



Forensic Science Regulator

Annual Report
25 July 2022 – 24 July 2023

September 2024





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Presented to Parliament pursuant to Section 9(5) of the Forensic Science Regulator Act 2021.

September 2024



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This annual report is published under the following provisions of the Forensic Science Regulator Act 2021:

s9(4) As soon as reasonably practicable after the end of each reporting period the Regulator must—

- (a) prepare a report about the exercise of the Regulator’s functions during that period,
- (b) publish the report in such manner as the Regulator considers appropriate, and
- (c) provide the report to the Secretary of State.

s9(5) The Secretary of State must lay the report before Parliament.

s9(6) In subsection (4) “reporting period” means—

- (a) the period of 12 months beginning with the date on which section 1 comes into force, and
- (b) each successive period of 12 months.

On the 21 July 2022 the Minister of State for the Home Office laid a Commencement Order for the Forensic Science Regulator Act 2021 (SI 2022 No. 856 (c. 51) Commencement No. 1 and Transitional Provision) that came into force on 25 July 2022.

This commenced sections 1 to 5 and 9 to 10 of the Forensic Science Regulator Act 2021, Sections 11 and 13 came into force on the day the Act received Royal Assent.

The only provisions that were not commenced on the 25 July 2022 cover the issuing of Compliance Notices, Completion Certificates and the Appeals process. These would be brought into effect on the 2 October 2023.

This annual report is prepared under the provisions of s9(4) and in line with these provisions, covers the period 25 July 2022 to the 24 July 2023.

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Foreword

This is the first annual report prepared under the provisions of the Forensic Science Regulator Act 2021. The introduction of the statutory regulation of forensic science in England and Wales is a significant and far reaching change in the oversight of forensic science. However, this is not a sudden change and the introduction of quality standards and the development of quality management systems in forensic science has taken place over the last 30 years. I have included a section in this report that covers this development and the origins of quality systems in forensic science to give context to statutory regulation.

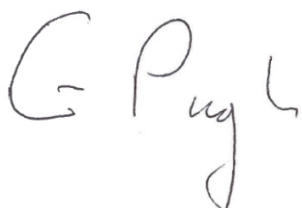
In the Code of Practice (the 'Code'), I state that the aim of forensic science regulation is to ensure that accurate and reliable scientific evidence is used in criminal investigations, in criminal trials, and to minimise the risk of a quality failure. It is with this broad and strategic aim in mind that the Code, and the investigation and enforcement processes required by the Act are being developed. It is equally important to recognise that forensic science is an integral part of the criminal justice system and forensic science regulation cannot operate in isolation. The development of the Criminal Procedure Rules and Criminal Practice Directions reflect this and when viewed through this lens the statutory regulation of forensic science can be seen as one further step in a succession of changes to ensure accurate and reliable evidence is used in the criminal justice system.

Reflecting all of the hard work over the reporting year the focus of this annual report is on the work to prepare, consult and gain approval for the Code and to understand the anticipated levels of compliance with the Code. The underlying regulatory model for forensic science set out in the Code has not changed from that adopted in the first version of the non-statutory Codes of Practice and Conduct, first published in 2011. However, to produce a statutory Code required the drawing together and reviewing of all the requirements Regulators had developed over the years and to take into account the provisions of the Forensic Science Regulator Act, particularly the focus on defining forensic science activities. In doing this, I recognise that there is experience and learning in taking an Act of Parliament and turning it into practical reality. I have included in the annual report a section that sets out my experience and learning, and where I think there could be changes to the Forensic Science Regulator Act that would improve the effectiveness of regulation.

On compliance and enforcement, for the first time a comprehensive picture has been produced that sets out the indicative compliance levels of organisations who are undertaking forensic science activities that are subject to the Code. This will be the basis for understanding risk and where appropriate taking enforcement action. In doing this, I have been keen to stress from the first day I took up this post that regulatory action should be proportionate and based on escalation, with the powers in the Act being used in general as a last resort. This is not least to support a strong and healthy culture in forensic science of self-referral and notifying the Regulator when there are errors or quality failures. I also register in this report that the compliance survey revealed a complex regulatory landscape. With 51 forensic science activities defined in the Code, 34 subject to the Code when it comes into force, it is likely that over 100

organisations will be subject to regulation. I highlight the resource and cost implications of the duplication and lack of co-ordination in the development and implementation of the systems and processes required to achieve compliance with the Code.

While the preparation and approval of the Code of Practice was my overriding priority in this reporting period, I equally recognise that I needed to be visible and engage with all the stakeholders and forensic science providers to hear their views if I am to deliver meaningful and effective regulation of forensic science. I am extremely grateful to all the stakeholders and senior leaders who have given me their time and contributed to the preparation for the statutory regulation of forensic science. I am also grateful to my legal advisers at Browne Jacobson who have helped me steer a path through the many legal issues that arose in the preparation of the Code. Most importantly, I must extend my very grateful thanks to all the staff who support me in the Office of the Forensic Science Regulator, a relatively small team who have delivered a significant and important change.

A handwritten signature in black ink that reads "G Pugh". The signature is written in a cursive, slightly informal style.

Gary Pugh
Forensic Science Regulator

The development and context for the regulation of forensic science

The effective application of science relies on a fundamental understanding of the basis of the science and confidence in the accuracy and reliability of the results produced. This no more so than for forensic science, which can identify the perpetrators of the most serious crimes and provides one of the strongest safeguards against false allegation and wrongful conviction.

The importance of quality and reliability of forensic science evidence has long been recognised from the formal establishment of purpose-built forensic science laboratories in the 1970s, through to the modern day requirements to comply with recognised international scientific standards. In the 1980s the focus for quality assurance in forensic science was inter-laboratory technical committees, quality assurance trials and audits of forensic practitioners. This was essentially an outcome-based approach focusing on the quality assurance trials, or as we would call them today proficiency tests, where simulated criminal cases covering a range of forensic science evidence were submitted to forensic science laboratories unbeknown to the forensic scientists or the management of the laboratory. The proficiency tests sometimes revealed quality failures and inconsistency and it was left to the senior leadership in the forensic science laboratories to rectify these matters supported by the inter-laboratory advisory committees. There was limited validation of methods or demonstration of competence, but this approach demonstrated the value of proficiency testing as a means of gaining an insight into how forensic science casework is undertaken and the extent and magnitude of the risks of a quality failure. The lesson to be learned for the future statutory regulation of forensic science is the importance of having effective co-ordinated and published proficiency testing across all Forensic Science Activities (FSAs).

The introduction of quality management systems (QMS) into forensic science was initiated in 1991 when Dr Janet Thompson CB established the Forensic Science Service as a government agency. The initial work, led by Dr Jim Zoro, established QMSs that were certified to general management standards such as BS 5750, latterly ISO 9001 [1], moving to accreditation to technical standards such as ISO/IEC 17025 [2]. Fingerprint Bureaux followed suit led by Greater Manchester Police and gained certification to ISO 9001. The establishment of QMSs by forensic organisations recognised that while individual forensic practitioners have an important duty to the courts as expert witnesses, the accurate and reliable delivery of forensic science relies on the operation of effective organisation-wide systems. This could be a complex multi-step scientific process such as DNA profiling relying on many individuals to contribute to generating the final result or the checking and peer review processes that ensure errors are minimised, interpretation is sound, and conclusion communicated clearly. The implementation of QMSs in the 1990s was a significant shift in the approach to managing quality and not without resistance as it established a corporate approach and consistency across organisations leading to some tension and resistance to change by individual practitioners who saw it as bureaucratic and restricting their freedom to develop and innovate in forensic science. History has repeated itself as new organisations or groups of forensic practitioners and managers have developed and

implemented QMSs with the same cultural and change management challenges. It should also be recognised that an effective quality management system is not only a vehicle to understand the risk of quality failure but provides the basis for effectively implementing change and improving performance. The lesson we learn from this is that the regulation of forensic science and meeting quality standards needs to engage and demonstrate benefits to practitioners and managers and needs visible leadership and organisational accountability for the whole quality system to function effectively.

By the time the role of the Forensic Science Regulator ('the Regulator') was created in July 2007, establishing an effective QMS had become the accepted model for the regulation of forensic science, with organisational competence in the operation of QMSs being assessed by the accreditation body, the United Kingdom Accreditation Service (UKAS). The key elements in this regulatory model are:

- validation including an understanding of uncertainty of measurement and error rates
- defining and demonstrating competence of forensic practitioners
- documented and controlled procedures
- internal audit and assurance process

As we have seen forensic science examinations carry risks and the consequences of a quality failure can be profound particularly where there is a system rather than an individual failure. Forensic science regulation aims to minimise the risk of a quality failure and ensure that accurate and reliable forensic science evidence is used in the investigation of crime and criminal trials and contribute to public confidence in the criminal justice system.

The role of the Forensic Science Regulator was initially established as a non-statutory public appointee funded by the Home Office, but operating independently of it, to advise the Government and the Criminal Justice System on quality standards in the provision of forensic science. The first permanently appointed Forensic Science Regulator was Andrew Rennison (2008-14) followed by Dr Gillian Tully CBE (2014-21). They have developed and extended the regulatory framework for forensic science building on and incorporating the standards that had been developed for forensic science over the last 30 years. The primary and source document for regulation of forensic science in England and Wales was the Forensic Science Regulator's Codes of Practice and Conduct. The Regulator incorporated international standards and guidance into the Codes of Practice and Conduct along with a professional code for forensic practitioners and specific requirements for the delivery of forensic science in England and Wales taking account of the Criminal Procedure Rules and Criminal Practice Directions. The Codes of Practice and Conduct provided the overarching quality framework, requirements, and guidance for the provision of forensic services in England and Wales. They did not seek to duplicate or replace international standards but provide direction, guidance, and interpretation on the application of international standards including ISO/IEC 17025 and ISO/IEC 17020 [3] and guidance documents such as ILAC G19 [4]. They also set out additional requirements and guidance developed by the Regulator recognising the risks to quality and the criminal justice system requirements set out in the Criminal Procedure Rules.

In addition to the general requirements set out in the Codes of Practice and Conduct, a series of appendices were produced that provided more detailed direction and guidance for the application of quality standards. Over the period of non-statutory regulation, 12 appendices to the Codes of Practice and Conduct were produced covering a wide range of forensic science activities.

The first Codes of Practice and Conduct was published in December 2011 and a final version (Issue 7) was published in March 2021. The summary above does not do justice to the breadth and complexity of the work and leadership by the Forensic Science Regulators and the work undertaken by the small group of staff that supported them. What is clear is that over more than 10 years a solid and robust platform was built on which the statutory regulation of forensic science could be implemented.

The first call for the statutory regulation of forensic science was made by the House of Commons Science and Technology Select Committee in 2011 [5]. This was reinforced in two further reports in 2013 [6] and 2016 [7]. Judge Leveson's review into efficiency of criminal proceedings [8], published in January 2015, repeated the call for statutory powers for the Regulator. In its Forensic science strategy published in 2016, the UK Government committed to "develop proposals to give the Forensic Science Regulator statutory powers, put the remit and the associated Codes of Practice on a statutory basis and enable the Forensic Science Regulator to investigate non-compliance where necessary" [9]. This was reiterated by the Government in the joint review of forensics provision published on 23 April 2019 [10]. In 2019 the House of Lords Science and Technology Committee also called for statutory powers in its report 'Forensic science and the criminal justice system: a blueprint for change' [11]. A Private Members' Bill to establish statutory powers for the Forensic Science Regulator was introduced in Parliament in 2020 and, following modification, the Forensic Science Regulator Act 2021 ('the Act') [12] received Royal Assent on 29 April 2021.

Main provisions of the Forensic Science Regulator Act 2021:

Section 1 establishes that there will be a statutory Forensic Science Regulator.

