



National Audit Office



# Electronic monitoring: a progress update

HM Prison & Probation Service

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**REPORT**

**by the Comptroller  
and Auditor General**

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**SESSION 2022-23**

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## **Report by the Comptroller and Auditor General**

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Commons in accordance with Section 9 of the Act

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**Gareth Davies**  
**Comptroller and Auditor General**  
**National Audit Office**

**30 May 2022**

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# Key information

## What is electronic monitoring?

Electronic monitoring ('tagging') allows the police, courts, probation and immigration services to monitor offenders' locations and compliance with court orders, and act if offenders breach their requirements. Government uses the following types of tags:

**Radio frequency** tags which monitor whether offenders have remained at home during set periods (curfew)



**Combined radio frequency and global positioning system (GPS)** tags which track offenders' locations and movements



**Alcohol monitoring tags** which monitor alcohol concentrations in offenders' sweat



- Used to monitor:
- people on bail;
  - community orders;
  - those on licence following their release from prison;
  - high-risk offenders; and
  - foreign national offenders.



there were **15,282** tagged offenders



## How does tagging work?

Tagging works by sending an alert to a monitoring centre if an offender breaches certain conditions, for example, leaving home during curfew or entering an area defined as out of bounds. Business users – such as police or probation officers – use the information to check compliance against conditions and understand offenders' behaviour.



**Tagging**

Offender's sentence includes a requirement to be tagged

Offender tagged and equipment installed

**Ongoing monitoring**

Monitoring centre checks compliance and send alerts if offender breaches conditions

It provides location data and case data to users on request

**Action**

Responsible organisation (eg police, probation) notified of breach

Responsible organisation decides on action eg recall to court/prison

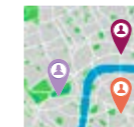
## Who is responsible for what?

HM Prison and Probation Service (HMPPS), an agency of the Ministry of Justice (the Ministry), is responsible for tagging. It originally let regional contracts to suppliers who operated an end-to-end service. In 2014, it changed to a functional 'tower' contracting approach with four different suppliers. It planned for each supplier to be responsible for a different element of the national programme: supplying and fitting tags to offenders; running a monitoring centre; providing underlying mapping data; and providing the communications network. HMPPS acted as an 'integrator' to coordinate work across the four suppliers. It took on this role in 2016 following a dispute with Capita, who previously acted as integrator.

### HMPPS



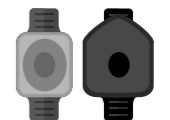
Run live service monitoring centre, case management, and fit tags to offenders  
(Capita)



Provide data and mapping infrastructure  
(Airbus)



Run communication network  
(Telefonica)



Supply tags and equipment  
(G4S)

## What is government trying to achieve with electronic monitoring?

Government regards electronic monitoring as a cost-effective alternative to custody which contributes to its goals to protect the public and reduce reoffending. It launched electronic monitoring in 1999. In 2011, in parallel to its normal tagging activities (the live service), HMPPS launched a transformation programme to improve efficiency and capability, mainly by introducing new technology and adding more sentencing options. It closed this programme in March 2022 and plans to widen the use of tagging over the next few years through a new expansion programme.

