**Jack Urquhart Memorial Lecture 2025**

**Dr Brian Plastow, Scottish Biometrics Commissioner**

**21 May 2025**

Good afternoon. I am Brian Plastow and for the last 4 years I have been the Scottish Biometrics Commissioner which in simple terms means that I exercise independent oversight on behalf of the Scottish Parliament of how Police Scotland, the Scottish Police Authority (SPA) and the Police Investigations and Review Commissioner (PIRC) use biometrics like DNA, fingerprints, images, and recordings.

It is a tremendous honour and privilege to be invited to speak at the ASPS Conference this year, and even more of an honour to give the Jack Urquhart QPM memorial lecture.

As some of you will know, I am a retired police officer and former ASPS member myself. At the risk of giving my age away, I first joined the police as a Cadet in Edinburgh in 1978 and I retired 35 years later in 2013. I then worked for HM Chief Inspector of Constabulary in Scotland for 3 years and amongst other things subsequently assisted Lord Scott on the Independent Advisory Group on Biometric Data.

When I first entered the world of policing 47 years ago in 1978, the word ‘biometrics’ was not used in everyday policing language, and I am not even sure it is now. In these days we photographed prisoners with a Kodak camera with a spool and reel, and we took fingerprints from prisoners by rolling black ink onto a brass plate then applying ink covered fingerprints to a paper form.

Of course, in 1978, nobody in policing had heard of DNA, and mobile phones – the internet – and email did not exist. So isn’t it remarkable how the world (and consequently the world of policing) has completely changed in less than 50 years.

Unfortunately, I never met Jack Urquhart personally, but I first learned about him by reputation in the late 1990’s and I am therefore delighted to address the Conference today in memory of the great man himself, and this afternoon I am going to be speaking about **‘Policing and Biometrics in an AI-Driven World.’**

As part of that, I am going to explain why the Parliament created my role and I am also going to talk about something called **‘The 3 Laws of Biometrics’** which is an international model for implementing biometrics properly. I will also reflect on where we are now and speak about the Scottish Code of Practice. Then finally I want to talk about international biometric exchanges for law enforcement purposes and to offer a view on where the police use of biometrics in an AI-Driven world needs to go in the next 5 years.

But before discussing biometric data in a policing context, it is important to note that what constitutes ‘biometric data’ can have different meanings in different UK legislation.

For example, in England and Wales the Protection of Freedoms Act 2012 and therefore the oversight of the England and Wales Commissioner extends only to DNA profiles and fingerprints taken by the police and not images. UK data protection law by contrast covers biometric and genetic data of living people, but not the source materials like a DNA mouth swab, or any data relating to deceased persons.

In Scotland, the Scottish Biometrics Commissioner Act 2020 introduced a more expansive legal definition relating to police use which as you can see covers DNA, fingerprints, images and recordings, other forms of biometrics and importantly the source samples from which information can be derived. For example, a DNA mouth swab.

So why did the Scottish Parliament legislate for a commissioner?

In many ways, the roots of the decision to deliver independent oversight can be traced all the way back to 1997 and the Shirley McKie fingerprint scandal.

Colleagues will remember that Shirley was a DC who was arrested, strip-searched, and ultimately sacked by Strathclyde Police acting on incorrect scientific opinion from four fingerprint ‘experts’ who certified that her thumb print had been recovered at a murder scene.

Such was the controversy over several years, that a member of the Scottish Parliament ultimately intervened and asked fingerprint experts from around the world to review the evidence. That resulted in 171 certifications from experts in eighteen countries which proved that the thumbprint recovered at the crime scene was not Shirleys. The result was a major credibility blow that undermined public confidence and trust in both forensic science in Scotland, and in the initial police investigation.

Then over the following years, reports by Professor Jim Fraser in 2008, HMICS in 2015 and by now Lord Scott in 2018 identified the need for independent oversight and recommended the appointment of a Biometrics Commissioner.

Then towards the end of the last Parliament, the former Justice Sub Committee on policing were critical of the way in which Police Scotland had introduced cyber kiosks and on the policing strategy 2016 to 2026 which signalled the future intended use of Live Facial Recognition. In fact, in 2020 the Scottish Parliament concluded that LFR would be ‘incompatible with the policing principles for Scotland’.

All these things led to the Parliament passing the SBC Act in 2020.

