



OFFICE OF THE BIOMETRICS  
AND SURVEILLANCE  
CAMERA COMMISSIONER

The Rt. Hon. Mark Harper, MP  
Secretary of State for Transport

**Copied to:** The Rt. Hon. Chris Philp, MP  
Minister for Crime, Policing and Fire  
John Edwards, Information Commissioner  
[by email]

5 October 2023

Dear Secretary of State

### **Enduring Risks to Automatic Number Plate Recognition System**

As I leave my position as Biometrics and Surveillance Camera Commissioner at the end of this month I wanted to ensure that you are aware of the significant and enduring risks arising from the country's Automatic Number Plate Recognition (ANPR) system. My predecessor and others had raised some of these risks before my appointment and I have seen no discernible mitigation of them over the course of my term. On the contrary, there is good reason to believe that the risks have become more acute.

In my last annual report, published in February 2023, I highlighted that ANPR is now so vast and vital that the absence of its own regulatory and governance framework itself represents a significant risk. My predecessor noted that the use of this surveillance technology has resulted in the creation of the largest non-military database in the UK, with approximately 15,400 traffic lanes being covered by cameras which submit between 75 and 80 million reads daily on a regular basis, and occasionally over 80 million. While these have shown only a slight increase in the past 3 months, it is conceivable that the current trajectory since my predecessor reported on this in 2019, will reach 100m reads each day by the end of 2024.

As I suggest in my annual report, ANPR is part of the critical national policing infrastructure and its governance arrangements ought to reflect that. In addition, the effective implementation of traffic management schemes such as Ultra Low Emission Zones (ULEZ) is dependent upon a reliable and comprehensive ANPR camera network and members of the ANPR Independent Advisory Group (IAG), which I chair, have repeatedly expressed concerns at the creeping extension of ANPR functions into non-policing areas.

At the same time, for all its technological advancement and operational indispensability, the ANPR system still relies ultimately on a piece of plastic affixed to either end of a vehicle. Served by a wholly unregulated market, what my predecessor termed the humble number plate represents a single and readily assailable point of failure with the ANPR network being easily defeated by the manufacture and sale of stealth plates, cloned registration marks and other rudimentary obscurant tactics. The result is that the ability to frustrate the ANPR system remains staggeringly simple at a time when proper reliance on it for key public services such as policing, law enforcement and traffic management is increasing daily.

Evidence that criminals disguise vehicles with cloned number plates copied from *bon fide* registrations in order to avoid detection has been available for almost as long as ANPR has existed but emission zones and other strategic traffic enforcement schemes put motorists in situations where they have to make significant financial choices and it is at least arguable that the incentives for some to 'game' the

ANPR systems have never been greater. To be clear: I am not commenting here on policy, rather I am pointing out that the well-documented risks to, and shortcomings of a critical policing tool need some urgent attention in light of emerging trends. Merely by applying reflective tape to distort part of a registration plate or purchasing stealth plates from online vendors, motorists can confuse and confound current number plate recognition technology and both of these are easily obtainable. One recent estimate suggested that one in fifteen drivers may already be using anti-ANPR technology; it is reasonable to expect this conduct to increase as the reliance on ANPR for new traffic management schemes continues.

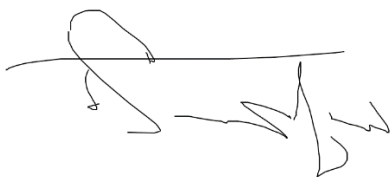
Like my predecessor before me, I am also concerned about the number of inaccurate data reads being produced by ANPR systems. Even at an accuracy rate of 97% the number of ANPR misreads produced at current levels still means up to 2.4 million inaccurate reads per day. Such processing of inaccurate data by public authorities and those operating in the private sector using DVLA records brings significant risks of penalty notices being wrongly issued to innocent motorists as well as potentially breaching data protection laws and I have copied this letter to the Information Commissioner for his consideration.

Taken together, these risks to ANPR threaten not only the efficacy of local policing and traffic enforcement initiatives but the integrity of a national system which has been so successful in supporting policing and law enforcement for decades. With drivers in the UK able to monitor their own vehicles outside their homes using live feed images between their phone and doorbell from anywhere on the planet, expecting the police and local authorities to rely on the number plate for critical functions such as traffic management and national security is no longer a quaint anachronism; it is increasingly looking like a strategic risk in itself.

I have been energetic in supporting the police and government to explore ways for harnessing new surveillance technology to identify individuals while assuaging public concern at the accuracy of cameras and algorithms. It seems counterintuitive at the same time to rely on the crudest form of unreliable visual identifiers to regulate the use of registered vehicles on our roads.

The government's Surveillance Camera Code of Practice is the sole legal instrument directly governing ANPR camera systems and it will be abolished by the Data Protection and Digital Information (No.2) Bills (subject to the will of Parliament) after which time there will be no individual or organisation with direct responsibility for overseeing or reporting on their operation. I would therefore urge you to give consideration to modernising the way in which vehicle registration, roads surveillance and ANPR systems are regulated generally and to addressing the enduring risks to the ANPR system in particular.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Fraser Sampson', written over a horizontal line.

**Professor Fraser Sampson**  
**Biometrics and Surveillance Camera Commissioner**