### Transformation programme

2011-12 to 2021-22

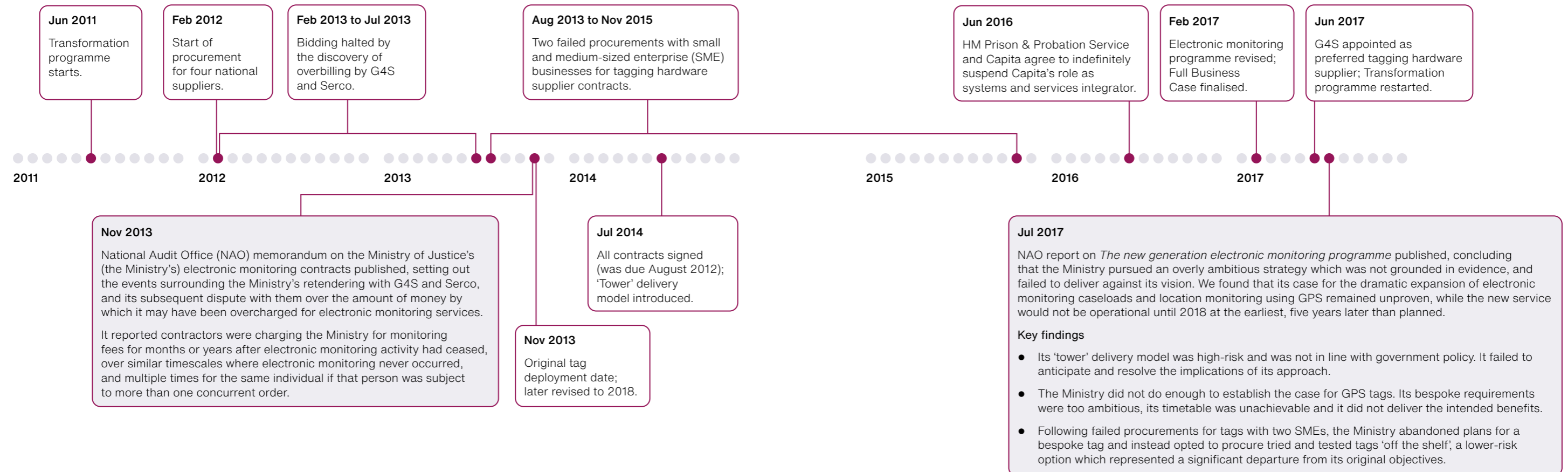
- Replace the existing temporary curfew tag provision
- Increase GPS location monitoring capability
- Introduce a new case management system ('Gemini') and user portal
- Build a robust and scalable operational service

### Expansion programme

2020-21 to 2024-25

- Develop a flexible and scalable service
- Build the evidence base to demonstrate the effectiveness of electronic monitoring
- Be data driven
- Be led by user needs and integrated with probation
- Ensure cost-effectiveness

## History and our previous coverage



## Key facts

**11 years**

duration of HM Prison & Probation Service's (HMPPS's) electronic monitoring ('tagging') transformation programme, from initiation in June 2011 to closure in March 2022

**36%**

increase in the number of offenders on tag between April 2017 and March 2022

**£98m**

losses to the taxpayer following HMPPS's decision to terminate development of a new case management system ('Gemini'), 63% of the programme's sunk costs by March 2021

### On HMPPS's tagging transformation programme (2011-12 to 2021-22):

**£153 million** net spend by HMPPS on the programme between 2011-12 and 2021-22

**29 months** movement in HMPPS's target launch dates for Gemini before it terminated Capita's contract (from September 2018 to February 2021)

**November 2018** date when HMPPS launched location monitoring services on schedule in England and Wales

**15,282** number of offenders on tag as at end of March 2022

### On HMPPS's tagging Expansion Programme (from 2020-21):

**£1,214 million** forecast cost of new programme from 2021-22 to 2030-31, including £808 million for the live service, £55 million for re-procurement and £232 million for expansion projects

**Around 6,000** forecast additional tagged offenders by the end of 2023-24



# Summary

**1** This report sets out our assessment of HM Prison & Probation Service's (HMPPS's) delivery of its electronic monitoring ('tagging') transformation programme, prompted by its cancellation of a key enabling project in 2021. It follows on from events in our previous report and focuses on HMPPS's progress against objectives set out in its 2017 Full Business Case.<sup>1</sup> We also examined how it has applied learning and how it plans to address risks in its expansion programme. We did not examine suppliers' performance in managing the current live tagging service. For background information on the programme, see pages 4 to 7.

