Adapting the UK's transport system to the impacts of climate change

A response to the Department of Transport Consultation

The Chartered Institute of Logistics and Transport

May 2024

Area 1: Culture

Q11: Overall, will the actions in 'Culture: Embedding climate risk' make organisations responsible for transport infrastructure more or less likely to report on climate risks?

We would agree that the actions as described would improve the situation, but we feel that they do not go far enough.

A good example of behavioural change and embedding the need for reducing energy use and carbon emissions was the DfT's Freight Best Programme that started from small beginnings as part of the Energy Savings Trust with only a 4% industry awareness in 2006 to around 46% having made significant changes in their transport businesses by 2011. This 5 year transition involved collaboration, sharing of good ideas and case studies and showing what "best practice" looks like. A similar programme of climate adaption is required so that its inclusion as "business as usual" becomes the norm.

Q12: In your view, what more, if anything, could government do to further encourage reporting on climate risks?

We would suggest that the following should be introduced as voluntary best practices from 2024, and a mandatory requirement from 2027 for all TIOs of a significant size, with the regulators in each sector responsible for enforcement:

- Accreditation to ISO14090
- Appointment of a named individual at board level with responsibility for climate adaptation and management of climate risk
- Reporting of financial cost of all climate related damages incurred in the previous 5-year period, and of projected financial impacts of climate related damages in the following 5 year period
- Production of an adaptation plan and resilience plan

Area 2: Economics

Q13: Overall, will the commitments in 'Providing the tools required' support organisations responsible for transport infrastructure in taking adaptation action?

These commitments will help, but additional support would improve outcomes. In the same way that Energy Saving Trust provide fleet reviews, for example, it would speed up and improve adoption of these measures if a similar body, e.g. Carbon Trust, were contracted to provide advisory services as required.

Q14: Overall, will the research commitments in 'Building the evidence base' support organisations responsible for transport infrastructure to make evidence-based investment decisions on climate adaptation?

In general, providing £10 million to launch a research hub, and a further £15 million for a programme of R&D, sounds like a good start. If the hub was already launched in 2023, and given the urgency of the timelines elsewhere in this document, 2025 seems a little unambitious for identifying where to spend that R&D money – at least some work should be launched in 2024.

We also suggest that greater emphasis should be placed on identifying best practices internationally. There is a tendency to wish to replicate the full research cycle of feasibility studies, trials, demonstrations etc. for things that have already been proven elsewhere in the world. Railways in India and the far East have always been built with monsoon rains in mind, for example – we should not need years of research to implement their knowledge in the UK.

Q15: Overall, will the actions in 'Incentivise action' support organisations responsible for transport infrastructure to embed adaptation into projects, policy and/or schemes?

Getting the needs of climate adaptation adopted within planning guidance is absolutely imperative in addressing this challenge. Simply stating within this strategy that by 2024 the DfT will 'insert consideration of adaptation into relevant planning documents' seems both unfeasibly optimistic and woefully lacking in detail. We assume that within this strategy this statement is actually only referring to planning documents within the transport sector, but we would contend that it is doubly important to have climate adaptation, with specific reference to transport infrastructure, embedded fully within the guidance on land use planning and development more generally. Addressing this challenge while development is still being permitted on floodplains, and developers are still free to cover large areas with impermeable surfaces without consideration of climate resilience, will be impossible.

Q16: Overall, will the commitments in 'Measuring progress' help organisations responsible for transport infrastructure in measuring progress on adaptation?

Again, requiring collation of data by 2027, and to 'progress the development' of indicators by 2028 seems out of step with the ambition of other parts of this strategy. These tasks enable much of the rest of the actions proposed, and so we would expect both to be well progressed by the end of 2025.

Area 3: Regulation

Q17: Overall, do you support or oppose the actions in the strategy aimed at standardising the approach to climate adaptation?

