Rail Sustainable Development Principles

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The railway is a sustainable, integrated transport system. It is effective, efficient and environmentally friendly. The railway helps passengers to access jobs, services, friends and family; it reduces congestion and transports goods. As expectations are changing, the rail industry cannot be complacent.

The railway has a major part to play in our country’s sustainability. It is a golden thread that connects our towns and cities. It has the potential to reinvigorate our communities, to support regeneration and generate local employment. The railway has already taken steps to become greener, more efficient and more sustainable. However, it has to do more if it is to fully realise its potential. It must place serving passengers and their communities at its heart while becoming even more carbon competitive.

We must continue to use technology to reduce carbon emissions. The industry must also deliver a network that is more integrated and accessible to people from all parts of society. There is a real opportunity to use stations to support local businesses and communities that deliver local jobs, regeneration, drive local and regional growth and increase productivity.

Focussing on passengers is critical whether through better information and world-class customer service or offering more productive use of time, with free and reliable Wi-Fi.

Projects of all sizes can and should benefit from a more sustainable approach. Community Rail Partnerships are a great example of what can be done to bring communities together at one end of the spectrum. Schemes like HS2, which will provide fast, frequent and reliable connections for over 100 cities and towns and improve job opportunities for hundreds of thousands of people, is at the other. It is this great diversity from rural services to high-speed intercity connectivity which puts the railway in a unique position to drive forward both the country’s growth and its sustainability.

These Sustainable Development Principles, developed by the industry, for the industry, set out a strategic vision. The industry is already making significant progress in delivering them. It is on target to reduce traction carbon emissions per passenger kilometre by 38% by 2019. All routes now have climate change adaptation plans. All new franchises will include ambitious
targets around reducing waste, cutting carbon emissions and delivering community and social benefits. For example, over 60% of Crossrail work has gone to SMEs and created nearly 3,000 local jobs.

I expect these principles to be at the core of our railway. Delivering this means working in partnership at every level of the industry. Between infrastructure providers and managers, operators, ROSCOs, the supply chain, the workforce and every branch of government. I am confident if we all adopt these principles we can deliver a railway that is better for the environment, which delivers real economic benefits and helps local communities prosper.

Claire Perry MP, Parliamentary Under Secretary of State at the Department for Transport
The Rail Sustainable Development Principles

Customer-driven Embed a culture where dialogue with customers puts them at the very heart of the railway, and where they are able to make optimal travel and logistics choices.

Putting rail in reach of people Position rail as an inclusive, affordable and accessible transport system through the provision of information and accessible facilities.

Providing an end to end journey Work together with all transport modes to provide an integrated, accessible transport system.

Being an employer of choice Respect, encourage and develop a diverse workforce, support its wellbeing and actively consider and address the challenges of the future labour market.

Reducing our environmental impact Operate and improve the business in a way that minimises the negative impacts and maximises the benefits of the railway to the environment.

Carbon smart Achieve long-term reductions in carbon emissions through improved energy efficiency, new power sources and modal shift.

Having a positive social impact Focus on local impacts and communities through better understanding and engagement.

Supporting the economy Boost the productivity and competitiveness of the UK, at a national and regional level, through efficient services and by facilitating agglomeration and catalysing economic regeneration.

Optimising the railway Maximise rail’s capability, build on its strengths and improve efficiency to deliver a transport system that is resilient and offers good value for money.

Being transparent Promote a culture of open and accountable decision making and measure, monitor and report publicly on our progress toward sustainability.
A sustainable railway is one where efficiency is high, costs have been reduced and incentives are in place to co-operate across the network. It is a railway where we plan and work for long-term benefits – around skills, technologies and whole-life costs. It is a railway which helps Great Britain meet its objectives, is at the heart of the policy process, and which meets travellers’ expectations and ambitions. It is a railway that wins customers away from other modes. It is a railway that is high-tech and growing; with a highly skilled, motivated and engaged workforce, exceptional leaders, and an increasingly wide set of customers.

The Rail Sustainable Development Principles define what sustainable development means for the railway. They have been developed within the Sustainable Rail Programme with significant input from its stakeholders and endorsed by the cross-industry Sustainable Development Steering Group.

