



**Forensic Science
Regulator**

**Conference 2024: Speech 10 October
2024**

February 2025

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Introduction

Good morning, can I welcome everyone to my second conference as the Forensic Science Regulator.

In my first conference in June last year the focus was on the work that had been completed to prepare and gain approval for the statutory Code, and we were looking forward to the Code coming into force in October. I highlighted that the theme of the conference was very much on the practicalities, implementation and impact of the statutory regulation of forensic science. I am very grateful to the contributors to that Conference from CPS, NPCC, UKAS, FCN and MOJ, who each gave their perspectives and insight into the challenges and risks. We had a packed programme, so I am afraid I had limited time for questions, but we did gather all the questions that were posed during the conference, and published the questions and answers provided by the relevant organisations.

I also highlighted it was my intention to reinvigorate the Specialist Groups, and I committed to continuing to support the good work of my predecessor Gill Tully in developing the regulatory approach to forensic interpretation in all its forms. Yesterday, a series of workshops were held looking at interpretation, I am very grateful to Gill for her continuing commitment to this area and agreeing to chair the Interpretation Specialist Group, Lee will be outlining some of work of Interpretation Specialist Group and the product of the workshops later today.

I also set out that I took seriously the comments made by the Minister of State in his video clip to the last conference and the key point he made in his speech during the House of Commons debate on the statutory Code. (see Slide 1)



House of Commons debate 20th February 2023; Minister of State for Crime, Policing and Fire, the Rt Hon Chris Philp

"Members on both sides of the House think the Code should be policed reasonably and proportionately, and not in a way that introduces excessive or unreasonable burdens on policing or the forensic science community. We want high quality and the maintenance of standards, but not to the extent that that creates unreasonable bureaucracy or cost."

"I hope that if the Forensic Science Regulator looks at the transcript of these proceedings, he will see that Members on both sides of the House think the Code should be policed reasonably and proportionately, and not in a way that introduces excessive or unreasonable burdens on policing or the forensic science community. We want high quality and the maintenance of standards, but not to the extent that creates unreasonable bureaucracy or cost."

We've had yet to hear a view from the current government on the regulation of forensic science, but I do not think that the focus on maintaining high quality, effectiveness and proportionality will change.

In my opening to today's conference, I want to consider regulation in the wider context and what the government expects of regulators, consider the development of the statutory regulation of forensic science and set out some of the compliance data I recently published in my annual report, and my priorities for understanding risk and my approach enforcement.

While all the provisions of the Act have been commenced and the Code has come into force, I think there are still some changes and adjustments to make to the Code, and the wider criminal justice system has not yet fully adjusted such that we are in a steady state in the effective statutory regulation of forensic science in England and Wales. I should be clear that I think it is

in the nature of forensic science that this does not mean no change more that we have a common understanding of risks and a proportionate approach to regulation that achieves the primary purpose of ensuring that accurate and reliable forensic science evidence is used in criminal investigations and proceedings responding effectively to science and technology change, organisational change and legislative change.

Regulation in a wider context

To consider regulation in a wider context if I reflect on the last three and half years of preparing and gaining approval for the Code, and the commencement of the provisions of the Act, I think the provisions of the Act provide a very sound and effective way of regulating forensic science. I would summarise these provisions into four areas;

1. I am regulating forensic science activities not forensic science as a whole with the focus for consultation on the persons who are, or are likely to be, carrying on activities to which the Code applies
2. The admissibility provisions draw compliance with the Code, or lack of it, into criminal trials,
3. The investigation and enforcement powers are based on my understanding of risk and taking action where I believe there is a substantial risk and finally, there are general provisions that allow me to consider more broadly the regulation of forensic science and in particular highlight lessons to be learned across the criminal justice system.
4. But there are not just requirements for Regulation but requirements on Regulators and a government view of how regulation should be delivered.

Following the Legislative and Regulatory Reform Act 2006 a Regulators Code was produced in 2014. The Code set out some principles.