Section 2 outlines the duty on the Regulator to publish a Code of Practice about the carrying on of FSAs in England and Wales.

Section 3 specifies the procedure for preparing and publishing the Code of Practice.

Section 4 establishes that the Code is admissible in evidence in criminal and civil proceedings in England and Wales.

Section 5 provides the power for the Regulator to investigate persons who the Regulator has reason to believe are carrying on a FSA to which the Code applies in a way that creates a substantial risk of:

- a. Adversely affecting any investigation, or
- b. Impeding or prejudicing the course of justice in any proceedings

Section 6 provides the Regulator with the power to serve compliance notices on persons the Regulator believes are carrying on a FSA to which the Code applies in a way that creates a substantial risk of

- a. Adversely affecting any investigation, or
- b. Impeding or prejudicing the course of justice in any proceedings

Section 7 outlines how the Regulator shall issue completion certificates once the Regulator is satisfied that a compliance notice is no longer needed.

Section 8 outlines the appeals process for persons served with a Section 6 compliance notice.

Section 9 contains information about other functions of the Regulator, which includes preparing and publishing guidance and an annual report.

Section 10 outlines that the Regulator may disclose to any other public authority any information received by the Regulator in connection with any of the Regulator's functions if the disclosure is made for the purpose of enabling or assisting the other public authority to discharge any of its functions.

Preparing for the statutory regulation of forensic science

Approach to preparing the Code

The Act requires the Regulator to prepare and publish a statutory Code of Practice about the carrying on of FSAs in England and Wales.

The Regulator approached the development of a statutory Code of Practice by recognising that the Code required structuring into three key sections. First, the existing non-statutory Codes of Practice and Conduct were edited to be incorporated as the core of the statutory Code setting general requirements. Second, FSAs were defined in line with the provisions of the Act. Third, the appendices to the non-statutory Codes of Practice and Conduct were reviewed and edited to extract the requirements to be added to the statutory Code as FSA specific requirements. The remaining text would be re-issued as guidance documents under s9 of the Act.

The drafting of the three strands of the statutory Code was performed by the Office of the Forensic Science Regulator (OFSR) with input from UKAS and over 100 specialists in relevant fields. The Regulator also established a Scrutiny Group consisting of senior quality leaders from UKAS, National Police Chiefs' Council (NPCC) and The Association of Forensic Science Providers to review and edit the draft Code and to highlight any concerns about the practical applications of the Code. The Scrutiny Group also act as a channel of communication for practitioners and organisations. The Quality Standards Specialist Group were encouraged to provide comments on the detail of drafts of the Code, and the Regulator's Specialist Groups provided comments on drafts of the FSA specific requirements that were to be added to the Code.

The Regulator engaged with stakeholders early in the process of developing a draft of the Code, prior to the statutory consultation. The Regulator held two informal feedback exercises on working drafts of the Code, in January and April 2022. The purpose of the informal feedback exercises was to raise awareness among the forensic science community of the upcoming statutory Code and the change to statutory regulation. The comments received during the informal feedback exercises were used to refine the drafts. The Regulator provided a general response to key themes emerging from both informal feedback exercises in a Newsletter published in July 2022.

The Regulator recognised the need to ensure organisational accountability for compliance with the Code and for risks related to the undertaking of FSAs. The Regulator introduced into the Code the role of a Senior Accountable Individual who is accountable for the strategic leadership of an organisation's compliance with the Code and risks related to any FSA undertaken by, or under the control of, an organisation. The Regulator set out and discussed this role with Chief Officers, Directors and senior leaders in the organisations that would be subject to the Code.

Statutory consultation on the Code

The Act requires consultation on the draft Code, and this must include persons appearing to the Regulator to be representative of persons who are, or are likely to be carrying on activities to which the proposed Code applies. The Regulator decided that as this was the first consultation on the statutory Code of Practice there would be a broad open consultation. The Regulator set out the arrangements for consultation in a newsletter and proactively approached organisations to establish a mailing list as the channel through which communication relating to the statutory consultation and the statutory powers would be achieved.

On the 25 July 2022, a Commencement Order was laid in Parliament, which allowed the Regulator to finalise the draft of the whole Code, and launch the consultation as required by s3 of the Act. The consultation on the draft of the Code was launched on the 8 August 2022 and closed on the 31 October 2022. The consultation was undertaken through a questionnaire posted on the Regulator's website with the facility for an online response, response by email, and by post. Direct approaches were made to organisations who undertake FSAs. The consultation was drawn to the attention of stakeholders and agencies across the criminal justice system and was publicised through news stories shared by the Chartered Society of Forensic Sciences and the Forensic Capability Network. Alongside this, the Regulator prepared detailed information and response guidance for consultees. This set out the background to the development of the Code highlighting that the Code was based on the non-statutory Codes of Practice and Conduct and proposed that the underlying regulatory model for forensic science would not change with the introduction of a statutory Code.

The Regulator welcomed comments on any aspect of the Code and posed some questions to respondents to understand their views and concerns on the regulation of forensic science.

Response to the statutory consultation on the Code

A total of 110 responses were received from a range of organisations and sectors including law enforcement, academia, commercial providers, judiciary, member of the public and emergency and response services. Almost 3,000 comments were received from the respondents by questionnaire and emails. A range of comments was received, from identifying minor grammatical errors, to raising concerns regarding the operation of the Code and offering suggestions for changes.

Responses to the consultation were largely from organisations rather than practitioners. This was expected as the Code outlines a regulatory model for forensic science which puts the onus on organisations to operate an effective QMS.

As part of the consultation some general questions were posed about the Code, the regulation of forensic science and the extent to which respondents agreed with statements pertaining to the Code and the effectiveness and impact of the statutory regulation of forensic science. Not all respondents responded to every question. In general, there was support for the regulatory

model described. The majority of respondents agreed that the Code sets out suitable requirements to provide the necessary control of processes and minimise the risk of quality failure and the statutory powers will improve the quality of forensic science used in the investigation of crime and the criminal justice system.

The Regulator provided a formal response to consultation [13].

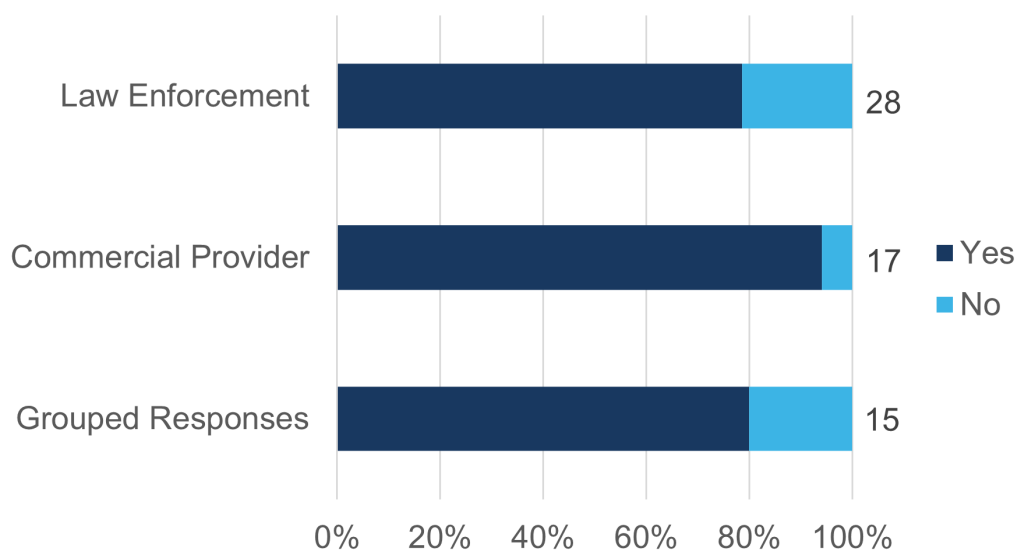
Code consultation responses

Do you support the regulatory model for forensic science described in the statutory Code?

Out of the 110 respondents, 60 answered this question. Of these respondents 83% (50) supported the regulatory model for forensic science.

More than 75% of respondents to this question in law enforcement and commercial provider categories supported the regulatory model described as shown by chart 1.

Chart 1: Responses to the question ‘Do you support the regulatory model for forensic science described in the statutory Code?’

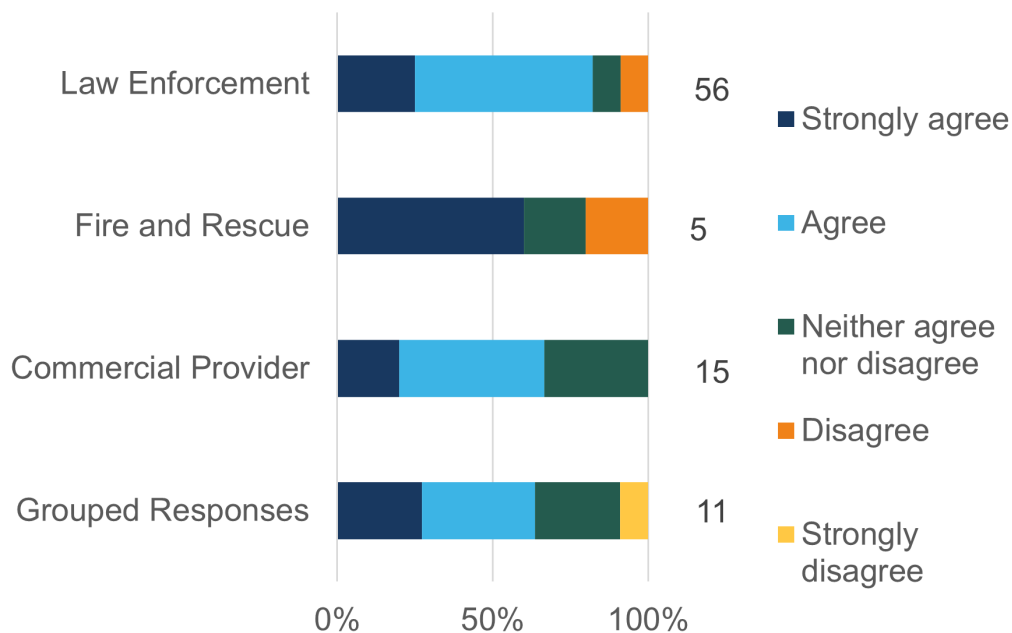


The statutory Code of Practice sets out suitable requirements to provide the necessary control of processes and minimise the risk of quality failure.

Out of the 110 respondents, 87 offered a view on this statement. 66 considered the Code of Practice sets out suitable requirements (strongly agree and agree) and 7 did not. 14 respondents neither agreed nor disagreed with the statement.

The responses were also analysed by organisation type.

Chart 2: Responses to the statement ‘The statutory Code of Practice sets out suitable requirements to provide the necessary control of processes and minimise the risk of quality failure’ – categorised by organisation type.



