17 August 2022

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Sent by email: FSREnquiries@homeoffice.gov.uk

Dear Mr Pugh,

Re: Complaint regarding quality and accuracy concerns relating to Home Office Electronic Monitoring using GPS tags

We write further to our letter dated 20 January 2022[1]. We wish to make a formal complaint in relation to quality and accuracy of data extracted from satellite enabled Global Positioning System (GPS) electronic monitoring aka GPS tags where such data is processed and interpreted for use in investigations and criminal prosecutions.

The GPS tags are used by the Home Office to collect and process communications (location) data. These tags are procured by the Ministry of Justice who currently have a contract with Capita for these purposes.

It is within your remit to deal with complaints from stakeholders and members of the public in relation to quality standards in the provision of forensic science services.

We are concerned that there may be systemic failures in relation to the quality and accuracy of data from GPS tags. One issue that has become visible relates to the battery life of GPS tags. We are aware of numerous reports of tags failing to charge properly. Failure to charge the device is a breach of bail conditions which can result in civil and criminal penalties including criminal prosecution. A further issue of concern is the (in)accuracy of the location data produced by the tags. On this basis we invite you to investigate the GPS tagging regime in the immigration context.

[1] https://privacyinternational.org/sites/default/files/2022-01/Letter%20to%20UK%20Forensic%20Science%20Regulator.pdf

Our complaint is made with support of several organisations and legal representatives who are in a position to provide testimonies relating to quality and accuracy concerns related to GPS tags.

Your jurisdiction

The Forensic Science Regulator Act of 2021, and the draft statutory Code of Practice[2] produced under s2 of that Act, introduced statutory powers for the Regulator, including powers to investigate (s5 of the Act) and one to require compliance (s6). You have the power to intervene:

> *where there is reason to believe that a person may be undertaking a forensic science activity to which the Code applies in a way that creates a substantial risk (that is a risk which is more than theoretical) of*
>
> > *a. Adversely affecting any criminal investigation, or*
> >
> > *b. Impeding or prejudicing the course of justice in any proceedings.*

A Home Office press release dated 17 May 2021 detailed the responsibilities of your office as follows:

- Establishing, and monitoring compliance with, quality standards in the provision of forensic science services to the police service and the wider Criminal Justice System (CJS).
- Ensuring, where applicable, the accreditation of those supplying forensic science services to the police, including in-house police services and forensic suppliers to the wider CJS.
- Setting and monitoring compliance with quality standards applying to national forensic science intelligence databases.
- Providing advice to Ministers, CJS organisations, suppliers and others as seems appropriate, on matters relating to quality standards in forensic science.

We further note section 9 of the Forensic Science Regulator Act 2021 which states that:

> 9. Other functions of the Regulator
> (1) The Regulator may prepare any public guidance or reports on any matter relating to forensic science activities carried on in England and Wales.
> (2) The Regulator may provide advice or assistance relating to forensic science activities carried on in England and Wales to any person.
> …

[2] Draft statutory code v2, published 1 April 2022 (accessible version): https://www.gov.uk/government/publications/forensic-science-regulator-draft-statutory-code-v2-for-comment/draft-statutory-code-version-2-accessible

(7) The Regulator may do anything (except borrow money) the Regulator thinks necessary or appropriate for the purpose of, or in connection with, the Regulator's functions.

Your role in regulating FSAs encompasses certain activities carried out by the Home Office. It is our view that Electronic Monitoring via the use of GPS tags by the Home Office is a form of digital forensics that is an applicable forensic science activity, where the extraction of data from satellite navigation is processed and interpreted for use in investigations and criminal prosecutions.

As such, we believe that your responsibilities relating to establishing and monitoring compliance, as well as providing advice, are engaged. We further highlight your other functions as relevant to steps you could take in relation to this matter.

We consider the preliminary issues in turn below, before looking at the substantive complaint and request that you respond to these in addition to responding to the complaint.

1. Confirmation that Electronic Monitoring via GPS tags is a digital forensics activity that can fall within your remit
2. Confirmation that the use of GPS tags by the Home Office can fall within your remit.

1. Electronic Monitoring via GPS tags is a form of digital forensics that can fall within your remit as a forensic science activity

As we understand it, the UK Forensic Science Regulator has not previously engaged on the issues of Electronic Monitoring via GPS tags. However, we see no reason why this should not fall within your remit. Indeed, this seems to have been accepted by you and so is, we trust, uncontroversial.

It should be noted that GPS tags used by the Home Office have dual capability and can use GPS and radio frequency technology[3]. They also contain a SIM card and, as noted by the Information Commissioner's Office, can therefore triangulate location by using GSM cell-based data.[4]

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[3] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1084425/Immigration_bail.pdf

[4] https://ico.org.uk/media/about-the-ico/consultation-responses/2013/2153/development-of-electronic-monitoring-service.pdf

"The offender wears a tamper-resistant small transmitter around the ankle that receives transmissions from the satellites and triangulates the offender's location based on the relative strengths of the signals. The mobile phone network is then used to communicate that information on the offender's location to a central computer at a monitoring centre in "real time". The central control then uses Google maps to plot locations, which allows the movements of the tag to be plotted against locations and times. The mobile phone network can also be used on occasions where a GPS signal is unobtainable, to triangulate location using GSM cell-based data (in other words if the satellites can't be used to pin-point a location the fall back system is to triangulate using proximity to the nearest mobile phone masts)."

The UK Forensic Science Regulator has already accepted that in the context set out below, information extracted from satellite navigation as a data storage medium, falls within the definition of digital forensics. The context being that this data is 'rendered into a useable form, processed, and interpreted for the purpose of obtaining intelligence for use in investigations or use in criminal prosecutions. ' As set out in the next section, the use by the Home Office includes use of trail data in investigations and criminal prosecutions.

The Forensic Science Regulator Newsletter refers to digital forensics as including satellite navigation[5]:

> "Digital forensics is the process by which information is extracted from data storage media (e.g., devices, remote storage and systems associated with computing, imaging, image comparison, video processing and enhancement, audio analysis, **satellite navigation**, communications), **rendered into a useable form, processed and interpreted for the purpose of obtaining intelligence for use in investigations, or evidence for use in criminal prosecutions**." [Emphasis added]

The Houses of Parliament, Parliamentary Office of Science & Technology consider GPS equipment to be a part of modern digital forensics[6]. Further, it is among the technology the Metropolitan Police examine annually. The Association of Chief Police Offices Good Practice Guide for Digital Evidence[7] considers satellite navigation systems as a source of digital evidence.

We note that satellite navigation forensics experts promote their services as FSAs; see, for example, Intaforensics[8]:

> "Satellite Navigation Forensics is the digital forensic approach concerned with the systematic examination of satellite navigation devices to extract map, trip data, call logs and history of waypoint locations to determine route details in criminal investigations. A satellite navigation or GPS device can provide detailed information about its location and when it was there. This information can prove to be crucial in building a picture to support or dispute evidence in a case. We analyse data held on SatNav and GPS devices and produce clear and concise reports ready for presentation."

