirements (Ken Livingstone, Mayor of London)
	Freight loco's power to weight ratio has increased over time and wagons have not increased in weight (Freightliner Limited)
	Ensure sustainability is considered at design stage of vehicles (Northern Rail)
	DfT has role to play in determining emissions, efficiency and weight of new stock (as involved in financial purchasing arrangements with franchisees) (Northern Rail)

	More realistic to provide guidance on maximum weight allowed for specific units (Merseytravel)
	Vehicle charging should be dealt with in the review of the VTU formula (currently includes mass to a degree) (Network Rail)
	Heavier trains for bulk traffic on busier routes may improve network capacity (Rail Freight Group)
	Greatest opportunity to affect train mass is incentivising Network Rail to guarantee track condition (HSBC Rail)
	Unnecessary – Network Rail already using DfT appraisal guidance in assessing changes to train services through RUSs
	Not all increase in mass is bad (ATOC)
	Potential for use of lightweight rail should be considered (Pre Metro Operations Ltd)
	Work is required to maximise train efficiency (Pre Metro Operations Ltd)

(m) Consultees are asked to comment on the idea of an environmental charge and in particular to identify variables that might be used as the basis for the charge, and to say whether they agree that environmental charges should not be implemented in CP4 (paragraph 4.24)	Should not be used as a 'carbon tax'(GNER)
	Contentious; details not clear (AMCL)
	Change description to reflect notion of passing charges on the 'inconsiderate' to the most 'considerate' (AMCL)
	Use of 'carbon credits' approach, avoiding perception as a means of raising funds (AMCL)
	Could be implemented in CP4 with proper consultation and design (AMCL)
	Little point – would be passed to customers or ORR (Martin Dover)
	Too early to consider – KPI regime must be evaluated first (RSSB)
	Must not lead to perverse incentive (causing shift to other modes) (RSSB)
	Should not be implemented – would disadvantage rail against other non-charged modes (Govia Limited)
	Could put out contradictory message about rail versus road emissions (Transport Scotland)
	Increased costs could prevent modal shift from road to rail (Transport Scotland)
	Operators' environmental performance is subject to factors outside their control; charges would likely be factored into franchise bids (First Group)
	Should be introduced in CP4 as long as it is cost neutral with an efficient mechanism (GMPTE)
	Should be implemented in CP4 as this will influence purchasing decisions affecting long term strategies (Sciotech)
	Seems to be precluded by EU legislation (RIA)
	Would not support if leading to shift to less sustainable modes (Ken Livingstone, Mayor of London)
	Variable used should include emissions (consequently should not be implemented in CP4) (Ken Livingstone, Mayor of London)
	Should not be implemented in CP4 (requires more study into perverse effects) (National Express)
	Lack of valid data means that there is no basis for charging in CP4 (Freightliner Limited)
	Support concept of charging with cross-modal parity (including those causing customers to pay full environmental and social costs); responsibility should rest with DfT (Freightliner Limited)
	Should not be necessary to incentivise implementation of affordable SD solutions, but funding support for TOCs may be required (Northern Rail)
	18.1 type arrangements could mask an incentive if introduced as part of CP4 (Northern Rail)
	Acceptable if applied across all modes of transport (Merseytravel)
	Additional charge would reduce rail's competitiveness (Merseytravel)
	Should not be levied in CP4 (Network Rail)

	Further investigation required to ensure optimal cross industry outcomes (Network Rail)
	Environmental fee may best be left until there is clarity on appraisal framework/modes paying for their own externalities (Rail Freight Group)
	Oppose environmental charge (perverse incentive effect, no similar proposal for road, behaviour changes are covered by other measures) (Rail Freight Group)
	Only appropriate once applied to all modes (Rail Freight Group)
	Perhaps provide bonus to traffic with exceptional environmental performance (Rail Freight Group)
	Increasing cost to rail without similar in other modes could be counter-productive (East of England)
	EU SD Policy should determine relative modal investment at national level (East of England)
	Once national mechanisms are in place for more sustainable transport movements, charging regimes could be applied (East of England)
	No new charges should be introduced (whether via Part E or otherwise) (South West Trains Limited)
	Reject charge in CP4 and all subsequent periods (EWS)