## Key findings

Progress in delivering transformation

**2 HMPPS has not achieved its vision for transformation because of its failure to deliver a new case management system ('Gemini').** In 2017, HMPPS opted to continue with the existing 'tower' contracting structure. This involved four suppliers each responsible for providing a different element of the service, whose work needed to be brought together by HMPPS as integrator. HMPPS set out to manage the complex interdependencies between suppliers but failed to do so effectively. The delays and HMPPS's eventual termination of Gemini have undermined its performance in delivering other objectives (paragraphs 3.2 to 3.4):

- HMPPS began to replace ageing curfew tags from the previous contracts in September 2020 against an initial target of March 2019. However, it has not improved efficiency and capability as planned, so the service remains no different from that in 2014 (paragraphs 2.6 to 2.8).
- HMPPS launched location monitoring on schedule in November 2018, using tags with the minimum features required to provide the service. It intended this to be a 'stepping-stone' to transformation when Gemini was ready. Without Gemini, HMPPS cannot fully meet its plans to give business users self-service access to maps on offenders' movements or deliver efficiency improvements (paragraphs 2.9 to 2.13).

<sup>1</sup> Comptroller and Auditor General, *The new generation electronic monitoring programme*, Session 2017–2019, HC 242, National Audit Office, July 2017.

- HMPPS expected its transformed service to be robust and capable of scaling up to include more types of tags and tagging, and new suppliers in future. HMPPS has launched and scaled-up new tagging services but using legacy systems rather than Gemini. This means it relies on obsolescent technology and fundamental inefficiencies in tagging services remain unresolved. HMPPS has started to address the most urgent obsolescence issues and aims to conclude this work by November 2022 (paragraphs 2.14, 2.22 and 2.23).

### **3 Both HMPPS and Capita contributed to severe delays in developing Gemini.**

HMPPS contracted Capita to develop Gemini and a user portal to allow business users to see case management information and mapping data. In May 2021, HMPPS suspended development of Gemini before terminating the contract for Gemini in December 2021. By this point, the programme was 18 months late against its first contractual delivery plan. HMPPS did not carry out its integration role effectively, and this was compounded by Capita's inability to resolve defects. An external review found that Capita's approach to developing Gemini was not inherently unprofessional but its inability to resolve defects was a key reason for the lack of progress. Capita told us that the rigidity of HMPPS's approach to testing lacked pragmatism. In Capita's view, HMPPS's change in tagging supplier and changes to its system designs, and its management of integration issues across suppliers, were the primary reasons for delay (paragraphs 2.3 to 2.5, 3.4 and Figures 8 and 9).

### **4 Five years since it relaunched its transformation programme, HMPPS has not systematically monitored the benefits it planned to achieve.**

HMPPS sought to achieve five outcomes: provide decision-makers with more effective options to manage offenders; provide cost-effective alternatives to custody and reduce the costs of electronic monitoring; improve public protection; improve monitoring data; and improve the quality and efficiency of electronic monitoring operations. It translated these aims into 12 planned benefits. However, HMPPS did not systematically track these and lost or partly lost three of them due to its termination of Gemini and the user portal, while a further three no longer apply (paragraphs 2.15 to 2.16 and Figure 10).

The consequences of not delivering the case management system

### **5 HMPPS's decision in 2021 to terminate the Gemini contract was the optimal decision at that point but this aborted project has cost taxpayers £98 million.**

In terminating Capita's contract, HMPPS stopped further spending on a system that was not ready for use. It considered that, given the risks Gemini posed to the live service, continuing its existing system would be more stable and sustainable. In addition, prolonged delays eroded the planned benefits. Of HMPPS's investment, £59 million provided ongoing value to the programme, but it disclosed the remaining £98 million in its 2020-21 accounts as 'fruitless payments': losses with no public benefit. HMPPS's net costs from 2011-12 to the point of its closure of the programme in March 2022 were around £153 million (paragraphs 2.5 and 2.17, and Figures 11 and 12).