As stated, satellite navigation technology is not the only technology used in GPS tags. They also rely on radio-frequency technology and the mobile communications network. The Information Commissioner's Office (ICO) have noted that GPS tags can use the mobile phone network when GPS signal is unobtainable,

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5 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/470526/FSR_Newsletter_26__October_2015.pdf

6 https://researchbriefings.files.parliament.uk/documents/POST-PN-0520/POST-PN-0520.pdf

7 https://www.npcc.police.uk/documents/crime/2014/Revised%20Good%20Practice%20Guide%20for%20Digital%20Evidence_Vers%205_Oct%202011_Website.pdf

8 https://www.intaforensics.com/sat-nav/

to triangulate location using Global System for Mobile Communications (GSM) cell-based data[9]. Cell-site analysis falls clearly within the remit of the Forensic Science Regulator and has its own Code of Practice Appendix[10].

The Forensic Science Draft Code refers to 'Digital Geolocation Analysis' stating that this includes radio frequency, electro-magnetic survey, mapping and/or cell site analysis for geo-location.

> "The following activities, subject to the provisions below, shall be considered to be Digital Geolocation Analysis.
>
> Sub-Activities
> a. Radio Frequency (RF) or Electro-Magnetic (EM) Propagation Survey of an area or location guided by case scenario and/or Call Data Records.
> b. Cell Site Analysis to determine the likelihood of the suspect being a specific location is opinion (i.e. expert) evidence and includes but is not limited to:
> i. Processing and normalisation of Call Data Records or other network provider data for the purposes.
> ii. Mapping of cell sites and cell site coverage
> iii. …
> c. Assessment and evaluation of RF or EM survey data, with reference to Call Data Records or other relevant network data for the purpose of a report of statement for the Criminal Justice System.
> d. The evaluation of the significance of propagation survey and/or network information, using Call Data Records any of the above sub-activities (or products of activities e.g. maps) to determine the likelihood of the suspect device being a specific location is expert opinion evidence.

We note that the draft Code states that the definition adopted of a 'forensic science activity' was one which could cover anything which might 'conceivably be considered forensic science':

> "Forensic science if a critical and important part of **criminal investigations** and the **administration of justice**, not only to identify offenders and provide expert evidence to the courts, but it is one of the strongest safeguards against false allegation and wrongful conviction. Forensic science examinations carry significant risks and the **consequences of a quality failure can be profound**, particularly where there is a system rather than an individual failure. The former could lead to the review of hundreds or even thousands of results generated by a flawed technique or method. The purpose 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 quality failure.**" [Emphasis added]

[9] https://ico.org.uk/media/about-the-ico/consultation-responses/2013/2153/development-of-electronic-monitoring-service.pdf

[10] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/918946/135_FSR-C-135_Cell_Site_Analysis_Issue_2.pdf

"The approach taken in the 2021 Act was to establish the concept of 'forensic science activity'. The definition adopted was, deliberately, one which could cover anything which might conceivably be considered forensic science."

"Section 11 of the 2021 Act defines forensic science activity (FSA) as follows.

(1) In this Act "forensic science activity" means an activity relating to the application of scientific methods for a purpose mentioned in subsection (2).
(2) Those purposes are –
    (a) Purposes relating to the detection or investigation of crime in England and Wales;
    (b) Purposes relating to the preparation, analysis or presentation of evidence in criminal proceedings in England and Wales;
    (c) Such other purposes as the Secretary of State may specify in regulations made by statutory instrument.

The s.11 definition is clearly a wide one which could cover a significant range of activities."

"Link to crime
The definition of FSA above … makes clear that FSA must be undertaken for one of the purposes set out in s.11(2)2021 Act.
The definition refers to 'crime' rather than a specific crime so that the work does not have to be related to a specific offence or suspected offence.
The 2021 Act uses the text 'relating to' which indicates the work does not have to be directly for the purposes stated."

"Where an activity is not defined as an FSA in the code this is not conclusive as to the issue. Only a clear statement by the Regulator, in the code, or by regulatory notice, will achieve this."

For these reasons we believe that Electronic Monitoring via GPS tags is a form of digital forensics that can fall within your remit as a forensic science activity.

2. Electronic Monitoring via GPS tags by the Home Office falls within your remit

For the following reasons we believe that quality and accuracy issues related to GPS tags used by the Home Office in the immigration context, fall within the remit of the Forensic Science Regulator where the data is used in investigations and criminal prosecutions.

Before looking at the investigations and criminal prosecutions informed by data obtained via Electronic Monitoring, we examine the technology itself in more detail.

2.1. The technology used in the tags

The GPS tags used by the Home Office, procured by the Ministry of Justice, rely on satellite enabled technology, they have a dual capability to use radio frequency technology[11] and use the mobile communications network.

2.1.1. Radio Frequency

Traditional radio-frequency tags rely on two different elements, a base station usually located in the individual's house and connected to the network and a tag attached to the individual. They are typically used to enforce curfew conditions, such as that an individual must remain at home from 7pm to 7am. The tag communicates with the base station (monitoring unit) over a specific radio frequency to detect if it is within range.

As noted in the Consultation on the Future Direction of the Electronic Monitoring Service (EMS) [12] by the Scottish Government, the information the radio frequency tag sends the monitoring unit provides reveals about a person's movements within an agreed location.

The locational information is essentially binary though: in other words, in terms of "location" it can only indicate whether the tag is present or is not present within the range of the home monitoring unit. The tag only "communicates" with the monitoring unit and it is the monitoring unit that sends the information back to the monitoring company. So, the two pieces of equipment need to be within range of each other for locational information (such as whether the tag is present) or other information (such as whether the tag has been tampered with) to be registered by the monitoring unit.

If the tag fails to report (or the signal is below a threshold) then it will raise an alert, and a specified number of alerts over a timeframe will prompt the tagging authority's control centre to phone the tag wearer on their landline. If this fails, the control centre may ask law enforcement to visit the address and ascertain if the wearer has absconded.

2.1.2. GPS

GPS is a space-based navigation satellite system that provides location and time information in all weather, anywhere on or near the earth.

GPS tags enable geolocation by receiving signals from at least 4 different satellites and doing some maths to pinpoint location. A GPS navigation chip will calculate and store location data and a Subscriber Identity Module (SIM) card connects the

11 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1051204/immigration_bail.pdf

12 https://ico.org.uk/media/about-the-ico/consultation-responses/2013/2153/development-of-electronic-monitoring-service.pdf

tag to the mobile network[13]. The information derived by the satellites signal allows the receiver to pinpoint its position, time and velocity of movement.

Whereas radio-frequency tags tell the tagging authority whether the tag wearer is observing a curfew, i.e., that the tag is within the vicinity of the monitoring box, GPS tags provide the authority with a *complete* location history, that is a log of where the tag was minute-by-minute of every day. This information can be accessed directly by control-centre personnel and can be monitored by software. The technology also enables live location monitoring, i.e. being able to see in real time the location of the individual.

The mobile phone network is used to communicate the location information to a central computer at a monitoring centre in "real time". The central control then may use a mapping service to plot locations and times.

As stated, the tag has a SIM card to communicate location data to the EMS. The mobile network can also be used to identify location. It will do this by triangulating data using GSM cell-based data. This means that it will work out location using the mobile phone masts which the SIM card communicated with at a certain time.

