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OFFICE OF RAIL REGULATION

SUSTAINABILITY BENCHMARKING

FINAL



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1. BENCHMARKING FRAMEWORKS

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.*

To assist in this process Enviro has conducted a benchmarking exercise involving comparison with the following organisations, as agreed by ORR and Enviro:

Civil Aviation Authority (CAA)

Maritime and Coastguard Agency (MCA)

OFWAT

OFSTED

International Union of Railways (UIC)

International Union of Public Transport (UITP)

Federal Railroad Administration (FRA)

These organisations were chosen as having similarities to ORR through their regulatory and/or influencing roles on ‘industry sectors’ including rail and other forms of transport, both in the UK and overseas.

The benchmarking aims to -

- ◆ Indicate to what extent ORR has implemented measures which meet its sustainability duties, as far as possible in comparison with each of the above organisations;
- ◆ Identify key elements of good practice in relation to SD and the role of organisations such as those benchmarked; and
- ◆ Make recommendations on how ORR could implement good practice in order to meet its SD duties.

1.2 Future Action

ORR intends to issue a consultation document to stakeholders, outlining proposed policy options for discharging its SD duties. It is intended that the benchmarking exercise will inform the content of this consultation.

The Rail Safety & Standards Board (RSSB) is conducting work (to which ORR has contributed) in line with its aim to coordinate development of the rail industry’s understanding of and contribution to SD. This includes development of SD metrics and reviewing existing SD research in relation to the industry.

In addition, the Rail Sustainable Development Group (RSDG), an industry body chaired by RSSD, is working on creating ‘the Route Map’ - a long-term SD strategy for the rail industry.

2. METHODOLOGY

2.1 Benchmarking Frameworks

The benchmarking was conducted using a series of frameworks developed for the task. Each framework was prepared by extracting appropriate elements from existing 'standards' to create sets of criteria against which benchmarking could be carried out. The selected standards were as follows (further explanation of each is provided later):

- ◆ UK SD Strategy Guiding Principles (subsequently not used – see below);
- ◆ UK SD Strategy Priorities;
- ◆ Sustainability Appraisal of Regional Spatial Strategies - Guidance; and
- ◆ BS 8900:2005 'Guidance for Managing Sustainable Development'.

2.2 Application of Company Information

In the case of the seven external organisations, the information used to complete the benchmarking was taken from publicly available sources. In the main part, these included annual reports and web-based material – in those versions currently available at the time of benchmarking. The quantity and quality of information varied considerably between organisations. However each had at least a comprehensive website which included specific information on their role and key activities. From these sources it was possible to identify –

1. Specific SD related measures, and/or
2. Activities which, whilst not necessarily focused on SD, have a relevant impact (for example, operational efficiency measures which by their nature will result in reduced resource use).

Benchmarking was conducted by working through the frameworks for each organisation in turn, where possible entering a summary of current activities against each criterion, as far as could be determined from the available information.

In the case of ORR, as well as publicly available information Envirosearch was provided with a wide range of documents along with details provided in response to specific requests. For this reason it was assumed that a lack of available information on any particular subject indicated that there was no activity in this area (however, it is accepted that discussion of the outcomes of this project may bring to light previously unrecognised activity). Chapter 4 of this report lists the sources of information which were used in completing the benchmarking exercise.

2.3 The Standards Used

The following is a description of each standard used in the benchmarking, along with a rationale for its selection.

2.3.1 UK SD Strategy Guiding Principles/Priorities

In 2005, the Government published 'Securing the Future' - the UK sustainable development strategy. This sets out the agenda for achieving sustainable

development (SD) across the UK and includes five guiding principles and four priorities for National action. ORR has accepted the Strategy's definition of SD and for this reason the principles and priorities were chosen as elements in the benchmarking process.

The guiding principles are presented in the Strategy as conceptual statements, whilst the priorities are presented in the form of actions at a largely national level, along with potential indicators of performance. Because of their general nature, there are limitations in the use of the principles and priorities as criteria for assessing organisational SD activity. This is particularly so in the case of the guiding principles, and because of the difficulty in linking specific organisational actions with particular principles these were excluded from the final frameworks. In the case of the priorities, however, as far as possible relevant measures were identified from each organisation which could be considered relevant to particular criteria within the framework.

2.3.2 Sustainability Appraisal of Regional Spatial Strategies - Guidance

In 2005, the UK Government published guidance to assist regional and local planning bodies in carrying out sustainability appraisal (SA) of strategies and development plans, in order to meet the requirements of the European Strategic Environmental Assessment Directive. Whilst obviously not written for this purpose, aspects of the guidance can be considered relevant when examining the outward-facing role of regulatory bodies (such as policy making, industry guidance etc). In particular, the headline SA objectives outlined in the guidance were adapted to produce a framework covering a wide range of SD-related issues.

2.3.3 BS 8900:2005

BS 8900:2005 'Guidance for Managing Sustainable Development' has been developed by BSi British Standards to provide guidance on managing SD to enhance organisational performance and effectiveness. This is the first UK standard outlining how organisations should approach internal sustainability management. A framework was prepared based on Section 4 of the standard: 'Putting Sustainable Development into Practice' which includes particular actions against which benchmarking can be conducted. It was agreed with ORR that corporate SD activity should not be a major element in the benchmarking, however the framework was used to take a brief look at what internal management measures are currently in place in ORR alongside CAA and MCA (as comparable UK organisations in contrasting industry sectors) – particularly with respect to the issue of leading by example.



3. RESULTS & RECOMMENDATIONS

The detailed results of the benchmarking against each framework are provided in Appendix 1.