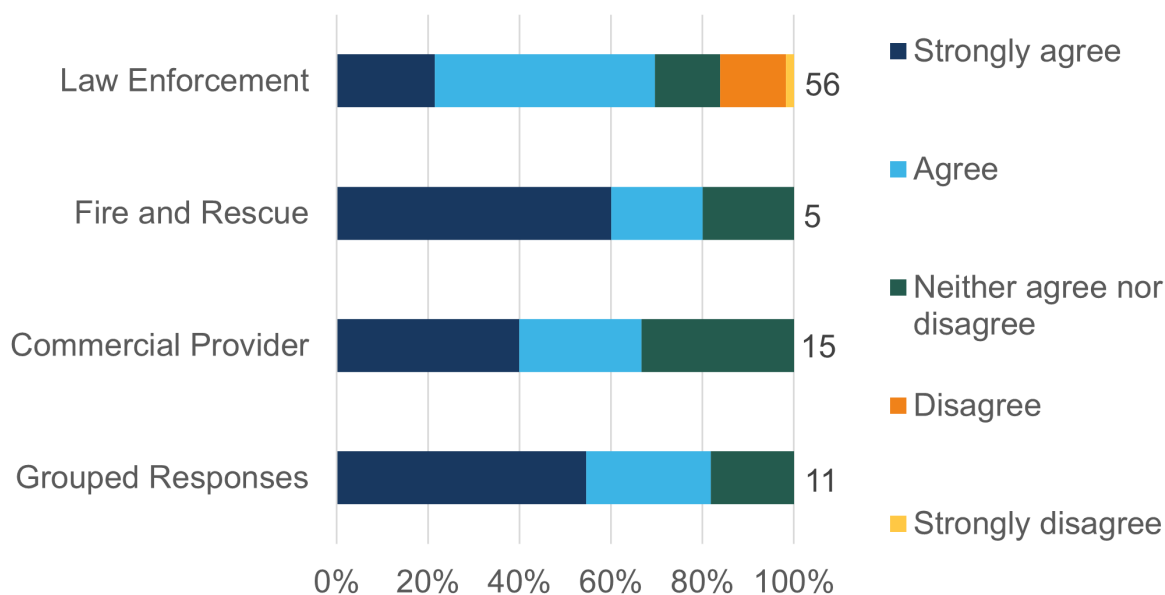
A greater proportion of respondents from law enforcement agreed with the statement when compared with the commercial provider category.

The statutory powers of the Forensic Science Regulator will improve the quality of forensic science used in the investigation of crime and the criminal justice system.

Out of the 110 respondents, 87 offered a view on this statement. 62 considered the statutory powers of the Forensic Science Regulator will improve the quality of forensic science used in the investigation of crime and the criminal justice system (strongly agree and agree) and 9 did not. 16 respondents neither agreed nor disagreed with the statement.

The responses were also analysed by organisation type.

Chart 3: Responses to statement ‘The statutory powers of the Forensic Science Regulator will improve the quality of forensic science used in the investigation of crime and the criminal justice system’ – categorised by organisation type.



Changes to the Code following consultation.

The Regulator gave careful consideration to the comments received and made some significant changes in responding to the concerns that were raised in the consultation responses:

- The Code was amended to allow for urgent legal classification of firearms to be undertaken outside of accreditation in agreement with the Regulator. This included a requirement that any legal classification of firearm is submitted to an accredited provider within 72 hours.
- Footwear coding activities will be allowed under a framework to be developed by the NPCC lead for footwear as an alternative to accreditation to ISO/IEC 17025 [2]. The definition of screening was updated to clarify that screening does not include cursory or preliminary selection of footwear for examination including premises searches.
- The Regulator reviewed provisions for certain frontline tools, often called kiosk type capture devices and amended the model for accreditation such that organisations could implement an ‘accredit once and deploy many’ approach.
- After reviewing the practicalities of accreditation for activities performed under different powers, with different purposes, the Regulator included several wider exclusions. Such exclusions include use of screening devices as defined in Schedule 7 of the Terrorism Act, 2000 [14], using an off-the-shelf tool following Schedule 3 of the Counter Terrorism and Border Security Act, 2019 [15], and acquisition of data utilising the Crime (Overseas Production Order) Act 2019 [16], and the analysis and processing of that data.

- The Regulator clarified that covert recovery would be excluded from this first issue of the Code. The exclusion is for recovery only, subsequent processing in any of the FSAs is subject to the requirements set for those individual FSAs. There is a general exclusion for recovery under the Investigatory Powers Act 2016 [17], however, the scientific standards and structures that are in place for covert forensic recovery remain under review. A future Code may set standards where this recovery is used in the investigation of crime or could be used in criminal proceedings in line with the provisions of the Forensic Science Regulator Act.

Transition from the non-statutory to statutory Code

The Statutory Code was approved by both Houses of Parliament and published on the 1 March 2023 [18] with an effective date to come into force on 2 October 2023. This was to allow time for accredited organisations to transition from the non-statutory Codes of Practice and Conduct to the Code, in order to declare compliance with the Code when it comes into force. The Regulator set up a Code Transition Management Group to oversee the progression of the organisations which were accredited to the non-statutory Forensic Science Regulator Codes of Practice and Conduct to the statutory Code through the submission of their completed transition templates and supporting documents to UKAS.

Regulator's conference

The Regulator hosted a conference on 20 June 2023 with the focus on the implementation of the Code. The conference was well attended, with speakers from UKAS, Forensic Capability Network, Ministry of Justice, Chair of the Forensic Science Regulator's Incident Examination Specialist Group, Police Digital Service, and OFSR. Questions from delegates were captured during the conference with the intention of publishing a consolidated response to all the questions. The Regulator would like to thank all of those who contributed to the conference, with a special thanks to the staff in the OFSR who organised and delivered a well-received conference.

The Regulator's experience and learning from the implementation of the Forensic Science Regulator Act 2021

The Regulator has set out below experience and learning from preparing and consulting on the Code and the potential for future legislative amendments that could improve the effective regulation of forensic science.

The preparation of the statutory Code

The Act is clear that the Regulator must prepare and publish a Code. There was no reason to fundamentally change the established model for the regulation of forensic science, therefore the non-statutory Codes of Practice and Conduct formed the basis for the statutory Code. To publish a singular Code would require a range of existing non-statutory documentation to be combined into one single document. There would need to be additional sections in the Code to cover the legal position of the Code, the definition of FSAs and FSA-specific requirements that were produced separately as appendices to the non-statutory Codes of Practice and Conduct.

Forensic science has grown into a wide range of science and technology applications used in the investigation of crime and criminal proceedings. What started out as laboratory analysis and fingerprint examination now encompasses crime scene examination, digital forensics, and forensic database management. The Act makes specific provision for the Regulator to take a flexible approach to which FSAs are subject to the Code and to make different provisions for different purposes or descriptions of person. In defining FSAs, the Regulator wished to recognise discrete identifiable areas of forensic science but not define these too narrowly such that there would be hundreds of FSAs and overly complex regulation. With this in mind, the Regulator defined 51 FSAs within the Code of which 34 would be subject to the Code when it comes into force and two FSAs with a deferred effective date of two years after the Code comes into force. This left 15 FSAs that do not have a date by which they will be subject to the Code, but this sends a clear signal as to the full scope of the FSAs that will be the subject of regulation.

All of the above makes for a lengthy and substantial singular Code, the Code approved by Parliament runs to 362 pages. This was a cause of concern and comment. However, having a singular Code inevitably resulted in a document running to hundreds of pages reflecting the complexity and range of forensic science and the need to ensure that regulatory requirements would be included in the Code.

The Regulator wishes to ensure that the Code is accessible and easy to use, and that organisations are able to establish a direct relationship with the Regulator to record the FSAs they undertake and their compliance with the Code. The Regulator will seek to establish a flexible and modular approach to the publication of the Code utilising an online platform as the

primary means of disseminating the Code for consultation and use but not detract from the requirement for a singular Code. The Regulator intends to establish an online portal that will allow organisations to inform the Regulator they are undertaking FSAs that are subject to the Code, evidence that they are acting in compliance with the Code and set out their plans for achieving compliance.

The status of the Code

The Act sets out that the Code is admissible in evidence in criminal and civil proceedings in England and Wales and a court may in particular take into account a failure by a person to act in accordance with the Code in determining a question in any such proceedings. This is an important provision in rightly integrating compliance with the Code into the provision of forensic science evidence in criminal proceedings. The Regulator has worked closely with the Ministry of Justice to ensure that the operation of the Code is aligned with the Criminal Procedure Rules and Criminal Practice Directions [19]. The Regulator is grateful for the cooperation and advice from the Ministry of Justice and particularly the links into the Criminal Procedure Rules Committee to ensure that this alignment is in place. The work undertaken by the Ministry of Justice in looking both at the development of forensic science regulation and the criminal procedure rules demonstrated that the statutory regulation of forensic science is one more step in an overall trend to introduce requirements that ensure the accuracy and reliability of forensic science evidence in criminal proceedings.

Investigations by the Regulator

Section 5 of the Act sets out powers to conduct investigations where the Regulator has reason to believe that a person may be carrying on a FSA to which the Code applies in a way that creates a substantial risk of adversely affecting any investigation or impeding or prejudicing the course of justice in any proceedings. The Regulator endorses the approach that the powers to conduct investigations are based on an assessment of risk to criminal investigations and proceedings rather than simply compliance with the Code.

The investigation and enforcement powers in s5 to s8 do not bind the Crown other than for someone serving or employed for policing purposes. This leaves many Crown bodies in central government who undertake FSAs, including several units in the Home Office, who cannot be subject to formal investigation and enforcement action by the Regulator pursuant to s5 to s8 of the Act. Where the Regulator has a specific concern about an FSA undertaken by a Crown body, the Regulator intends to inform the relevant Secretary of State for the Crown body and utilise the provisions of s9 to give advice and assistance to the Crown body in question to ensure that accurate and reliable forensic science evidence is used in the investigation of crime and criminal proceedings. This is in line with paragraph 34 of the explanatory notes to the Act.

The Accreditation of Forensic Service Providers Regulations 2018 and the Accreditation of Forensic Service Providers (Amendment) Regulations 2019

The Accreditation of Forensic Service Providers Regulations 2018 [20] (the 2018 regulations) transpose the European Council Framework Decision 2009/905/JHA [21] on accreditation of forensic service providers carrying out laboratory activities in order to facilitate exchange of fingerprint and DNA data under the Prüm arrangements. The 2018 regulations set a simple requirement for accreditation to the international standard 'ISO/IEC 17025'. The Regulator has no role, and the Code plays no part, in ensuring the requirements of the 2018 regulations are met to the satisfaction of the European Commission and EU member states.

In contrast the Code sets requirements for the undertaking of FSAs including the requirement for accreditation to ISO/IEC 17025 [2] but importantly based on general and specific requirements set out in the Code and an interpretation of this standard such that it can be applied to the undertaking of an FSA. This creates two different regulatory approaches for the undertaking of some fingerprint and DNA FSAs in England and Wales. This has a practical impact in that a lack of compliance with the Code requires a declaration of non-compliance and a description of the steps taken to mitigate non-compliance. It does not bar forensic science evidence from being used but may be utilised in an admissibility challenge and the Code requires the court to be made aware of the mitigation. If a strict interpretation of the 2018 regulations is taken, then a lack of accreditation would prohibit fingerprint and DNA evidence from being used in criminal proceedings. In the absence of the statutory regulation of forensic science it is understandable that a simple requirement for accreditation was introduced to satisfy the requirements of the European Commission as a Member State and latterly incorporated into the UK-EU Trade and Cooperation Agreement. However, if fingerprint examination and DNA profiling are to be regulated, and other countries and territories require assurance regarding the application and compliance with quality standards, then it is the Regulator's view that this should be rooted in the Act. In fact, the Act makes provision at s9(2) and s9(3) for the Regulator to provide advice or assistance relating to FSAs to any person in a country or territory outside the UK.

The Accreditation of Forensic Service Providers (Amendment) Regulations 2019 [22] ('the 2019 Amendment') amends regulation 4 of the 2018 Regulations in respect of laboratories at Aldermaston, Fort Halstead and Porton Down which carry out laboratory activity on items requiring specialist handling and containment due to the presence of hazardous chemical, biological, radiological, nuclear or explosive material. The 2019 Amendment sets out that the requirement for accreditation for the purposes of the 2018 Regulations is satisfied where that laboratory activity is carried out by, or under the supervision of, an individual employed by an accredited forensic service provider to carry out laboratory activity.

