	ROLE OVERVIEW	EXPERTISE ISSUES and LIMITATIONS	COST & AVAILABILITY ISSUES
POLICE OFFICERS	Police officers are typically the first responders at crime scenes, responsible for securing the area, protecting the public, gathering initial evidence, and arresting suspects where necessary. More complex investigations, such as homicides, organised crime, and serious fraud, are led by CID detectives, who bring additional training and specialist investigative expertise to manage challenging cases effectively.	Police officers develop their expertise through structured training, with a minimum of two years for new recruits, while detectives complete additional specialist qualifications. Their expert knowledge is enhanced by access to elite units such as the Flying Squad, Counter-Terrorism Command, and the Cyber Crime Unit, which provide specialist expertise and advanced investigative techniques.  Despite this, investigative expertise can be undermined by procedural failings. The Stephen Lawrence case (1993) revealed how a lack of expert handling at the scene, coupled with institutional racism, caused major investigative errors and delayed justice for nearly two decades. Similarly, the Hillsborough Disaster (1989) highlighted shortcomings in expert planning, public safety management, and evidence handling, leading to widespread criticism of policing practices and a significant erosion of public trust.	The annual cost of employing each police officer is well over £100,000, which includes salary, equipment, and ongoing training. These high costs place significant pressure on police budgets, particularly as the demand for skilled investigators continues to rise  There are also persistent issues of availability. High workloads contribute to sickness, burnout, and retention problems, with around 19% of officers absent at any one time. Recruitment challenges and a shortage of specialist investigators create further delays, particularly in handling complex investigations such as organised crime, terrorism, and cyber-related offences.
SOCOS/CSI	Scene of Crime Officers (SoCOs) are responsible for securing and processing crime scenes to preserve their integrity. They recover biological and physical evidence, including DNA, fingerprints, and fibres, and ensure all materials are packaged, labelled, and documented correctly to prevent contamination. Their work provides the foundation for forensic analysis and plays a critical role in supporting successful investigations and prosecutions.	Scene of Crime Officers (SoCOs) receive specialist scientific training that equips them with the expert skills required to recover, preserve, and document evidence effectively. They play a critical role during the 'golden hour', when prompt and precise action is essential to prevent evidence degradation. Their expert handling ensures investigators and forensic scientists have reliable, uncontaminated materials to analyse, forming the foundation of many successful prosecutions  However, when expert procedures are not followed, the consequences can be severe. In the Amanda Knox case (2007),. investigators were heavily criticised for failing to secure the scene and mishandling key forensic items. These errors led to claims of evidence contamination, which significantly weakened the prosecution's case and highlighted how mistakes in scene management can undermine justice.	Training and equipment costs for CSIs are substantial, as specialist tools and protective gear are essential to safely and effectively manage crime scenes. The Salisbury Novichok poisonings (2018) highlighted the extreme risks faced by investigators when handling hazardous materials, which require costly specialised equipment and strict safety protocols. However, there are persistent issues with availability. Staffing shortages, particularly in rural areas, can lead to delays in securing scenes or rushed evidence collection, increasing the risk of compromised investigations. High staff turnover and limited geographic coverage further exacerbate these challenges, meaning that SOCO resources are not always available when and where they are most needed.
FORENSIC SCIENTISTS & SPECIALISTS	Forensic scientists and specialists analyse a wide range of evidence in laboratory settings, including DNA, toxicology, ballistics, fibres, and digital data. Many work as specialists, providing expertise in highly technical areas such as	Forensic scientists provide <b>expert analysis</b> of evidence recovered from crime scenes, drawing on <b>science degrees</b> and often <b>postgraduate research</b> to deliver findings that <b>significantly influence legal proceedings</b> . Their <b>specialist expertise</b> covers areas such as <b>DNA profiling, toxicology, ballistics, digital forensics, and anthropology,</b> enabling investigators to link suspects, victims, and crime scenes with precision.	Forensic services are expensive to operate, with annual costs estimated at £300 million to £350 million. These high expenses stem from the specialist training required for staff and the substantial cost of advanced technologies used in areas such as DNA profiling, toxicology, and digital forensics. However, funding pressures have created significant availability challenges. Police budget cuts have reduced the use of