(n) Consultees are asked whether they consider on-train metering as a practical option, and, if not, to explain what obstacles exist and how these might be overcome (paragraph 4.31)	Current arrangements not effective; would support greater reliance on metering over modelling and incentives to reduce losses, procure cheaper electricity, and enable regenerative braking (GNER)
	Independent calibration and reading is not cheap (AMCL)
	Electric traction not a problem (Martin Dover)
	Yes, it is practical (retrofitting may be difficult on DC stock) (RSSB)
	Need a plan to move to a full metered system (RSSB)
	Data obtained should take into account sustainability of energy sources, route, traffic etc (RSSB)
	Practical option for new stock; retrofit may not be so (Transport Scotland)
	Desirable and could be linked to VTACs (GMPTE)
	Cost-neutral, differential charges placed on older stock would encourage quick retrofitting (GMPTE)
	Detailed work needed to establish retrofit costs (RIA)
	Clarity required on who should fund work beneficial to nation (rather than rail industry) (RIA)
	Would enable those who have installed efficient systems to retain benefits and incentivise others to follow (Ken Livingstone, Mayor of London)
	Would encourage better assessment of energy use leading to eg more efficient driving techniques (Ken Livingstone, Mayor of London)
	Recommendations from National Task Force on traction electricity and on-board metering should be the basis for any changes (National Express)
	Rising traction electricity and diesel costs are sufficient incentive for operators to take action (Freightliner Limited)
	Required if cost allocation is needed (currently no incentive for developing regenerative braking if costs are shared with others using line) (Merseytravel)
	Recognise benefits; retrofitting would require cost/benefit appraisal (Network Rail)
	Strong case for new trains/trains which cross a number of network metering boundaries (Network Rail)
	Support widespread adoption of on-train energy monitoring (HSBC Rail)
	Emissions trading scheme (under which some TOCs may be covered) could provide funding for energy saving programmes (HSBC Rail)
	ORR could promote to government benefits of scheme to fund fitting of energy saving technology (HSBC Rail)
	No justification for mandatory metering; value in sample metering and fleets to understand usage and driver behaviour (ATOC)

	Better use could be made of existing lineside metering (ATOC)
	TOCs and Network Rail are working together on EC4T; no need for on-train metering; focus is on improving procurement and quality of wash up process (South West Trains Limited)
	Rail relies on fossil fuels (price and supply risks) (Merseytravel)
	Should take lead in considering alternative sources of electricity (Merseytravel)
	Operators and Network Rail should produce energy plans (Merseytravel)
	Supportive of initiatives such as use of greener fuel sources, on-train metering, regenerative braking, development of a technical strategy for rail being taken forward by DTI (Ken Livingstone, Mayor of London)

(o) Consultees are also asked to identify any impediments to the further development of regenerative braking across the network (paragraph 4.32)	Lack of available, cost effective technology (GNER)
	Limited benefits for intercity fleet compared with urban (GNER)
	ORR and DfT should pay Network Rail to install additional equipment (Martin Dover)
	DfT should fund extension of the electrified network (Martin Dover)
	All new stock and infrastructure should be regen-capable (even if not at first used) (RSSB)
	Manufacturers should consider energy storage in diesel vehicles and hybrid technology (RSSB)
	Discontinuity between drivers, railway undertakings and manufacturers can result in sub-optimal performance of stock assets (RSSB)
	Must be enabled on both DC and AC networks as soon as possible (Govia Limited)
	Transmission loss through distribution must be measured and minimised (Govia Limited)
	Metering should ensure TOCs only pay for power used in operating trains (Govia Limited)
	Apparently no incentive for Network Rail to invest in required infrastructure (Transport Scotland)
	Not practicable for existing trains (require renewal of entire traction system) (First Group)
	Should be required for new and upgrade schemes (Sciotech)
	Use of on board storage would be effective for inner city and metro (Sciotech)
	Should be decided on a case-by-case study (RIA)
	Priority for investment may vary between the industry and Network Rail (should be covered by detail of environmental statements) (RIA)
	Might not be cost beneficial to the industry – ORR should seek mechanism to balance funding (RIA)
	Limitations of network to accept are well known (eg DC lines) (Ken Livingstone, Mayor of London)
	Clearer understanding required of safety issues relating to implementation (Ken Livingstone, Mayor of London)
	Too expensive to retrofit, will consider for new stock in the future (Freightliner Limited)
	Freight likely to generate current at inconvenient times for use by other trains (at night) (Freightliner Limited)
	Concerned that network could not cope with return of power caused by stopping a freight train (Freightliner Limited)
	AC – new trains/traction packages required (Network Rail)
	DC – more research required (safety cases, short circuit detection) (Network Rail)
	Regenerative braking (and on-train metering) are simplest to achieve on AC (Natural England)
	DC metering is complicated, braking is less efficient (Natural England)
	DC suffers system losses, but already at optimum design (Natural England)