3.1 Summary Framework

The key results from each framework were combined to produce a summary framework, shown in table 1, overleaf.



SUSTAINABILITY BENCHMARKING

Table 1 Summary Framework

Key Area	Summary of Best Practice	ORR	CAA	MCA	OFWAT	OFSTED	UIC	UIPT	FRA
Sustainable Development Policy	- Published policy statement on SD role/aims - Strategy for fulfilling SD role defined								
Climate Change and Energy	- Regulatory/advisory measures in place to ensure reduction in energy use/greenhouse gas emissions								
Environmental Management	- Regulatory/advisory measures in place to ensure prevention/correction of environmental damage - Advisory measures in place to encourage EMS implementation								
Health & Safety Management	- Regulatory/advisory measures in place to ensure high health & safety standards (industry and public) - Advisory measures in place to encourage H&SMS implementation								
Performance Measurement and Reporting	- Establishment of appropriate indicators of industry SD performance - Reporting of industry SD performance								
Social Impact	- Regulatory/advisory measures to ensure effective management of social issues (incl diversity, access, crime) - Regulatory/advisory measures to ensure ethical commercial and operating practices - Advisory measures to ensure positive impact of industry on society/local community - Public engagement to raise SD awareness in relation to industry								
Sustainable Economic Development	- Regulatory/advisory measures in place to ensure efficiency - Regulatory/advisory measures in place to ensure fair commercial practices and competition - Financial incentive/disincentive mechanisms to ensure sustainable operational practices								
Sustainable Development Research	- Conducting research to improve industry sustainability (incl appropriate technology) - Encouraging/supporting relevant research by external bodies (incl universities)								
Leading by Example	- Internal measures in place which demonstrate best practice, setting a good example to industry (incl policy, management measures, performance reporting in relation to SD)								

	= Comprehensive, formal measures in place which are specific to this key area
	= Limited range of formal measures in place, including measures which have relevance but are not specific to this key area
	= Few or no formal measures identified (from information available)

In order to produce this framework, nine key areas were identified which could be considered as summarising best practice taking into account which SD measures organisations such as ORR (ie bodies with a remit to regulate/influence/represent particular sectors, and in particular transport) could be expected to implement given the nature and scope of their roles.

The following section aims to –

- ◆ Provide examples of best practice in each of the nine key areas (above), and outline ORR's performance;
- ◆ Make recommendations on measures ORR should implement as part of a future SD strategy; and
- ◆ Cross reference the above with the key elements of the UK SD Strategy.

3.2 Detailed Analysis of ORR's Performance and Recommendations

3.2.1 Sustainable Development Policy

Examples of Best Practice

Examples of best practice highlighted by the benchmarking exercise include the following:

Publication of a sustainable development and environmental policy, including web publication

Establishing corporate working groups to take forward SD strategy.

ORR's Current Position

Positive - ORR has already formed a Sustainable Development Policy Steering Group with a remit to define policy and strategy for ensuring it discharges its SD duties effectively, with regard to its Corporate Strategy and Business Plan.

Gaps - ORR has to date not produced an SD policy statement.

Recommended Measures

Enviros would recommend that ORR should ensure its sustainability intentions are made clear through publicly available policy documentation. Ideally this should be in the form of a separate, overarching policy statement on sustainability management which includes, or makes reference to, relevant existing policies including the Health & Safety Enforcement Policy. If possible a draft policy, or at least an indication that ORR intends to produce a statement should form part of the forthcoming stakeholder consultation.

Reference to UK SD Strategy

This key area relates to all elements of the Strategy, rather than any particular principal or priority.

3.2.2 Climate Change and Energy

Examples of Best Practice

Examples of best practice highlighted by the benchmarking exercise include the following:

Development of performance monitoring

Provision of environmental guidance to operators including efficiency and emissions

Development of an emissions trading mechanism for airline operators (CAA)

Research conducted into renewable energy sources

Research into cleaner diesel

Research into energy efficiency technologies (including rail)

ORR's Current Position

Positive – ORR has a statutory role to improve efficiency and already has in place and is developing measures to encourage efficiency in rail operators. These include: development of enforcement and penalties policies which include efficiency; development of performance monitoring; review of charging to ensure efficiency; and review and approval of Network Rail's Route Utilisation Strategies Programme. Improvement in efficiency is likely to have an effect on energy use.

Gaps – ORR currently has no specific measures in place with regard to minimising the climate change impacts of the rail industry.

Recommended Measures

Possible measures that could be implemented include the following:

ORR should ensure that any metrics developed in order to monitor railway performance should be sufficient to provide an effective measure of the industry's contribution to climate change, plus its progress in implementing measures to mitigate this.

The environmental requirements placed on operators through the licensing process could be extended to include specific reference to energy management, and at the same time guidance provided to both rail inspectors and operators should cover aspects of energy management.

A working group could be established to review and disseminate information on relevant emerging energy efficiency technology applicable to the rail industry.

ORR is already considering the use of financial mechanisms including environmental charging and incentives. Whilst an emissions trading scheme (as for the aviation sector) may not be appropriate, financial measures could be used to penalise/ reward energy related performance including the rate of uptake of efficient technology.

Reference to UK SD Strategy

This key area relates to the priority 'Climate Change and Energy'.