As noted by the Forensic Science Regulator[14], cell site analysis relies on the acquisition of communications data, the processing of those data and the presentation of those data in the form of maps and tables.

Tags can collect GPS location data at different frequency of intervals. For example, the buddi ST3 Smart Tag 4 indicates the ability to set intervals[15] at either 15 minutes, 30 minutes or an hour[16]. Its specification states: *"GPS Location (Intervals can be defined or a real-time request made)"*.[17] If you collect it at a lower frequency, you collect less location data. The 'Attenti One Piece Tracking Device' states in its manual that in Active Mode, *"The standard 1 Piece call-in interval is once every hour while in compliance"*, while in Passive Mode, *"the standard 1 Piece call-in interval is once every six hours."*

According to one company which sells GPS tracking devices to industry, some devices do not use intervals at all and instead use on-demand tracking[18]. This means that they only turn on in response to a specific location request.

It is possible for GPS tags to create inclusion and exclusion zones. As noted by Buddi who have a pilot project with The Mayor's Office for Police and Crime, London, ('MOPAC'), their tag features inclusion zones which are areas on a map to

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13 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/779199/gps-location-monitoring-pilot-process-evaluation.pdf

14 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/918946/135_FSR-C-135_Cell_Site_Analysis_Issue_2.pdf

15 https://manuals.plus/buddi/st3-smart-tag-4-era-monitoring-system-manual#axzz7PgoPr5dw

16 https://www.manualslib.com/manual/587617/Lowrance-Link-2.html?page=54

17 https://www.manualslib.com/manual/587617/Lowrance-Link-2.html?page=54

18 https://www.brickhousesecurity.com/gps-trackers/tracking-intervals

indicate where the device should be located during set times of the day and exclusion zones which are set up customisable zones to trigger alerts when the device enters the specified zone.[19] The HM Prison & Probation Service leaflet on GPS tags states that a notification will be sent to the monitoring unit if an individual enters an exclusion zone[20].

The data collected by the tags is referred to as 'trail data'. This is the complete location history of the person who is wearing the tag (or a smart watch), i.e., a log of where the person has been minute-by-minute every day. The data collected may also include the time and length of time that devices are charged.

2.2. Criminal justice system

The use of tags in the immigration context engages the definition of FSA set out in s11 of the 2021 Act, because it includes the purposes of detecting or investigating of offences, and the preparation of evidence in relation to this. Breach of bail conditions can result in criminal prosecution.

According to the Secretary of State's Immigration Bail Guidance[21], trail data can be used:

- If a breach of immigration bail conditions has occurred, or intelligence suggests a breach has occurred to consider what action should be taken in response to a breach up to and **including prosecution**
- to be **shared with law enforcement agencies** where they make a legitimate and specific request for access to that data [emphasis added]

The Home Office can review all trail data of those on immigration bail when a breach has allegedly occurred, for 'any other indication that criminal activity has taken place' and share that with Law Enforcement agencies[22]. These data may then be shared with law enforcement:

> "If, during the course of the review of the trail data, by the HO, there is any other indication that criminal activity is or has taken place then the data may be processed and shared with Law Enforcement agencies under Part 3."

The DPIA states that "The MOJ operate and maintain the police dashboard. It will display all details of every IE tag wearer in the UK and will be updated weekly by MOJ, after receipt of data from a third-party supplier 'EMS'. … The sharing of this

[19] https://buddi.uk/security

[20] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/823842/Location_monitoring_-_Victims_Leaflet_Print.pdf

[21] V2, published 28 June 2022: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1084425/Immigration_bail.pdf

[22] https://privacyinternational.org/sites/default/files/2022-02/67021%20Wood%20Annex%20B.pdf

data to police colleagues is not new. It is just that the data can now be centralised, collated, and analysed easier."[23]

In addition, in the immigration system, as with the criminal justice system, those subject to immigration control can be deprived of their liberty. The Home Secretary has very wide powers of detention that can be exercised without key safeguards such as a time limit or judicial oversight of the decision to detain. Thus, a breach of immigration bail, which could result from a quality issue related to a GPS tag, causing an inaccurate breach notification, could result in an individual being detained.

2.2.1. Comparison with probation

When considering the oversight function of the Forensic Science regulator, it is important to note the differences between the use of GPS tags in the immigration context versus the probation context.

Whilst we are not endorsing the use in the context of probation, we note there is a disparity between the level of safeguards on the immigration side as compared to the use of tags for probation purposes. It is therefore all the more urgent that the Forensic Science Regulator considers the use of tags in the immigration context.

Moreover, there are fewer safeguards on how trail data can be accessed in the immigration context. According to the Home Office's immigration bail policy, trail data may be accessed under certain circumstances including "where it may be relevant to a claim by the individual under Article 8 ECHR"[24]. Article 8 claims relate to a person's family or private life and may involve considerable personal and private details about an individual's life. Therefore, people who make a human rights claims will now be effectively granting the state unrestricted access to highly personal and sensitive geolocation data—simply because it "may be relevant" to their claim. Meanwhile in the criminal justice system electronic monitoring data must only be "processed for specified, explicit and legitimate purposes"[25].

GPS tags are used in probation to monitor compliance with conditions. There is a code of practice: the HM Prisons & Probation Code[26], which states that:

> "It is a decision for the Courts whether to impose an electronic monitoring requirement as part of a Court Order and it incumbent upon them to

[23] https://privacyinternational.org/sites/default/files/2022-02/67021%20Wood%20Annex%20B.pdf

[24] Page 23, Home Office bail policy https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/952910/i mmigration-bail-v7.0-gov-uk.pdf

[25] Code of Practice: Electronic Monitoring, Electronic Monitoring Directorate, October 2020 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/926813/ em-revised-code-practice.pdf

[26] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/926813/em-revised-code-practice.pdf

consider any statutory safeguards and issues of fairness and proportionality."

The HM Prisons & Probation Code goes on to note that when imposing licence conditions which include electronic monitoring these should be "preventative as opposed to punitive and must be proportionate, reasonable and necessary." The Code of Practice for HM Prisons & Probation involved consultation with the ICO.

By contrast, there is no equivalent code of practice in the migration context. As far as we are aware, neither has there been equivalent engagement by the Home Office with the ICO. In addition, whilst there is an expectation that tags will be removed after six months in the probation context, there is no time limit in the immigration context.

Moreover, as noted above, it is clear that trail data in immigration cases could be used to support prosecutions, just as they are in probation.

For these reasons, we believe that quality and accuracy issues related to GPS tags used by the Home Office in the immigration context, fall clearly within the remit of the FSR.

3. The complaint

Turning now to our substantive complaint, and mindful of the FSR's remit, we focus on an examination of GPS tags from a quality and accuracy perspective.

We note that we are only aware of those issues that have been drawn to our attention by an inevitably limited number of case studies and findings since the imposition of the Home Office's policy of using GPS tags. These may be the tip of the iceberg in terms of potential problems with the devices. We include anonymous case studies within this complaint from individuals who have been tagged, and quote from them here.

While there are plans to use GPS data in relation to criminal prosecutions, in the immigration context, given the recent rollout of their use, we are not aware that this has yet happened. We therefore believe that it is timely for the FSR to conduct preliminary investigations and to contact the relevant parties.