To maintain public confidence and to safeguard quality standards in forensic science a comprehensive quality management system is the established way of meeting quality standards, and holding accreditation is a demonstration of this. The Code applies to all forensic science organisations including those laboratories covered by the 2019 Amendment. The Code

does not disapply the 2019 Amendment but as a matter of policy the method outlined in the 2019 Amendment (i.e. that they are supervised by someone from an accredited laboratory) is not a method for a laboratory in England and Wales to demonstrate compliance with the Code.

Territorial extent of the Act

The primary provision in s2 of the Act states that the Regulator must prepare and publish a Code of Practice about the carrying on of FSAs “in England and Wales”. s5 and s6 of the Act also provide for the Regulator to exercise regulatory functions in relation to FSAs “to which the Code applies”. The legal interpretation of these provisions is taken to mean the Code applies to FSAs which are carried on in England and Wales. Where an FSA is undertaken in part in England and Wales, and in part outside of England and Wales, the Code will only apply to the part of the FSA undertaken in England and Wales.

The effect of this provision means that any FSAs that are carried on outside England and Wales and used in criminal investigations or criminal proceedings in England and Wales are not subject to regulation including the requirement to make a declaration of compliance with the Code. The Regulator's assessment is that currently most FSAs used in criminal investigations and proceedings in England and Wales are carried on in England and Wales. However, the Regulator has received a referral regarding the provision of expert forensic science evidence to a court in England and Wales that potentially signal a risk to criminal proceedings undertaken by a forensic science provider from outside of England and Wales. In the longer term there is a risk that the restrictive provision could incentivise commercial organisations to provide services from outside England and Wales. It also introduces the risk that novel or new scientific techniques developed and delivered outside of England and Wales such as the use of Artificial Intelligence are not subject to regulation including method validation. A preferable position that would provide greater assurance to the Criminal Justice System in England and Wales is that the regulatory functions of the Regulator should apply to FSAs used in criminal investigations and proceedings in England and Wales regardless of where they are carried on. This would provide a consistent and comprehensive application of the regulation of forensic science for all criminal investigations and proceedings in England and Wales.

Status of Scotland and Northern Ireland

Since the establishment of the Regulator's role in 2007 the forensic organisations in Scotland and Northern Ireland have made a significant and important contribution to developing the regulation of forensic science and the non-statutory Codes of Practice and Conduct. They have contributed significantly to the Regulator's Specialist Groups that have developed requirements and guidance on the undertaking of FSAs. They adopted the non-statutory Codes of Practice and Conduct on a voluntary basis, recognising the different jurisdictions within the UK and the establishment of and compliance with forensic quality standards would ensure the accuracy and reliability of forensic science evidence across all jurisdictions in the UK.

The Regulator is keen to maintain the professional links with forensic science organisations in Scotland and Northern Ireland but there is limited basis in the Act for doing this. The only provision that covers engagement by the Regulator outside of England and Wales is the provision in s9 for the Regulator to provide advice or assistance relating to FSAs to any person in a country or territory outside of the UK. This leaves Scotland and Northern Ireland in an undefined position in respect of contact with the Regulator. The Regulator has visited Scotland and Northern Ireland and spoken with senior forensic and police leaders and officials to discuss the impact of aligning with the requirements of statutory regulation in England and Wales and how this might be done on a voluntary basis to ensure a consistent approach across the UK.

Compliance with the Code

The statutory basis for regulation of forensic science set out in the Act gives the Regulator powers to conduct investigations and take enforcement action through a Compliance Notice where the Regulator believes there is a substantial risk to criminal investigations and proceedings. The Act also makes provision for the Code to be admissible in criminal proceedings and that a court may take into account a failure by a person to act in accordance with the Code in determining a question in any such proceedings. The Code requires a declaration of compliance for all FSAs that are subject to the Code and where non-compliance is declared details of the steps taken to mitigate the risks associated with non-compliance should be set out. The introduction of these powers and requirements is a fundamental change in the role of the Regulator in moving from a non-statutory to statutory basis.

Central to the discharge of the statutory role the Regulator will need to understand the risks to criminal investigations or proceedings by organisations and individuals who are undertaking FSAs that are subject to the Code. The Regulator sees the identification of risks being achieved in two ways:

- Reactively, where a referral for an FSA that is subject to the Code is made to the Regulator and following an investigation the Regulator establishes that there is a substantial risk to criminal investigations or proceedings.
- Proactively, through an understanding of compliance with the Code including the operation of a quality management system by organisations who are undertaking FSAs that are subject to the Code. The absence of, for example, method validation or demonstration of competence by a forensic practitioner as would be expected in an effective quality management system could pose a substantial risk to criminal investigations or proceedings.

The reporting of errors or quality incidents to the Regulator through the referral mechanism is an established mechanism to alert the Regulator to potential risks and has been in place since the role of the Regulator was established in 2007. The Regulator has conducted investigations and reviews into errors and quality failures and where appropriate issued a lessons-learned report, but in the absence of statutory powers any compliance with recommendations made by the Regulator has been voluntary.

To take a proactive approach to understanding risk the Regulator needs to establish who is undertaking FSAs that are subject to the Code and the extent of their compliance with the Code including whether methods are validated and individuals have demonstrated competence. At the point the Act gained Royal Assent in 2021 there were no formal records held by the Regulator of individuals or organisations who undertook forensic science activities or the extent to which they were compliant with the non-statutory Codes of Practice and Conduct. To address this the Regulator has conducted two compliance surveys alongside the work to prepare, consult and gain approval of the Code.

Initial baseline compliance survey

In October 2022, the Regulator undertook an initial baseline compliance survey structured around FSAs set out in draft Code of Practice that was subject to consultation as required by the Act. This was essentially a pilot exercise to gather information about the FSAs being undertaken, to support the statutory consultation and enable effective regulation. This provided a basis for understanding compliance with the Code.

The high-level findings of the baseline survey, to which 83 organisations responded were:

- there were varying compliance levels across all forensic disciplines
- there were four FSAs where no organisation is accredited for any sub-activity – two of those FSAs have deferred accreditation of 24 months and the other two are in niche areas of the examination and analysis of substances used as lubricants in sexual offence and the analysis of taggants
- there were high levels of non-compliance in scene examination and digital forensics
- there were high levels of compliance in biology, drugs/chemistry and marks/traces/patterns

Full survey to establish compliance with the Code

Following the approval by Parliament and publication of the Code the Regulator established the extent of compliance with the finalised Code by issuing a second compliance survey in June 2023. The primary purpose of the survey was to provide a starting point for discussion and action in respect of achieving compliance with the Code.

This survey contained questions relating to all FSAs set out in the Code whether they were subject to the Code or not. The detailed information requested on compliance for the FSAs that are subject to the Code included:

- identification of FSAs undertaken and whether they are compliant with the Code including the requirements for accreditation
- number of sites at which FSAs are undertaken
- estimation of annual number of cases where FSAs are undertaken
- details of accreditation status
- where applicable compliance with a NPCC framework where this was allowed as a compliance mechanism in the Code
- whether the organisation has a quality management system in place for the FSA and which elements of that are in operation, e.g. validation of methods and demonstration of competence by practitioners

Basis for high level analysis of the full compliance survey findings

The statutory Code compliance survey provided a large and complex data set. The data was analysed to produce a high-level picture of compliance and risk on the following basis:

- 51 FSAs were defined in the Code of which 34 FSAs are subject to the Code, two FSAs (Forensic examination of sexual offence complainants and Cell site analysis for geolocation) have a deferred date of the 2 October 2025 and the remaining 15 FSAs are not subject to Version 1 of the Code
- data analysis has largely focussed on the 34 FSAs that are subject to the Code when it comes into force on the 2 October 2023
- the data represented a snapshot in time when the survey was completed by participating organisations and this may well have changed since the survey was completed
- data analysis set out in this annual report was based on the information provided without any validation or further contact with organisations, e.g. accreditation status or scope and effectiveness of QMSs
- the data has been analysed to give an ‘organisational’ and an ‘FSA view’, with the main compliance analysis focused on the FSAs
- using the data supplied on the volume of FSAs undertaken by compliant and non-compliant organisations an ‘indicative % compliance’ was estimated for the FSAs that would be subject to the Code

Table 1: FSAs to which the Code applies

Number	Name	Code applies
Incident examination		
INC 100	Incident scene examination	Yes
INC 101	Collision investigation	No
INC 102	Examination of fire scenes	No
INC 103	Examination to establish the origin and cause of an explosion	No
INC 200	Forensic examination of detainees	No
INC 201	Forensic examination of deceased individuals	No
Biology		
BIO 100	Forensic examination of sexual offence complainants	Yes
BIO 200	Human biological material examination and analysis	Yes

Number	Name	Code applies
BIO 201	Non-human biological examination and analysis: vertebrates	Yes
BIO 202	Non-human biological examination and analysis: plants, microbes and invertebrates	No
BIO 300	Human body fluid distribution analysis	Yes
BIO 400	Human DNA analysis	Yes
BIO 401	Human kinship analysis	Yes
BIO 500	Taggant analysis	Yes
Drugs, toxicology and noxious materials		
DTN 100	Toxicology: analysis for drug(s), alcohol and/or noxious substances	Yes
DTN 101	Toxicology: analysis for drugs and alcohol under the Road Traffic Act 1988, Transport and Works Act 1992, and Railways and Transport Safety Act 2003	Yes
DTN 102	Toxicology: analysis for drugs in relation to s5A of the Road Traffic Act 1988	Yes
DTN 103	Examination and analysis to identify and quantify controlled drugs and/or associated materials	Yes
DTN 104	Toxicology: alcohol technical calculations	No
DTN 105	Examination and analysis relating to the preparation and production of drugs and/or psychoactive substances	No
DTN 200	Examination and analysis of corrosives and/or noxious substances	Yes
DTN 300	Examination and analysis of residues of lubricants used in sexual offences, including oils, greases and lubricants	Yes
DTN 400	Examination and analysis of ignitable liquids and their residues	Yes
DTN 500	Examination and analysis of chemical and/or biological agents and associated materials	Yes
DTN 501	Examination and analysis of explosives, explosives precursors and explosive residues	Yes
DTN 502	Examination and analysis of radioactive material	No
DTN 503	Examination and analysis of suspected explosive devices and associated material	No

Number	Name	Code applies
Marks, traces and pattern		
MTP 100	Friction ridge detail: visualisation and enhancement	Yes
MTP 101	Friction ridge detail: comparison	Yes
MTP 200	Footwear: coding	Yes
MTP 201	Footwear: screening	Yes
MTP 202	Footwear mark comparisons	Yes
MTP 300	Marks visualisation and enhancement	Yes
MTP 301	Marks comparison	Yes
MTP 400	Damage and physical fit	Yes
MTP 500	Examination and analysis of particulate trace materials	Yes
MTP 600	Examination and analysis of gunshot residue (GSR)	Yes
MTP 601	Examination, analysis and classification of firearms, ammunition and associated materials	Yes
MTP 602	Firearms: ballistics	Yes
MTP 700	Document handwriting	Yes
MTP 701	Document authenticity and origin	Yes
Digital		
DIG 100	Data capture, processing and analysis from digital storage devices	Yes
DIG 101	Analysis of communications network data	No
DIG 102	Digital network capture and analysis	No
DIG 200	Cell site analysis for geolocation	Yes
DIG 300	Recovery and processing of footage from closed-circuit television (CCTV) /video surveillance systems (VSS)	Yes
DIG 301	Specialist video multimedia, recovery, processing and analysis	Yes

Number	Name	Code applies
DIG 400	Technical audio operations	Yes
DIG 401	Speech and audio analysis	No
Case and data management		
CDM 100	Case review	No
CDM 200	Control and management of a forensic database service	No