3.2.3 Environmental Management

Examples of Best Practice

Examples of best practice highlighted by the benchmarking exercise include the following:

Environmental working groups/expert groups on key subjects such as noise

Environmental Research and Consultancy Department (CAA)

Environmental Information Sheets (in various forms for operators and in some cases the public, eg CAA in relation to noise)

Certification of aircraft - emissions and noise (CAA)

Contingency guidance eg oil spills

ORR's Current Position

Positive – ORR has a statutory role to have regard to the effect on the environment of activities connected with the provision of rail services. ORR has published environmental guidance for operators, includes environmental obligations within the Stations Code, includes environmental and land disposal conditions within licences, and places requirements on Network Rail regarding environmental protection. The Network Code Part E (Environmental Protection) sets out rights and obligations in respect of environmental damage on the network. If reasonably necessary to prevent or remedy train operator-caused environmental damage, Network Rail can assess the position and prescribe who should take action.

Gaps – ORR currently has relatively limited measures in place with regard to requirements for environmental management approaches (including systems) within the licensing process.

Recommended Measures

Possible measures that could be implemented include the following:

ORR already intends to revise the wording of the environmental conditions within licences, however ORR could strengthen the environmental element of licensing, in particular regarding the specifics of required environmental policies and systems and key environmental aspects that these should address, and make better provision for approval and inspection of these.

ORR is considering updating the document 'Railway Operations and the Environment – Environmental Guidance'. This could be developed more fully to form a comprehensive, updatable manual for operators on environmental management techniques. In particular this could include guidance on management systems, references to the latest external resources, and case studies of good practice within the industry.

ORR has stated that priority areas for concern include the following: energy use; noise/vibration issues; visual intrusion (graffiti, litter, fly-tipping, etc); fuel storage; and pollution. Specific guidance could be developed for operators/inspectors in these and other areas, including specific standards such as those required for oil storage along with summaries of relevant legislation. Such guidance could be included in the manual suggested above.

ORR should provide particular guidance and incentives for the uptake of certified systems such as ISO14001, to ensure consistency of approach.

Reference to UK SD Strategy

This key area relates to the priorities 'Climate Change and Energy' and 'Natural Resource Protection and Environmental Enhancement'.

3.2.4 Health & Safety Management

Examples of Best Practice

Because health & safety regulation/promotion is the primary function of a number of the benchmarked organisations, numerous examples of what could be considered good practice were demonstrated. A small number of examples are listed below:

Safety award scheme for operators (CAA)

Competency transfer project to ensure 'handing down' of safety skills and knowledge (UIC)

Public safety education programmes (CAA, MCA, FRA)

Safety information for third parties including school bus drivers and truck drivers (FRA)

Specialised working meetings on terrorism (UIC)

Safety database development (UIC)

Reporting against safety indicators (ORR, UIC)

ORR's Current Position

Positive – ORR has recently taken on a statutory role as H&S regulator in the rail sector. ORR has published its Health & Safety Enforcement Policy. ORR has in place a wide range of measures to ensure high standards of health & safety including inspection and provision of guidance (for both the industry and public). Development is being undertaken in areas such as risk-based assessment, measurement and reporting, and intervention planning.

Gaps – ORR has a comprehensive range of measures in place, although further emphasis could be placed on public safety information.

Recommended Measures

ORR's current measures are already well developed and wide-ranging. EnviroS would recommend that the area of health & safety (of both industry workers and the public) is recognised and promoted as a key aspect of ORR's SD duties, and is incorporated in future SD policy and strategy.

Reference to UK SD Strategy

This key area relates to the priority 'Sustainable Communities'.

3.2.5 Performance Measurement and Reporting

Examples of Best Practice

Examples of best practice highlighted by the benchmarking exercise include the following:

Development of measurement and reporting framework for H&S (ORR)

Sustainable reporting and indicators working group (UIPT)

Development of industry performance monitoring (various, for example development of SD indicators for the rail sector)

REPID programme for standardisation and tools in environmental performance indicators (UIC)

Benchmarking of assaults on staff and prevention of assaults (UIC)

Reporting against safety indicators (ORR)

ORR's Current Position

Positive – ORR conducts comprehensive reporting of health & safety issues in the industry, including the Annual Report on Railway Safety which incorporates various metrics in areas such as enforcement, prosecution, incidents and accidents.

Gaps – Reporting by ORR is currently limited to health & safety and commercial aspects.

Recommended Measures

ORR supports and is involved in the work of the Rail Safety & Standards Board (RSSB), in particular recent work commissioned to develop SD metrics for the industry. Once completed, ORR should ensure that these metrics are adopted and applied to regular monitoring and reporting.

ORR should encourage reporting of SD related performance by operators, for example including guidance in the suggested environmental manual (above).

Reference to UK SD Strategy

This key area relates to all elements of the Strategy with regard to the aspects of SD which should be measured and reported, and specifically to 'Sustainable Communities' with regard to public participation.

3.2.6 Social Impact

Examples of Best Practice

Examples of best practice highlighted by the benchmarking exercise include the following:

Public information programmes (eg 'Your Ocean' and 'Seasmart', MCA; www.trackoff.org, RSSB; 'Operation Lifesaver', UITP)

Code of practice for disabled people

Public information documents (eg 'Travelling Safely' and 'Icefall' leaflets, CAA)

Electronic training access for the disabled

TV advertisement on public transport and environmental advantages

Schools engagement (eg drawing competitions on public transport and youth project awards)

ORR's Current Position

Positive – ORR has a number of regulatory and advisory measures in place to address particular areas of social impact. These include working groups and strategy on route crime and work related violence, licence conditions regarding disability and discrimination, and Rail Guidance Documents on route crime and violence.

Gaps – ORR currently has limited measures to address non-regulatory social impact aspects.