3.1. Quality concerns

The Forensic Science Regulator Draft Code, in addressing quality concerns states that when considering a potential quality issue, the Regulator can respond depending on the nature of the issue and potential impact. Options include initiating investigation or compliance action.

We suggest as a first action that the Regulator writes to the Ministry of Justice, Home Office, and Electronic Monitoring Service to establish the extent of quality issues affecting GPS tags. A number of reports indicate that there is cause for concern.

As noted by the Independent Chief Inspector of Borders and Immigration:

> "In January 2022, Her Majesty's Inspectorate of Probation published a report of its inspection of 'The use of electronic monitoring as a tool for the Probation Service in reducing offending and managing risk.' In summary, this report recommended improvements to the collection, analysis and use of data, the publication of clearly defined policy, vision, strategy and operational frameworks for the delivery of EM for probation practitioners, and improvements to the safeguarding of vulnerable offenders.'"[27]

The report by the National Audit Office[28] is cause for concern and refers to the use of "obsolescent technology", "unsupported operating systems, missing system updates and outdated and vulnerable hardware and software." It notes that maps with location data are "difficult to interpret". In relation to data quality issues, it notes that:

> "poor-quality data – many free text fields lead to a lack of standardisation in data entry, higher likelihood of error and limited opportunities for systematic reporting;"

In the section 'Unresolved shortcomings in data quality and availability' it states:

2.18 HMPPS intended Gemini to resolve long-standing and fundamental short comings with the quality, reliability and availability of data associated with its legacy case management system ('integrity'). These include:
- Inefficient processes: a lack of automation corresponds to onerous levels of manual data entry, validation and cleaning of data, corresponding to a higher likelihood of error;
- Poor-quality data – many free text fields lead to a lack of standardisation in data entry, higher likelihood of error and limited opportunities for systematic reporting.

The Independent Chief Inspector of Borders and Immigration ('ICIBI') report March-April 2022 'An inspection of the global positioning system (GPS) electronic monitoring of foreign national offenders' raises several quality concerns stating that:

- This expansion [of Electronic Monitoring] should be supported by a comprehensive training package for both existing and new staff alongside the implementation of quality assurance process.
- Currently staff rely on Excel spreadsheets they have created themselves and information from Home Office IT systems that they told inspectors they did not trust. There are inconsistencies in data across the Hub's areas of activity,

[27] ICIBI March – April 2022 'An inspection of the global positioning system electronic monitoring of foreign national offenders.' https://www.gov.uk/government/news/inspection-report-published-an-inspection-of-the-global-positioning-system-gps-electronic-monitoring-of-foreign-national-offenders-march-april-2

[28] https://www.nao.org.uk/wp-content/uploads/2022/01/Electronic-monitoring-a-progress-update.pdf

and no data quality framework is in place to assure that the data is being properly managed, including the sharing of trail data.

- There was no overall data governance framework in place to provide assurance that data being collated by the Hub met quality standards to assure the consistency and validity of data. This is particularly important where use of multiple spreadsheets introduce an additional risk or error with data entry and processing.
- GPS devices track and record the location of all wearers at all times and the data was stored by EMS on their internal servers. The Home Office did not have access to these systems, which was a concern as it had limited oversight how this data was managed, protected and shared.
- Staff consistently said they had not been provided with adequate training for their roles.

In relation to Capita Electronic Monitoring Service, we note that the ICIBI states that:

> 'EMS performance was measured as a whole across the entire MOJ contract – the Home Office currently accounts for approximately 10% of devices issued through this contract. Disaggregated performance data was only recently made available to the Home Office, for the first time, for 6 of the 16 levels, covering the period October to December 2021. This showed EMS's performance for the Home Office part of the contract fell significantly below the target for 3 of the service levels, while a fourth fell below the target for 2 of the 3 months.'
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> 'Due to lack of staff on the SDT little was done to monitor or investigate breaches of service levels for Home Office cases, although managers told inspectors that they intended to explore this when staffing became available.'
>
> 'Inspectors requested data held on technical faults and equipment failures. The Home Office stated that although such data was available for the whole contract: "It has not been possible to distinguish between Home Office, acquisitive crime or other cohorts using GPS devices as they all have the same serial number ranges, so it is impossible to tell how many of these were Home Office cases."
>
> "The Home Office provided estimated data calculating Home Office Immigration Enforcement GPS orders as a percentage of the total GPS orders under the contract. This was then applied to the total faults recorded across the contract. This resulted in the following analysis: "The main reasons for these technical faults were charging issues(81%), SIM [card] (9%) and communication failure (6%) across all cohorts."
>
> "Instances of faults in December were exceptionally high across the whole of the MOJ contract, with 1,195 devices returned, which included "907 SOLO [EM devices]" which "[Capita EMS] had to recall and return due to a charging fault which all had to go back for repair."

The quality issues related to data risk create a risk of false allegation and wrongful conviction.

3.2. Accuracy

GPS is a space-based global navigation satellite system that provides location and time information in all weather, anywhere on or near the earth. GPS monitoring uses a network of 30 US maintained NAVSTAR satellites to calculate the physical position of the GPS tag. Although other networks of satellites do exist (Glonass, Galileo, Compass) they are not yet ready for use[29].

GPS location information may be accurate to a few meters in good conditions. A high-quality position fix requires an open view of the sky. There can be errors in so-called urban canyons, close to buildings and other locations where only a few satellites are visible.

Drift relates to issues concerning the strength of a GPS signal. This can vary depending on the distance to the nearest satellite. When the signal is particularly weak this can cause drift being the movement in the accuracy of the signal which means that an individual may be recorded some distance from their true location[30].

The impact of tall buildings relates to the phenomenon often referred to as 'urban canyons' where a GPS signal can be disrupted in built up areas where very tall buildings can block the satellites and cause the signal to bounce. If the signal from one or more satellites bounces off a tall building, this can give rise to an error of 100m of more. Larger errors can also arise where the view of the sky is restricted so that only a few satellites are visible. Similarly, much like many smart phones, GPS tags may be less accurate in very rural areas.

Further, whilst the GSM mobile phone network can be used as a back-up when GPS signal is unobtainable, the level of accuracy provided by the substitute system is much lower[31].

The devices can use the mobile network where GPS signal is unobtainable, to triangulate location using GSM cell-based data. i.e., if satellites can't be used to pin-point a location the fall-back system is to triangulate using proximity to the nearest mobile phone mast.[32] As noted by the Scottish Government in their 2013 consultation, it is important to note that although the mobile signal can pick people up in buildings and other locations where sometimes GPS cannot, the accuracy of the triangulation using this method may not be as reliable as with GPS.

The accuracy of cell tower data depends on the density of mobile base stations. The density of mobile base stations can vary from a hundred meters in town centres to several kilometres in the open countryside.