The principles represent the core values of the rail industry and are fundamental in delivering a sustainable railway. A railway that is at the centre of the transport system, that meets the travel needs of society without compromising future quality of life. In this second issue, the principles have been brought up to date, to reflect the changing knowledge and understanding of the challenges and opportunities of sustainable development for the rail industry.

The purpose of the principles is to inform and become an integral part of the industry’s culture, policy, and decision making processes. They take account of whole-system and whole-life-cycle approaches to drive greater efficiency and better delivery. It is the responsibility of all rail industry organisations to adopt and implement these principles.
Customer-driven

Embed a culture where customers are at the heart of decision making, and where they are able to make optimal travel and logistics choices.

We recognise the importance of understanding and responding to the needs and expectations of our customers. To do this we need to listen and, in listening, to think of ourselves as part of a whole journey. The whole rail supply chain needs to gain a deeper understanding of how rail fits into overall needs to travel and move goods. Across the industry, we will continue to talk to customers, to understand the trade-offs between different expectations, such as price and comfort, and to draw the balance that they expect.

We need to understand and reward existing customers, and to understand the views of non-rail users. These are the potential customers of the future. By improving our response to all customers’ requirements, we will appeal to those who do not currently use our services.

All customers, whether freight or passenger, have two basic preconditions to using rail - reliability and safety. Beyond this, key passenger needs are:

- Service frequency and speed
- Punctuality
- Journey quality and comfort
- Value for money and a simplified fare structure
- Effective handling of service disruption
- Security
- Connectivity with other modes

Freight users’ requirements centre around:

- Cost and connectivity
- Speed
- Distance
- Flexibility

Information on services, connections, costs, and carbon should be made available for journey planning. Information on service disruption and onward journeys should be available throughout the journey.
Putting rail in reach of people

Position rail as an inclusive, affordable and accessible transport system through the provision of information and accessible facilities.

The railway is a key way for people to access employment, health services, education and leisure. It should be accessible to all. This includes:

- Physical accessibility for the less able, elderly and those with children and luggage. This goes beyond step-free access.
- Supporting vulnerable groups and contributing to inclusivity through accessibility.
- The availability of information on services, disruption and connections before and during travel. People increasingly expect accurate, up to date and personalised information.
- The affordability of travel by rail and simplicity of the fares system.

These issues should be understood from the differing perspectives of all user groups including commuters, business travellers, leisure travellers, and freight customers. We also need to consider potential users, such as jobseekers and young people.

For passengers, we need to be delivering for a population where 20% of people have a disability and 7 million people will be over 75 by 2024. If the measures put in place are to be trusted they must work during disruption as well as normal operation.

For freight services, the location and connectivity of distribution centres and ports is critical. The closer a hub is to the ultimate customer and the fewer the interfaces, the better.

Addressing these issues will help to remove barriers to travel by rail, encouraging all sections of the travelling public and freight transporters to see rail as a potential part of their journey.
Providing an end to end journey

Work together with all transport modes to provide an integrated, accessible transport system.

Rail can be at the core of many journeys. However, people travel from door to door, and freight from producer to customer. By its nature rail can deliver only part of these journeys. An integrated transport system – linking modes and enabling each to use its strengths to deliver the most sustainable journey – is key to achieving modal shift and bringing economic benefits.

To achieve this, we should work with operators of other modes and with transport and local authorities to improve the quality of the whole journey. We respond to customer needs. This means a continuing focus on customer experience, and greater understanding of sustainable ways to complete the non-rail parts of the journey.

Integrated thinking for the physical journey is crucial. But providing information for planning, and signage and service information throughout a journey, are equally important. And customers expect this information to be free, up to date, and always available. As well as improved inter-modal information, this is likely to need a greater range of partnerships or collaborations. Some, such as information management, will be outside the rail and public transport sectors.

Hard issues, such as better station and depot facilities, parking and access need to be combined with soft issues, such as good journey information, integrated timetables, through ticketing. And these all need to be promoted to customers, to improve the overall travel experience. The industry needs to gain a better understanding of the experience of the last mile after the station or depot.

These issues are beginning to be addressed through initiatives such as Station Travel Plans, electric vehicle charging points, and smart cards. Beyond that partnership and collaboration will be needed with complementary providers; whether these relate to walking routes, buses, metros, trams, cycling or pay-as-you-go car services.
Being an employer of choice

Respect, encourage and develop a diverse workforce, support its wellbeing and actively consider and address the challenges of the future labour market.