As you can see from this slide, my function is to **support and promote** **lawful, effective, and ethical** practices. The five important words being support and promote, and lawful, effective, and ethical.

The Act is intended to be complimentary to reserved legislation in this space and one of my functions is to maintain a statutory Code of Practice back by compliance mechanisms and to provide a complaints route for data subjects relative to the Code.

On 16 November 2022, the Scottish Parliament approved my statutory Code of Practice at which point Scotland became the first country in the world to have a legally binding code guiding how policing bodies can use biometric data under domestic criminal procedure law. The Code itself is backed by legal powers to require information or issue a compliance notice as well as powers of investigation in relation to complaints. If a compliance is not acted upon (without reasonable excuse) there are procedural arrangements to report the matter to the Court of Session.

The Code is a principles-based framework but also contains specific guidance to policing bodies and it has all the words you would expect to find when balancing the needs of policing in terms of keeping people safe with other legal obligations such as upholding human rights and equalities legislation.

Since the Code took effect in November 2022, there have been no breaches of the Code, and we have also conducted two rounds of formal compliance assessments finding Police Scotland/SPA/PIRC fully compliant in 2024 and 2025.

And in my annual report to Parliament each year, and in my evidence sessions with the Criminal Justice Committee I provide assurance to Parliament that biometrics are being used appropriately in Scotland, albeit sometimes making recommendations for improvement.

During my four years as Commissioner there have been no significant controversies in Scotland relevant to the police use of biometric data or technologies, and although I am completely independent of Scottish Government, the next slide shows what the Cabinet Secretary has said about the Code and about how it helps strengthen public accountability.

So, I would suggest that Scotland is in a good place just now when it comes to the police use of biometric data, and we have come a long way since the fingerprint scandal years before the establishment of Police Scotland.

However, as we know the world of technology keeps revolving and at this moment in time we are literally on the cusp of the **second industrial AI-Driven revolution** that will transform both society and policing in the years ahead.

For example, in less than 5 years, passports and boarding passes will almost certainly become obsolete in the developed world and passengers will be able to travel internationally through borders controlled entirely by their digital credentials and live facial recognition. Hard copy driving licences will also cease to exist and will be fully digitised and biometric enabled.

On a recent trip to Dulles airport in Washington DC, I was able to board a return flight to the UK without showing my passport or boarding pass because of the live facial recognition systems which compare your entry image with your exit image without you having to stop at a static camera point. So, this sort of AI-Driven biometric technology is already here and more is coming, and coming fast.

Therefore, the questions for policing are firstly how do we keep up to work smarter and not harder? And secondly, how do we implement new AI-Driven solutions to keep citizens safe and make policing more effective, but while maintaining trust and not getting the implementation and delivery wrong?

Well, that is where the **Code of Practice** can help. That is where **Police Scotland’s Rights based pathway** can help, and that is where **‘The three Laws of Biometrics’** can help.

The Three Laws of Biometrics is a conceptual framework for how to introduce biometric enabled technologies properly. The framework was developed by the Biometrics Institute, which is the largest global forum of biometric subject experts with the mission of supporting the responsible use of biometrics to develop public trust. Its membership incudes governments, regulators, technology companies, airlines, and policing bodies.

As you can see from the model it involves the three stages of **policy, process, and technology** but importantly policy always comes first, process always follows policy, and the technology always comes last.

Under this model, you must **never** buy or implement a technology until your policy and process tells you that it is safe to do so. Because if you do it the wrong way round and follow a technology first approach, as happened in Scotland with cyber kiosks, then you might risk losing public confidence and trust.

If I apply this model to the setting up of my own organisation 4 years ago then policy came first in the shape of a 4-year Strategic Plan and a Code of Practice.

Process then followed policy as we began conducting the activity set out in our strategic plan, thus turning policy in to practice.

In my function, we do not process any biometric data, but a good example of Police Scotland and the Scottish Police Authority following the 3 Laws of Biometrics (and technology coming last) is the national roll out of Body Worn Video where the funding came after policy and process, and another good example is the current national conversation on Live Facial Recognition to help Police Scotland develop policy on whether to proceed.

So, in terms of where we are now, my suggestion is that the new legislative framework in Scotland helps to support and promote the lawful, effective, and ethical use of biometrics.

At SBC, we have now laid three annual reports and five separate joint assurance reviews in Parliament showing how important biometrics are in police investigations and we have made a few minor but important recommendations for improvements. For example, ensuring that people who have their data taken after being arrested understand what that data will be used for via an information leaflet.