Recommended Measures

Possible measures that could be implemented include the following:

ORR should ensure both public and industry awareness of its SD policy, strategy and performance, in particular through its website and as a discrete section within its annual report.

ORR should develop ongoing measures to ensure SD awareness throughout the industry including preparation of guidance to operators on development of an SD policy and management measures, and SD awareness-raising events. In particular, ORR should consider the possibility of developing an SD-related competency model for application by the rail industry in training and development.

ORR should consider means for increasing public engagement on SD, including publicity of the benefits of rail transport in relation to SD, and links with the education sector to influence transport choices at an early stage.

Whilst possibly outside ORR's direct remit, there may be scope for a specific review of community impact and involvement throughout the rail industry, with subsequent encouragement of non-mandatory activities (such as community outreach, voluntary and charitable activities, and cause-related 'marketing' - ie raising awareness of both ORR's work and particular relevant charitable causes/issues through association with ORR's name).

Reference to UK SD Strategy

This key area relates to the priority 'Sustainable Communities'.

3.2.7 Sustainable Economic Development

Examples of Best Practice

In terms of best practice it is not possible within the scope of this study to determine which, if any, of the regulators constitute best practice. Each industry has its own unique aspects that justify, or necessitate, differences in the regulatory approach.

Nonetheless, we note that employing incentive based regulation itself is generally regarded as the best practice model to drive improvements in efficiency and outputs in regulated companies. ORR employs incentive based regulation to regulate the performance of Network Rail, which is broadly the same as the incentive based approach used by Ofwat for the water industry. Incentive based regulation is used to mimic the outcomes that would be expected in a competitive industry.

By employing a quarterly review of key Network Rail performance indicators, ORR could be deemed to be an example of best practice with regard to general performance monitoring.

Ofwat provides awards to operators for effective reporting, although replicating this for Network Rail would be more difficult given the absence of comparators (with Ofwat regulating some 20 different companies).

ORR's Current Position

Positive – As a fundamental element of its statutory role, ORR has implemented a comprehensive regulatory framework to determine Network Rail's revenue requirement and determine the outputs the company should achieve. ORR has a range of incentive mechanisms in place to ensure that the company is incentivised to achieve these outputs at least cost. ORR is reviewing much of the regulatory framework as part of the 2008 periodic review and is considering if it is necessary to make any changes to the incentive regime to ensure continued or improved efficiency and outputs by Network Rail.

Under incentive based regulation, Network Rail is incentivised to minimise the volume of energy used by the network, although its ability to influence the consumption of electricity by operators is limited. ORR has also implemented a mechanism whereby train operators using regenerative braking gain a discount on their traction electricity charges.

Gaps – ORR currently only has limited financial incentives or mechanisms to explicitly promote environmental performance.

ORR has undertaken some initial consultation on environmental charges and has conducted a consultancy in relation to this, which is published on ORR's website. ORR is currently giving further thought to environmental charging and incentives and intends to consult on this shortly.

Recommended Measures

ORR should further consider the use of environmental charging and, in particular, incentives for good performance and implementation of SD.

Reference to UK SD Strategy

This key area relates to the priority 'Sustainable Consumption and Production'.

3.2.8 Sustainable Development Research

Examples of Best Practice

Examples of best practice highlighted by the benchmarking exercise include the following:

Research conducted on specific environmental issues, including: renewables, noise impact of train horns, noise impact of brake pads, electromagnetic effects, effluents

Research on environmental costs of transport (UIC)

Research on safety and accident prevention (UIC, FRA)

Environmental Research and Consultancy Department (CAA)

Five year strategic plan for research, development and demonstrations (FRA)

University research grants programme (FRA)

ORR's Current Position

Positive – ORR has conducted or supported various pieces of research and reviews, and has published a wide range of documents and reports outlining these, including research on health and safety issues (including reports on specific incidents and technical problems).

Gaps – the above work has primarily been in the areas of health & safety and commercial issues (this is understandable given the main focus of ORR's role).

Recommended Measures

RSSB has recently commissioned work to identify existing research on SD in the rail industry, with a view to identifying priorities for further research. ORR could take a leading role in commissioning and encouraging further research in those areas which RSSB has stated are of particular concern, including –

- ◆ Energy use/consumption
- ◆ Sustainable fuels
- ◆ Noise/vibration issues
- ◆ Visual intrusion
- ◆ Fuel storage
- ◆ Land contamination
- ◆ Diffuse pollution
- ◆ Security at stations
- ◆ Safety of the general public and industry workers
- ◆ Electromagnetic radiation impact.

ORR should consider engaging with universities and associated research institutes as a means of commissioning research. A formal university partnership programme would also assist with respect to 'Social Impact' (above).

Reference to UK SD Strategy

This key area relates to the priorities 'Sustainable Consumption and Production' and Sustainable Communities.

3.2.9 Leading by Example

Examples of Best Practice

Within the three organisations (ORR, CAA, MCA) examined against BS 8900 (see section 2.3.3) limited information was available to indicate to what extent corporate SD measures were in place, however examples of existing practice highlighted by the benchmarking exercise include the following:

Greening Operations - Local Action Plan (MCA)

Sustainable Development and Environmental Policy (CAA)

Health, Safety & Environmental Policy statement (ORR)

Equality & Diversity Policy statement (ORR)

Environmental awareness raising events for staff (CAA)

Environmental Supplier Audits (CAA)

Targets for energy, water, waste, paper, transport, purchasing (CAA).

ORR's Current Position

Positive – ORR has in place an internal Health, Safety & Environmental Policy, and an Equality & Diversity Policy.

Gaps – Further structured management measures are not apparent within ORR.