We support the actions, but feel that as currently stated they are not assertive enough to achieve action in the timescales inherently stated in the rest of the document. To 'explore the role' of standards, or 'consider the need' for remits, by 2027, is not sufficiently urgent or defined.

We further agree that in this area consistency across the sector is of great importance, given the need for working between modes, and between transport and other parts of the economy.

Q18: What role, if any, would you like government to take in setting climate adaptation standards, including why?

In terms of standards, we feel the government should simply adopt ISO14090 as its de facto standard. While we recognize that it is often preferable to review and adapt such standards to a local context, in this instance the need is too urgent for that approach. The ISO organisation, of which the British Standards Institute is a member, are experienced at recruiting panels of experts from around the world, and take great pains to draft, review and refine the standards they produce, and the I4000 series of standards relating to environment and climate have been an international benchmark for decades.

We would propose adoption of the standard as voluntary best practice from 2024, with mandatory introduction from 2027. If any aspects of the standard are found to be particularly problematic over the coming three years, specific exemptions can be made, while also adding additional requirements if they seem necessary. This approach will be far more streamlined and cost effective than if DfT were to start from scratch, and likely to produce a better result, which will also have the benefit of being in alignment with international best practices.

Q19: Do you support or oppose a review of transport regulators' remits regarding climate adaptation?

We would support such a review. Furthermore we would suggest that the following should be introduced as voluntary best practices from 2024, and a mandatory requirement from 2027 for all TIOs of a significant size, with the regulators in each sector responsible for enforcement:

- Accreditation to ISO14090
- Appointment of a named individual at board level with responsibility for climate adaptation and management of climate risk
- Reporting of climate related damages incurred in the previous 5-year period, and of projected climate related damages in the following 5 year period
- Production of an adaptation plan and resilience plan

All of the above are consistent with the approach to embedding climate risk in organisational culture, as covered in earlier questions.

Area 4: Collaboration

Q20: Overall, will the actions in 'Working in partnership' support organisations responsible for transport infrastructure to expand their capability on climate adaptation?

This part of the strategy is insufficiently detailed. It is positive that there are already some cross sector forums active within the transport sector, those mentioned being the IOAF, Transport Research Innovation Board and the UK Roads Leadership Group, as well as a number of international forums. However, there are two major limitations to the proposal as it stands:

1. In the list of actions no mention is made of collaboration between the transport sector and other sectors (although the Operators' Adaptation Forum is mentioned in the document body). Adaptation to increased rainfall and flooding, in particular, will require action within the planning system and with the agriculture sector (and others) to stop building on floodplains, increase wetlands, maximise the use of porous surfaces in new developments and increase their use in existing infrastructure. TIOs can play their part in this, as they are directly responsible for surfaces and drainage on their own estate, but if this challenge is to be addressed there needs to be a concerted effort across government departments to fundamentally change the thinking around land use and drainage throughout the country.

2. TIOs are expected to map interdependencies and provide training to staff by 2028. This seems out of step with the greater urgency of the timelines proposed in the rest of this strategy, and no detail is given on how they will be compelled/incentivised to do this, or how they will be supported.

One thing we would suggest is that the board level representatives on climate adaptation from all TIOs should be encouraged to meet on an annual basis. Furthermore we feel that past experience of the level of collaboration fostered by forums of this type suggests that there will only be genuine engagement by the TIOs if they can see a clear benefit to it. To this end, we would suggest that the DfT should explore ways to tie funding for adaptation measures to the requirement to gather data on their implementation and effectiveness and to sharing that information through these collaborative bodies.

Another suggestion is that the roll-out of climate adaptation could be done in collaboration with STBs (Sub-national Transport Bodies) as they are already setting up forums to discuss transport, environment and resilience issues. Here are a couple of examples.

STB (Sub-national Transport Bodies) EXAMPLES

The impacts of climate change are likely to manifest themselves in different ways across the regions and countries that make up the UK. The DfT is increasingly devolving power to the regions and has established its Sub-national Transport Bodies. One of their main aims is to set up collaborative groups across a range of stakeholders and this importantly includes different representatives from Local Authorities across planning, environment, economics and transport. Here are two examples of climate adaption in discussion and practice.