As an industry we recognise that we can only succeed and deliver planned investment with a skilled, talented and motivated workforce. The railway must be a place where able and talented people choose to work.

Attracting, recruiting and retaining the right people is a challenge. New technologies, such those driven by the Digital Railway, mean we need new skills and we are competing with other industries for these and more traditional skills. To succeed we need to expand the industry’s image as a modern, high-tech and growing sector, where software engineering is as important as train driving. We need to partner with schools and universities to ensure a pipeline of people with relevant skills. Apprenticeships will be key, as will a greater focus on leadership and management; driven by a cross-industry skills strategy to which all are committed.

The industry is committed to ensuring that it is a fair, safe, diverse and supportive place to work. We need to build the competence to ensure that our staff can address sustainability issues. We also need to support the health and wellbeing of our workforce. Staff engagement is at the heart of this, with proven benefits for productivity. The railway should be a sector in which people are proud to work and feel committed to its success.
Reducing our environmental impact

Operate and improve the business in a way that minimises the negative impacts and maximises the benefits of the railway to the environment.

While the railway’s green credentials compare favourably with other modes, we recognise that there are still many ways in which we can reduce our impact.

We generate waste, noise, and air emissions. We use significant amounts of water, steel, concrete and other materials. We will manage these proactively, monitoring and minimising our impacts through established management systems and ensuring mitigation is built in to all new investments.

The industry is one of the largest landowners in the country. Over 400 Sites of Special Scientific Interest and extensive linear habitats have the potential to provide important biodiversity corridors. As the network is managed and enhanced, negative impacts on biodiversity must be minimised and opportunities for improvement implemented.

More widely, ensuring the principles of green infrastructure are followed can help reduce carbon emissions, and improve air quality and biodiversity value. These can also positively impact on health and quality of life.

These improvements will be achieved through the application of whole-life and whole-system assessments to decision making and asset management. The principles of the waste hierarchy – reduce, re-use, recycle – will be applied in relation to resource management; and life-cycle assessment in relation to design and materials selection, considering both cost and environmental impacts.

As we implement these across the industry, we will reduce the amount of waste generated and aim to send zero waste to landfill. We will reduce our use of water and increasingly use recycled water. We will implement sustainable procurement policies and increasingly use these to help reduce cost as well as impact.
Carbon smart

Achieve long-term reductions in carbon emissions through improved energy efficiency, new power sources and modal shift.

We are committed to the pursuit of a lower carbon railway. Less carbon means less cost, and the more ambitious we are, the more we are helping the country meet its carbon targets. We have both traction and non-traction targets and believe we can halve our footprint in the medium term. We can also make a significant contribution to reducing the carbon footprint of travel and logistics in Great Britain, by encouraging a shift of passengers and freight from more carbon intense modes, and accommodating increased demand for rail.

But there are challenges over the coming years, especially as road and aviation are promising significant reductions in their own carbon intensity. The first step, which is well under way, is to identify the areas where the industry can improve efficiency. In the medium term there are opportunities to achieve step changes in carbon intensity. For traction emissions this will come through further electrification, lighter trains, and alternative power sources including batteries.

On non-traction we have a very varied estate, with many listed buildings and a variety of ownership models. This often means different parties working together to implement projects. This is a fast moving sector, with significant innovation, and we will ensure that across the rail estate we keep up with best practice on energy efficiency. There are also significant opportunities for renewable energy generation on the railway estate. Together, using existing technology, these could reduce non-traction energy, and bills, by up to 50%.

Lastly, as a major infrastructure sector, we have a significant embodied carbon footprint. There is increasingly strong evidence linking cost and carbon in infrastructure projects. We need to focus on increasing our understanding of this and targeting opportunities to reduce the carbon and cost in new projects.
Having a positive social impact

Focus on local impacts and communities through better understanding and engagement.

Connecting people and communities is at the heart of rail’s purpose. With a network that is at the same time national and local, rail is in a unique position to have a wider social impact. To do this we need to start by having an in-depth understanding of the issues and needs in a local area. Better information can help us to tailor support to meet needs – whether this is around better access, youth unemployment, or cultural diversity.

