

# CELL SITE ANALYSIS

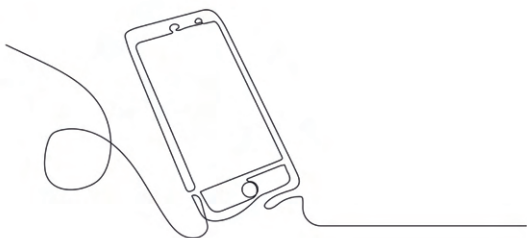
At Forensic Access, we have experienced Cell Site Analysts ready to provide their services to determine areas where a mobile device may have been at the time of call activity recorded by the network. Our Analysts utilise several techniques, such as Call Data Record (CDR) Analysis and Radio Frequency Propagation Surveys (RF Surveys), to consider whether a mobile device could have been at a location significant to a case.



## Call Data Record (CDR) Analysis

Provided by mobile network operators, CDR's include details such as cell ID, date, time, and duration of communications. When a mobile device engages in activities like calls, texts, or data sessions, these interactions are logged, enabling analysts to consider the device's possible movements.

Patterns of usage are examined, identifying the most frequently used cells, and determining common contacts and the frequency of communication. This analysis helps in understanding the routine and possible movements of a device.



### Did You Know?

The Call Data Records (CDRs) of a mobile phone need to be secured from the network provider – these are usually retained for 12 months and requested by the Police under the Investigatory Powers Act.



## Radio Frequency Propagation Surveys (RF Surveys)

Conducting RF surveys involves measuring the radio signal strength and coverage area of cell sites. These surveys validate whether the cells appearing in CDRs provide service to the locations of interest. They are crucial in cases where precise geographic validation is necessary.

Our experts can produce a report detailing the following information:

- 1.** Evidential call data, including showing calls between target phones.
- 2.** Timeline analysis showing the movement of a device during a period of interest, helping to establish whether a device could have been at a location at relevant times.
- 3.** Cell detection maps showing the measured coverage of specific cells detected during RF surveys.
- 4.** Analytical results, for example activity by hour in a given district postcode area, or contacts common to a group of phone numbers.
- 5.** Attribution analysis showing the most used cells or overnight cells.
- 6.** Colocation and non-colocation analysis to consider whether phones could have been located in the same area or were in separate areas at the relevant time.

**Did You Know?** **Cell Site Analysis** has emerged as a pivotal technique in criminal investigations, offering invaluable insights into the movements and communications of suspects.



**Here's what some of our customers have to say**

“The cell site experts we have instructed have been extremely **knowledgeable**, informative, easy to work with and able to explain complex topics in **straightforward** language that the court and juries are able to understand. We have no hesitation in using the same experts for **future cases**.”

**The Forensic Group Ltd**

“The crown offered no evidence yesterday and the case has been discontinued. They reviewed the **cell evidence** and determined there was not enough evidence to bring the matter to trial. Thank you very much for all of your help on this matter and for **going above and beyond**.”

**Criminal Defence Solicitors**

## Contact our Casework Team

Our Casework Managers are a valuable resource for Solicitors and Legal Professionals.

You will have a single point of contact to manage all expert-related communication and administration. They manage all aspects of the case from the initial enquiry through to the delivery of the expert report. Our Casework Managers:

- Provide quotes from independent experts in line with LAA requirements.
- Handle case materials to ensure experts have the right materials at the right time.
- Provide regular updates at every stage of the case and ensure deadlines are met ahead of trial.
- Quality check reports to ensure the instruction is addressed and suitable for court.
- Ensure adherence to the highest standards of quality throughout every case.

**Please get in touch with our casework team to instruct a cell site analysis expert.**

✉ [science@forensic-access.co.uk](mailto:science@forensic-access.co.uk)

☎ +44 1235 774870

🌐 [www.forensic-access.co.uk](http://www.forensic-access.co.uk)

🌐 [www.linkedin.com/company/forensic-access-limited](http://www.linkedin.com/company/forensic-access-limited)