- Regulators should carry out their activities in a way that supports those they regulate to comply and grow,
- Regulators should provide simple and straightforward ways to engage with those they regulate and hear their views,
- Regulators should base their regulatory activities on risk,
- Regulators should share information about compliance and risk,
- Regulators should ensure clear information, guidance and advice is available to help those they regulate meet their responsibilities to comply and
- Regulators should ensure that their approach to their regulatory activities is transparent.

There have been various initiatives since the Regulators Code was produced and the latest government thinking on Smarter Regulation is focused on trade and commerce, and promoting economic growth, but the principles seem to me a sound basis for regulating forensic science taking into account the critical contribution that forensic science plays in the investigation of crime and criminal proceedings.

So, to take both the main provisions of the Act and what is expected of me as a statutory Regulator then the regulation of forensic science is not simply about enforcement, it must also be about engagement, proportionality and a risk-based approach. To give a broader perspective of regulation and how it operates across many sectors I am very pleased and grateful to the chair of the Institute of Regulation Marcial Boo, for agreeing to come and give such a perspective to the conference today.

I am also very grateful today to Wim Neuteboom who will give us a European perspective as to how forensic quality standards have been developed and applied, and some thoughts on the factors that will shape the thinking of our European colleagues.

Development of the statutory regulation of forensic science

Turning now to the development of the statutory regulation of forensic science as we move from the practicalities of preparing and publishing the Code to what I have described as forensic regulation as business as usual, I think there is still some development and adjustments to be made to the Code, and I would like to set out my thinking on this in respect of the Code, compliance and risk.

The Code

First with regard to the Code as we were producing the first version, we recognised the Code had evolved over 10 years expanding to deal with issues such as data security, and as I recognised at the last conference the statutory Code could not simply be a re badging of the non-statutory Codes of Practice and Conduct. So, we anticipated there would be a need for a version two of the Code on the first anniversary of the Code being approved by parliament in March 2024. We consulted on version two of the Code in February this year, but with the election being called there has been a delay in the Code being approved by the Secretary of State and laid before parliament for approval. Chanda the Head of the OFSR will set out the changes we are making in version two of the Code, the timeline and some further consultation we are undertaking to take advantage of the opportunity presented by the delay in the approval processes. I would like to set out two significant changes that we consulted on in February; first establishing the primacy of the Code and second some changes we will make in the regulation of incident examination.

At last year's conference I described how we had produced the first definitions of forensic science activities and that there was more work to do in aligning and focusing accreditation requirements for each forensic science activity and how I wished to use the Specialist Groups to support this. In version two of the Code, I've made clear that the Regulator will decide which

ISO standards apply, the interpretation of those standards and the applicability of any third party guidance that is used in the undertaking of forensic science activities that are subject to the Code. These changes are not only important in ensuring that accreditation is based on the regulatory requirements for forensic science activities that are subject to the Code but also to ensure there is effective consultation with individuals and organisations that are undertaking forensic science activities as required by the consultation provisions in the Act. The requirement for accreditation to ISO standards needs careful consideration and I would be the first to admit that in relation to the choice of a standard, the interpretation of that standard and the relevance of any third-party guidance I need to draw on a broad range of advice not least from those who undertake the forensic science activities, and of course the national accreditation body UKAS. To achieve this as part of the work to reinvigorate the specialist groups I will be looking to them as the primary source of advice to me on the regulatory approach, the application of ISO standards, the interpretation of these standards and the applicability of any third-party guidance for any FSA that is subject to the Code.

As it happens we have already taken this approach following some issues that were raised with me about the comparison of friction ridge detail, you will see on our website that we have recently consulted on changes to the FSA definition and FSA specific requirements that clarified that there is no requirement to treat areas of friction ridge detail from different parts of the human body separately for the purposes of gaining accreditation, and we have set out the scope of accreditation required for undertaking this FSA, and in the FSA specific requirements provided a direct interpretation of the relevant clauses of ISO/IEC 17025 and ILAC-G19 that will form the basis of accreditation assessment for the undertaking of friction ridge detail comparison. This work was undertaken by the Fingerprint Quality Standard Specialist Group chaired by Neil Denison. I am very grateful to the senior practitioners, quality professionals, UKAS, and Lee Parkes from the OFSR for the work they have done to produce the revisions to the Code in short timescales so we can include them in version two of the Code.