**6 HMPPS avoided further risks to value for money by stopping Gemini, although it now expects to spend £9.8 million on remediation work to ensure its 10-year-old legacy system can continue safely.** G4S introduced the 'Integrity' case management system in 2012, and HMPPS must now rely on it until at least 2024. In July 2021, HMPPS reviewed the system's resilience and capacity to handle higher demand. It identified risks which could jeopardise the service, including unsupported operating systems, missing system updates, and outdated and vulnerable hardware and software. It noted significant risks related to its 16-year-old telephone system, which is critical to enabling timely contact with offenders and business users. HMPPS plans to address these risks by November 2022. However, it cannot do 'live' testing of the system's ability to cope with higher volumes within its existing budget and is therefore relying on monitoring ongoing system performance. This reactive approach carries risks as it relies on early alert and prompt fixes to emerging problems (paragraphs 2.22 and 2.23).

**7 HMPPS is not providing stakeholders with location monitoring data in line with its original aims, limiting its added value for supervising offenders and protecting the public.** HMPPS expected Gemini and the user portal to allow users such as police and probation officers to have self-service access to case information and to historic and real-time maps of offenders' movements. Instead, users must request mapping data from Capita, which creates a delay, and HMPPS cannot collect information on the timeliness or quality of the service. HM Inspectorate of Probation found the absence of a user portal leaves a gap in service provision. Probation staff find the process time-consuming and the maps difficult to interpret, which hinders their responsive supervision of offenders. HMPPS is cautious about introducing further changes to Capita's current contract but has committed to improve service standards to support public protection better in future contracts. HMPPS has also introduced a new reporting tool, which provides some weekly offender-level mapping data for the police, and plans to roll it out to probation staff (paragraphs 2.19 to 2.21).

**8 HMPPS's ability to carry out analysis and evaluation is severely constrained by the poor quality and availability of data.** HMPPS intended Gemini to integrate data from other systems through automated interfaces. Without it, the service relies on staff manually re-keying information. This is both inefficient and more prone to error. HMPPS did not include in the contract a requirement for full and direct access to the management information Capita holds on tagging, making it difficult for it and other users to make improvements. More generally, the system is not linked to other systems in the justice sector so HMPPS cannot reliably link data, limiting insights into offenders' journeys or longer-term reoffending. Only data on offenders' age and gender are captured, so HMPPS does not know whether tagging is proportionately applied to offenders with other protected characteristics, including ethnicity (paragraphs 2.18, 4.13 and Figure 13).

**9 Evidence on the effectiveness of tagging remains weak, particularly on reducing reoffending and diverting offenders from prison.** HMPPS's location monitoring pilots provided useful learning on launching a new service which it successfully applied to its national rollout. However, it did not analyse reoffending and offenders' diversion from prison as planned because of constrained resources. HMPPS estimates that to break-even from its investment in its expansion programme, it would need to divert around 5,000 offenders from prison or deter 9,000 repeat offences by 2025-26. However, the effect of tagging on these outcomes remains unproven and poor-quality data mean HMPPS is heavily reliant on anecdotal information. To address gaps, it has committed to evaluate its current and future tagging expansion initiatives, including the effect on reoffending and other rehabilitative outcomes (paragraphs 2.9 and 4.12 to 4.15).

Reasons for delays in delivering the case management system

**10 There were shortcomings in HMPPS's performance as systems and service integrator.** HMPPS took on the integrator role from Capita following a dispute in 2016. As integrator, it had to agree requirements, ensure suppliers' contributions were compatible and resolve integration issues. However, HMPPS did not spend enough time at the outset with Capita to explore the feasibility of its requirements. Instead, it took a detailed, prescriptive approach which was inflexible and limited innovation. An external review of the programme found that HMPPS did not intervene early enough to resolve cross-supplier integration issues. In addition, a breakdown in trust and collaboration between HMPPS and Capita led to three formal disputes between HMPPS and Capita during the programme (paragraph 3.4).

