Intelligent Transport Systems UK
Submission to the Strategic Road Investment inquiry

1. **About Intelligent Transport Systems UK**

1.1 Intelligent Transport Systems UK (ITS UK) is the national membership association for transport technology. ITS UK is the voice of the transport technology industry; we provide a national platform to support the roll out of technology for a cleaner, safer and more effective transport network, both at home and abroad.

1.2 ITS UK has 150+ members, from both the private and public sector, and covering all sizes and disciplines, with members working in areas like Mobility as a Service (MaaS), traffic management and enforcement, integrated transport, connected and autonomous vehicles, public transport services, smart ticketing and much more. More information on ITS UK and the intelligent transport sector can be found at www.its-uk.org.uk

1.3 We believe that intelligent transport has a vital role to play in supporting the UK Government's ambitions:
   - **Economic growth:** The sector is conservatively valued at £1.5bn and generates £15bn a year for the UK economy. It is an important export, with UK businesses integral in the roll out of intelligent transport overseas, and there is potential for the UK to develop a competitive advantage in the sector in the future, with the global market expected to be worth £900bn by 2025. The industry also supports highly skilled jobs and training opportunities.
   - **Decarbonisation:** The intelligent transport sector is vital in incentivising the travelling public to low carbon forms of transport and decarbonising the road, rail and wider transport network. The sector is ready to support Government in reaching Net Zero by 2050.
   - **Supporting Zero Harm:** Intelligent transport systems can help reduce road deaths, such as by helping local and national transport authorities, through data, to identify potentially hazardous junctions. Similarly, the implementation of new operational and enforcement technology can help ensure we continue to make our roads safer for all who use them.
   - **Increasing capacity & cost efficiency:** Intelligent transport has a key role in optimising the usage of our transport network, by making best use of current infrastructure assets, incentivising behaviour change and through the predictive maintenance of infrastructure, to name a few. Ultimately, this ensures the best possible usage of our limited road and rail network and can provide cost effective increases in capacity.

1.4 This submission to the Transport Select Committee's inquiry on Strategic Road Investment comments on key issues of pertinence to the transport technology sector. We have not sought to answer all aspects of the Committee's brief.

2. **Whether the Government's roads investment programme aligns with other policy priorities, such as decarbonisation, levelling up, productivity and growth.**

2.1 ITS UK believe the Government's road investment programme can play an important role in delivering its objectives on economic growth, decarbonisation and productivity.

2.2 The road programme supports around 65,000 jobs in the supply chain, including in the technology sector and every £1 of investment in the strategic road network returns over £2 to the economy. Greater connectivity across the country also has a clear benefit to productivity by bringing people and businesses closer together. The transport network covers all parts of the

country, so investment can also act as a catalyst for achieving the Government's levelling up priorities.

2.3 In particular, intelligent transport systems investment supports a growing sector with high quality jobs and training opportunities within it, including apprenticeships and entry routes for young people. Investment in transport technology can also reduce the need for major infrastructure interventions, thereby reducing costs and impact to those who use the road network or live nearby it. ITS solutions can be rolled out quickly and cost-effectively too.

2.4 On decarbonisation, ITS UK supports National Highway's Net Zero Plan to reduce Scope 1, 2 and 3 emissions by a minimum of 4.2% each year (from 2020). The next Road Investment Strategy (RIS3) should continue to support the roll out of electric vehicle charging points at motorway service stations and the decarbonisation of the maintenance and construction fleet. Technology has a role to play in supporting the decarbonisation of the road network, for example, through the use of data to journey plan, road users can avoid areas of congestion, thereby making best use of the network and reducing fuel use.

2.5 Measures are also being taken to look at reducing the impact of operational technology on the environment, such as by ensuring technology is used to its maximum life and then reused or recycled. National Highways Operational Technology Strategy includes plans for how the sector can build in circular economy thinking into operational assets.

3. How RIS3 should take account of technological developments, and evidence on ways of increasing capacity on the Strategic Road Network (such as smart motorways and potential alternatives to them).

3.1 Smart motorways provide safety, carbon and efficiency benefits, but their roll out has not been delivered effectively. National Highways need to continue to deliver Stop Vehicle Detection as well as other technology solutions, such as CCTV, to ensure smart motorways provide maximum safety benefits.

3.2 The moratorium on smart motorway roll out should provide the opportunity to generate more public awareness about the safety benefits and to increase understanding around their use. A national effort, from Government and transport authorities, is required to ensure motorists know how smart motorways work and what processes are in place should they break down.

3.3 There are a number of other technologies that could help increase capacity on the strategic road network. The UK should consider implementing a national 'pay as you drive' policy focused on calculating charges by use. This will reduce congestion, improve air quality and reduce noise pollution, as well as provide better public health. It will also offer a more holistic approach to filling the £35 billion gap left by the take up of electric vehicles, rather than the piecemeal plan to extend Vehicle Excise Duty.

3.4 Research has shown that 'pay as you drive' polices are becoming more popular amongst the public, with polling by the Campaign for Better Transport showing that 60% of people believe vehicle taxation needs reforming with only 6% disagreeing. 69% would be more supportive of pay as you drive if public transport was made more affordable and better connected.

3.5 The greater use of data is a key way of supporting transport authorities to improve capacity on the road network. Our road system is increasingly producing more data than ever before, as

more connected vehicles are introduced. Connected vehicles allow the opportunity for every public vehicle to be a sensor platform offering the opportunity for services that improve safety, reduce congestion and decrease carbon emissions. This data could also be used to monitor, evaluate and improve transport schemes, but requires the skills and resources to support these systems. However, this data is often siloed, limiting its potential usage.

3.6 The emergency SOS eCall system, which has been installed in all vehicles post-2018, is a clear example. Currently the data is not shared with transport authorities, yet it could provide valuable analytics that support the safety of road users by helping identify potentially dangerous locations on the network.

3.7 ITS UK supports National Highways' Digital Roads Strategy which will utilise technology to deliver improvements around construction, operations and customer improvements. The growing digitalisation of the road network will see a transition towards an instantaneous view of the network. Digital exhaust data provided by vehicles, for example, can now be used to understand and optimise the use of infrastructure. For instance, vehicle video cameras can now be processed anonymously to identify potholes, litter, lighting infrastructure etc., replacing manually and carbon intensive tasks with more carbon efficient methods.

3.8 There are opportunities to develop digital twin models from this data, supporting the use of predicative maintenance and more effective use of assets. These tools also provide real world applications of AI in public services, accelerating this industry and generating export opportunities.

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