This change of focus of the remit of the Specialist Groups and their role in advising me on the regulatory approach to FSA's is an important change allowing for dialogue and discussion on how forensic science activities should be regulated. We have made good progress on re-establishing the Specialist Groups but there is more to do, Chanda will describe the progress to date in the restructuring of these groups and working groups that support them. Can I take the opportunity at this point to thank the chairs and members of the Specialist Groups and the Working Groups that support them, they are critical to the effective regulation of forensic science and in advising me on how to regulate forensic science in England and Wales.

I am also acutely aware that there are 15 FSAs that are defined in the Code but not yet subject to the Code, I am afraid that our immediate priority was to focus on the forensic science activities that are subject to the Code. However, we do need to start to lay the ground for bringing these FSAs under the Code and some of the restructuring you will see in version two is enabling us to take a flexible approach to how we do this, so for example we could make FSAs subject to the Code for the purposes of engaging the investigation and enforcement provisions without setting any requirements. We also need to accommodate a range of approaches to demonstrating compliance with the Code. The history and structure of the Code is very much focused on accreditation of laboratories to ISO 17025, in version one I have already allowed

alternatives to this by allowing the use of the NPCC framework for video based evidence and footwear screening, and there are clearly some highly interpretative areas where accreditation will not be effective such as body fluid distribution analysis. I also think that our approach to bringing FSA's under the Code should not be to simply set a deadline for achieving accreditation, but we should start by setting clear requirements and we should consider an approach where organisations are required to achieve set milestones in delivering capability that meets the requirements of the Code as a stepping stone to overall compliance whether that be achieving accreditation or some other compliance mechanism.

Finally, on the Code there is an FSA in the Code that I think we do need to make progress on as a priority, this is case review. Case review covers three types of activity; cold case review looking for new opportunities, case review commissioned by the defence and post-conviction review commissioned by the CCRC or other organisations. In the introductory paragraph to the Code, I state that "Forensic science is a critical and important part of criminal investigations and the administration of justice, not only to identify offenders and provide expert evidence to the courts, but also as one of the strongest safeguards against false allegation and wrongful conviction." Case review is an extremely important part of the criminal justice system as we have seen in some recent high-profile cases, notably the successful appeal of Andrew Malkinson. I am very grateful to the Chartered Society of Forensic Sciences for assisting me in developing the requirements and the regulatory approach that we should adopt to case review, this is not going to be easy and will need careful thought. I think perhaps there is also some wider consideration of what the criminal justice system expects from those who undertake case review. Sue Carney-Gannon who has been co-chairing a group with Darrell Matthews the CEO of the chartered society will give a short presentation on the work they are undertaken to assist me in developing the regulatory approach to case review.

Turning now to the second area I would like to touch on, over the last year or so there have been increasing concerns raised with me about the impact of the regulation on incident examination. To understand these concerns, I have spoken to forensic practitioners, managers, quality professionals and leaders, I visited organisations while they were under assessment by UKAS, and I have called in accreditation assessment reports. Every crime scene examiner, manager, quality professional and leader I spoke to first expressed their commitment to effective regulation but then went on to set out concerns about the impact of the current approach. I am more than familiar with the culture change and challenges that come with the introduction of a quality management system and seeking accreditation, but what I am hearing and seeing is much more serious in terms of its impact not only on the productivity of incident examination but its effectiveness and the motivation of frontline practitioners.

I conducted a survey of Senior Accountable Individuals in the organisations who undertake incident examination to gauge the impact of some of the concerns I was hearing and the effectiveness of regulation. If I was to summarise the headline response to the survey it would be that police organisations who undertake incident examination are committed to the effective regulation of this forensic science activity and the benefits of this to the criminal justice system, however there are significant and real concerns about the impact of regulation and in particular some of the requirements in the Code and the accreditation process.