**11 HMPPS's transformation timetable was over-optimistic.** HMPPS pursued a fixed launch date early in the programme before it had a clear view on whether suppliers were ready to proceed. It did not agree its first delivery plan with suppliers until August 2018, although it had originally expected to launch the new service in September 2018. These delays were due to the volume of interdependencies between suppliers' technical solutions, the changes Capita had to implement to accommodate G4S's tags and Capita's delays in developing the data centre. In addition, HMPPS did not build in any contingency into its first contractual delivery plan. It subsequently re-baselined its delivery plan three times, moving the targeted launch date for Gemini by 29 months, and these delays eroded planned benefits (paragraph 3.5).

**12 HMPPS did not escalate significant risks, and the Ministry of Justice (the Ministry) missed opportunities to provide additional support and detailed scrutiny at key decision points.** The programme had high risks and low delivery confidence over a long period, but HMPPS did not escalate these to the Ministry. There was also a lack of digital leadership from the Ministry, and the programme's technical assurance capability, which was provided by consultants, did not extend to providing strategic advice or challenge. In 2019-20 HMPPS used a business case 'addendum' rather than a revised business case to extend the programme, which complied with minimum requirements but which limited the extent of scrutiny it received at this crucial time. HMPPS did not make clear the programme's progress, the key risks or how, given previous delays, it would achieve its revised target transformation date. There was no formal requirement set by the Ministry for HMPPS to escalate risks in this way. The Ministry's Investment Committee was content only to 'note' the addendum. HM Treasury approved the addendum based on affordability only. This was a missed opportunity for an external strategic look at the programme and for more detailed scrutiny on whether termination would have been a more prudent option at this point. The programme team raised doubts about Gemini's capability and the possibility of continuing with the current case management system as a potential fallback option in June 2019, 23 months before it suspended development. However, had HMPPS terminated the Gemini contract at the end of 2019-20, taxpayers' exposure would still have been significant: 84% of losses (£82 million) related to expenditure between 2011-12 and 2019-20 (paragraphs 3.6 to 3.8 and Figure 14).

#### Expanding electronic monitoring services

**13 HMPPS has responded to policy changes that seek to widen its use of tagging to broader groups of offenders.** It launched a £1.2 billion expansion programme comprising three expansion projects so far:

- HMPPS has achieved positive outcomes in its alcohol monitoring service, reporting offenders' high sobriety rates while on tag. It launched services for offenders on community-based court orders in October 2020 and was well-placed to respond to unexpectedly high demand due to sentencers' enthusiasm for the intervention. The longer-term impacts of alcohol monitoring are not yet known (paragraphs 4.3 to 4.5 and Figure 15).
- HMPPS launched a pilot scheme for acquisitive offenders – those with convictions for theft, burglary or robbery – in April 2021, making tagging a condition of eligible prison leavers' licences. It successfully rolled out an innovative tool which enables participating police forces to match crime incidents with offenders' location data, and there is anecdotal evidence of some resulting in convictions. HMPPS has not yet sought systematic data from police forces on the efficiency or outcomes of using this tool to investigate crime (paragraphs 4.6 to 4.8 and Figure 15).

- HMPPS's and the Home Office's plans to monitor Foreign National Offenders (FNOs) using smartwatches which capture biometric data have been severely delayed. HMPPS rolled out standard fitted tags on schedule for its higher-risk FNOs but has stopped developing the watches after discovering 11 months into development that it was using an operating system that did not meet Government Cyber Security Standards. HMPPS and the Home Office have now sourced an alternative option (paragraphs 4.9 and 4.10 and Figure 15).