	Easiest option is to avoid multiple accelerations remote from sub-stations (Natural England)
	Other improvements could be gained from avoiding route conflicts/matching braking with acceleration (Natural England)
	ERTMS type control could achieve overall system efficiency; would require business case to be constructed (Natural England)
	A commercial framework to encourage metering/regenerative braking difficult as schemes span more than one party (Natural England)
	Could offer TOCs incentives to eliminate timetabled multiple accelerations (Natural England)
	Support regenerative braking and would be interested in proposals to reduce implementation costs (EWS)
	Not only applicable to electric traction (Pre Metro Operations Ltd)

(p) Consultees are asked to identify other areas where our incentives framework and structure of access charges could promote positive environmental decision-making (paragraph 4.34)	Network code F and G (proposer pays) may not promote positive environmental decision-making (GNER)
	Mechanism required to provide long run benefits to all parties (GNER)
	Requires collective decision (AMCL)
	Consider 'relationship' incentives based on joint initiatives (eg re-engineering to reduce emissions) (AMCL)
	Joined-up, holistic approach required, aligning cost incentives, other drivers and their consequences (RSSB)
	ORR could set energy targets for stations, depots and offices (Transport Scotland)
	In new developments (where short term risks discourage projects) (RIA)
	Incentives/charges should encourage optimal network usage (Ken Livingstone, Mayor of London)
	A cut in access charges and positive incentives would help freight to contribute to a low carbon society (Freightliner Limited)
	Environmental charging should be across the transport industry (Freightliner Limited)
	Sustainable and stable economics for the rail freight industry will encourage customers (Freightliner Limited)
	ORR reflect government statements on safeguarding rail freight (Freightliner Limited)
	Require incentives for TOCs in environmental station development, using lower emissions rolling stock, or avoiding heavy vehicles (Northern Rail)
	Additional funding for Network Rail/TOCs to implement SD projects? (Northern Rail)
	Consultation does not mention ORR's involvement in DfT's Community Rail Development Strategy (Northern Rail)
	Too many incentives/penalties without understanding their impacts may be counter-productive (Network Rail)
	Need to consider rail's SD position in comparison with other modes to understand where improvements can be made (Network Rail)