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[29] https://ico.org.uk/media/about-the-ico/consultation-responses/2013/2153/development-of-electronic-monitoring-service.pdf
[30] https://reform.uk/sites/default/files/2018-10/Tagging report_AW_8.pdf
[31] https://reform.uk/sites/default/files/2018-10/Tagging%20report_AW_8.pdf
[32] https://ico.org.uk/media/about-the-ico/consultation-responses/2013/2153/development-of-electronic-monitoring-service.pdf

The UK Forensic Science Regulator in the Codes of Practice and Conduct, Digital Forensics – Cell Site Analysis 2020 notes that a risk analysis in relation to mapping should consider[33]:

i. "Misrepresentation of a cell site in the wrong location, for example, labelled with an incorrect time of usage and/or cell identification; and
ii. Inappropriate sector representation."

Some of these difficulties relating to cell site analysis were considered in *R v Calland* [2017] EWCA Crim 2308:

> "Cell siting evidence can be powerful evidence. But it is not capable of locating a phone with pinpoint accuracy and it has other limitations. Those limitations are familiar to all who conduct and try criminal cases in which such evidence is commonly adduced. The limitations are not however necessarily familiar to the members of a jury."

The Scottish Government consultation in 2013 highlighted several problems with GPS tags:

- "GPS usually works in most domestic homes, but may not work inside all buildings;
- GPS usually works whilst travelling in cars, however, may not work on trains;
- GPS drift (movement in accuracy of signal) might occur when static for long periods of time and near waters;
- GPS accuracy is affected by nearby tall buildings and does not work underground."

> "There are no absolutes about accuracy or performance of any GPS device. However, we can reliably say what the likely accuracy of any one "fix" is within a particular range. (A fix is where the GPS system locates the tag in a particular place at a particular time). Depending on the strength of signals to the nearest satellites a fix might be accurate to 2-5 meters, 5-10 meters, 10-20 meters etc. "No absolutes about accuracy" does not mean the data can't be used it just means that whoever is using it needs to understand the difference between fixes that are accurate to 2 meters as compared to entries that are accurate to 20 meters. Additional assurance can be gathered from multiple fixes. So, if an offender has generated 20 fixes or data points at regular intervals on a map within 5 minutes, whilst any one point may be subject to drift, nineteen others showing an offender proceeding in a certain direction gives you a great deal more certainty about the result showing his or her movements."[34]

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33 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/918946/135_FSR-C-135_Cell_Site_Analysis_Issue_2.pdf

34 https://ico.org.uk/media/about-the-ico/consultation-responses/2013/2153/development-of-electronic-monitoring-service.pdf

There is no discussion in the guidance associated with Electronic Monitoring via GPS tags regarding accuracy concerns. It appears this issue is not dealt with at all, nor the consequences inaccurate readings would have for an individual.

3.3. Battery Life

Deficiencies related to the battery life of tags are one key quality failure.

People who are tagged as a condition of their immigration bail are informed that their GPS tagging devices must be charged for an hour a day, and this is echoed in EMS's leaflet[35], in their YouTube video hosted on the HM Prison and Probation Service channel[36], and in the "tagging handbook" published on the government's website[37]. However, people with tags (including all those who provided case studies, below) have been informed by the Secretary of State that they should charge the device for at least 2 hours a day, which is at odds with the EMS leaflet. A handbook on GPS tagging from the Ministry of Justice suggests that fully charging a tag usually takes "at least 2 hours every day".[38]

Battery life in GPS tags is a recognised problem. This has been noted in the recent reports of the HM Inspectorate of Probation[39] and the Ministry of Justice[40].

Testimonies given by people who have been tagged reflect that battery life is a persistent issue, and one that affects daily life.

Case study: One person on immigration bail, 'B', explained the impact of this, and how problems with the battery, and fears of being accused of breaching his bail, affected his mental health:

The tag takes a long time to charge, and often runs out of battery. I was told I had to charge it for an hour every day. The idea is that it takes up to an hour to charge, and if you charge it well until it pings, you should then get 24 hours battery life out of it. However, I found that it takes up to 2 hours to charge it.

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35 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/823813/Subject_Handbook.pdf

36 https://www.youtube.com/watch?v=yAsUEcB0yUg dated 5/03/2019

37 https://www.gov.uk/government/publications/gps-location-monitoring

38 https://www.bl.uk/britishlibrary/~/media/bl/global/social-welfare/pdfs/non-secure/e/l/e/electronic-monitoring-global-positioning-system-annex-n-gps-handbook.pdf - this handbook seems to date back to 2019, as it refers to the Ministry of Justice GPS pilot dated 2019 (https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/814219/process-evaluation-gps.pdf).

39 https://www.justiceinspectorates.gov.uk/hmiprobation/wp-content/uploads/sites/5/2022/01/Electronic-monitoring-thematic-inspection.pdf

40 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/814219/process-evaluation-gps.pdf

This has been really difficult at night, and during the day in view of my caring responsibilities. It's meant that I can't always move freely as I need to, needing always to consider the need to charge, and that I'm often forced to stay home for long periods of time while the tag charges. It can take up to two hours to charge the tag.

I've found that it can suddenly shut down without warning even if it's been charged. One day I was away from home and the tag just died, and was dead for about two hours before I could get home to charge it. I didn't get a text alert about this, but I was really worried that I'd be accused of breaching my bail by failing to charge the tag.

Because the tag takes longer than an hour to charge, it also means that I'd be forced to stay near a plug or be hooked up to an extension lead for hours, including while trying to sleep. You can imagine that if the plug is on the other side of the room, I have to have an extension lead trailing around behind me including in bed. This was uncomfortable, and felt degrading.[41]

A Ministry of Justice evaluation[42] of GPS tags in 2019 noted that:

> "Forty-three per cent of violations were due to tracker shutdowns resulting from loss of the tag's battery power due to insufficient charging – potentially representing the 'burden' of wearers having to charge the battery daily."

The design of the tagging system contributes to the drain on the battery due to the use of live location tracking. The Reform report 'Cutting crime: the role of tagging in offender management' dated September 2015 states that:

> "1.6.1 As pressure rises to ensure GPS devices run more and more concurrent capabilities, the battery life reduces significantly. In addition, increasing volumes of data transfer drains the battery life of a device. Continuously tracking offenders to provide real-time intelligence requires much more frequent communications between the electronic anklet and central portal. Interview for this report suggest that this type of tracking can reduce a tag's battery life to just a few hours…"

The ICO has commented that:

> "While advances to battery technology have increased in recent years, GPS can be very draining on batteries and battery life depends on the frequency with which the system provides updates on locations (every 10 seconds, every 30 seconds, every minute etc)."[43]

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[41] B is a client of the human rights law firm Duncan Lewis Solicitors, and has consented to their anonymised information being included in this complaint.

[42] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/814219/process-evaluation-gps.pdf

[43] https://ico.org.uk/media/about-the-ico/consultation-responses/2013/2153/development-of-electronic-monitoring-service.pdf

Failure to charge is a breach of bail conditions[44], meaning that if the battery is depleted, all data (including trail data) can be shared with the Home Office, and this can result in civil and criminal penalties relating to the breach, but it can also be used for unrelated matters. According to the Immigration Bail Guidance[45], the individual will have the opportunity to make representations against whether a breach occurred or to provide a reasonable excuse for the breach.

As B's case study reflects, those on bail often greatly fear being accused of a breach of bail conditions, and issues with the battery life of tags can therefore cause immense stress.