The South West is very reliant on a small number of roads and railways which can be subject to floods and bad weather.

Western Gateway and Peninsula Transport STBs have collaborated in the production of a South West Freight Strategy which covers the period to 2050. In that, there are two initiatives that directly relate to the need for better planning for alternative routes to provide resilience in transport networks;

RD11 Promoting suitable alternative routes in the event of adverse weather. – National Highways

RL9 Allocate sufficient freight train paths on the main line and diversionary routes. - Network Rail

Network Rail Freight Managers say that a perceived lack of freight paths on certain routes should not dissuade companies from looking for a suitable train path. But it is recognised that the situation of Plymouth and Cornwall being cut off from the national rail network when the rail track at Dawlish was washed away is unacceptable. Apart from the well-received repairs at Dawlish there needs to be an inland alternative route logically via the recently reopened Okehampton route. Although there are some missing links of a through route still to be considered for reopening.

In May 2024 the STB covering the area between Gloucestershire and Dorset launched its Strategic Plan for the period from 2024 to 2050. Strategic Transport Plan - Western gateway (westerngatewaystb.org.uk)

In the document it discussed the challenges facing Western Gateway in relation to National Aims and emerging Key Themes. In the section where they discuss “improving transport for the user” there is reference to climate change adaptation and locations as follows;

“Climate change adaptation and network resilience: Vulnerability of the road and rail networks to future weather events, including in the upper Severn area (fluvial flooding), Somerset Levels (coastal/fluvial flooding), Salisbury environs (groundwater flooding), along the South Coast at Poole and Weymouth (tidal flooding), Swindon-Bristol Parkway (pluvial flooding) and crossings of the Severn (wind, pluvial flooding).”

Q21: Overall, will the actions in the strategy help organisations, understanding of interdependencies across different infrastructure?

Not sufficiently to address the challenge, see previous answer.

A good example of successful cross-collaboration related to the transport sector is “Operation Mermaid” it’s a series of multi-agency nationwide initiatives to tackle dangerous vehicles which involves the Police Service, VOSA, H.M Customs and Excise, the Benefits Agency, Immigration Service and the Environment Agency. It mostly targets large goods vehicles and other commercial vehicles. A total of 964 vehicles were stopped across 30 forces during the operation in February to clamp down on illegal or unsafe goods vehicles. In total they found that 413 vehicles (43 per cent) that were stopped were found to have offences ranging from vehicle defects to drivers exceeding their hours. https://policeprofessional.com/news/operation-mermaid-continues/

The message here is that as long as the different agencies including DfT, DEFRA, the Environment Agency and the private sector understand the importance of action, buy-in to the

objectives, allocate sufficient resources in terms of time and money and develop a joint action plan then the outcomes are likely to be successful.

Overall comments:

Q22: What, if any, further comments do you have on the transport adaptation strategy?

Timeline and urgency:

Throughout this document the question of urgency looms large. Many of the actions are proposed to be completed in 2024, which seems extremely optimistic given that it will be half way through 2024 before this consultation exercise is completed (not to mention that there may be a change of government in the interim). It would be easy to criticise these target dates as unrealistic, and yet if they were less ambitious they would undoubtedly be criticised for not being ambitious enough. It is clear that extreme weather events are already playing havoc with the UK's transport infrastructure, and this document should have been produced 10 years ago. However, the UK is not alone in finding itself in this position.

In seeking to embed a significant cultural shift into an entire sector of the economy, a staged approach would usually be prudent. First introducing the requirement for strategies, named representatives, reporting etc. on a voluntary basis, learning from the experience of the first movers, sharing best practices and only later making these things mandatory to bring the laggards up to scratch – this approach gives time for learning and minimises disruption.