So it was clear that there needed to be change in the regulatory approach, I have set out six areas where I think there needs to be change (See slide 2 and slide 3), and I have asked the Incident Examination Specialist Group to advise me on changes to the Code, produce FSA specific requirements including defining scope of accreditation required for the undertaking of incident examination as a forensic science activity and section 9 guidance. I have also asked the Specialist Group to advise me on the transition from the current basis for regulation to one that is based on the new FSA specific requirements and scope of accreditation in version two of the Code. This transition will remove the current requirement for accreditation, allow a period for organisations to implement changes to meet the new requirements, with organisations reporting back to me on their progress and then after a reasonable period the requirement for accreditation will be reinstated based on a new revised scope of accreditation. This is still work in progress, as with any change there will be a period of uncertainty and adjustment. However, I am clear on “what” needs to change, there is broad support for this and a view that this will improve the effectiveness of regulation for this change. What we need to do next is decide on the “how,” Alan Tribe will set out the work of the IESG in redefining the forensic science activity of incident examination, developing FSA specific requirements and guidance, and how the scope of accreditation for incident examination will be defined and form the basis of declaring compliance with the Code.



PROPOSED CHANGES TO THE REGULATORY APPROACH TO INCIDENT EXAMINATION

The key elements of this change will be;

- primary focus will be for the organisation to design and implement a corporate competency framework based on the achievement of practitioner competence and applying professional judgement.
- managing the potential risk of DNA contamination will recognise the uncontrolled environment of the scene of an incident and be based on the organisation having a thorough and comprehensive understanding of the risks and processes that actively mitigate the risk
- validation requirements will only apply to those elements of incident examination that involve testing or the use of equipment.



PROPOSED CHANGES TO THE REGULATORY APPROACH TO INCIDENT EXAMINATION

The key elements of this change will be;

- the approach to note taking will be flexible and proportionate to the nature of the incident and the examination that has taken place.
- the scope of accreditation required for undertaking incident examination will not be based on volume and major crime, the Code will set out the scope of accreditation required taking into account the extent and complexity of crime scene management
- the requirements set out in the Code including accreditation will apply for a defined geographic area in which they undertake incident examination. There will be no requirement to demonstrate compliance with the Code, including accreditation for individual sites/bases, within the defined geographic area.

Compliance Data

Turning to compliance data and assessing risk, I have set out previously that there are two ways that I can understand risk, I can be reactive in responding to referrals where issues are brought to the notice of the Regulator or proactive by establishing who is undertaking FSAs that are subject to the Code and the extent to which they comply with the requirements set out in the Code.

I firmly believe that “prevention is better than cure” and that by proactively seeking to establish the risk in undertaking FSAs will reduce the need to take action after the event when prosecutions have failed or there have been wrongful convictions. The capacity to do this at present is extremely limited due to limited resources and a lack of IT infrastructure that would enable a proactive approach. However, I would like to set out now some work we did last year to support the process of approval of the first version of the Code by conducting a compliance survey, to gauge the indicative compliance of the 34 forensic science activities that are subject to the Code and this information has recently been published in my first annual report.

Slide 4



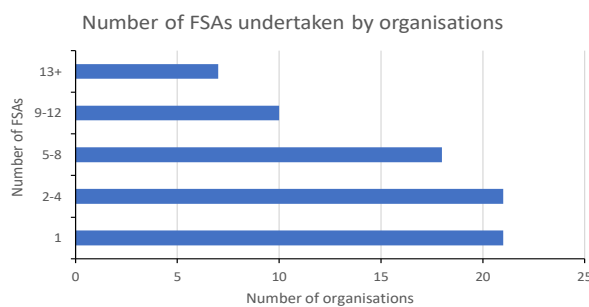
FSR Compliance Survey – Basis for Data Analysis

- data analysis was undertaken for only the 34 FSA's that are subject to the Code, all other FSA's have been excluded.
- the data presented represents a snapshot in time when the survey was completed by participating organisations, and this may well have changed since the survey was completed.
- the data presented is based on the information provided without any validation or further contact with organisations, the primary purpose of survey is to provide a starting point for discussion and action in respect of achieving compliance with the Code.
- The data has been analysed to give a high level “organisational view” and a “FSA view”, the FSA view identifies the risks associated with non-compliance with the Code



FSR Compliance Survey – Organisational View

- 105 organisations responded to the FSR Compliance Survey (cf 83 Organisations October 2022)
- 60 organisations who were sent the survey did not respond including seven organisations who are understood to be undertaking FSA's that are subject to the Code.
- 77 organisations were undertaking forensic science activities were subject to the Code when it came into force,



The compliance survey was conducted in June last year to establish how many organisations are undertaking each FSA that is subject to the Code and the extent to which they were meeting the requirements of the Code, not just whether organisations held accreditation but the extent to which there was an effective quality management system in place covering such things as method validation and demonstration of competence which are of course the mitigating steps that need to be outlined in a declaration of non-compliance with the Code.