When the battery runs low, the tag will vibrate and the power light will flash red on the tag until it is charged[46]. This can of course happen at any time of the day or night, thereby waking people up in the middle of the night. It may also occur in public spaces, thereby exposing the fact that the individual is wearing a tag.

If the battery begins to fail, it will be necessary to charge devices for much longer periods of time and more regularly with, of course, the tag attached to the individual's leg, thereby limiting their freedom of movement considerably beyond what is intended through the imposition of the electronic monitoring condition. This is a particular concern if the battery degrades to the point that multiple charges need to occur within a single day. Those with tags report having to rush home quickly to charge their tag while in the middle of other activities, including while caring for children. These incidents interrupt daily life, and leave some reluctant to leave the house for fear of being accused of a breach for not having charged the battery.

The individual can be given a portable charger which they can bring with them to charge a device if they are out and about. However, if the device is faulty and will not charge properly when connected to the mains, then a portable charger will face the same problems with being unable to effectively charge the device and making the device hold a charge. Thus, a portable charger is not an answer to a faulty device.

Case study: Another immigration bailee, 'N', describes battery issues as follows:

The main problem is the battery life of the tag […] Generally, I have to charge my tag for at least 3 hours every day. I charge it when I wake up in the morning, I charge it again just before I leave the house to go out for the afternoon, and I charge it

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44 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1051204/immigration_bail.pdf "maintaining their EM device and any mobile phone issued to them as outlined in the induction leaflets issued by the supplier to include charging the device daily until fully charged"

45 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1051204/immigration_bail.pdf "maintaining their EM device and any mobile phone issued to them as outlined in the induction leaflets issued by the supplier to include charging the device daily until fully charged"

46 https://www.bl.uk/britishlibrary/~/media/bl/global/social-welfare/pdfs/non-secure/e/l/e/electronic-monitoring-global-positioning-system-annex-n-gps-handbook.pdf

again in the evening before going to sleep. Even when I do this however, the tag often beeps when I am out of the house (suggesting that the battery is low), which means that I must charge it immediately.

I have a power adaptor that I can use to charge the tag when it runs out of battery, when I am away from mains electricity. Previously, the portable charger did not function properly. This was very frustrating as it meant I never knew when the charger would work when I was out of the house, so I always had to be somewhere with access to mains electricity. Someone from the Home Office came to my house one day, and they provided a new portable charger. This new portable charger works a lot better than my old one, but this doesn't change the fact that I have to charge the tag using the mains for several hours every day.

The other problem with the tag's battery problem is that it stops me from sleeping. Every 2-3 nights on average, I will be asleep, and I am woken suddenly because my tag starts vibrating. It is as if I am shocked out of sleep. It seems to be completely random when it happens, it happens even though I charge it before I go to bed every evening. When this happens, I have to connect it up to the mains, which means placing my foot into a very awkward position for around 2 hours. Sometimes I fall back asleep while it is charging, but if it slips out of the charger, it will start beeping again and I am again woken up suddenly.[47]

Battery issues have also plagued immigration bailee 'M', as below:

At the moment, I am finding the practical issues that are associated with the GPS tag most difficult. Every day, as soon as I wake up, I have to charge the tag using the mains before I can do anything. This is supposed to last me the whole day, but I often find that the tag runs out during the day. This means that I find it really difficult to do anything I had been planning to do. I am constantly worrying about when the tag might run out of battery.

The tag also runs out sometimes in the middle of the night. It starts vibrating when it has run out, and it means I have to wake up and attach my leg to the mains socket which is really uncomfortable.

The other issue is that my portable charger doesn't work very well at all. I will charge the charger at time, but it never seems to be fully charged, so that when I am out and about and I try and use it for my tag, it works a tiny bit and then says it runs out. This means that I always need to be near to mains electricity. I have tried several times to call the helpline number that I was given to call if I had any technical issues with the tag, however the line just rings and rings.

3.4. Other faults

We have received reports of the tags malfunctioning in such a way as to suggest that they have been tampered with or damaged, when no such thing has occurred.

[47] N is a client of Duncan Lewis Solicitors, and has consented to their anonymised case study being included here.

Case study:

'E', who is subject to immigration bail, was visited unannounced by staff members from EMS Capita who came to investigate an alleged incident of tampering with the GPS tag. When EMS staff members were able to investigate the issue. They informed E that there were no issues with the device, and that they could see the tag was fully charged.[48]

Bailee M - mentioned above - notes that they too were accused of a 'strap tamper':

The Home Office also visited my home after there had apparently been a 'Strap tamper' of my tag. They checked the tag and saw that it was still attached to my ankle. They fitted a new tag anyway, maybe to prevent further problems in case the tag was faulty. I am not sure what the 'Strap tamper' issue meant.

Finally, N (mentioned above) has reported that he too received unexpected visits from EMS/Home Office staff to his home, informing him in an unclear way that he had been in breach of his bail conditions. The supposed breach appeared to relate to a requirement to enable the provider to check the device without warning.

One time recently [...] *I was told by the Home Office that I had breached my bail conditions. This is because they said they had visited my home on several occasions to check my tag, and I had not been there. This was confusing because I do not have a bail condition which says I need to be in the house at a certain time imposed, nor do I have a curfew condition.*

There therefore appears to be a pattern of visits taking place late at night, outside of reasonable business hours, and for the most part unannounced. It Is unclear why the contractor cannot give prior notice and conduct home visits during reasonable business hours.

4. Contracting information: third party providers

One aspect that may be relevant to the accuracy and reliable of extracted data and data relied upon in criminal prosecutions relates to the different third parties involved in Electronic Monitoring. The Ministry of Justice are the contract owners and EMS are the service suppliers for the GPS tags. Criminal Casework (CC) manage their foreign national offenders (FNOs) through tagging and EMS provide data direct to CC to respond to any Immigration Bail condition breaches.

To procure the tags, the Ministry of Justice designed a single end-to-end service split into four 'lots':

- the monitoring service;

[48] E is a client of Duncan Lewis Solicitors who has consented to an anonymised case study being included here.

- the monitoring and mapping software;
- the monitoring hardware; and
- the network

These were awarded respectively to:

- Capita, who were awarded a contract valued at £229,000,000 in 2014[49];
- G4S monitoring technologies who were awarded a contract valued between £29,000,000 and £53,000,000[50];
- Airbus Defence and Space Limited, awarded a contract valued at £10,400,000[51]; and
- Telefonica who were awarded a contract for £3,200,000[52].

It has been argued by Reform[53] that doing this divides accountability and creates compatibility challenges. The horizontal model also means that none of the providers will face any competition for the duration of their contracts (six years for the monitoring service provider and three years for the other three providers). The one-off tender for a single supplier of each service element cements the market position of those providers and hinders entrants[54].

It is unclear whether Electronic Monitoring remains split into four lots. Capita were recently awarded an extension of their contract[55] however this states that: "This notice announces the award of three (3) of the originally advertised four (4) contracts for the provision of the next generation of electronic monitoring (EM) services and supplies in England and Wales, being Lots 1, 2 and 4.

