1. Is forensic science contributing to the delivery of justice in the UK?
1. Yes, forensic science contributes very significantly to the delivery of justice in the UK. Forensic science plays a pivotal role in the vast majority of violent crimes in particular murder and serious sexual assaults. The use of DNA profiling and fingerprinting is extremely common to eliminate suspects from enquiries very early on and save investigating organisations time and money.

2. What are the current strengths and weaknesses of forensic science in support of justice?
2. Forensic science in England and Wales is delivered consistently across the private sector to an extremely high-quality standard. It is delivered in timeframes that are unrivalled anywhere in the world at a cost to policing that has been reduced by over 50% in 7 years to less than £80m per annum. It is perhaps this focus on the cost/price of forensic science that is also its weakness as the forensic science providers (FSPs) can no longer support research, development or innovation. Consequently, the UK has fallen behind many other countries. The lack of investment into forensic science has driven the sector to breaking point.

3. What is the scientific evidence base for the use of forensic techniques in the investigation and prosecution of crimes? Are there any gaps in the evidence base?
3. There is a vast scientific evidence base for most forensic techniques. Those used by FSP’s must be tested, validated and independently accredited (by UKAS and the FSR) before they can be utilised in the CJS. There is always room to improve our knowledge and understanding of current and new techniques.

4. Is the current training available for practitioners, lawyers and the judiciary appropriate?
4. Training for forensic practitioners is largely carried out by the employee’s organisation. There are organisations that offer specialist courses such as blood pattern analysis or Expert Witness training, but these represent a minor element of overall training requirement.

5. Is the current market for forensic services in England and Wales sustainable? Are changes needed to ensure forensic science provision is maintained at the level required? What are the risks of a market approach, for example what happens if a provider goes out of business? And what is the impact on quality?
5. In order to address the question of sustainability, trajectory and likely impact without intervention it is important to analyse the history and current status of the forensic market in England and Wales.

6. Key Forensic Services was established in 2005 and is a privately owned forensic science provider (FSP). KFS employs 230 staff and operates from three laboratory sites in England. KFS is the smallest of the three main FSPs in England and Wales with market share of approximately 15%.
7. At the same time as KFS was founded the Forensic Science Service (FSS) became a wholly owned Government Company (Gov Co). The change to the FSS’s status triggered a review of the trading relationship between its customer base, largely the police forces of England and Wales which eventually lead all police forces, mainly as regional groups, implementing EU procurement policy and tendering their forensic services that had up to this point been almost exclusively provided by the FSS.

8. Between 2005 and 2008 the owners and founders of Key Forensic Services invested tens of millions of pounds in the staff, laboratories and equipment needed to achieve the ISO 17025 quality standards which were a pre-requisite to bidding for police forensic contracts.

9. In the first round of tendering in 2008, as a new FSP with no track record KFS had limited success in winning work from a regional collaboration between the Northwest, Southwest and Wales police forces and as a result did not secure sufficient business to cover the minimum threshold costs of providing its services, with insufficient sales therefore to offset ongoing losses. The company continued to trade with the support of its investors.

10. In 2008 KFS became an Approved Supplier to the National Forensic Framework Agreement (NFFA)


12. Throughout 2009 and 2010 police regions begin issuing tenders under the NFFA

13. Comprehensive Spending Review 2010 announces 20% cuts to police budgets

14. December 2010 government announced closure of FSS

15. In 2010 the external market was estimated at £160m-£170m. It had reduced in size in recent years. In 2006-7 the external market was estimated at £190m (PWC Report for NPIA September 2010)

16. In 2011 Operation Slingshot managed the re-tendering of all police contracts previously awarded to the FSS

17. In 2012 KFS became an approved supplier to the National Forensic Framework Agreement Next Generation (NFFANG)

18. Between 2013 and 2015 police force regions issued tenders under NFFANG

19. NFFA & NFFANG terms and conditions altered by police forces to;

19.1. Remove inflationary price increases for FSP

19.2. Reduce Contracted turnaround times for services, increasing suppliers’ costs of provision,

19.3. Increase Service Credit charges for later than contracted delivery,

19.4. Materially reduce hourly based contract content and placed a greater emphasis on fixed price products,
19.5. Significantly increased the number of charging points to more than 3500 line items adding huge complexity and bureaucracy to charging and invoicing

20. Increased focus by police on triaging casework submissions (to reduce external spend)

21. Continuing emphasis on price reductions and the increased reliance on Police casework submissions officers to determine what casework should be submitted coupled with fixed price products resulted in raising contractual barriers between customer and suppliers to the detriment of the added value on complex forensic investigations that FSPs would otherwise be able to provide