FSR Compliance Survey – FSA View

- Overall indicative compliance for all sub-activities in an FSA taking into account volume of cases per FSAs undertaken.

Indicative Compliance Level	No of FSA's
90% plus	12
75%-89%	10
50%-74%	5
25%-49%	3
0%-24%	4
Total	34



FSR Compliance Survey – FSA with 90% plus indicative compliance

FSA – BIO 400 – Human DNA analysis
 FSA – MTP 700 – Document handwriting
 FSA – DTN 102 – Toxicology: analysis for drugs in relation to s5A of the Road Traffic Act 1988
 FSA – BIO 300 – Human body fluid distribution analysis
 FSA – MTP 601 – Examination, analysis and classification of firearms, ammunition and associated materials
 FSA – DTN 500 – Examination and analysis of chemical and/or biological agents and associated materials
 FSA – DTN 300 – Examination and analysis of residues of lubricants used in sexual offences, including oils, greases and lubricants
 FSA – MTP 300 – Marks visualisation and enhancement
 FSA – BIO 401 – Human kinship analysis
 FSA – MTP 600 – Examination and analysis of gunshot residue (GSR)
 FSA – MTP 200 – Footwear: coding
 FSA – DTN 501 – Examination and analysis of explosives, explosives precursors and explosive residues

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FSR Compliance Survey – FSA with 75 - 89% indicative compliance

FSA – MTP 100 – Friction ridge detail: visualisation and enhancement
FSA – MTP 101 – Friction ridge detail: comparison
FSA – MTP 400 – Damage and physical fit
FSA – DTN 400 – Examination and analysis of ignitable liquids and their residues
FSA – MTP 301 – Marks comparison
FSA – DTN 103 – Examination and analysis to identify and quantify controlled drugs and/or associated materials
FSA – MTP 202 – Footwear mark comparisons
FSA – DTN 101 – Toxicology: analysis for drugs and/or alcohol under the Road Traffic Act 1988, Transport and Works Act 1992, and Railways and Transport Safety Act 2003
FSA – MTP 602 – Firearms: ballistics
FSA – DTN 100 – Toxicology: analysis for drug(s), alcohol and/or noxious substances.

These FSA's are undertaken by 31 organisations, 27 organisations have undertaken validation and have demonstration of competence for forensic practitioners, 7 organisations have indicated that they have not undertaken any preparation to achieve accreditation.

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FSR Compliance Survey – FSA with 50 - 74% indicative compliance

FSA – BIO 500 – Taggant analysis
FSA – MTP 500 – Examination and analysis of particulate trace materials
FSA – MTP 201 – Footwear: screening
FSA – DTN 200 – Examination and analysis of corrosives and/or noxious substances
FSA – BIO 201 – Non-human biological examination and analysis: vertebrates

These FSAs are undertaken by low volume

These FSAs are undertaken by 15 organisations, 12 organisations have undertaken validation and have demonstration of competence for forensic practitioners, 2 organisations have indicated that they have not undertaken any preparation to achieve accreditation.

Slide 10



FSR Compliance Survey – FSA with 25 - 49% indicative compliance

FSA	No of org carrying out FSA	Indicative compliance with Code	General volume of cases undertaken
INC 100 – Incident scene examination	48	43%	high
BIO 200 – Human biological material examination and analysis	23	35%	high
MTP 701 – Document authenticity and origin	3	27%	very low

Slide 11



FSR Compliance Survey – FSA with 0 - 24% indicative compliance

FSA	Number of organisations carrying out FSA	Indicative compliance with Code	General volume of cases undertaken
DIG 300 – Recovery and processing of footage from closed-circuit television (CCTV)/video surveillance systems (VSS)	44	22% ¹	very high
DIG 400 – Technical Audio Operations	27	9% ¹	low

Note 1: NPCC framework and accreditation are compliance routes, indicative compliance data does **NOT** include NPCC framework.