However, given the frankly catastrophic costs that extreme weather is already imposing on UK Plc, we feel a more assertive approach is necessary and justified for this issue. We recognise that making the cataloguing and reporting of climate risks, and the preparation of action plans, mandatory immediately is unworkable, as the institutional knowledge simply does not exist. We have therefore suggested in our response that ISO14090 (and/or other existing schemes/standards) should be adopted as voluntary best practice immediately, but backed up by also indicating immediately that this will become mandatory in 2027.

Need for a more consistent approach between that of local Highway Authorities (HAs) and national TIOs (e.g. National Highways & their Regulators (ORR))

Whilst many local HAs have already defined a 'Resilient Network' that provides alternative routes between different parts of their area if a particular route is subject to flooding or other incidents. , often these do not benefit from the use of a comprehensive network of VMS signs similar to those on National Highways (NH) network, which could constrain a local HA's ability to report effectively on the impact of flooding or other incidents where climate change is a contributory factor.

Whilst many larger freight and logistics operations are clustered close to NH's Strategic Road Network, in other areas of the country freight and logistics hubs are located close to the Major Road Network (MRN). Sub-national Transport Bodies (STBs) could also have a role to play in the Climate Change adaptation process, for two reasons, as they have a key role to play in:

a) prioritising funding towards improvements of the MRN network, and;

b) since the 'Decarbonising Transport' was published in July 2021, the DfT have been working closely with STBs to develop a tool that can be used to undertake a Quantified Carbon Reduction assessment.

This process is not starting from scratch:

Although concerted action on climate adaptation per se is now somewhat overdue, both private companies and public bodies do already have emergency planning in place. This needs to recognised, and where possible the DfT should seek to build on the work that organisations are already doing in this regard – while at the same time making sure that the steadily escalating nature of climate risks is factored in. The following examples illustrate this point.

BOCM Pauls

Some parts of the private sector have “emergency” plans in place and have periodic meetings where key personnel within the business are brought together to not only review emergency plans but also see if there are new challenges emerging that need addressing. The main motivation for this is to avoid serious shocks to the business even if one of the emergencies occurs. Many organisations plan for loss of a building, perhaps due to a fire or other occurrence. But there is an increasing list of items including weather related situations that need factoring into risk assessments. In 1998 BOCM Pauls, the market leader in animal feed at the time, developed an emergency plan which was informed from workshop discussions which included gathering representatives from manufacturing, transport, sales, environment and communications. The plan proved very useful and was deployed twice in the following three years for the River Ouse floods in Selby, Yorkshire in 2000 and the Foot and Mouth disease in 2001. In the case of the flood, water levels were greater than the 1% estimate (the "hundred year" flood risk). Unfortunately the number of instances of flooding is growing. The flood closed the companies biggest production plant for many days and manufacturing and transport staff had to be redeployed to other factories across the country for several weeks. Having an emergency or disaster plan was valuable to the company in terms of mobilising actions and despite much disruption high levels of customer service were maintained. The Environment Agency has implemented major plans to avoid the worst of flooding in the future. This example was before Climate Change Adaptation became a business priority but this form of emergency planning needs to be done by most businesses.

Network Rail

Network Rail is divided into five regions and fourteen routes, and has a well-established Adaptation Plan. They produce local level weather resilience and climate change adaptation plans that explain their understanding of how weather and climate change can affect their infrastructure at a more targeted, local level. Their Regions have developed Weather Resilience and Climate Change Adaptation (WRCCA) Plans for the next five years (2024–2029, Control Period 7, CP7). These identify the risks to assets and outline how they are understanding the issues. They will use them to make informed decisions on actions and investment to improve resilience during CP7, and longer term. They have developed CP7 plans to support the delivery of their two funders’ and stakeholders’ key priorities. They therefore include interventions that mean they can minimise and adapt to the impact of extreme weather and climate change, and put in place schemes that make their business more sustainable. Network Rail plans broadly align with DfT’s strategy and their wider work on climate change adaptation to deliver key actions.