



**ANNUAL
REVIEW**

23/24



**FORENSIC
SERVICES**
SEIRBHISEAN
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FOREWORD



Welcome to the SPA Forensic Services annual review for 2023-2024, a year in which we made significant progress towards transformational change. We have continued to deliver performance improvements with a focus on increasing both capacity and quality.

As part of the New Operating Model, a newly strengthened senior management team is now in place, with additional posts now recruited in key areas. The consultation with all 600 Forensic Services staff and stakeholders on the New Operating Model for Forensic Services was completed and finished by the end of the financial year – with changes to scenes ways of working, the establishment of a National Tasking Unit, the introduction of Capability Team Managers, and the appointment of Forensic Operations Leads. The budget for Forensic Services 2023-24 – approved by SPA members – allowed Forensic Services to move ahead with our plans to implement our New Operating Model and the investment in staff. We have also identified and are committed to delivering savings identified through our Forensic Services Efficiencies Plan – which will meet the gap between our original plans and the finalised budget.

UKAS confirmed the maintenance of Forensic Services accreditation to ISO 17025 – the 26th consecutive year of UKAS accreditation at Forensic Services.

At the end of the financial year, the number of open cases had been reduced to 5,850, with demand and output remaining broadly in balance for Groups 1-8 crimes. There remains continued high demand and output in relation to Group 7 (Road Traffic) crimes – which is driven mainly by Drug Driving casework. Demand in Drug Driving work in Forensic Services has increased by around 300% since 2018-2019 and this demand has been supported by continuous outsourcing to balance our capacity.

The HMICS Assurance Review of the Scottish Police Authority Forensic Toxicology Provision was published on 25th April 2023, and Forensic Services support in full the recommendations made and the review's call for a strategic, joint response to improve the delivery of drug-driving services in Scotland and the requirement for significant future investment in Forensic Services.

Forensic Services will continue to work closely with our partners to deliver the HMICS review's recommendations and ultimately make Scotland's roads safer from drug driving. The review acknowledged that Forensic Services staff are committed professionals making a positive contribution to public safety in a pressurised environment.

This year we agreed and published an updated Memorandum of Understanding (MOU) between the Scottish Police Authority and the Chief Constable of the Police Service of Scotland (Police Scotland) and the Crown Office and Procurator Fiscal Service (COPFS), which has been signed by all parties. This MoU outlines the arrangements for the provision of forensic services by the Authority to Service Users and is valid until further notice. It is an overarching document that sets out details of the processes operated by the Authority to provide forensic services, and is underpinned by guidance documents shared by all parties to the agreement.

We updated and published the Forensic Services Performance Framework following extensive discussions with members of the Forensic Services Committee and SPA Corporate colleagues. We will continue to report performance against this updated framework to the SPA Forensic Services Committee quarterly.

In September Forensic Services were given access to enable control of the Scottish Fingerprint records on the UK-wide Indent1 system – a change that had been in discussion for five years. Previously, Forensic Services had to request changes to be completed – which inevitably led to delays. This change allows Forensic Services to manage the weeding of fingerprint records in line with our legislation in Scotland.

Among the high-profile cases delivered during 2023-2024 were:

- **Connor Gibson, 20, was convicted of murdering his 16-year-old sister Amber Gibson on 26 July 2023 at the High Court in Glasgow. Another man, Stephen Corrigan, 45, was also found guilty of attempting to defeat the ends of justice and Breach of the Peace. These convictions followed extensive evidence led by Forensic Services scientists including marks found on the victim's clothes and analysis of DNA samples.**
- **Nicholas Rossi, an American suspected of faking his own death and hiding in Scotland, was extradited back to the United States of America at the end of December. Edinburgh Sheriff Court had heard that fingerprints matched those of Rossi after hearing evidence from a Forensic Services fingerprint expert.**

With the progress towards transformational change and our performance improvements, Forensic Services are in a strong position as we move into 2024-25.