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FSR Compliance Survey – FSA with 0 - 24% indicative compliance

FSA	Number of organisations carrying out FSA	Indicative compliance with Code	General volume of cases undertaken
DIG 100 – Data capture, processing and analysis from digital storage devices	59	19%	very high

Slide 13



FSR Compliance Survey – FSA with 0 - 24% indicative compliance

FSA	Number of organisations carrying out FSA	Indicative compliance with Code	General volume of cases undertaken
DIG 301 – Specialist video multimedia, recovery, processing and analysis	41	2%	high

Recovery, processing and analysis - highlighting speed estimation from video footage and approach

- Speed estimation from video footage is covered in the FSA DIG 301 – Specialist video multimedia, recovery, processing and analysis.
- I received a series of referrals on unsatisfactory performance in a proficiency test conducted by the FCIN, there were significant errors made by many participants, limited validation of the methods and ineffective peer review.

Regulatory Action:

- Establish who is undertaking speed estimation and in what volume, and the current capability and competence of organisations to undertake speed estimation.
- Understand the action taken by Senior Accountable Individuals and their position on the continued undertaking of speed estimation and the extent of retrospective case review.
- Establish the plans and action taken to achieve accreditation and compliance with the Code for organisations undertaking speed estimation and any interim steps taken to ensure the criminal justice system can have confidence in the results.

First Request for Information:

- Organisation's position on the continued undertaking of speed estimation from video footage and the rationale for this position.
- Details of any review work on completed cases including the scope, extent and timescales of this review.
- For those who have decided to continue - form of words that will be used in a declaration.
- To report an estimated speed and the explanation of the uncertainty of measurement.

Second Request for Information:

Gap Analysis to be completed for those organisations who continue to undertake speed estimation from video footage.

Position on undertaking:

- Police organisations undertaking speed estimation from video footage.

- 12 continue to undertake speed estimation from video footage
- 15 suspended or stopped undertaking speed estimation from video footage.
- 14 commercial organisations have indicated they undertake speed estimation from video footage

I am considering my response and the need for enforcement action based on the information that has been provided to me, but the level of risk was such that I felt it was necessary to alert all parties in the criminal justice system to the potential risks in the undertaking of speed estimation from video footage and I have issued a report in the form of a FSR Notification on the website to do this.

More generally I think my assessment of risk from the compliance survey is that I need to focus on the two forensic science activities;

Data capture, processing and analysis from digital storage devices (FSA -DIG100).

Specialist video multimedia, recovery, processing and analysis. (FSA - DIG 301)

I have been clear that my approach to enforcement will be proportionate, balanced and based on escalation. Clearly, the criteria that I believe there is a substantial risk needs to be established acknowledging the Act allows me to take into account a failure to act in accordance with the Code. I will be shortly writing to organisations who undertake these two FSAs to understand the current levels of compliance and progress made over the last year. I am committed to working with organisations to understand and mitigate risks and to ensure the effective regulation of forensic science.

So in concluding today I hope I have given you an insight into where I am with the regulation of forensic science and what the focus for the future will be, as I said at the outset I think there are still some changes and improvements to make and the wider criminal justice system has not yet fully adjusted such that we are in a steady state of stable and effective statutory regulation of forensic science in England and Wales, but we are very much well on the way, and I would like to thank all of the organisations in policing the commercial sector, the FCN, the accreditation body UKAS, the CPS and the MoJ, and all of the colleagues and leaders supported me and given me sound advice and honest feedback, but my greatest thanks must go to the staff of the Office of the Forensic Science Regulator, Chanda for her leadership, energy and for the quiet diplomacy I lack, the scientists Lee, June, Linsey, Jen, Simon and Kayla for their hard work, wise counsel and flexibility, and to Claire and Nadine who manage the day-to-day business of the office and have organised and delivered this conference, thank you.

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