‘Organisational view’ of the full compliance survey findings

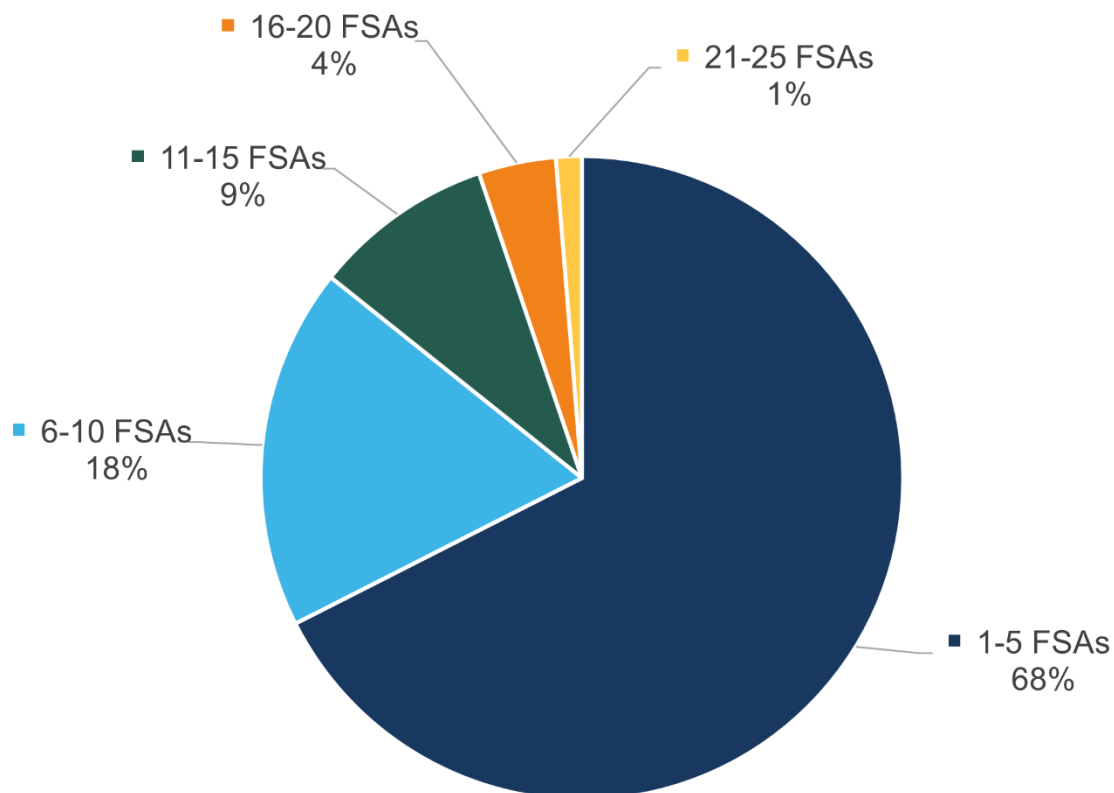
The full compliance survey was sent to 165 organisations with 105 organisations providing a response giving a response rate of 64%. Of the 60 organisations that did not respond, they were predominantly small organisations who are believed to be undertaking FSAs that will not be subject to the Code when it comes into force.

Of the 105 organisations which responded, 77 organisations are undertaking at least one of the 34 FSAs subject to the Code. 52 (68%) of these forensic science providers undertake 1-5 FSAs and 4 (5%) undertake more than 15 FSAs as shown in table 2 and chart 4 below.

Table 2: Number of organisations undertaking number of FSAs

Number of FSAs	Number of organisations undertaking FSAs
1-5 FSAs	52
6-10 FSAs	14
11-15 FSAs	7
16-20 FSAs	3
21-25 FSAs	1
Total	77

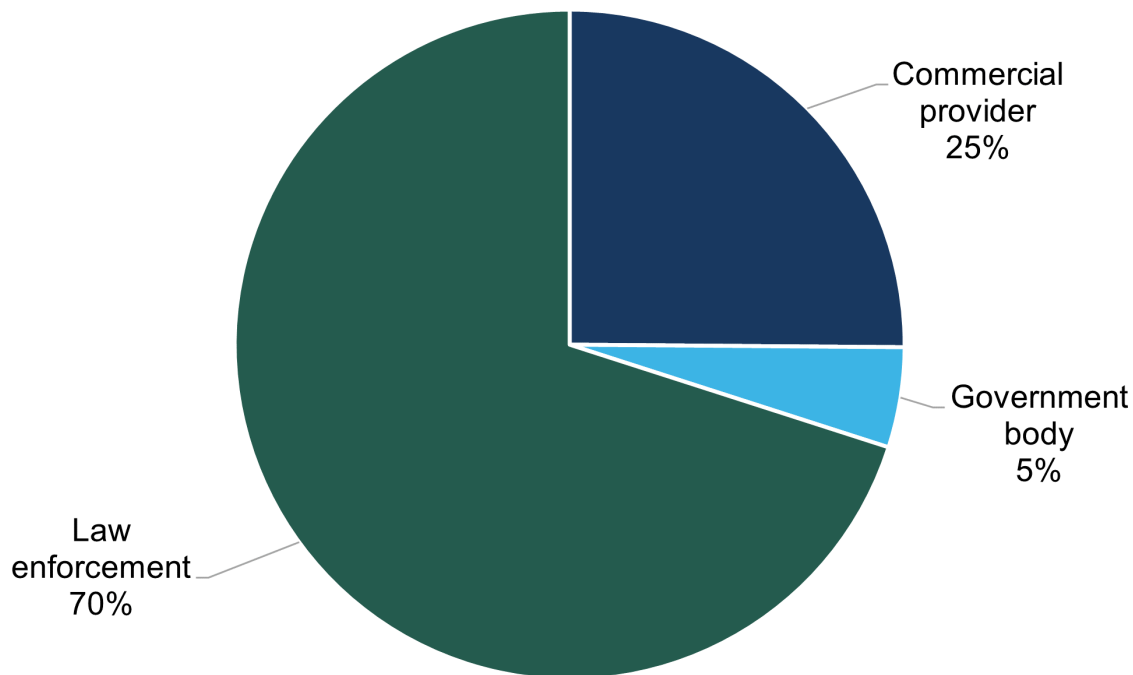
Chart 4: Number of organisations undertaking volume of FSAs



The data shows that FSAs as described by the Code are undertaken by mainly forensic science providers undertaking a small number of FSAs. There are relatively few organisations which provide a forensic science service across a wide range of FSAs. In this FSAs analysis, the volume of cases undertaken has not been taken into account.

Of the 34 FSAs subject to the Code, the majority of the FSAs are undertaken by law enforcement bodies as shown in chart 5 below.

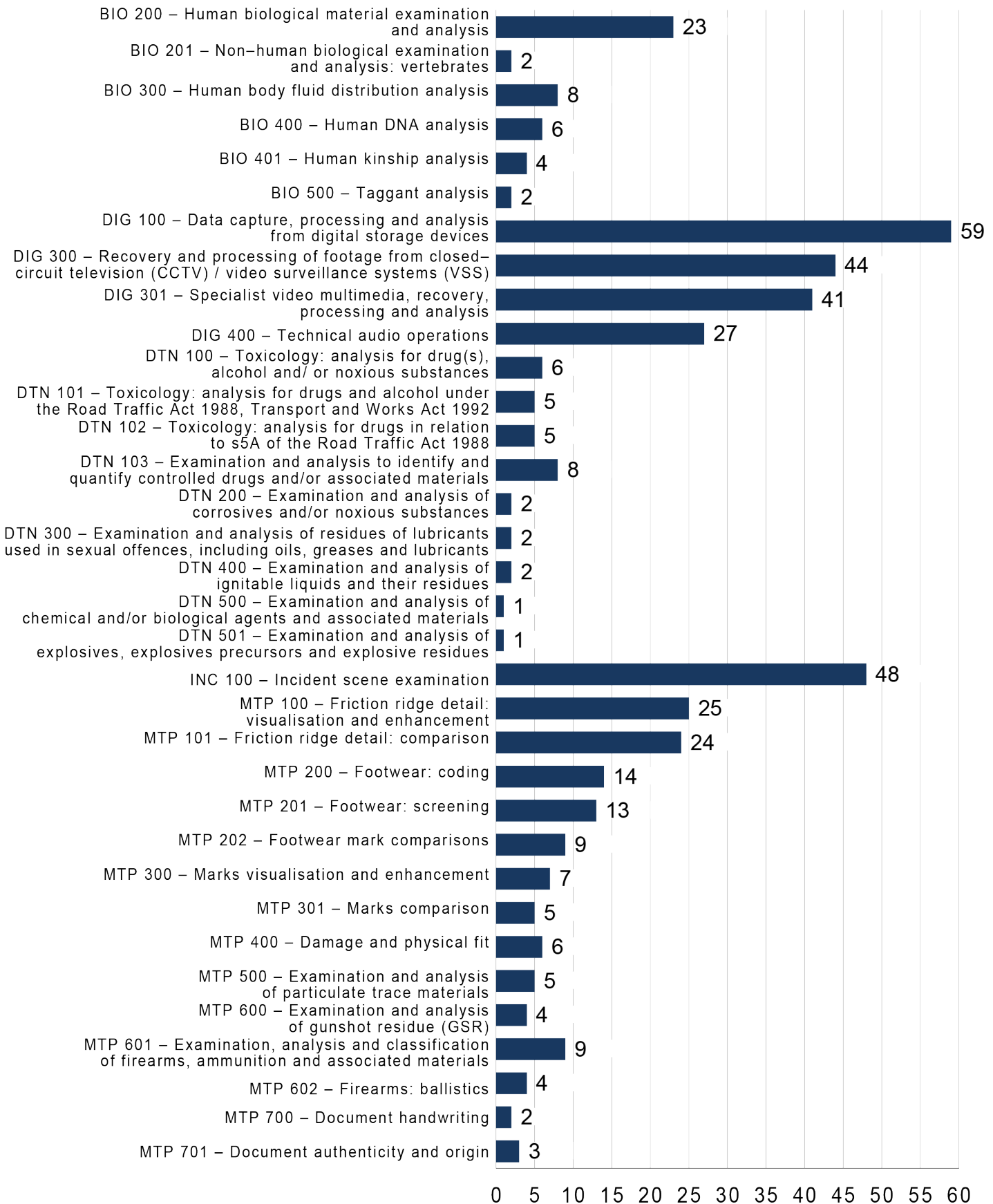
Chart 5: Total FSAs undertaken by organisation type



‘FSA view’ of the full compliance survey findings

The overall picture of the number of organisations which carry out each of the 34 FSAs subject to the Code is shown in chart 6.

Chart 6: Number of Organisations that carry out each FSA



The five FSAs which are undertaken by the greatest number of providers are shown in table 3, all but one of these FSAs are in the digital forensics discipline. In contrast and understandably the examination and analysis of chemical and/or biological agents and associated materials is undertaken by only one organisation.

Table 3: FSAs undertaken by the most and the least number of providers

FSA	Number of organisations
DIG 100 – Data capture, processing and analysis	59
INC 100 – Incident scene examination	49
DIG 300 – Recovery and processing of footage from CCTV and video surveillance systems	42
DIG 301 – Specialist video multimedia, recovery, processing and analysis	36
DIG 400 – Technical audio operations	26

FSA	Number of organisations
DTN 500 – Examination and analysis of chemical and/or biological agents and associated materials	1
DTN 200 – Examination and analysis of corrosives and/or noxious substances	2
DTN 300 – Examination and analysis of residues of lubricants used in sexual offences, including oils, greases and lubricants	2
DTN 501 – Examination and analysis of explosives, explosives precursors and explosive residues	2
BIO 201 – Non-human biological examination and analysis: vertebrates	2
BIO 500 – Taggant analysis	2
MTP 701 – Document authenticity and origin	2
MTP 700 – Document handwriting	2

Of the 15 FSAs not yet subject to the Code, table 4 shows the number of organisations who responded to the survey indicating they undertake these FSAs.