Fiona Douglas
Director of Forensic Services SPA

A year in numbers

570

scientists and staff

21,800

cases dealt with in labs

15,209

CJ profiles added to DNA database

7,537

CJ profiles removed from DNA database

7,600

serious crime scenes attended

5,000

for crimes of dishonesty scenes attended

£5.9m

new lab opened in Govan

£45

million budget

26

years consecutive UKAS accredited



Justice Secretary opens new £5.9million laboratory

Cabinet Secretary for Justice and Home Affairs Angela Constance and then Drugs and Alcohol Policy Minister Elena Whitham officially opened our new state-of-the-art Post Mortem Toxicology Laboratory in Govan.

Named Moorepark Laboratory, after the area, this forensic laboratory will play a vital role in toxicology testing. The purpose built laboratory created by £5.9 million of Government funding carries out toxicology tests for a wide range of substances, including drugs and alcohol, when an unexplained death occurs.

Ms Constance said: “My sympathy goes out to everyone who has lost a loved one through drugs. While the prevention of such deaths is the top priority in our £250 million National Mission on Drugs, toxicology facilities such as Moorepark have a key role to play when, unfortunately, these tragedies do occur.

“Information gained from testing done at this new state-of-the-art facility helps to build our knowledge of drugs trends, including the emerging threat of synthetic opioids. With Rapid Action Drug Alerts and Response reports and other surveillance measures, we can also increase awareness of drug supply so services can be targeted at harm reduction.

“Post-mortem toxicologists also play a vital role in helping to detect crime and, very importantly, in providing answers in the sad circumstances where loved ones have passed away suddenly or unexpectedly.”

Fiona Douglas, Director of Forensic Services said: “This £5.9 million investment in the new Moorepark Laboratory and highly skilled scientists and staff secures the future of the Post Mortem Toxicology service in Scotland.

“Bringing post-mortem toxicology into Forensic Services allows us to enhance the drugs information we provide to support the work of the Drugs Harm Taskforce.”

(l-r) Drugs and Alcohol Policy Minister Elena Whitham, Cabinet Secretary for Justice and Home Affairs Angela Constance, Director of Forensic Services Fiona Douglas, Head of Post Mortem Toxicology Hazel Torrance

Fired up for training

A controlled fire with so many benefits. That is what took place at the successful launch of two test burns at the Scottish Fire and Rescue Service Training site, Portlethen.

Key project partners were all in attendance to witness this occasion, including Forensic Services, Scottish Fire and Rescue Service, Leverhulme Research Centre for Forensic Science, Police Scotland, Danish Police, and independent fire investigation body Hawkins.

This innovative facility allows Forensic Services to work with live test burns and use the latest technology to improve the high-quality fire investigations we deliver as part of our commitment to scientific excellence.

The facility is the result of an ongoing collaboration between partners, allowing for realistic training to be carried out for staff on scenes with known outcomes in terms of point of origin, cause, and fire development on a regular basis, thus enabling Fire Investigators from different agencies to demonstrate ongoing competency in one of the most complicated areas of Forensic work.

This involves the use of photogrammetric recording of scenes to allow them to be reconstructed into Virtual Reality. This cutting-edge approach ensures that training opportunities are captured, recorded, and can be used for years to come and ensures that Fire Investigation training in Scotland will be secured for the future.



When dreams become reality



An idea years in the making was finally realised as the official handover of the new Virtual Reality technology developed, trialled, and delivered by our Police Scotland Digital Division colleagues took place.

This ground-breaking new technology is designed to improve knowledge and understanding around fire investigations while increasing training opportunities for staff.

This working headset will enable Forensic Services to successfully assist and improve the high-quality fire investigation training we deliver as part of our commitment to scientific excellence. The process created will also enable images recorded at a scene in a particular and specific way to be rendered into Virtual Reality using a technique called photogrammetry.

Graham Strong, Forensic Operations Lead, said: “Karen Robertson and I attended the European Academy of Forensic Science conference in Stockholm in September 2022, where we witnessed a presentation delivered by Sang-hun Sean Yu and Vincenzo Rinaldi on the Leverhulme Virtual Reality project with the Danish Police.

“We realised that this could have a significant impact on the sustainability of the Fire Investigation facility, and we invited Vincenzo and Sean to join the official working group.

“This put renewed energy into the project, which also meant we wanted to take the Virtual Reality project as part of the Research Development and Innovation portfolio.

