Law Commission Consultation: Automated Vehicles: passenger services and public transport January 2020

Introduction

The Met Office is the UK's National Meteorological Service, a Public Sector Research Establishment and an Executive Agency of the Department for Business, Energy and Industrial Strategy. We are responsible for monitoring and forecasting the weather and conducting scientific research to support, develop and improve these capabilities. In addition, we host the Met Office Hadley Centre for Climate Science and Services, which delivers policy relevant climate science and advice.

The Met Office's interest in the second consultation is focussed on the importance of considering the potential for severe weather to interfere with Highly Automated Road Passenger Services' (HARPS) sensors.

Chapter 3: Operator licensing – a single national system

Consultation Question 2

Do you agree that there should be a national scheme of basic safety standards for operating a HARPS?

We agree that there should be a national scheme of basic safety standards for operating HARPS. HARPS, by definition, will not have a user in charge. There may or may not be access to a remote 'supervisor', as highlighted by the Law Commission, it is too early to tell how this may operate.

As such, it becomes ever more critical to mitigate for weather and environmental conditions for safety considerations and for efficiency reasons (such as traffic flow), which ought to be implicit in any national safety scheme.

Referring to parts of our submission to the first consultation:

The sensors which autonomous vehicles rely on for their operation may suffer either degraded performance or misleading output when operating in certain weather conditions. Current vehicle regulations mean that all elements of roadworthy vehicles are type approved to operate within a range of environmental conditions (e.g. temperature). We would, therefore, support a mechanism which either mandates (by the appropriate authority) the systems required or sets out a minimum list of weather conditions a sensor or feature is able to operate in. As autonomous road vehicles will have multiple sensors, we believe it will be necessary to define any weather-related Operational Design Domain in terms of the suite of sensors, not any individual one.

We think both fleet operators and network operators should maintain regulated and approved mechanisms to ensure the Operational Design Domain (on the basis of weather) is defined and not exceeded. In addition, this mechanism must be dynamic to reflect swiftly changing weather patterns as well as forecasting timeframes covering the potential duration of a journey.