Table 4: Number of organisations undertaking FSAs not subject to the Code

FSAs	Number of organisations
INC 101 – Collision investigation	34
INC 102 – Examination of fire scenes	23
INC 103 – Examination to establish the origin and cause of an explosion	12
INC 200 – Forensic examination of detainees	33
INC 201 – Forensic examination of deceased individuals	30
BIO 202 – Non-human biological examination and analysis: plants, microbes and invertebrates	2
DTN 104 – Toxicology: alcohol technical calculations	10
DTN 105 – Examination and analysis relating to the preparation and production of drugs and/or psychoactive substances	5
DTN 502 – Examination and analysis of radioactive material	4
DTN 503 – Examination and analysis of suspected explosive devices and associated material	5
DIG 101 – Analysis of communications network data	Omitted from the survey
DIG 102 – Digital network capture and analysis	29
DIG 401 – Speech and audio analysis	12
CDM 100 – Case review	52
CDM 200 – Control and management of a forensic database service	15

Analysis and indicative compliance for FSAs subject to the Code

To provide an indicative compliance level, the data for the FSAs that are subject to the Code was analysed, taking into account the volumes of cases undertaken, to calculate a weighted indicative compliance level for each FSA. Also taken into account for each FSA was whether organisations self-declared that they had validated methods and demonstration of competence by practitioners. These are key elements of the mitigations required where organisations declare non-compliance with the Code. The results of this analysis based on five bands of indicative compliance is shown in table 5.

Table 5: Indicative compliance level for FSAs

Indicative compliance		Number of FSAs
Very high	≥ 90%	12
High	75% - 89%	10
Medium	50% - 74%	5
Low	25% - 49%	3
Very low	0% - 24%	4
	Total	34

Based on this analysis and scrutiny of the data received in the full compliance survey, the Regulator has made a general assessment of the five bands of indicative compliance outlined above with a more in-depth scrutiny for the FSAs with lower compliance. This is reported below.

General Assessment: High - Very high indicative compliance levels

Of the 34 FSAs that are subject to the Code when it comes into force, 22 (64%) show high to very high levels of compliance. These FSAs are activities that have been subject to regulation for some considerable time and are generally undertaken by organisations with mature and established QMSs for these FSAs. Even where non-compliance was declared by organisations, they had undertaken validation and had demonstration of competence for forensic practitioners. The lack of compliance was more about their scope of accreditation not fully covering all the sub-activities of an FSA. The FSAs that have high to very high compliance levels are:

- human DNA analysis
- document handwriting

- toxicology: analysis for drugs in relation to s5A of the Road Traffic Act 1988
- human body fluid distribution analysis
- examination, analysis and classification of firearms, ammunition and associated materials
- examination and analysis of chemical and/or biological agents and associated materials
- examination and analysis of residues of lubricants used in sexual offences, including oils, greases and lubricants
- marks visualisation and enhancement
- human kinship analysis
- examination and analysis of gunshot residue (GSR)
- footwear: coding
- examination and analysis of explosives, explosives precursors and explosive residues
- friction ridge detail: visualisation and enhancement
- friction ridge detail: comparison
- damage and physical fit
- examination and analysis of ignitable liquids and their residues
- marks comparison
- examination and analysis to identify and quantify controlled drugs and/or associated materials
- footwear mark comparisons
- 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
- firearms: ballistics
- toxicology: analysis for drug(s), alcohol and/or noxious substances

General assessment: medium indicative compliance level

Of the 34 FSAs that are subject to the Code, 5 (15%) show an average level of 50% to 74% compliance. These FSAs are undertaken by 15 organisations, 12 of these organisations have undertaken validation and have demonstration of competence for forensic practitioners. The FSAs with medium indicative compliance level are:

- taggant analysis
- examination and analysis of particulate trace materials
- footwear: screening
- examination and analysis of corrosives and/or noxious substances
- non-human biological examination and analysis: vertebrates

General assessment: low to very low indicative compliance levels

Of the 34 FSAs that are subject to the Code, 7 (21%) show low to very low levels of compliance. The FSAs with low to very low indicative compliance level are shown in table 6.

Table 6: Organisations with low to very low compliance levels

FSAs	Indicative compliance
Incident scene examination	43%
Human biological material examination and analysis	35%
Document authenticity and origin	27%
Recovery and processing of footage from closed-circuit television (CCTV)/video surveillance systems (VSS)	22% (Not inc. NPCC Framework)
Data capture, processing and analysis from digital storage devices	19%
Technical Audio Operations	9% (Not inc. NPCC Framework)
Specialist video multimedia, recovery, processing and analysis	2%

The Regulator made a more in-depth assessment during the 2022-23 reporting year of the indicative compliance for these seven FSAs using the information supplied in the full compliance survey, the results of this analysis were as follows:

Incident scene examination

The full compliance survey responses indicated that 48 organisations, mainly police organisations, were undertaking this FSA and in high volume. The requirement to achieve compliance with the non-statutory Codes of Conduct and Practice including accreditation for this FSA was outlined in issue 2 (2014) with a deadline of 2020, this was subsequently amended to 2022. There had been a lot of recent activity by police organisations to put in place QMSs and accelerate progress to achieve compliance with the Code.

Human biological material examination and analysis

The full compliance survey responses indicated that 23 organisations were undertaking this FSA and in high volume. The requirement to achieve compliance with the non-statutory Codes of Conduct and Practice including accreditation for this FSA was outlined in issue 1 (2011) with a deadline of 2013, this was subsequently amended to 2017. There was a mix of commercial companies and police forces undertaking this FSA with the commercial companies having high levels of compliance and a more complex scope of accreditation.

Document authenticity and origin

The full compliance survey responses indicated that 3 organisations were undertaking this FSA and in very low volume. The responses indicated demand for this FSA had reduced significantly with the development of digital media and that this FSA may well soon be an infrequently used technique as defined by the Code which sets different requirements for compliance.

Recovery and processing of footage from closed-circuit television (CCTV)/video surveillance systems (VSS)

The full compliance survey responses indicated that 44 organisations, mainly police organisations, were undertaking this FSA and in very high volume. For this FSA the Regulator has allowed compliance to be demonstrated with the Code by adherence to the NPCC framework for video based evidence as an alternative to accreditation. It was not possible to take account of the information provided on indicative compliance with the NPCC framework, and the responses were highly variable ranging from 90% to 0% to 'unknown'.

Data capture, processing and analysis from digital storage devices

The full compliance survey responses indicated that 59 organisations were undertaking this FSA and in very high volume. There was a mix of commercial companies and police forces undertaking this FSA. The requirement to achieve compliance with the non-statutory Codes of Conduct and Practice including accreditation for this FSA was outlined in issue 1 (2015) with a deadline of 2017. The failure mode and risk will be that relevant data is not recovered confirming or not that a crime has been committed or providing evidence to exclude an individual. Police Digital Forensic Units indicated their intention to comply with the requirements of the Code including accreditation but identified units or roles based outside of the Digital Forensic Units who are either unaware or did not intend to comply with the Code.

Technical audio operations

The full compliance survey responses indicated that 27 organisations, mainly police organisations, were undertaking this FSA and in low volume. This FSA covers 'simple' audio acquisition and conversion for subsequent processing e.g. voicemail messages. Non-compliance was higher than expected, many police forces had not recognised that 'self' created material such as 999 calls, body worn video and video interviews are excluded from the Code. Furthermore, the NPCC framework for video based evidence covers audio associated with video as a compliance route and this did not seem to be understood. Where the NPCC framework for video based evidence was mentioned in the survey, it was indicated that 90% to 95% of the audio work could be performed under the framework.

Specialist video multimedia, recovery, processing and analysis

The full compliance survey responses indicated that 59 organisations were undertaking this FSA and in high volume. There was a mix of commercial companies and police forces undertaking this FSA. This FSA involves highly complex technical processing and scientific analysis which can have a significant bearing on an investigation or criminal proceedings. For example, was an object a firearm, what speed was a vehicle travelling, what is the height of an individual and can a person's face be compared with a reference image and an opinion given as to whether it is a known person. The requirement to achieve compliance with the non-statutory Codes of Conduct and Practice including accreditation for this FSA was outlined in issue 3 (2015) with a deadline of 2017. The failure modes include relevant data not being recovered, loss of data from recovered items or degradation and unreliable speed, height, other measurement and opinion. The full compliance survey responses indicated a low number of organisations have conducted method validation and can demonstrate practitioner competence and a high number of organisations who have made little preparation for accreditation and meeting the quality standards in the Code.

Table 7: Indicative compliance level per FSA

FSAs with indicative % compliance				
Very high (> 90%)	High (75 – 89%)	Average (50 – 74%)	Low (25 – 49%)	Very low (0 – 24%)
BIO 400 – Human DNA analysis	MTP 100 – Friction ridge detail: visualisation and enhancement	BIO 500 – Taggant analysis	INC 100 – Incident scene examination	DIG 300 – Recovery and processing of footage from CCTV/video surveillance systems
MTP 700 – Document handwriting	MTP 101 – Friction ridge detail: comparison	MTP 500 – Examination and analysis of particulate trace materials	BIO 200 – Human biological material examination and analysis	DIG 100 – Data capture, processing and analysis from digital storage devices
DTN 102 – Toxicology: analysis for drugs in relation to s5A of the Road Traffic Act 1988	MTP 400 – Damage and physical fit	MTP 201 – Footwear: screening	MTP 701 – Document authenticity and origin	DIG 400 – Technical Audio Operations
BIO 300 – Human body fluid distribution analysis	DTN 400 – Examination and analysis of ignitable liquids and their residues	DTN 200 – Examination and analysis of corrosives and/or noxious substances		DIG 301 – Specialist video multimedia, recovery, processing and analysis
MTP 601 – Examination, analysis and classification of firearms, ammunition and associated materials	MTP 301 – Marks comparison	BIO 201 – Non-human biological examination and analysis: vertebrates		

FSA's with indicative % compliance

Very high (> 90%)	High (75 – 89%)	Average (50 – 74%)	Low (25 – 49%)	Very low (0 – 24%)
DTN 500 – Examination and analysis of chemical and/or biological agents and associated materials	DTN 103 – Examination and analysis to identify and quantify controlled drugs and/or associated materials			
DTN 300 – Examination and analysis of residues of lubricants used in sexual offences, including oils, greases and lubricants	MTP 202 – Footwear mark comparisons			
MTP 300 – Marks visualisation and enhancement	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			
BIO 401 – Human kinship analysis	MTP 602 – Firearms: ballistics			
MTP 600 – Examination and analysis of gunshot residue (GSR)	DTN 100 – Toxicology: analysis for drug(s), alcohol and/or noxious substances			
MTP 200 – Footwear: coding				
DTN 501 – Examination and analysis of explosives, explosives precursors and explosive residues				

Assessment of risk

Compliance with the Code is an absolute concept; a forensic unit either complies with the requirements set out in the Code or does not. However, the Regulator recognises that the impact of different non-compliances might not be equal, with a continuum from minor to severe, with increasing risk posed to the criminal justice system. The enforcement powers in the Act are not automatically triggered by a lack of compliance with the Code. However, a lack of compliance with the Code would, in the view of the Regulator, provide the basis for an intervention to assess risk and may trigger use of the powers of the Act. The Act requires the Regulator to assess and understand risk making the provision that if the Regulator “has reason to believe” that a person may be carrying on a FSA to which the Code applies in a way that creates a substantial risk of adversely affecting any investigation, or impeding or prejudicing the course of justice in any proceedings then enforcement action can be taken. Substantial risk is defined in the Code as being “more than remote or theoretical”.