Recommended Measures

By adopting best practice internally, ORR is in a position to lead by example and influence those operating within the rail industry. Moreover, by going through the process of developing its corporate SD measures, ORR will be better placed to understand the issues facing operators in enacting the requirements and suggestions of ORR in this area.

Enviros would suggest that ORR makes the implementation of internal SD management a priority in order to maintain its credibility, particularly with respect to any recommendations it makes to others.

Leading by example is an explicit intention of the Government, as stated in the UK SD Strategy.

There are many measures which ORR could consider in order to develop its internal approach. In brief, the principal activities are likely to include the following:

- ◆ Baseline review of ORR's performance and current SD activities;
- ◆ Development of a publicly available SD policy statement (this could incorporate the existing health, safety and environmental, and equality and diversity policy statements);
- ◆ Definition of objectives and targets for improving performance and implementing systems etc across a range of SD aspects (incorporating existing health and safety and environmental objectives, and including aspects such as diversity, and sustainable procurement);
- ◆ A programme of implementation, with defined roles and responsibilities;
- ◆ Training and awareness raising for staff, including SD in general and specific areas such as energy use, waste minimisation etc; and
- ◆ Reporting against indicators and targets (including production of an annual SD report, or section within the current annual report at least).

ORR should consider the adoption of certified systems such as ISO 14001 which have been successfully implemented in other public sector organisations.

In addition to internal systems, ORR should consider the adoption of outward-facing activities including community involvement (including staff volunteering and mentoring programmes and structured support of appropriate charities).

Reference to UK SD Strategy

This key area relates to all elements of the Strategy, rather than any particular principal or priority.

3.3 Conclusions

The following points summarise ORR's performance in the benchmarking:

- ◆ Based on the information available, generally ORR compares well with the other organisations benchmarked and could be viewed as being on a par with most of the others in terms of the number of SD-related activities undertaken/measures in place. However, CAA and UITP display a wider range of measures in place, with measures in all nine key areas, including such examples as public engagement through published SD-related guidance, conducting a wide range of SD-related research, and providing SD-related awards for operators.
- ◆ ORR is committed to developing its approach to discharging its SD duties, however its formal structures have, to date, largely been limited to health & safety, environmental issues and commercial practices. This is understandable given the primary function of ORR, and is similarly the case with CAA and MCA.
- ◆ Key areas in which ORR appears to have undertaken fewest activities include implementing a formal SD policy statement and associated strategy, and measuring and reporting SD performance in the rail sector – however, it is recognised that ORR is conducting work which is specifically aimed at producing its SD policy/strategy, and that RSSB has commissioned work to develop SD indicators which will be used to monitor the rail industry. In addition, ORR is not fully in a position to set an example to its sector though implementation of comprehensive internal SD management. ORR is not alone



with respect to these issues, although CAA in particular, as a comparable UK body, has published its SD policy. Whilst this is largely environmentally focused, it clearly states CAA's intentions in this area. Formally stating intent in this way is a fundamental prerequisite to influencing sustainability in any sector.



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APPENDICES



UK Sustainable Development Strategy - Priorities

In 2005, the Government published 'Securing the Future' - the UK sustainable development strategy. This sets out the agenda for achieving sustainable development (SD) across the UK and includes five guiding principles and four priorities for National action. This framework aims to identify activities which are in line with the four priority areas. A summary of how the strategy describes each area, along with performance indicators for each, is provided as a guide to identifying activities. Not all of these will be appropriate to the organisation/sector being examined, and activities may be included which, whilst not relating to specific points listed, are nevertheless considered relevant. Indicators have been colour-coded according to ORR's priorities (green = highest importance, orange = lowest).

