

Digital Forensics Services

Cell site scene preservation

Managing the forensic risks associated with fast-changing mobile phone networks

With the advent of 5G, UK mobile network operators are actively reconfiguring their mobile networks across the UK: 3G and some 2G cells will be replaced by 4G and 5G cells.

The pace of change has significant forensic consequences for Law Enforcement Agencies (LEAs). There is an increased risk that the mobile network will have changed between the time any calls were made by a target phone and the subsequent time (potentially weeks or months later) at which cell site surveys are performed. This risk grows if Call Detail Records (CDRs) of interest are not quickly identified and can seriously undermine the validity of phone evidence presented in court.

Our 'rapid response' cell site scene preservation service aims to negate those risks and support LEAs in their desire to meet the 'Gold Model' for investigations. To help secure best evidence, we've brought together the latest surveying equipment, a defensible process and certified experts.

The service covers:

- Scoping call with operations manager to identify locations of interest
- Deployment within 72 hours of a request, scanning all the UK mobile operators' 2G, 3G and 4G networks with our Software Defined radio survey tool to capture a 'date-stamped' snapshot. Other methods are less suitable for this task:
 - SIM-based tools are prone to only selecting a few legitimately serving cells and so are more likely to miss potentially critical information
 - Scanners provide no assurance that a cell actually provides service at a location
- Processing and supply of detailed reports and maps identifying which cells at the time of the survey have been detected in an area of interest
- Option to have data sent back for processing by your own analysts

Additional services:

Cell site consulting - Should phones be subsequently identified our experts can assist with the interpretation of our survey report findings and advise on any other aspects of cell site data analysis as part of the investigative effort.

Expert witness – The CCL team has seven certified expert witnesses for cell site with more joining the team this year, and has been instrumental in developing the understanding of the role of opinion evidence in court.

About CCL

CCL's Digital Forensics unit is the largest ISO 17025 accredited facility in Europe with 70+ analysts. It has a 20+ year track record of supporting law enforcement and national security in the UK, with its meticulous data recovery and analysis key to thousands of successful major investigations in that time. Its cell site team represents the UK's biggest, broadest and deepest pool of knowledge and experience in the rapidly evolving and highly challenging field of cell site analysis.