This has all been done in partnership with the Authority and Police Scotland, and last summer we co-hosted the first ever ‘Biometrics in Criminal Justice’ conference in Scotland where speakers included the Chief Constable, Chair of the Authority, and the Cabinet Secretary for Justice.

I now want to turn to the UK context and say something about biometric data volumes and exchanges:

Last year in the UK there were around seven million crimes recorded by the police. We know that biometrics play a significant role of fixing and verifying the identity of people who have been arrested which is around 90,000 episodes in Scotland each year, and that they also assist in matching people to, or eliminating them from, crime scenes.

Biometrics probably help to solve around 70,000 crimes in the UK each year and because mostly serious crimes are the subject of forensic activity, some of these will be the most serious types of crimes such as murders, rapes and child abuse. So, biometrics are a critical component of the overall policing approach to delivering public safety.

As you can see from this slide, UK policing holds around 7 million DNA profiles, 8 million fingerprint templates and well over 20 million facial image templates. All the national databases on which these are hosted run on non-generative AI solutions.

As part of the Trade and Cooperation Agreement post Brexit, UK policing still exchanges fingerprints and DNA on an ‘as required’ basis with all 27 EU member states with a population of 514 million citizens, and there are also appropriate exchanges with Interpol which has about 190 member countries.

The EU exchanges under the Prum Convention currently involve DNA and Fingerprints but in the next few years will be expanded to include facial images, which is why UK policing is in the process of seeking to establish a single custody database of good quality images in the same way as exists for DNA and fingerprints. All of this is essential to disrupting and detecting international criminality.

UK policy in relation to biometrics in the next 5 years is to deliver a single custody image database, to improve the AI used in retrospective facial search with a new ‘strategic facial matcher’ capability, more adoptions of live facial recognition – with a White Paper for England and Wales expected soon. To prepare for Prum 2 and image exchanges with the EU, and more inter-agency and international exchange agreements.

Another good example of multi-agency and international cooperation on biometrics is the UK Child Abuse Image Database (CAID) which identifies illegal content, identifies offenders, removes illegal content, and keeps children safe.

Therefore, the needs of UK law enforcement and by extension the needs of Police Scotland in the next 5 years include:

* Access to better retrospective facial search solutions.
* Considering live facial recognition (LFR) capabilities as a strategic response to issues like violence against women and girls which in my view is a national emergency. I know that LFR can be controversial, but thinking back over my 47 years working in criminal justice in Scotland, I also remember that DNA was as well when it first came in.

Also, if various retailers are already using facial biometrics at self-service checkouts in Scotland, why wouldn’t Police Scotland also want to use it to help identify criminals?

As part of my role, I want to make sure that Police Scotland has access to the technology that it needs, and that they are not denied access to the tools they need to keep us all safe in Scotland by London based civil liberties groups and privacy campaigners who are not accountable to the Parliament, Scottish Ministers or the people of Scotland.

* Mobile view and enrolment solutions – to view driving licences for specific policing purposes.
* AI enabled digital forensics for rapid triage.
* Rapid DNA solutions for specific circumstances such as disaster victim identification and/or deaths in building fires.
* Voice recognition capabilities in emergency call centres to identify repeat victims: again, useful as part of a strategic policing response to violence against women and girls.
* Non-generative AI for categorisation, weeding, transcribing, and redaction of data to free officer and staff time.

And that takes us nicely back to ‘The Three Laws of Biometrics’ and reminds us that in moving towards any of these biometric enabled technologies, policy must always come first, operational processes should always support that policy, and technology should always come last and be delivered in a way that is lawful, effective and ethical and in a way that promotes public confidence and trust.

So, thank you very much for listening. It is of course important that policing works smarter not harder, and in that regard it’s important to remember that there is no such thing as good or bad technology – rather it’s about how people choose to use it.

In my view, 99.9% of the time, policing in Scotland gets that right. So, I would just like to close by thanking ASPS members for the remarkable job that you and those who you lead do every day in keeping the people of Scotland safe. Policing is a noble cause, and we are lucky in Scotland (and the UK) to have policing systems designed with public consent that are envied around the world.

Policing in the public good has a long and proud tradition in Scotland and it is a legacy that I am sure that Jack Urquhart would still be proud of today.

Thank you.