22. Criteria for contract award largely based on lowest price (40% to 80% of evaluation weighting on price)

23. External forensic market value falls from £132m in 2011/12 to £76m in 2017/18 (HMICFSR Value for Money Profiles 2017)

24. Internal forensic spend rises from £103m to £140m over the same period (HMICFSR Value for Money Profiles 2016)

25. In January 2018 KFS went into administration

26. In March 2018 KFS was bought out of administration by CorpAcq

27. Despite significant restructuring and cost reductions KFS continues to lose money

28. During the above period the greater emphasis on private sector forensic service provision has ensured the UK enjoys amongst the best quality services available anywhere in the World, with the most demanding turnaround times and at the lowest cost.

29. The impact of austerity measures has been felt by all in the UK and in particular by police forces of England and Wales. In response to significant budget cuts police forces have quite rightly used every means at their disposal to reduce costs, especially with their supplier base.

30. However, the impact of a decade of price reductions and falling demand has decimated the private sector forensic service provision in England and Wales.

31. There main contributing factors that have given rise to the current situation and the reduction in the use of forensic science by the police forces of England and Wales are listed below;

32. The reduced attendance by police and or CSI at scenes of crime, and thus reduced volumes of forensic casework for analysis by suppliers,

33. Changes to police force policy when investigating certain types of crime in particular volume crime,
34. An increase in forensic activities being conducted by police forces themselves e.g. exhibit screening, drug testing, firearms classification,

35. Screening out of forensic evidence types in particular of physical evidence e.g. footwear, glass, paint etc from scenes of crime submitted to forensic suppliers for analysis

36. A reduction in number of exhibits submitted per forensic case

37. The commoditisation of complex services into tightly defined and priced components removing the judgement and discretion of the expert

38. Over 50% reductions in forensic spend by many police forces over the last 7 years

39. These combined effects have had many unintended consequences that has created a very fragile forensic market were none of the 3 largest FSP can sustain their businesses in the medium to long term without intervention from policing or government.

40. The sector is losing experienced forensic practitioners and failing to attract new staff due to low salaries compared to other sectors, an inability to invest in staff development and the increasing level of uncertainty in ongoing employment.

41. Forensic science in England and Wales has become the target of unsustainable cuts that, despite its perceived value to the criminal justice system, is now regarded as an expense that forces should seek to avoid rather than the tool that it once used to be ensuring impartial, high quality and effective science was at the heart of many police investigations.

42. Changes Required

43. Immediate

44. Funding: FSP’s require an immediate injection of funding through direct price increases (in the order of 25%-40% depending on the area of expertise) for existing contracted services or through increased police force budgets ringfenced to be spent on forensic services. This funding is required as soon as possible (within 3 months).

45. Service Credits: A suspension of service credits contained in contracts. Many police contracts contain financial penalties for late delivery of work. These penalties are often disproportionate and make loss making contracts even worse for the FSP’s.

46. Short-term

47. The approach to procurement has to change and some forces have already adopted a non-commoditised approach and entered into longer term contracts (up to 10 years) with FSP with a different basis for buying their services. However, even with these models there is a bias towards cheapest provider and an expectation of price freezes or even price reductions throughout the life of the contract. Given the nature of the services FSP’s provide, largely delivered by forensic practitioners, this is an unreasonable condition of many contracts as the
cost of delivery is disproportionately dependent on employee salaries, which increase over time.

48. **Medium-term**
49. Consideration should be given to the outsourcing for activities that FSPs can deliver to police forces that have been moved "in-house". It simply cannot be the case that a cottage industry of forensic activities each requiring accommodation, equipment, staff and ISO accreditation can be as cost effective as the centralised operating model adopted by FSPs where economies of scale enable the most efficient operation and enable FSPs to negotiate supplier discounts based on increased volumes of activity.

50. Consideration should be given to a “Rate Card” approach whereby there is a fixed and agreed charge by all FSP’s for certain types of forensic activity.

51. **Long-term**
52. Consideration should be given to the outsourcing of other forensic activities that have historically always been delivered by polices such as scene of crime attendance, fingerprints comparisons and digital forensics.

53. **Consequences of not Implementing Change**
54. In the very near term the most likely risk is the loss of one or more FSPs from the forensic sector in England and Wales. It is KFS’s belief that none of the three large FSPs make a profit and all three are most likely loss making as KFS currently is.