Rail led regeneration can have significant impact, but the importance of integrating with local communities is just as critical, even where major schemes aren’t planned. We will ensure pro-active communication and engagement with communities about their needs and our plans, and act on the results to ensure that, through our behaviours, working practices and relationships, rail is a good neighbour.

Engaging in and aligning with local development plans can help ensure we meet both current and future needs. Stations and other assets can also become a part of the community, as technological changes mean we need fewer buildings these will become community hubs, serving SMEs, social enterprises, and community groups, or to replace the increasingly rare local shops, pubs and post offices.
Rail should venture ‘beyond the railway fence’ and build relationships with local schools, community organisations, and business networks. We should promote rail as being at the heart of local sustainability. We should invest in community facilities and encourage wide employee involvement in external community activities.

Much good practice already exists, and the growth of community rail partnerships is one of the great success stories of the modern railway. Hundreds of stations across the country have been adopted by community groups, bringing unused station buildings back to life and creating a pleasant and safer environment. Over 50 community rail partnerships bring train operators and Network Rail together with community groups and local authorities to put new life into our local railways, both rural and urban. In addition, there is good evidence of the link between community rail partnerships and both increased rail use and reduced costs.
Supporting the economy

Boost the productivity and competitiveness of the UK, at a national and regional level, through efficient services and by facilitating agglomeration and catalysing economic regeneration.

Rail is a key economic enabler and we are determined to further improve our support for the economy. There are a number of well-established ways in which rail supports productivity:

- Reducing congestion
- Increasing the benefits of co-location
- Increasing outputs through reduced journey costs and times

By transporting millions of commuters every day, rail plays a critical role in the economies of our major cities. As seen in the Northern Hub, rail can play a key role in regeneration and generating economic benefits in regions throughout the UK. Rail freight also makes a significant contribution, supporting key industrial sectors and increasingly penetrating other markets such as the distribution of food and other products.

The rail supply sector plays a vital role in maximising the economic benefits of rail to the economy, especially at a time of record investment. This sector has published its own plan to grow capacity and productivity, including investing in skills and innovation. Greater engagement, and business, with SMEs will be a key focus.

Throughout, how we run our businesses will define the impact we have. Paying the Living Wage will lead to greater productivity, as well as improved local economic impact. Sustainable procurement approaches can have significant impacts for local businesses, SMEs and social enterprises, directly supporting local economies and building awareness of rail as well as getting good value for money. While engaging with economic development stakeholders will be essential.
Optimising the railway

Maximise rail’s capability, build on its strengths and improve efficiency to deliver a transport system that is resilient and offers good value for money.

Rail demand has grown consistently for over twenty years and is forecast to increase by another third by 2024. Continued pressure on public finances means the industry must maximise the capacity and capability of the existing network and deliver high value where there is investment.

Rail needs to provide value for money, offering the optimal balance between customer needs and investment. This will be key to ensuring rail remains affordable to government funders and customers, while also coping with increases in demand.

We are determined to address the challenge of increasing capacity, to play as full a role as possible in reducing carbon from the transport sector and relieving congestion. This will involve more and longer services, expanding the network (including new lines), and dealing with the more complex pinch points.

Many of rail’s challenges can only be addressed through the development of novel technologies, practices and processes. These solutions must both deliver what is needed today and be viable over the longer term when social, economic, and climatic conditions may be quite different.

On this last point, the need for assets to be more resilient to extreme weather has been starkly demonstrated in recent years. This is only likely to increase. Route-based resilience plans are being implemented, which is a good start. But we need to ensure the railway is building climate change adaptation into all investment decisions, asset management plans, and operational planning.
Being transparent

Promote a culture of open and accountable decision making; and measure, monitor, and report publicly on our progress toward sustainability.

We recognise the need to involve stakeholders in the development of future strategy. We aim to improve this by embedding a culture where dialogue with government, customers, neighbours and those who have an involvement in rail. We will put their needs at the centre of decision making and follow this up by being open about decisions, performance, and progress.

Many rail companies report publicly on their corporate responsibility and environmental performance. Yet greater clarity is needed on performance and ticketing to meet the expectations of stakeholders and customers. More sharing of data and information within the industry, and with the supply chain, will also be critical to achieving best value solutions for the whole network.