### Learning the lessons and managing future risks

**14 HMPPS has made some pragmatic decisions to reduce delivery risks but must procure new contracts and transition to the new service against a demanding timetable.** By 2023-24, HMPPS expects to monitor around 21,400 cases, about 6,000 more than March 2022 based on analysis presented in its business case. Alongside this, it needs to re-procure contracts against a fixed deadline. In line with good practice, it has invested time and resources in exploring upfront the prospective suppliers' capability, experience and potential technical solutions. By committing to procure tried and tested technologies – rather than commissioning bespoke systems – HMPPS is better placed to address the shortcomings which occurred in its transformation programme. It also plans a phased approach to confirming the requirements for technical interfaces. It will first understand how the future tagging provider's systems will work, rather than expecting suppliers to undertake development work in parallel, which is prudent. Significantly, HMPPS has developed a clear risk escalation framework which, if followed, will ensure more timely and appropriate scrutiny than has been the case previously. However, HMPPS is constrained by its current suppliers' contract expiry dates, meaning it has had to set itself a demanding timetable for the procurement and transition to the new service. For example, it expects that suppliers will be able to integrate their systems in six months, but it has not yet tested their potential systems or the ease of their integration (paragraphs 4.16, 4.19 and 4.21, and Figures 18 and 19).

**15 HMPPS has again chosen to outsource the role of systems and service integrator and must be prepared to step in to handle any problems arising.** HMPPS believes it does not have the capability and capacity to undertake this role and that the supplier who fits the tags will be better placed to act as integrator. HMPPS has committed to: thoroughly test prospective suppliers' capability, experience and access to suitable systems; clearly define interfaces and responsibilities between parties; and seek strong assurance of suppliers' integration work. However, in outsourcing this function – which it tried unsuccessfully before – HMPPS will need to be prepared to manage the risks with this approach. These include:

- parties having different interpretations of what the integrator role involves and where accountability lies if problems arise;
- the integrator having no contractual oversight of the other supplier; and
- the potential for real or perceived conflicts of interest, and the associated impact on relationships (paragraphs 4.20 and 4.21, and Figure 17).

**16 HMPPS's new arrangements offer significant opportunities to improve tagging services and better meet stakeholders' needs.** HMPPS has run workshops, commissioned external reviews, gathered stakeholders' feedback and documented lessons it considers it must apply. HMPPS has the opportunity to redefine how it oversees the service, resolve inefficiencies and improve transparency of suppliers' performance. It plans to provide policing and criminal justice stakeholders with greater access to better-quality and more timely data, which should improve their insight into offenders' behaviour. Improving data should also help HMPPS test ways of measuring the impact of tagging on longer-term outcomes (paragraph 4.22 to 4.25 and Figure 18).

### **Conclusion on value for money**

**17** HMPPS has launched new services, extended tagging to new groups of offenders and taken pragmatic steps to reduce delivery risks. But it has not achieved the fundamental transformation of tagging services it intended and has wasted £98 million through its failed attempt to develop the Gemini case management system. It did not manage the implications of its complex delivery model effectively, set overly prescriptive requirements and did not perform its role as systems and service integrator effectively. Programme risks persisted for protracted periods without escalation to – or adequate scrutiny or support from – the Ministry. Better scrutiny in 2019-20 could have informed whether termination was a more prudent option at that point, although taxpayers' exposure would still have been significant. HMPPS's decision to stop Gemini in 2021 was well-founded in the circumstances and protected the taxpayer from further losses. However, its lack of focus on monitoring benefits and continued poor evidence base means that – more than 10 years into the programme – Parliament still does not have a clear view on what it has achieved or whether electronic monitoring is an effective intervention. To date, HMPPS has not achieved value for money.

**18** HMPPS has identified lessons from its management of the transformation programme. Its plans for re-procurement and transition to the new service mean it is now better placed to avoid repeating past mistakes. However, it has limited time to make the transition, and at this early stage it does not yet know how easy it will be to integrate prospective suppliers' work. Ultimately, achieving value for money in the future will depend on HMPPS delivering a reliable, responsive and cost-effective service to stakeholders, supported by evidence that tagging brings proven reductions in reoffending and that more offenders are diverted from prison. HMPPS is taking welcome steps to identify what data and information it needs to build the evidence base. Still, significant work remains to demonstrate the value of electronic monitoring in protecting the public and reducing reoffending.