“We approached Police Scotland to discuss the idea, and after seeing the benefits and value, a team was created to take the process created by Leverhulme and make it work in a practical police environment where information security issues were of paramount importance”.

Celebrating Excellence



Forensic Services launched our Excellence Awards to recognise the work our colleagues have delivered for the communities of Scotland. These awards support our vision of Scientific excellence for safer communities by affording us the opportunity to celebrate and reward our staff – our most important asset – for the outstanding contribution they make.

Our inaugural event recognised 77 of our dedicated and talented staff in the following categories:

- **Category 1 – Greatest Contribution to Forensic Science Award**
- **Category 2 – Service Improvement Award**
- **Category 3 – Science and Innovation Award**
- **Category 4 – Wellbeing Award**
- **Category 5 – Staff Member of the Year Award**
- **Category 6 – Team of the Year Award**
- **Category 7 – Director’s Award**

Following the success of the event, the awards will return allowing a further opportunity to recognise more of our colleagues for the outstanding work they deliver.

Our Values

Integrity, Professionalism, Impartiality

Our Purpose

To provide excellent, innovative forensic services to support justice in Scotland and keep our communities safe and protected

Our Vision

Scientific excellence for safer communities

Strategic Outcomes

Our people are supported through a positive working environment, enabling them to provide excellent forensic services

We are sustainable, adaptable and prepared for future challenges

We deliver high-quality, ethical services; and lead in order to advance forensic science

We work collaboratively with partners to serve the needs of the public and Criminal Justice in Scotland

SPA Forensic Services 'compliant with the Biometrics Code of Practice'

In January 2024, Dr Brian Plastow, the Biometrics Commissioner for Scotland, published the first annual assessment on compliance with the Scottish Code of Practice by the SPA.

The Commissioner's overall determination for 2023/24 is that the SPA are using biometric data and technologies in a lawful, effective, and ethical manner and are currently compliant with the Scottish Biometric Commissioner's Code of Practice. In the year since the Code of Practice was approved by the Scottish Parliament, no complaints have been received about the inappropriate use of biometrics from data subjects.

Dr Plastow said: "I wish to congratulate SPA on achieving compliance with the Scottish Code of Practice. Biometric data and technologies are used extensively for policing and criminal justice purposes and make a valuable contribution to community safety in Scotland. When used in a lawful, effective, proportionate, necessary, and ethical manner, they also help promote public confidence and trust."

The Code of Practice relates to the use of biometric data under the Scottish Biometrics Commissioner Act 2020 and therefore solely to matters within the devolved competence of the Scottish Parliament.



Scenes Tasking Unit and new ways of working delivered

The year 2023-2024 was a key year for change in Forensic Services where we completed formal consultation with all our staff and stakeholders on our New Operating Model.

In advance of the roll out of the New Model, we made some significant initial steps to prepare. These included our new Scenes Tasking Unit – which is an important addition to the Forensic Services Operational Support Team. This new unit is key to the delivery of Search & Recovery at the scene and is responsible for the triaging and subsequent deployment of Scene Requests. They ensure that Forensic Service staff attend scenes that are viable, the appropriate staff attend, as well as being a liaison between the public and partners at Police Scotland.

Based in Dundee, our Tasking Officers respond to requests throughout Scotland helping to bring a consistent approach to Scene Examination Requests across the country. Our Tasking Unit operates between 0630-2230, 365 days a year.

Search and Recovery – Scenes

Search and Recovery – Scenes have Forensic Scene Examiners and Senior Forensic Scene Examiners based at 13 offices across Scotland. Their primary function is to attend scenes where it has already been assessed that there is forensic value in attending, whether that is to capture images, recover evidence, or both.

The two distinct operational roles are aligned to attendances at volume and serious crime with our Forensic Scene Examiners attending scenes of a less serious nature and Senior Forensic Scene Examiners attending mainly at serious or major incidents.

Both scene attending roles have the capability to photographically record the scene. Preserving the integrity of evidence at the scene is also paramount. The formation of a scene examination strategy using professional judgement is key to an appropriate scene examination and for serious crime. Senior Forensic Scene Examiners work collaboratively with other discipline representatives and Police Scotland to identify a suitable strategy incorporating all anticipated aspects, usually via a Forensic Strategy Meeting.