I. Monitoring service including the processing centre, related hardware and software, and field operatives (Lot 1);
II. Monitoring and mapping software applications (Lot 2);
III. Monitoring hardware (anklets etc.) and firmware and software; and
IV. Network (Global System for Mobile Communications (GSM)) (Lot 4)."

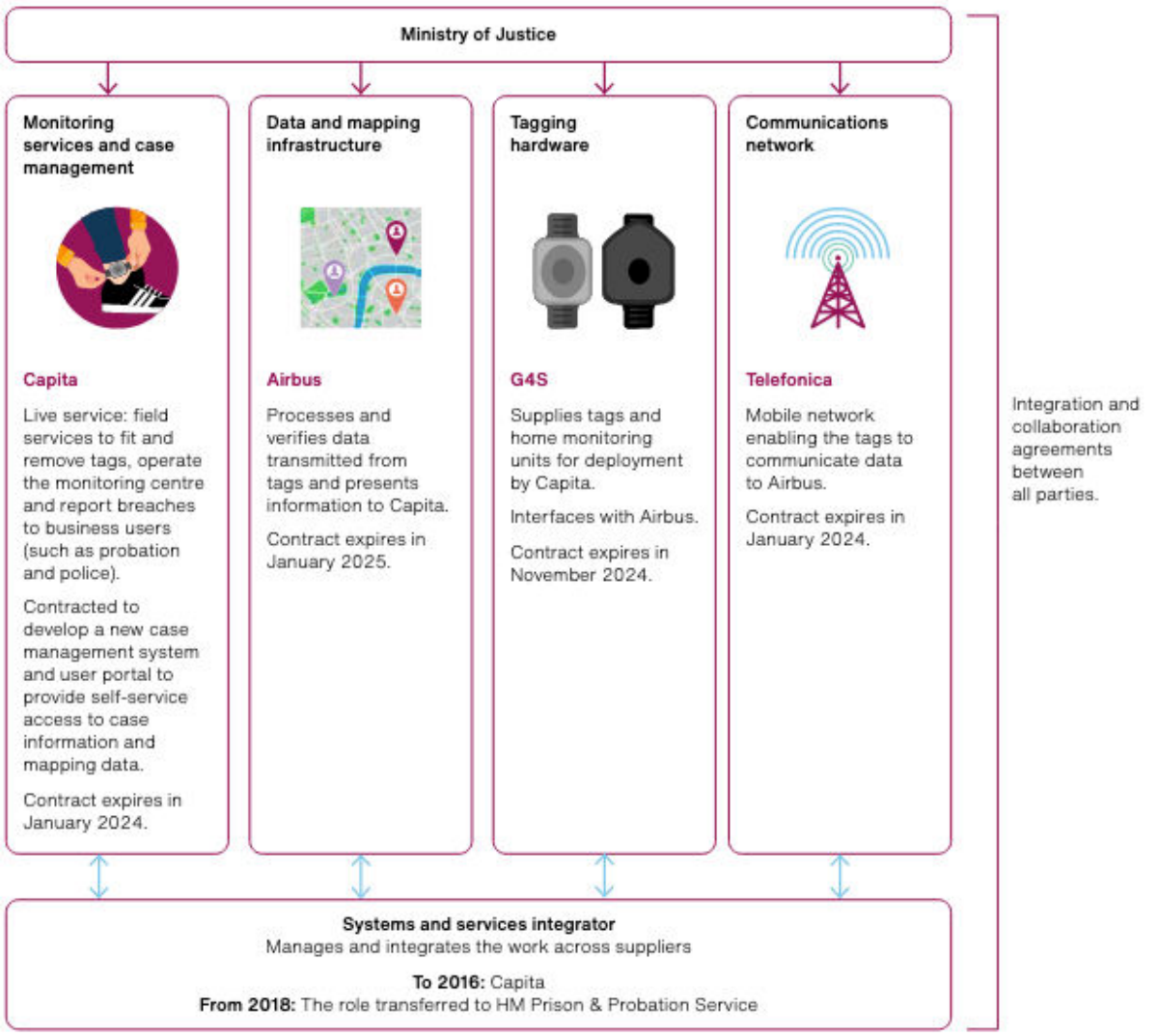
We note there is a tendering process that closed in April 2022 for Electronic Monitoring[56].

[49] https://www.contractsfinder.service.gov.uk/notice/6b7768af-64c7-42c1-9ca2-47999949084f?origin=SearchResults&p=1
[50] https://www.contractsfinder.service.gov.uk/notice/453fb31d-e00e-43fb-b7d2-413c3216a765?origin=SearchResults&p=1
[51] https://www.contractsfinder.service.gov.uk/notice/e8255365-4e01-422e-a797-6d24e8afc1fa?origin=SearchResults&p=1
[52] https://ted.europa.eu/udl?uri=TED:NOTICE:284886-2014:TEXT:EN:HTML
[53] https://reform.uk/sites/default/files/2018-10/Tagging%20report_AW_8.pdf
[54] https://reform.uk/sites/default/files/2018-10/Tagging%20report_AW_8.pdf
[55] https://www.capita.com/news/capita-extends-moj-contract
[56] https://www.contractsfinder.service.gov.uk/notice/cdf01f23-7054-4f81-8215-695fb4a7a8f9?origin=SearchResults&p=1

We are aware the recent National Audit Office report 8 June 2022 provides the following graphic[57]:

HM Prison & Probation Service's (HMPPS's) 'tower' delivery model for its tagging transformation programme

HMPPS's delivery model involves four main suppliers whose work it brings together in its role as systems and services integrator



Note

1 The Ministry of Justice is the contracting authority. HM Prison & Probation Service managed the tagging transformation programme.

Source: National Audit Office analysis of HM Prison & Probation Service documents

[57] https://www.nao.org.uk/wp-content/uploads/2022/01/Electronic-monitoring-a-progress-update.pdf

Conclusion

The Home Office's GSP monitoring regime raises serious concerns that stem from issues of quality and accuracy of the devices used. As is made clear from the testimonies of those affected, issues with the devices are no small matter. It is quite possible that a faulty battery, or a malfunctioning or poorly fitted device, could result in a person being accused of a breach of conditions, and subjected to criminal proceedings.

Moreover, there is a dearth of accountability and scrutiny over the immigration GPS regime, in stark contrast to the MoJ/probation-linked regime. A confusing tangle of providers, and a chain of responsibility that is difficult for bailees to access, renders it hard for those on bail to address or correct any breaches. Wider issues with the technical functioning of the GPS regime do not appear to have been addressed.

Given the Secretary of State's recently announced intention to expand the scheme to people arriving in the UK to seek asylum[58], there is an urgent need for an examination of the significant issues arising as the scheme is rolled out.

For the reasons set out above we encourage you to take up this complaint.

Yours sincerely,

Camilla Graham Wood
Senior Legal Officer

Privacy International

[58] https://www.nytimes.com/2022/06/18/world/europe/britain-migrants-electronic-monitoring.html

Annex A: Background information

From January 2021, those who were subject to electronic monitoring but were tagged with Radio Frequency tags were moved over to monitoring by GPS[59].

From 31 August 2021, by virtue of immigration regulations[60], the provisions in Schedule 10 the Immigration Act 2016, providing for foreign national offenders[61] liable to deportation to be subject to mandatory electronic monitoring as a condition of immigration bail, were commenced.