## Recommendations

**19** These recommendations are intended to support HMPPS and the Ministry in applying lessons, mitigating risks and maximising future benefits.

### On managing re-procurement

- a** The Ministry and HMPPS should ensure digital, data and technology colleagues provide strategic direction and oversight at key decision points in the re-procurement process. They should be involved in:
- developing requirements before bid processes commence;
  - evaluating bidders' tender documents and proposed solutions; and
  - exploiting opportunities to improve operational processes, contract management and data.

### On managing suppliers and technical integration

- b** HMPPS must apply lessons from its previous approach to integration and ensure that it:
- understands the risks with its selected delivery approach and puts in place mitigations for those risks;
  - conducts scenario-testing to explore how it could resolve commercial disputes arising from, for example: (1) differences in interpretation of roles and responsibilities; and (2) incompatible solutions creating integration risks; and
  - has sufficient controls and incentives in place to enable its future monitoring and field services supplier to deliver an effective systems integrator role.

### On managing expansion

- c** The Ministry and HMPPS should set realistic expectations for what can be delivered in the next two years. They need to put in place the capacity and capability to handle new initiatives and an increasing caseload alongside re-procurement activities. As part of this, HMPPS should:
- regularly review activity against demand forecasts to ensure it has the people, systems and funding in place to support growth and take prompt action should activity go significantly above or below expectations; and
  - manage demand for further expansion of tagging services to new cohorts as it transitions to new contracts to support new suppliers in delivering a stable operational service.



## On data and evidence

- d** HMPPS needs to evaluate the effectiveness of electronic monitoring. It should:
- publish an electronic monitoring data strategy explaining how it will improve data – and how policing and criminal justice stakeholders will access those data. This should include addressing gaps in the diversity characteristics of offenders to meet commitments in the Lammy Review;
  - publish an overarching evaluation strategy setting out how it intends to measure the impact of electronic monitoring on outcomes (such as reoffending, diverting offenders away from prison, impact on probation work, police and criminal justice efficiency) including how it will gather systematic feedback from users; and
  - implement a system to track the benefits articulated in its business case – with robust baselines – and embed benefits management into reporting and governance to ensure accountability.

# Part One

## Overview of electronic monitoring

**1.1** Electronic monitoring ('tagging') allows the police, courts, probation and immigration services to monitor offenders' locations and compliance with court orders, and act on non-compliance. Individuals are tagged with a device, usually around their ankle. Tagging works by sending an alert to a monitoring centre if an offender breaches conditions, for example, leaving home during curfew or entering a prohibited area. Business users – such as police or probation officers – use the information to check compliance against conditions.

**1.2** Tagging is most commonly used as part of bail, community orders or licence conditions for prison leavers. There has been a 36% increase in the number of tagged individuals between April 2017 and March 2022, by which point there were around 15,300 offenders on tag (**Figure 1**). Tagging as a condition of bail increased markedly from the onset of the COVID-19 pandemic, contributing to a 47% increase in cases since around the first national lockdown (**Figure 2** on page 20). **Figure 3** on page 21 sets out an overview of the service.

### Delivery approach

**1.3** In 2014, HM Prison & Probation Service (HMPPS) adopted a 'tower' contracting model to delivering electronic monitoring services, awarding contracts to four different suppliers, each supplying different elements at a national level (**Figure 4** on page 22).<sup>2</sup>

<sup>2</sup> In 2014, electronic monitoring was run by HMPPS's predecessor body, the National Offender Management Service (NOMS).