	fire investigation, forensic anthropology, and computer forensics. Using advanced scientific techniques, they help to establish links between suspects, victims, and crime scenes, providing evidence that is often central to securing convictions.	However, forensic evidence is <b>not infallible</b> , and errors or misinterpretations can result in <b>serious miscarriages of justice</b> . The <b>Sally Clark case</b> (1999) highlights this risk: expert witness <b>Professor Roy Meadow</b> wrongly testified that the likelihood of two natural cot deaths in the same family was 1 in 73 million, leading to Clark's wrongful conviction for murdering her two infant sons. After <b>three years</b> , her conviction was overturned, exposing the dangers of <b>flawed expert testimony</b> .  Similarly, in the <b>Barry George case</b> (2001), forensic evidence of <b>gunshot residue</b> used to convict him of the murder of TV presenter <b>Jill Dando</b> was later <b>discredited</b> , resultßing in his acquittal. The <b>Colin Stagg case</b> (1994) further illustrates the risks of <b>over-reliance on forensic profiling techniques</b> : an undercover <b>'honey trap' operation</b> based on flawed psychological profiling collapsed, Stagg was acquitted, and the <b>real perpetrator remained at large for several years</b> .	forensic science in investigations, limiting the capacity to analyse evidence effectively. The shortage of qualified forensic experts leads to delays in laboratory processing and the preparation of cases, while also restricting the availability of expert witnesses during trials. As a result, even when forensic evidence is critical, it is not always accessible in a timely or reliable way.
PATHOLOGISTS	Forensic pathologists are medical doctors who determine the cause, manner, and timing of death through detailed postmortem examinations. Their findings help investigators establish whether a death was natural, accidental, or suspicious and provide vital timelines that guide the direction of criminal investigations and court proceedings.	Pathologists are highly skilled medical professionals whose work plays a crucial role in criminal investigations. Typically, they hold a medical degree and complete at least seven years of specialist forensic training, giving them expertise in evaluating injuries, analysing toxicology results, and establishing cause and timing of death. Their findings often form the cornerstone of homicide investigations, providing critical insights that guide police and prosecutors.  However, despite this high level of expertise, errors can have serious consequences. In the Camden Ripper case (2002), forensic pathologist Dr Freddy Patel misdiagnosed a victim's cause of death, which delayed the identification of a serial killer and allowed him to commit further murders. This case highlights how even small mistakes in expert interpretation can significantly undermine investigations and delay justice.	Forensic pathology faces severe cost and availability challenges in England and Wales. There are only around 35—40 Home Office-registered forensic pathologists, creating a serious shortage of experts. This limited availability often causes significant delays in conducting autopsies, which in turn slows investigations, charging decisions, and court proceedings.  The shortage is worsened by the high cost of training and maintaining these specialists. Becoming a forensic pathologist requires a medical degree followed by at least seven years of specialist training, involving substantial investment in education, laboratory facilities, and ongoing professional development. These costs act as a barrier to entry, reducing the number of qualified professionals entering the field.  Because of these combined cost pressures and limited availability, investigative progress can be seriously delayed. In some cases, access to expert pathology reports — which are often central to determining cause of death — can take weeks or even months, impacting the overall effectiveness of the criminal justice process.

The Crown Prosecution Service (CPS) is an independent body. established in 1986, responsible for **reviewing cases** investigated by the police and deciding whether they should proceed to prosecution. It advises police during investigations, determines the appropriate charges, and prepares cases for court. The CPS also operates **specialist divisions** that require advanced **expert knowledge**, handling areas such as terrorism, complex fraud, and organised crime.

Prosecutors within the CPS are qualified solicitors or barristers who undergo rigorous professional training — completing the Legal Practice Course (LPC) or Bar Vocational Course (BVC) followed by pupillage or training contracts. This ensures they are recognised experts in criminal law. The separation of roles between the police, who investigate, and the CPS, which prosecutes, is designed to maintain independence and impartiality in the justice system.

CPS prosecutors apply their **expert knowledge** to ensure that every case satisfies both the **evidential test** — there is sufficient, reliable evidence to secure a conviction — and the **public interest test** — that prosecuting the case serves society's wider interests. In addition, the CPS operates **specialist divisions** for **terrorism**, **organised crime**, **complex fraud**, and other **high-profile areas**, enabling it to handle **highly intricate cases** requiring advanced expertise.

However, despite this level of **professional expertise**, the CPS faces significant **recruitment and retention challenges**. Salaries range from £28,000 to £54,000 for junior and mid-level roles and around £65,000 for Senior Crown Advocates, whereas equivalent roles in the **private sector** can command £80,000 to £150,000 or more, particularly in London. This disparity makes private practice far more attractive, leading to staff shortages, heavier caseloads, and frequent delays in case preparation.

These pressures have contributed to high-profile failures. In the Damilola Taylor case (2000), the CPS relied on a vulnerable witness who was later deemed unreliable, resulting in the collapse of the first trial. The Birmingham Six case similarly exposed systemic weaknesses: wrongful convictions, secured on the basis of flawed forensic evidence and unreliable confessions, were eventually overturned after years of appeals.

There are significant cost and availability challenges facing the Crown Prosecution Service (CPS). In 2020, the CPS operated on a budget of £567 million, which has proven insufficient to meet growing demands. Limited funding, combined with comparatively lower salaries than the private sector, contributes to burnout, high staff turnover, and an ongoing shortage of experienced prosecutors. CPS lawyers are frequently required to manage hundreds of cases simultaneously, creating severe workload pressures.

These availability issues have a direct impact on justice. Delays in charging decisions and trial preparation are especially problematic in complex cases that require highly skilled prosecutors, such as rape prosecutions, terrorism, and large-scale fraud. The consequences are stark: in 2020, there were 58,657 rape allegations in England and Wales, yet only 1,925 prosecutions were initiated. This shortfall has been partly attributed to a lack of experienced CPS lawyers and insufficient resources to handle such cases effectively.

**CPS**