In this context, a foreign national offender is any foreign national who has received a 12-month custodial sentence; or is deemed to be a persistent offender. Power for deportation derives from the UK Borders Act 2007 and applies to non-European Economic Area citizens and EEA citizens. EEA citizens are all EU citizens and those who are citizens of Lichtenstein, Iceland, Norway and Switzerland.

This was designed to implement the 2015 Conservative party manifesto commitment to *"introduce satellite tracking for every foreign national offender subject to an outstanding deportation order or deportation proceedings."*[62] The provisions were debated in 2016 during the passage of the Immigration Act 2016[63] and have been debated recently in light of proposed amendments to the Nationality and Borders Bill in November 2021,[64] specifically in relation to the absence of strict limits and safeguards on how long electronic monitoring is used and in what circumstances. These amendments did not pass.

Since 31 January 2022 all those already on immigration bail and subject to either deportation proceedings or a Deportation Order, are now subject to a review of individual circumstance and GPS tags are now starting to be issued to those individuals. In addition, the Secretary of State for the Home Department (SSHD) i.e., Home Office, can impose electronic monitoring on those not subject to a deportation order if justified by the circumstances of the case.[65]

Electronic monitoring must always be considered for those subject to deportation orders. For those who are not subject to deportation orders, electronic monitoring can be imposed by the Secretary of State as a condition of bail, for example where

[59] https://www.biduk.org/articles/805-bid-s-briefing-on-electronic-monitoring
[60] Immigration Act 2016 (commencement and transitional provisions No 1) (England and Wales) Regulations 2021, SI 2021/939 (see paragraphs 2(2) and 2(3)(a) of Schedule 10),
[61] all those in England and Wales subject to either deportation proceedings or a Deportation Order at the point of release from prison or Immigration Removal Centre
[62] https://ucrel.lancs.ac.uk/wmatrix/ukmanifestos2015/localpdf/Conservatives.pdf.
[63] https://hansard.parliament.uk/Lords/2016-03-15/debates/73C9801F-AE95-4E8C-A536-BAE51FFABDDC/ImmigrationBill?highlight=electronic%20monitoring%20immigration#contribution-3EE5F5F7-0688-41F9-9A84-9437DE772086
[64] https://hansard.parliament.uk/Commons/2021-11-04/debates/4d819fad-a167-4619-b084-6ef35bc49ac7/NationalityAndBordersBill(SixteenthSitting)?highlight=electronic%20monitoring%20immigration#contribution-72252173-13DE-46E6-8015-84E474D5C96D
[65] Immigration Bail policy, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/952910/i mmigration-bail-v7.0-gov-uk.pdf, p.20.

the person presents a high risk of absconding from immigration bail or pose a significant risk of harm to the public or to public health.

A bail condition requiring a person to wear a GPS tag can be combined with restrictions on their movements, including curfews and conditions on where they can go (called inclusion or exclusion zones).

The Home Office Data Protection Impact Assessment states that the number of tag wearers will rise significantly from 280 to approximately 4500[66]. Bail for Immigration Detainees (BID) estimates:

> "At the end of March 2020 there were 194 people on immigration bail subject to an electronic monitoring condition. There are 9,987 people facing deportation living in the community – meaning that an additional 9,793 people could become subject to electronic monitoring."[67]

There are now more recent figures which show that 11,236 people are facing deportation living in the community[68]. A recent Freedom of Information Act request states that currently 1,412 people are being electronically monitored as of 29 March 2022.

[66] https://privacyinternational.org/sites/default/files/2022-02/67021%20Wood%20Annex%20B.pdf
[67] https://www.biduk.org/articles/805-bid-s-briefing-on-electronic-monitoring
[68] https://www.gov.uk/government/publications/immigration-enforcement-data-q4-2021

Annex B: The legislation

Immigration bail can be granted by the SSHD or by the First Tier Tribunal (FTT). Schedule 10 of the Immigration Act 2016 (IA 2016), Part 1 paragraphs 2(2) and 2(3) place a mandatory duty on the Secretary of State to electronically monitor those on immigration bail who could be detained because they are liable to deportation, subject to deportation proceedings or are under a deportation order. These duties were commenced on 31 August 2021.

A bail condition requiring a person to be subject to electronic monitoring can be combined with restrictions on their movements, including curfews and conditions on where they can go (called inclusion or exclusion zones) (paragraph 2(1) Schedule 10 IA 2016). Pursuant to paragraph 2(1) of Schedule 10, the SSHD must impose at least one immigration bail condition on those not subject to deportation proceedings or under a deportation order. These conditions are set out at paragraphs 2(1)(a)-(f) of Schedule 10, and Electronic Monitoring ("EM") is one of the potential immigration bail conditions the SSHD can impose (as per paragraph 2(1)(e)).

The mandatory duty under Schedule 10, paragraph 2 Immigration Act 2016 to impose an electronic monitoring bail condition applies to everyone who is liable to be deported, at any point within the deportation process, from the point at which the Secretary of State for the Home Department ("SSHD") considers whether deportation should apply, to those subject to a signed deportation order, even where the order is not enforceable owing to a legal or practical barrier.

Paragraph 4(1) of Schedule 10 sets out the power to impose an electronic monitoring condition. Its purpose is to require a person to "co-operate with such arrangements as the Secretary of State may specify for detecting and recording by electronic means one or more of the following":

- A person's location at specified times, during specified periods of time or while the arrangements are in place.
- A person's presence in a location at specified times, during specified periods of time or while the arrangements are in place.
- A person's absence from a location at specified times, during specified periods of time or while the arrangements are in place.

The arrangements may include: (Paragraph 4(2) Schedule 10):

- A requirement for a person to wear a device.
- A requirement for a person to make specified use of a device.
- A requirement for a person to communicate in a specified manner and at specified times or during specified periods.
- The exercise of functions by persons other than the Secretary of State.

Schedule 10 provides exemptions for people who are under 18, or for mentally unwell people who are released on to immigration bail following detention under

sections 37 and 41 of the Mental Health Act 1983 whilst they remain subject to a supervision order. There are also two more general exceptions: where it would be contrary to a person's Convention rights and where it would be impractical.

Immigration bail can be granted by the Secretary of State or by the First-tier Tribunal. The decision to impose electronic monitoring (EM) is mandatory requirement in certain circumstances as noted above. The decision as to whether an exemption applies is a decision for the Secretary of State. The Tribunal has no jurisdiction over whether an exemption applies and no discretion as to whether or not EM should be imposed where it is a mandatory requirement or where the SSHD has made a decision that it should be.

If bail is granted by the SSHD, then the SSHD will not impose EM if the SSHD considers imposing such a condition would be impractical/contrary to the individual's convention rights (para 5(a) and (b) of Schedule 10). In cases where immigration bail is granted by the First-Tier Tribunal, the Tribunal cannot impose such a condition where the SSHD considers that the condition would be contrary to an individual's convention rights/impractical (paragraph 2(7) and 2(8) of Schedule 10).

Schedule 10 makes no reference to the technology used in the EM condition. The introduction of GPS monitoring was a policy decision.