55. If an FSP goes out of business, as KFS did in January this year, there is an immediate funding requirement for that organisation to enable ongoing cases to be completed or transferred to another FSP’s.

56. There is insufficient capacity in the market place in the short to medium term for other FSPs to absorb the caseload of each other and so very quickly significant backlogs of cases would build up resulting in delays to cases in the CJS.

57. The impact on the quality of forensic science would be limited if an FSP went out of business. The industry operates very high-quality standards at both organisational and individual scientist level. All FSPs are accredited to ISO17025 and the FSR Codes of Practice and Conduct. Although there would be severe delays in the delivery of cases to the police and the wider CJS, the quality of the science conducted in each case should not be at risk.

8. **Is the system of accreditation working successfully to ensure standardised results and the highest quality analysis and interpretation of significance of evidence?**
58. Reference is often made to the dubious quality of forensic science provided by the private sector. This is demonstrably not an accurate assessment of the situation. Though this may be the case with niche service providers providing largely defence casework services, only providers approved to tender for Police or other Government forensic services do so. To be an approved supplier the supplier must be accredited to ISO 17025 and Forensic Science Regulator Codes of Practice and Conduct for the services that it is offering. In contrast the accredited FSP’s customer who also provide services often do not have ISO or
FSR accreditation and if they do it as to a far lesser extent than their contracted providers.

9. What role should the Forensic Science Regulator have? If the Forensic Science Regulator is to have statutory powers, what should these be?

59. The current FSR and her office do an excellent job with limited resources. The current role is sufficient. Yes, statutory powers should be granted. The powers need to be such that the FSR can ensure that all organisations involved in the provision of forensic science adhere to the same quality standards.


60. No. The strategy is very vague, aspirational and largely focused on the provision of forensic services within the Police and provides very little insight as to the strategy for the private sector provision of forensic services. It should be noted that, whereas, the Police provide the majority of fingerprint, digital and scene attendance forensic services, it is the private sector that provides the vast majority of all other forensic services.

12. How should further research funding for forensic science be justified? What should be the focus of such research? What is the role of UK Research and Innovation, especially considering the interdisciplinary nature of much forensic science?

61. Forensic science often provides compelling, impartial scientific evidence to incriminate or exonerate a person from a crime. It can save significant amounts of time and money for both the police investigators and the courts. The case for investing in further research can be made by looking at the advancements made by UK scientists and institutions over the last 30 years, for example the development of DNA profiling, a technique now used throughout the world. The focus of the research needs to be decided by those delivering the services (FSPs, law enforcement), those using the services (law enforcement, courts) and those developing new technologies or processes that may have an application in forensic science (academia and private sector). It should be appreciated that the majority of development relating to the application of scientific techniques in forensic science is conducted by the FSP’s, whose contribution to R&D in the sector is frequently overlooked.

13. Where are the gaps in research and understanding of forensic science? How and by whom should the research questions be articulated to fill these gaps?

62. The gaps will vary depending on one’s perspective. For example, forensic practitioners recognise that there are gaps in their knowledge around the subject of transfer and persistence of forensic evidence that can inhibit their ability to interpret certain scientific findings. Users of forensic science will have different needs. The lack of investment in this area has resulted in complete inertia. Private sector FSPs need significantly increased funding if their customer base expects them to invest in research, development and innovation. The question of articulation is only part of the requirement, a genuine commitment to funding is required if the sector is serious about research into forensic science.

14. How can a culture of innovation in forensic science be developed and sustained?
Like in any business an investment in innovation is made on the basis there is an anticipated return on that investment. Currently there is limited value placed on innovation by most users/buyers (mainly police forces) of forensic science. In addition, users/buyers generally have no money to support innovations or even small projects in collaboration with FSPs or other organisations. There is a fear within many police forces that if they are seen to collaborate with FSP’s it somehow displays a bias towards them that could prevent them purchasing new products and services in the future. Police forces are not keen to support innovation directly as many believe that this may be seen as endorsement of the new product or service. Not being able to work closely with customers on new innovations increases the risk that the innovation will not be adopted or being irrelevant or ill conceived. The rate of adoption and customer take up of new products or services is also prohibitively long, dis-incentivising innovators from making any material investment due to the investment cycle to sales generation. Without incentivisation (funding) and the prospect of generating growth, new income streams and/or competitive advantage then innovation in the forensic science sector will remain stagnant. A dedicated fund for forensic research and development projects should be established that FSP’s and other organisations can access by proposing R&D projects. This could be managed by Innovate UK, for example.

14 September 2018