Priority Area	Description	Summary of Indicators	ORR	CAA	MCA	OFWAT	OFSTED	UIC	UIPT	FRA
Sustainable Consumption and Production	Achieving more with less	Greenhouse gas emissions Emissions of pollutants River quality Resource use Fish stocks Water resource use Land recycling Waste	Environmental Guidance provision to operators (policy and systems) The Stations Code (clause 14) Licence conditions (environmental)	Sustainable Development and Aviation Environmental Policy in place Environmental Information Sheets	Sustainable Shipping Conference 2005 Provision of waste management guidance to ports Regulation of port waste management (plan approval) Guidance on charges for port waste reception 'Your Ocean' - Nat Maritime Museum exhibition MGN/MIN/MSNs	Developing approach to SD ongoing 2005-8 Work with the Environment Agency and the Drinking Water Inspectorate to ensure companies can meet environmental and drinking water quality standards Set price limits on companies to encourage efficiencies Set price limits to ensure safe, reliable service Approval of charging schemes Approval of companies' codes of practice Enforcement of licence conditions SD consultation Incentive-based regulation Monitoring of company performance Modelling of shared water resources (working with EA) Member of the Water Saving Group Lead sub-group on water efficiency best practice Working with Waterwise Sponsoring economic research category in EA 2006 Water Efficiency Awards (widened to include non- and household initiatives Ensured investment (£3.5 billion – sewerage; £2 billion – drinking water quality) National SUDs Working Group	Cost saving and efficiency objectives (within Ofsted)		Sustainable Development Working Group Sustainable Reporting and Indicators working group Charter on Sustainable Development	Intelligent Railroad Systems (incl impacts on efficiency, emissions, safety)
	Reducing impacts of products and materials across their lifecycle Building on people's awareness of social and environmental concerns Reducing inefficient use of resources Boosting business competitiveness Breaking the link between economic growth and environmental degradation									
Climate Change and Energy	Reducing greenhouse gas releases Changing in the way we generate and use energy Changing other activities that release greenhouse gases Preparing for climate change Setting a good example and encouraging others	Greenhouse gas emissions Use of renewable/sustainable fuels Energy generation and consumption	Statutory role to improve efficiency Developing efficiency and performance strategy/policies Developing enforcement and penalties policies (including efficiency) Development of industry performance monitoring Encouragement of use and development of rail network Environmental Guidance provision to operators (policy and systems) Review of RUS Review of charges under PR2008 (freight and passenger) Licence conditions (environmental)	Environmental Information Sheet - Emissions SRG certification of aircraft - emissions Development of emissions trading scheme	Formal involvement in offshore renewables planning and consent Various research conducted in relation to renewables (including effects on systems, navigation)		Protocols - Protocol between Ofsted and Building Control Departments	UIC Diesel Action Plan Rail Diesel Study Railway Energy Efficiency Conference/Project Evaluation of Energy Efficiency Technologies for Rolling Stock and Train Operation of Railways (EVENT) Knowledge Management for Energy-Efficiency Technologies of Railways (EVENT ComTool) – database Railway and energy information day	Car-Sharing Platform	
Natural Resource Protection and Environmental Enhancement	Understanding environmental limits Environmental enhancement and recovery Integrated policy framework	Bird populations Biodiversity conservation Environmental stewardship Agricultural emissions Land use Land recycling Environmental equality Dwelling density Households and dwellings Fish stocks Ecological impacts of air pollution Emissions of air pollutants River quality Water stress Flooding Noise and vibration Fuel storage Land contamination Diffuse pollution Electromagnetic radiation impact	Requirements placed on Network Rail regarding Environmental Protection Environmental Guidance provision to operators (policy and systems) The Stations Code (clause 14) Licence conditions (environmental) ERCO provision of expert advice to DfT Review of the Network Code Part E (Environmental Protection)	Provision of environmental advice in runway development Analysis of environmental impact of airport developments Directorate of Airspace Policy role in determining impacts ERCO provision of expert advice to DfT Economic Regulation Group provision of advice to Govt on environmental costs Safety Regulation Group support for environmental certification CAA Aviation Environmental Co-ordination Group Environmental Research and Consultancy Department Environmental Information Sheet - Noise SRG certification of aircraft - emissions and noise	Development of legislation (eg Marpol, IBC code) Research - environmental protection (oil spills, waste reception, ecology, marine litter) National Contingency Plan Marine Pollution Control Unit Counter Pollution and Response Branch Pollution response coordination (Marine and Shoreline Response Centres) Oil spill contingency guidance for ports SOSREP intervention in salvage Ballast Water Scoping Study Receiver of Wreck duties FSA safety and pollution assessment method and services MGN/MIN/MSNs	Contribution to research on costs of removing phosphorus from effluents Worked with Defra on code of practice odour nuisance Review of water quality problems from storm sewage in Thames Tideway (with Thames Water) Participating in Defra-led working group on pollution in Olympics site		UIC leaflet 345 'Environmental specifications for new rolling stock' EGNV - Expert Group Noise and Vibration Environment Platform Core Group Environment Experts groups Position paper on the limits of noise pollution for new rolling stock Research on noise (technical tests/evaluation eg brake pads) Workshop - Rail Freight Noise Abatement in Europe UIC sub-commission on Noise and Vibrations Rail Freight Noise Abatement in Europe Workshop Energy, Noise, Pollution and Electromagnetic research REPID Network - environmental indicators 'The way to sustainable mobility' – report Research on environmental costs of transport www.railway-mobility.org		Issue Briefs (inc H&S, environmental, noise) FRA Environmental Impact Assessment of projects or actions sponsored or taken by the Agency Encouragement of Environmental Management Hazardous Materials: Hazardous Materials Incident Reduction Program Tank Car Facility Conformity Assessment Program Tank Car Owner Maintenance Program Evaluations Spent Nuclear Fuel and High-Level Nuclear Waste Program Railroad Industrial Hygiene Program Rulemaking, Approvals, and Exemptions Guidance on assessing noise and vibration impacts FRA Office of Safety enforces the Railroad Noise Emissions Compliance Regulation High Speed Ground Transportation Noise and Vibration Impact Assessment Manual CREATE Freight Noise and Vibration Model Analytic model to assess the noise impact of train horns Final Rule on the Use of Locomotive Horns at Highway-Rail Grade Crossings Train horn noise quiet zones
Sustainable Communities	Creating communities that embody sustainable development at the local level Working to give communities power and say in decisions Working in partnership	Active community participation Crime Fear of crime Security (at stations) Employment and poverty Education (incl sustainability) Health Electromagnetic radiation impact Safety (general public and industry workers) Mobility and access (incl road accidents) Social justice/Environmental equality Housing (incl conditions and land use) Violence International assistance Noise and vibration Visual intrusion (graffiti, fly-tipping etc)	New statutory role as H&S regulator H&S Strategy H&S Enforcement Policy Developing long-term H&S strategy/policies Developing risk-based assessment of H&S approach Developing measurement and reporting framework for H&S Developing Intervention Plans (2006-07) to ensure workers/public H&S HMRI H&S inspections Track Worker Safety Committee Encouragement of use and development of rail network Managing Fatigue in Safety Critical Work - guidance HMRI inspections on route crime Route Crime Reduction and Mitigation Groups www.trackoff.org HMRI strategy on route crime (2006-9) Partnership on Work Related Violence Licence conditions (disability) Licence conditions (discrimination) Code of practice for disabled people RSPG - various Rail Guidance Document - Route Crime - Lineside Security Rail Guidance Document - Route Crime - Lineside Materials Rail Guidance Document - Violence to Staff Rail Guidance Document - Noise at Work in the Railway Industry Rail Guidance Document - Vibration at Work RIAC	Safety Regulation Group Safety Intervention Programme Annual Safety Plan Safety research in relation to regulatory activity Aviation Health Unit CAA Safety Award Chair of steering group on aviation OH&S Traveling Safety leaflet 'Isotallit' leaflet CAA Cabin Safety Office inspections 46 Industry Consultative Committees Airworthiness approval Safety indicators (reporting)	Large Commercial Yacht Code Research - safety, accident prevention (eg vessel stability, lifeboat design, human error) Coastguard operations 'Seasmart' - public safety Seafarer training/information provision (H&S, Medical) COC/CEC verification Wide range of safety-related guidance for industry and public Marine certification and inspection	Guaranteed Standards Scheme (including customer compensation) Memorandum of understanding between the office of water services and the health and safety executive Work on ensuring affordability (for households, including low income) Encouraging awareness of the scheme supporting vulnerable group customers Working with the Water UK debt focus group Monitoring of companies' handling of telephone calls	Statutory programme of inspection of schools, local authorities, teacher training providers, child minders and daycare providers, colleges Comprehensive inspection reports for parents Joint area reviews 'Healthy Schools, Healthy Children' report – best practice dissemination Race equality scheme Objective to ensure safety and development and learning of children 'Inclusion: does it matter where pupils are taught? Provision and outcomes in different settings for pupils with learning difficulties and disabilities' – report 'Safeguarding children: an evaluation of procedures for checking staff appointed by schools' – report 'Food for thought: A survey of healthy eating in registered childcare' – report 'Taking the first step forwards towards an education for sustainable development' - report Inspection of ESD in schools 'Special educational needs and disability: Towards inclusive schools' – report Protocols - Protocol between Ofsted and Environmental Health Departments	Safety Platform Human Factors Working Group Occupational H&S Group UIC leaflets on standards of competency and safe working practices Development of a policy on alcohol and drug prevention in the workplace Benchmarking of assaults on staff and prevention of assaults UIC Safety database 'SafeCulture' method and toolkit SAFECOR - Harmonised Operational Safety on Corridors SAMNET: Safety Management and interoperability thematic Network in railway systems SAMRAIL: Safety Management in Railways IRSC (International Railway Safety Conference 2006) Security Group COLPOPER (Cooperation between railway police forces) UIC Schengenral project (immigration) Joint UIC - UITP declaration on terrorism Specialised working meetings with US authorities on terrorism Avian flu threat meetings Charter on Rail Passenger Services (incl safety, security, cleanliness, mobility/access, language) Combined Transport Group (incl commercial and technical exchanges, intermodal tracking, infrastructure capacity consideration) UIC World Training Activities a) general railway management issues and b) human resources and training International Training Group E-Rail (incl improving training access for the disabled, for instance people with imp Competency transfer project International Rail Activities Information Session (SIAFI) 'New Railway Environments: New Competencies' training seminars European Railways Purchasing Conference (ERPC) ethical standards UIMC (International Union of Railway Medical Services) – care of staff (H&S objec	Diversity Initiative working group Public Transport International publication (incl SD, safety) Training programme for public transport managers Mobility in Cities Database 'Public Transport in 2020: From Vision to Action' looking at trends UITP/UNEP TV advert on public transport and environmental advantages Partner in European Mobility Week/car-free day Schools drawing competition on 'the city and public transport' Partner in European Year of People with Disabilities Sustainable Development Workshops UITP Youth Project Awards	Issue Briefs (inc H&S, environmental, noise) Promotion and regulation of safety Automated Track Inspection Program (ATIP) Collision Analysis Working Group (CAWG) DOT National Crossing Inventory (Outreach) Drug and Alcohol Program Highway-Rail Grade Crossing and Trespassing Prevention Programs Railroad Safety Advisory Committee (RSAC) Railroad Safety Board Regulatory Overview Research & Development Safety Improvement and Development Team (SIDT) State Rail Safety Participation Program Switching Operations Fatality Analysis (SOFA) Rail Integrity Task Force 'Operation Lifesaver' – public rail safety education programme School Bus Safety Alert – information for bus drivers Truck Driver Safety Alert – information for truck drivers Technical Bulletins (safety for workers) Safety Advisories Emergency Orders (safety) Safety Directives Hazardous materials safety program Hazardous Materials Transportation Program - research Partnerships in Domestic and International Standards-Related Organizations (e.g., AAR, ASME, TDG/CGSB) Education, Safety Assurance, Compliance, and Accident Investigation Five Year Strategic Plan for Railroad Research, Development and Demonstrations Fra university research grants program Office of Civil Rights Programme Specific environmental justice role