Based on this initial and general assessment and acknowledging it is based on the full compliance survey results alone it is the Regulator’s view that risks;

- are well understood and managed for the FSAs with high to very high (> 75%) indicative level of compliance
- are contained for the FSAs with medium (50-74%) indicative level of compliance but action needs to be taken to achieve full compliance with the Code and the Regulator acknowledges that in generally these FSAs are undertaken in low volumes
- need to be understood and mitigated for the FSAs with low to very low (<49%) indicative compliance levels with urgent action to achieve compliance with the Code

The validation of the full compliance survey data through contact with individual organisations to understand the levels of risk and the plans to mitigate risk will be a priority for the 2023-24 reporting year. The Regulator will initially focus on the FSAs with low to very low (<49%) indicative compliance levels.

General comments on the results of the full compliance survey and future approach to monitoring compliance levels

The full compliance survey indicated that 77 organisations were undertaking at least one of the 34 FSAs that are subject to the Code with the potential for this to increase to over 100 organisations when all 51 FSAs defined in the Code are made subject to the Code. For the data capture, processing and analysis from digital storage devices FSA the survey indicates that there are 59 organisations undertaking this FSA. This makes for a complex and fragmented landscape for regulating forensic science in England and Wales. If each organisation who undertake an FSA is independently developing their QMSs including method validation and demonstrating practitioner competence, then this will mean a large element of duplication and repeated work

across the forensic sector. This is in contrast to, for example, Scotland, where there is a central focus, and European States where there are national or at least federated forensic organisations. In the various consultations undertaken by the Regulator concerns have been raised about the costs and resource implications of regulation but by far the biggest cost impact is the duplication and lack of coordination in the development and implementation of the systems and processes required to achieve compliance with the Code. The Regulator has worked closely with the NPCC Forensic Capability Network and NPCC Forensic Collision Investigation Network and endorses the work they are doing to provide central validation and support to police organisations to reduce the resources required for individual organisations to achieve compliance with the Code. However, they cannot mandate a method or approach within the police service and as they are police funded have no remit to support the commercial sector.

Undertaking compliance surveys is inefficient and resource intensive for both the organisations that are subject to regulation and the Regulator. Paragraph 6 of the Schedule to the Act makes provision for the Secretary of State to provide the Regulator the resources necessary for the carrying out of the Regulator's functions. Under these provisions, the Regulator is seeking to establish a more efficient technical solution that will:

- allow organisations to log on a secure portal and input the information requested by the Regulator
- allow organisations to update that information whenever it changes
- give the Regulator access to up-to-date data to assist with the ongoing compliance and monitoring of risks
- allow the Regulator to report to the Secretary of State, Parliament and stakeholders on the risk landscape of forensic science provision in England and Wales

Such a portal will significantly reduce the cost, timeliness and complexity of administering the one-off surveys by streamlining the data input requirement from all forensic science providers in England and Wales. Without this capability the Regulator will be severely restricted in discharging the statutory functions and reporting to the Secretary of State, Parliament and stakeholders.

General regulatory activities

This section of the annual report deals with the business-as-usual activities undertaken by the OFSR that have transitioned from non-statutory to statutory regulation.

Referrals and general enquiries to the Regulator

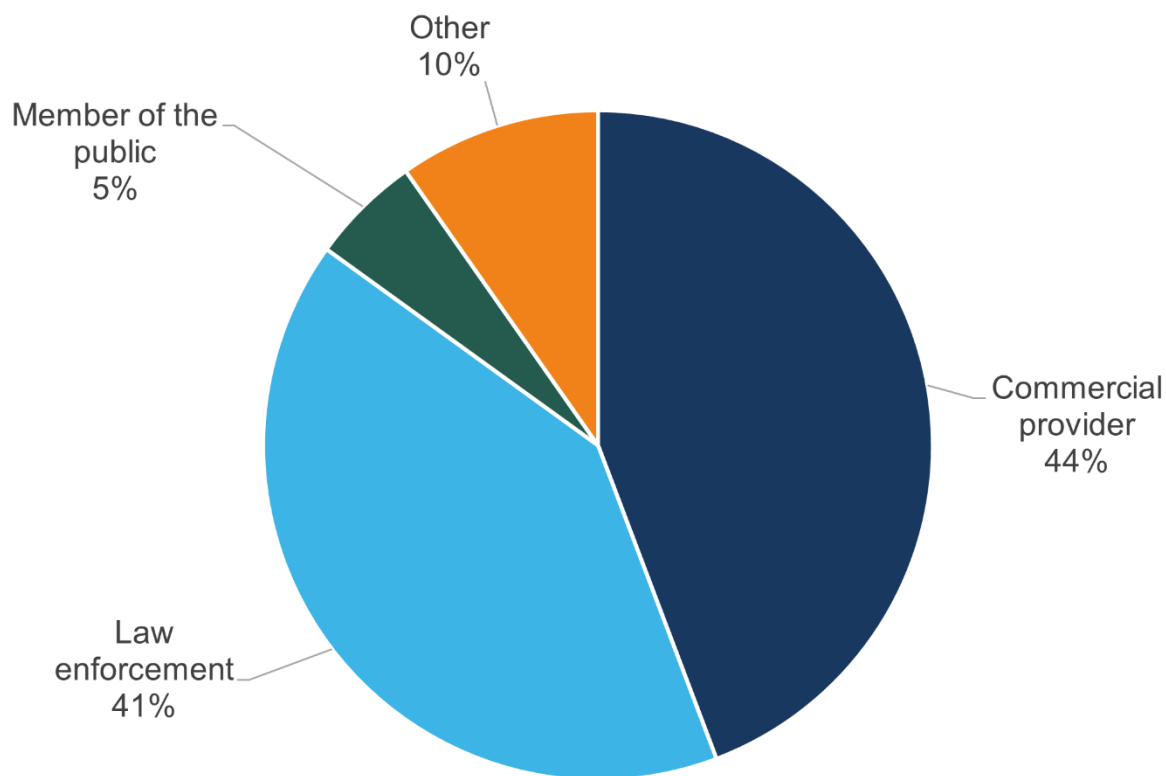
Part of the role of the Regulator is to investigate non-conformances which have been referred to the Regulator. Non-conformances (also known as referrals) refers to any aspect of a forensic unit's work that does not meet the requirements set out in the forensic unit's policies, procedures, commissioning party requirements, or the Code. The Regulator endorses the positive culture of self-reporting in the forensic science sector and encourages forensic units to bring to the attention of the Regulator any non-conformances, to ensure these issues are given proper consideration.

Any other enquiries received by the OFSR on behalf of the Regulator via the FSREnquiries mailbox, that are not reporting non-conformances, are classified as general enquiries. Examples of general enquiries include questions about the Code or guidance documents, and general enquiries from the public about forensic science.

The Regulator received 114 referrals and 104 general enquiries in the reporting period of 25 July 2022 and 24 July 2023 to align with the first year of statutory regulation.

Of those 114 referrals, 80% were self-referred and the remaining 20% were referred from third parties. Most of the referrals received by the Regulator were from the commercial providers as shown in Chart 7.

Chart 7: Source of referrals



Most of the referrals were in digital forensics as shown in table 8.

Table 8: Breakdown of referrals per forensic categories

Forensic categories	Number of referrals
Digital forensics	43
Biology	22
Toxicology/drugs	21
Marks, traces and patterns	14
Incident scene	11
Forensic science services	3
Grand total	114

Of the referrals received during the reporting period, 43% were closed during that same period.

Legacy referrals

At the time the Regulator was put on a statutory footing, there were 148 referrals open. Of those legacy referrals, 59 were addressed in the reporting period.

Given that the resources of the OFSR have been largely devoted to preparing the Code and statutory regulation, referrals were triaged on receipt to establish if they required immediate action. The Regulator recognises that there is a significant backlog of open referrals and plans to focus on addressing the backlog.

The Regulator and members of the OFSR deal with a wide range of enquiries received via the FSREnquiries mailbox and via direct emails to members of the OFSR and Regulator. All but one of the 104 enquiries received via the FSREnquiries mailbox in the reporting period have been actioned and dealt with. The number of enquiries received directly by members of the OFSR and the Regulator on a frequent basis have not been counted and reported on but have been dealt with.

A summary of the data for enquiries and referrals is shown in table 9.

Table 9: Summary of referrals

Forensic categories	Prior to 24 July 2022	25 July 2022 to 24 July 2023
Referrals received	148*	114
Referrals closed during 25 July 2022 to 24 July 2023	59	53
Outstanding referrals	89	61

* These are referrals still open prior to statutory regulation and not referrals received

Anonymous reporting

An anonymous reporting line operated by Crimestoppers has now been live since July 2019. This line is available to report concerns about forensic science quality. For those within the profession, it is intended that this line is used as a last resort, since the Regulator generally expects any quality issue identified within a forensic unit to be addressed through that organisation's internal quality management processes in the first instance. There may, however, be instances where a person believes either that their organisation has not addressed their concerns or that they would be disadvantaged in some way by reporting concerns internally. It is for such instances that the anonymous reporting line has been established.

In this reporting period there have been eight reports through this route. The number is, as anticipated, relatively small. The culture of forensic science in England and Wales means that most people, and organisations, generally feel confident about reporting issues. These anonymous reports were reviewed by the Regulator and necessary actions were taken. The Regulator did not identify any significant concerns via the anonymous reporting line.

Data protection

There have been no issues affecting the Regulator's use of personal data in this reporting period.

Freedom of Information (FOI)

On commencement of s1 of the Act on 25 July 2022, the Regulator was established as an authority subject to the Freedom of Information Act 2000 [23] (FOIA). For this reporting year the Regulator was subject to FOI and received 14 information requests. Of the 14 received information requests, 13 were dealt with within the required time limit.

Development and maintenance of standards

Since the Code's approval by the Secretary of State and both Houses of Parliament, the Regulator has focused efforts on the drafting and reviewing of guidance documents, under s9 of the Act, that support the Code.

The statutory basis for regulation of forensic science will change the basis for the issuing of guidance documents by the Regulator. Guidance documents issued under the provisions of s9 of the Act will not set any requirements as all requirements will be in the Code. In the preparation of the Code all the non-statutory guidance documents were reviewed and any requirements incorporated into the Code. The guidance documents with requirements removed will be republished and rebranded in a new format with some changes to style and structure with a new naming system to distinguish them from the previous non-statutory guidance. All the guidance documents will be subject to external review by the Regulator's Specialist Groups or the Scrutiny Group.

Regulators Specialist Groups

During this reporting period the work of the Specialist Groups has been temporarily deprioritised to enable focus to be given to the preparation of the Code and commencement of the Act. Members of the Specialist Groups have been involved in preparing the draft Code, through defining FSAs and reviewing any relevant appendices to the non-statutory Codes of Practice and Conduct.

The Regulator has taken the opportunity in this temporary hiatus to review and refocus the Specialist Groups. The position and intent of the Regulator's Specialist Groups is as follows:

Incident Examination Specialist Group

The Incident Examination Specialist Group held its first meeting in March 2022 and supports the Regulator with recommendations on the preparation, implementation and monitoring of forensic quality standards for Incident Examinations. The group assisted with drafting FSA specific requirements to aid the interpretation of the statutory Code for incident examination, and via its subgroups, fire scene examination and collision investigation. The Incident Examination Specialist Group will also consider quality and technical issues and recommend areas where guidance documents from the Regulator would be beneficial.