Forensic Operations Leads and Capability Team Managers

Forensic Operations Leads

Forensic Operations Leads are to act as a national forensic science lead providing support and co-ordination of the overall Forensic Services response to the investigation and review of specific major incidents and sensitive enquiries, from crime scene to court, by Police Scotland and partner agencies.

They will act as the single point of contact for partners, providing advice and guidance to the Senior Investigating Officer (SIO) and enquiry teams. We will set the forensic strategy across all forensic disciplines and capabilities, the triage and prioritisation of cases to ensure the effective and efficient delivery of the scientific requirements in the investigation.

Capability Team Managers

In 2023-2024, we introduced, trained, and delivered Capability Team Managers, who are responsible for day-to-day operational management of Forensic Services Teams, ensuring the delivery of a high-quality, comprehensive forensic service to partner agencies and customers. These roles include:

- Accountable for the day-to-day performance, supervision, motivation, leadership of Forensic Services Teams to maintain service standards and delivery to meet organisational goals.
- Contribute to forward planning and day-to-day workload management to provide a consistent service – ensuring delivery to the internal or external customer.
- Responsibility for forward planning and day-to-day management of staffing levels and physical resources.
- Liaising with internal and external agencies.
- Responsibility for managing individual performance and objectives for the individual team members to ensure a balanced approach to service delivery by carrying out regular staff appraisal and identifying training needs.

Forensic Services Cold Case Review Team: a decade of success

Forensic Services launched a new dedicated Cold Case Review Team in the autumn of 2013 with the primary aim of providing our customers, Police Scotland, and the Crown Office and Procurator Fiscal Service with a more robust and consistent national cold case review service.



From the beginning, the team worked closely with the PSOS Homicide Governance Review team, who are based at the Scottish Crime Campus, and the COPFS National Homicide Team – who initially identified, discussed, and prioritised work on the 48 cases.

Over the past 10 years, Forensic Services have worked on more than 70 cold cases – which have spanned the whole of Scotland and extended internationally through our work on the Lockerbie Bombing inquiry.

Most of these cases are homicides and date as far back as the 1960s. The team's reviews have also included long-term missing person enquiries – looking back over the work undertaken at the time of these investigations.

Forensic Services have a range of different Alternative Light Sources that can assist the scientist to search, detect, and recover trace and biological evidence. This, coupled with the advancement in DNA profiling techniques, provide the Forensic Services Cold Case Review Team with very powerful tools that allow them to detect very small amounts of biological material which can be tested and provide useable DNA profiles for intelligence and evidential purposes.

The future

Forensic Services are well-placed as we move into 2024-2025 to drive ahead with introducing our New Operating Model. After full consultation over the past two years with staff and stakeholders, Forensic Services will start to roll out the new ways of working through our three capabilities: Search & Recovery; Analysis; and Reporting. These capabilities will be with wrap around support from the Forensic Services Operational Support Team. Our New Operating Model has been designed to bring benefits to Forensic Services, our staff, our partners, and the communities we serve.

These benefits include:

- **Being more cost effective and using our skills and resources efficiently.**
- **The improvements in resilience to help meet changing demands and justice priorities.**
- **Delivering enhanced reporting capabilities.**
- **Driving improvements in Research and Development in Forensic Science.**
- **Managers better able to support staff.**
- **Increased emphasis on improving wellbeing.**
- **Colleagues are empowered and have a greater sense of value.**
- **Improved career path opportunities.**
- **The new structure allows us to enable and empower our colleagues to expand their abilities and skills.**
- **Maximising benefits of local delivery of serious crime forensic services.**
- **Providing faster delivery of intelligence.**
- **Improving response times for non-serious crime scene attendance.**
- **Dedicated senior scientific role to provide enhanced service for the most serious incidents.**
- **Providing a better service to COPFS and Courts.**
- **Enabling Police Scotland to improve use of police resources.**
- **Our communities will have an increased confidence in the criminal justice system.**
- **Early detection and quicker intelligence will help prevent recidivist criminality.**
- **Supporting our community through delivery of results to protect the innocent in creating a faster justice process.**
- **Delivering added value benefits across the public sector (e.g. health care).**



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