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To reduce disparities in economic performance	Regional/local variations in performance Reduction in inequalities Comparative costs	Developing an economic enforcement policy Application of Competition Act Relating to Railways	Costs and charges review Modifications to charges in favour of smaller operators						
To encourage and accommodate both indigenous and inward investment	Encouragement of business start up Encouragement of investment Availability of land and property for development								
To encourage patterns of movement in support of economic growth	Commuting patterns Accessibility to work Alternative transport modes Journey times Freight distribution efficiency	Review of charges under PR2008 (freight and passenger) Freight charging policy							
To enhance the image of the area as a business location	Attraction of investment Attraction of workforce								
To improve the social and environmental performance of the economy	Ethical trading Environmental Management Systems Employee relations and management practices				Sustainable development workshop (stakeholders, water industry, customer, environmental groups)	Taking the first step forwards towards an education for sustainable development - report Inspection of ESD in schools	European Railways Purchasing Conference (ERPC) ethical standards	Sustainable Development Workshops	

BS 8900:2005 'Guidance for Managing Sustainable Development' has been developed by BSi British Standards to provide guidance on managing Sustainable Development (SD) to enhance organisational performance and effectiveness. The framework below is based on Section 4 of the standard: 'Putting Sustainable Development into Practice' which includes particular actions (highlighted in blue) against which benchmarking can be conducted.