Additional comments	Clear requirement for leadership (at first sight would be DfT, but may be Network Rail) (AMCL)
	Rail must not assume it is the most environmentally friendly mode (AMCL)
	A direct comparison of environmental burden (average passenger/tonne freight mile) of rail versus other modes must be made (AMCL)
	Changes to vehicles to drop fuel use cannot be achieved by TOCs/FOCs alone (AMCL)
	No change should be made if it weakens rail's competitive position (Govia Limited)
	Greatest contribution of rail is to provide increased capacity and encourage modal shift (Govia Limited)
	ORR should prioritise the issues raised in the consultation, taking forward simple issues before complex (Govia Limited)
	Environmental performance is a key factor in future success of rail freight (Rail Freight Group)
	Must not underplay rail's environmental benefit (Rail Freight Group)
	Measures to improve performance must remain in step with other modes (avoiding costs to rail alone) (Rail Freight Group)
	ORR should consider rail in context of overall UK transport sector (eg avoiding perverse incentives) and include explicit reference to this in its aims (Rail Freight Group)
	ORR should prioritise aims and actions supporting modal shift (Rail Freight Group)
	ORR must remain closely involved in government strategy (impact of Stern and Eddington reports) (Rail Freight Group)
	ORR should explain how it links with other departments in relation to targets and strategies for transport (Rail Freight Group)
	ORR/RSSB should lobby government to ensure taxation/funding supports rails' SD (Lloyd's Register Rail)
	Strong leadership is required, DfT best placed with support from ORR (Lloyd's Register Rail)
	Starting point is to clearly define SD for rail (Lloyd's Register Rail)
	Vital to produce clear targets and define activities for companies (Lloyd's Register Rail)
	Measurement should be flexible with monitoring of success in promoting good practice (Lloyd's Register Rail)
	Alternative to quantified measures would be extent of compliance with an agreed best practice route map (Lloyd's Register Rail)
	Wider decisions will need to assess situation in wider transport system, requiring cooperation with other bodies (Lloyd's Register Rail)
	ORR has support rather than leadership role (HSBC Rail)
	Rail should be considered as two industries (passenger and freight) with different alternatives

	VIBAT study identifies increased role of rail in reducing transport emissions (East of England)
	In East of England, network requires investment (increased housing, expansion of ports) (East of England)
	Current commercial success of rail is playing key role in reducing transport emissions (ATOC)
	Improving environmental performance is a key element of TOCs' overall CSR approaches (marketplace issue) (ATOC)
	Rail's environmental credentials have supported public subsidy received; political commitment to rail is thus closely connected to environmental improvement (ATOC)
	Important to consider crucial trade offs regarding environmental issues (ATOC)
	Avoid greening all activities simply for completeness – focus on where greatest impact can be made (ATOC)
	ORR should be more involved in relation to EU requirements for noise mapping and water pollution (ATOC)
	Travel by rail is green (supported by Stern and Eddington reports) (South West Trains Limited)
	Transport needs to become more sustainable to reduce its share of greenhouse gas emissions (Sciotech)
	Only long term fuel is electricity from a variety of sources (including renewables) (Sciotech)
	EU Noise Directive could have enormous implications for UK transport network (Sciotech)
	ORR should be lead body for developing and implementing DfT, DEFRA or EC (Sciotech)
	ORR should involve other European regulatory bodies to develop a common strategy (Sciotech)
	Need to take an holistic view (eg reduction in mass will also reduce noise and vibration) (Sciotech)
	SD is amongst most significant global issues (RIA)
	Pleased to see ORR support for RSSB cross-industry initiative (RIA)
	Decisions may require careful comparison of costs/benefits (RIA)
	Some questions raised in the consultation appear simple but require complex answers/wider considerations (RIA)
	Increase in tonnage has been mainly due to longer distances travelled rather than additional loads (Ken Livingstone, Mayor of London)
	Sustainability can be enhanced by improving rail product and affordability; but must improve the rail production process (Network Rail)
	Document lacks ambition in promoting rail (Merseytravel)
	Rail industry seems to be complacent (Merseytravel)
	Train leasing not covered – ways to influence type of stock bought and leased (DEFRA)
	Important that environmental standards don't result in ticket price rises (DEFRA)

	Punctuality and network robustness necessary to maintain viability of rail (DEFRA)
	Ensure action plans from Environmental Noise Directive are taken into account (DEFRA)
	DfT should lead policy on all modes paying for external costs (Freightliner Limited)
	Potential for re-opening lines/passenger on freight-only lines should be considered and encouraged (Pre Metro Operations Ltd)
	Desire for safety or fear of change should not be allowed to conflict with innovation and development of a publicly-useful railway which reduces environmental impacts (Pre Metro Operations Ltd)