Medical Forensics Specialist Group

The Medical Forensics Specialist Group covers the biology FSA – examination of sexual offence complainants. This group is supporting the Regulator with matters relating to forensic medical examination facilities. This is an important area of work as examination of sexual offence complainants requires compliance with the Code from October 2025. To support meeting the requirements of the Code there are specific guidance documents and the Medical Forensics Specialist Group are reviewing these as they are updated in line with the requirements of the Act.

Interpretation Specialist Group

The Interpretation Specialist Group is a new Specialist Group being established to consider issues around interpretation in forensic science. The group will revisit the document FSR-C-118 – Development of evaluative opinion [24], that was issued by the previous Regulator, to produce a general guidance document. The aim of the group will be to produce guidance documents that are specific to each FSA, or FSA grouping.

Drugs and Toxicology Specialist Group

This Specialist Group is a new group to advise the Regulator on the undertaking of the relevant FSAs described in the statutory Code and the quality standards and accreditation that should apply to these activities. It would also facilitate the establishment of two working groups, reporting into the Specialist Group, to provide advice to the Regulator on the development of 'off-site' testing for drugs covered by the Misuse of Drugs Act 1971 [25] (and related legislation) and on the FSA specific requirements for Road Traffic Act 1988 s5A drugs driving analysis.

The Regulator has progressed work on the s5A drugs driving FSA specific requirements, consequent on the wider review of the recent quality failure and a series of representations made in the consultation of the Code, and so has established a working group to look at this. The s5A working group has a specific remit to consider and recommend changes to the FSA specific requirements for drugs driving analysis and comprises a small group of representatives from industry, academia and independent practice to consider how these requirements could be improved for clarity and practicality, whilst ensuring high quality standards are maintained.

Digital Forensics Specialist Group

Since the Regulator was put on a statutory basis, the members of Digital Forensic Specialist Group were consulted ex-committee on development of the FSA definitions and the group convened to discuss the feedback from the consultation. Previously the group had overseen the output of sub or writing groups including what has now become the FSA specific requirements in the Code on video analysis and cell site analysis, and on the development of guidance on the validation of digital forensics. The anticipated short- and medium-term areas for technical advice the Regulator anticipates include but are not limited to the use of frontline tools such as kiosks

and cell site analysis. The Regulator intends reviewing the role and makeup of the group and/or the need for separate ad hoc task-finish groups to assist with specific FSAs or sub activities.

DNA Specialist Group

The DNA Specialist Group has been supporting the Regulator by providing advice on matters related to the analysis, interpretation, and reporting of a range of types of DNA analysis, from Y-STR to mixture interpretation. Over the last few months, the group has been assisting the Regulator's office with reviewing guidance documents as these are updated in line with the requirements of the Forensic Science Regulator Act. To ensure the Regulator has advice and guidance on all the biology FSAs, the remit and membership of this group will be broadened to cover all the biology FSAs.

Fingerprint Quality Standards Specialist Group

This is an established Specialist Group which, for many years, has been chaired by Gary Holcroft of Scottish Police Authority. Gary has recently stepped down from this position and the Regulator thanks him for his contribution to the group and to the wider aims of regulation during his tenure. Neil Dennison from Yorkshire and the Humber has agreed to take on the role of Chair, with the intention of reconvening the group over the summer, or early autumn.

Firearms Specialist Group

A firearms specialist group has been established, chaired by Martin Parker of the British Association for Shooting and Conservation. The group is in the process of drafting a guidance document to support FSA – MTP 601 – Examination, analysis and classification of firearms, ammunition and associated materials. This guidance is to provide clarification on the dispensation allowed in the Code for urgent classification to be carried out without requiring accreditation. This guidance document will be published in advance of the Code coming into force.

Forensic Pathology Specialist Group

The non-statutory Regulator had some responsibilities in respect of the oversight of forensic pathology, which had previously been carried out by the Home Office. The Act required the Regulator to define FSAs. The Regulator decided that the medical functions carried out by forensic pathologists and regulated by the General Medical Council and overseen by the Home Office Forensic Pathology Delivery Board would not constitute FSAs as defined by the Act. On this basis the Regulator's functions in respect of the oversight of forensic pathology were relinquished and returned to the Home Office, and the Forensic Pathology Specialist Group was disbanded.

Resources and finance

Under paragraph 6 of the Schedule to the Act, the Secretary of State may, after consultation with the Regulator, provide the Regulator with staff, accommodation, equipment and other facilities as the Secretary of State considers necessary for the carrying out of the Regulator's functions. This section of the annual report sets out the resources made available to the Regulator.

The Regulator is supported by a team of staff known as the Office of the Forensic Science Regulator (OFSR) who work under the direction of the Regulator and are employed by the Home Office.

As this annual report spans two financial years and it is not straightforward to extract data accurately for this annual report reporting year, the financial year 2022-23 has been used to report on the resources made available to the Regulator. This is shown in tables 10 and 11.

Table 10: Staff Resources allocated to the Regulator in 2022-23

	FTE (Full Time Equivalent)
Regulator	0.8
Office of the Forensic Science Regulator	4 during Apr 2022 to Sept 2022 7.6 during Oct 2022 to Mar 2023
Business support	1 ad hoc support

Table 11: Budget allocated to the Regulator in 2022-23

	Financial year 2022-23
Staff pay	£607,000
Non-staff pay	£217,000
Total budget	£839,000

Now the Regulator understands the full implications of the statutory regulation of forensic science, including the scale of issues and referrals to be expected, the challenge to address compliance and use the Act effectively, it is concluded that the Regulator and OFSR will need more resource/budget to fulfil its functions.

Forward view

The first year of the statutory regulation of forensic science has laid solid foundations in anticipation of the Code coming into force in October 2023 and the remaining provisions of the Act being commenced. As this report sets out, a considerable amount of work has been done to understand the compliance picture for FSAs that are subject to the Code and provide the basis for understanding and taking action on risks to the investigation of crime and criminal proceedings. In the next reporting year, the focus and priority will be on validating the information provided in the full compliance survey, developing a detailed understanding of risks and taking enforcement action where appropriate.

The Regulator will be looking to ensure that the Code is fit for purpose and anticipates revisions to the Code. It will also be important in the next reporting year to monitor the reaction of the criminal justice system to the statutory regulation of forensic science and particularly how declarations of non-compliance are dealt with by the courts.

As acknowledged in this report the work to prepare the Code and to prepare for commencement of the Act has taken up most of the time of the Regulator and the OFSR and workstreams not dedicated to producing new content for the Code were suspended. This has meant the Specialist Groups and development of quality standards has been essentially put in abeyance. In the next reporting year these important structures in the delivery of regulation must be reinstated and reinvigorated. One of the key tasks for the next reporting year will be to consider the FSAs that are not subject to the Code and develop the regulatory model and the time scales for making these FSAs subject to the Code.

While there is a considerable amount of work to be done in establishing the statutory regulation of forensic science, and levels of non-compliance must be reduced, there is a broader context to the regulation of forensic science and challenges it presents. The production and approval of the Code is not an end in itself. It is the efficiency and effectiveness of the structures and processes that identify and mitigate the risk of quality failure and flawed forensic science evidence being used in the investigation of crime or in criminal proceedings that are the ultimate basis for measuring success of forensic science regulation. The Regulator recognises the need to take account of the strategic context in which forensic science regulation is applied and developed.

The following sets out the broader challenges that will shape and direct forensic science regulation.

Efficiency and effectiveness of quality management systems

The underpinning Regulatory model for forensic science relies on organisations having an effective quality management system. The quality standards set or adopted by the Regulator and the specific requirements in the Code provide the basis for assessment of QMSs by UKAS. There is a significant investment required in time, cost and intellectual capital in the development of an effective quality management system. This is not something that can be achieved in weeks or even months; it requires leadership, culture change, and ownership. It should not be seen as something additional or external to core service delivery. The Regulator recognises the significant initial investment, and this can seem onerous and bureaucratic as organisations gain an understanding of the requirements and quality standards set by the Regulator. As highlighted by the full compliance survey responses there is an inherent inefficiency in multiple organisations whether police forces or commercial providers who are undertaking the same FSAs but as individual legal entities each develop and implement their QMSs separately. While accountability must sit with individual organisations, and specifically the Senior Accountable Individual, the Regulator will support and enable efforts to provide centralised or common resources to enable efficient compliance with the statutory Code. The Regulator is also keen to support individual organisations through their management review process to streamline and improve efficiency and effectiveness of their QMSs.

Continuing professional development

The Regulatory model for forensic science is built on the contribution and commitment of forensic staff who design and implement the required quality management system. Equally in forensic science there is a significant and individual responsibility that forensic practitioners carry as expert witnesses within the criminal justice system. In doing so they need to ensure that they understand the key elements of the quality management system including the validation of the methods they are using and how their competence is demonstrated and maintained. They also need to be abreast of developments in their area of expertise and to be able to work within the quality management system to bring innovation and apply new technology. The Regulator wishes to look closely at the continuing professional development requirements for forensic staff and producing guidance or expanding the Code to ensure that organisations support and encourage continuing professional development.

Proficiency testing

The Regulator is keen to shift the emphasis of risk management for FSAs from a reactive to a proactive approach. This means that rather than dealing with a quality incident or failure after the event, the Regulator will be looking to identify risks at an early stage, working closely with UKAS and forensic units. Another strand in this proactive approach to understanding risk is not the general 'quality health' of forensic science the Regulator is keen to understand and promote proficiency testing programmes for all FSAs that are subject to the Code. The Regulator wishes to facilitate and encourage proficiency testing with a view to producing guidance and expanding the Code to ensure effective use of proficiency testing.

Interpretation of forensic science evidence

The interpretation of forensic science evidence or in simple terms answering the question from the investigator or lawyer “what does it mean” is foundational and core to forensic science and its role in the criminal justice system. In February 2021 the Regulator’s predecessor published the Development of Evaluative Opinions [24], this is an important document providing guidance and a sound framework for developing evaluative opinion across a wide range of FSAs. The Regulator is keen to instigate work to develop requirements for each FSA or groupings of FSAs and add these requirements to a future version of the Code. The Regulator will also take a broader view of interpretation recognising:

- the opinions given by forensic practitioners in the investigative phase and address investigation questions such as establishing the sequence of events, validating the account of suspects, complainants or witnesses and even providing an opinion as to whether or not a crime has been committed
- the evaluative opinion where competing propositions are considered from the prosecution and defence and a probabilistic approach can be taken to evaluating the propositions
- the statistical analysis of analytical results where the quantification of an analyte is required and an opinion as to whether the level of analyte exceeds a legally defined limit

Innovation in quality standards

The Regulator recognises the dynamic and changing nature of forensic science and the impact the new developments and innovation could have on the current operational delivery. This may be a novel FSA that requires new forensic science quality standards, or it could be innovation in existing science and technology that changes or modifies the delivery of forensic science results. In this latter respect there is the potential for transformational change with a move to ‘real time forensic science’ where miniaturisation and scientific development could allow forensic science results to be generated in minutes and hours not days and weeks, with a shift from delivery in remote facilities to the location of the crime scene, suspect or victim. In this scenario where there is a reduced user scientific and technical competence requirement, and the validation and quality control are embedded in the device or instrumentation then a different regulatory approach would be required. This is sometimes referred to as a ‘type approval’ approach and the Regulator is open and will actively support innovation that is seeking to achieve this type of transformational change. This may require a move away from the current Regulatory model utilising standards such as ISO 17025 [2]. The Regulator equally recognises changes in crime and criminality that may make some FSAs redundant or require the development of new FSAs. The Regulator will look to keep abreast of these long-term developments to ensure that regulation is fit for purpose and anticipates changes in science, technology, crime and criminality.

Abbreviations

Forensic Science Activities	FSA
National Police Chiefs' Council	NPCC
Office of the Forensic Science Regulator	OFSR
Quality Management System	QMS
United Kingdom Accreditation Service	UKAS

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