Reference	Clause	Summary Description	ORR	CAA	MCA
4.1	The Organisation	Prepares and maintains an SD statement which forms the foundation for the organisation's SD activities and helps align primary purpose with related SD activities	Health, Safety & Environmental Policy statement; Equality & Diversity Policy statement	Sustainable Development and Aviation Environmental Policy in place	Greening Operations - Local Action Plan
4.2	The Issues				
4.2.1	<i>General</i>	<i>Ongoing systematic stakeholder engagement is intrinsic to SD</i>			
4.2.2	Stakeholder Identification	Defines and identifies stakeholders and their representative organisations, clarifying their interest and relationship with the organisation	Has defined stakeholders for consultation on SD		
4.2.3	Stakeholder Engagement	Engages with stakeholders to understand the social, economic and environmental impacts and risks of the organisation's activities	Is about to consult stakeholders on SD	Engages with staff	
4.3	Capability				
4.3.1	<i>General</i>	<i>For the principles of SD to be put into practice, the organisation requires appropriate resources and a range of competencies</i>			
4.3.2	Resource Allocation	Allocates appropriate resources (financial, human and manufactured) to achieve the SD objectives		CAA Aviation Environmental co-ordination Group	
4.3.3	Competence Building	Identifies the learning and development needs (partic. SD) of employees; provides resources to develop competence; reviews existing learning and development programmes in line with SD	Has a training policy (not specifically in relation to SD)	Environmental awareness raising events for staff	
4.4	Management				
4.4.1	<i>General</i>	<i>SD can be managed using various techniques, including introducing SD elements into existing management systems</i>			
4.4.2	Assessing Risks and Opportunities	Undertakes an assessment which identifies impacts and issues, establishes their significance, and prioritises actions to maximise opportunities and minimise risks		Environmental Supplier Audits	
4.4.3	Identifying Performance Indicators	Identifies, defines effective ways to measure, and implements key indicators in relation to the SD objectives	Has indicators in relation to aspects of equality	Targets for energy, water, waste, paper, transport, purchasing	

4.4.4	Achieving Progress	Assigns responsibilities to manage performance against the SD objectives and indicators; integrates the objectives through inclusion in job responsibilities and personal objectives; manages performance equitably in relation to any other organisational objectives			
4.5	Review				
4.5.1	<i>General</i>	<i>SD should be integrated in performance review and reporting processes</i>			
4.5.2	Review of Strategy	Reviews and updates the SD strategy at appropriate intervals, or following significant organisational change			
4.5.3	Operational Review	Assesses progress in relation to SD activities and reports internally and externally on indicators	Policy to monitor and report health and safety and environmental performance		
4.5.4	Follow-up	Ensures that the findings of reviews are dealt with and implements the changes required for continual improvement			
4.6	Building Confidence	May establish processes for building confidence in the management of SD, including subjecting aspects of this to verification			

Source: BSi British Standards

Summary Comparison - Key Areas

This framework summarises comparisons in a range of key areas drawn from the preceding frameworks. These key areas have been selected as being fundamental elements in influencing sustainable development impacts within the organisations' respective industry sectors.

It should be noted that, to a greater or lesser extent, each organisation will be restricted in the range of measures it implements by the scope of its particular function.

Key Area	Summary of Best Practice	ORR	CAA	MCA	OFWAT	OFSTED	UIC	UIPT	FRA
Sustainable Development Policy	- Published policy statement on SD role/aims - Strategy for fulfilling SD role defined								
Climate Change and Energy	- Regulatory/advisory measures in place to ensure reduction in energy use/greenhouse gas emissions								
Environmental Management	- Regulatory/advisory measures in place to ensure prevention/correction of environmental damage - Advisory measures in place to encourage EMS implementation								
Health & Safety Management	- Regulatory/advisory measures in place to ensure high health & safety standards (industry and public) - Advisory measures in place to encourage H&SMS implementation								
Performance Measurement and Reporting	- Establishment of appropriate indicators of industry SD performance - Reporting of industry SD performance								
Social Impact	- Regulatory/advisory measures to ensure effective management of social issues (incl diversity, access, crime) - Regulatory/advisory measures to ensure ethical commercial and operating practices - Advisory measures to ensure positive impact of industry on society/local community - Public engagement to raise SD awareness in relation to industry								
Sustainable Economic Development	- Regulatory/advisory measures in place to ensure efficiency - Regulatory/advisory measures in place to ensure fair commercial practices and competition - Financial incentive/disincentive mechanisms to ensure sustainable operational practices								
Sustainable Development Research	- Conducting research to improve industry sustainability (incl appropriate technology) - Encouraging/supporting relevant research by external bodies (incl universities)								
Leading by Example	- Internal measures in place which demonstrate best practice, setting a good example to industry (incl policy, management measures, performance reporting in relation to SD)								

	= Comprehensive, formal measures in place which are specific to this key area
	= Limited range of formal measures in place, including measures which have relevance but are not specific to this key area
	= Few or no formal measures identified (from information available)