**Figure 1**Tagging cohorts and volumes of offenders, March 2022<sup>1</sup>

There are six main tagging cohorts

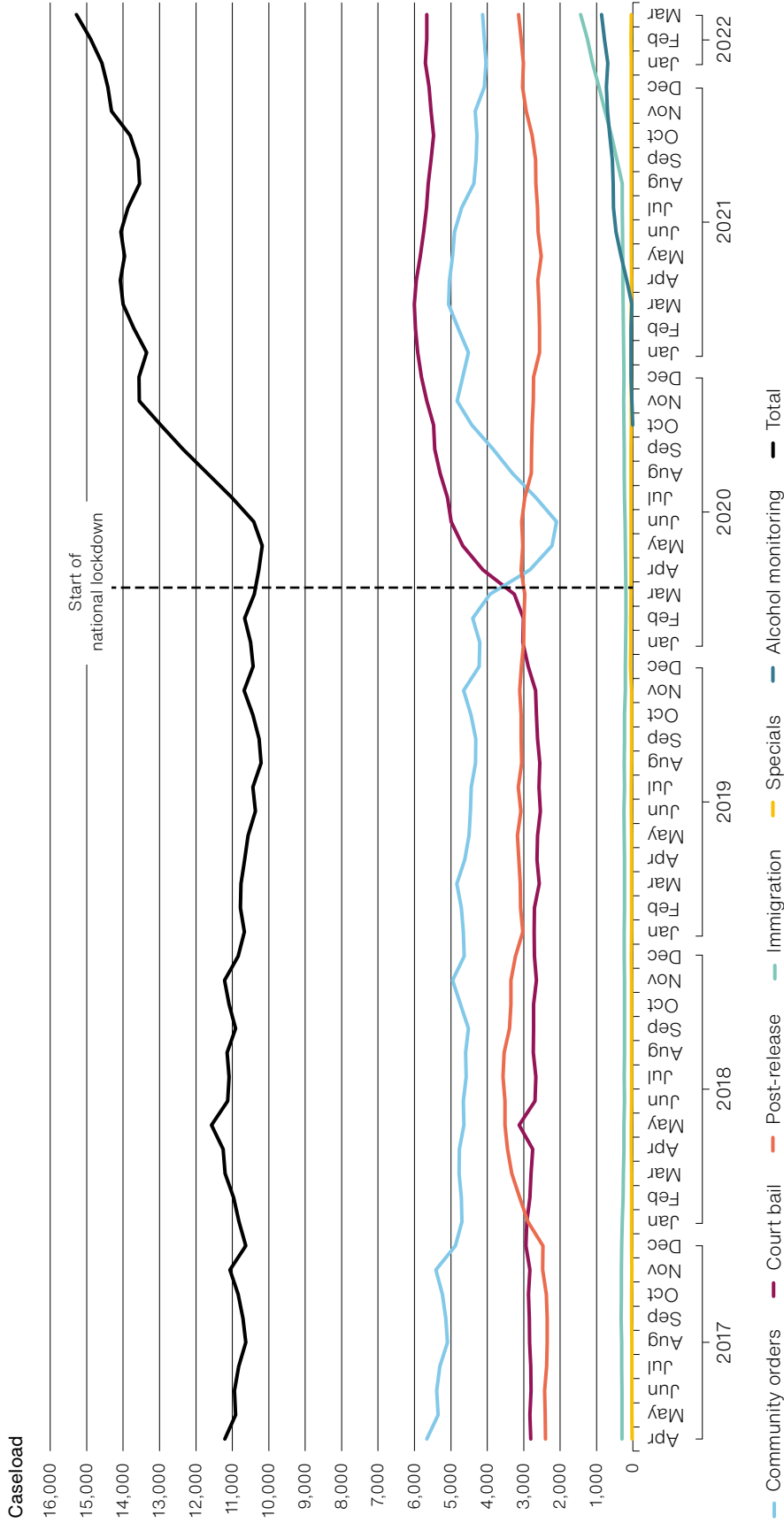
Cohort	Description	Caseload	Percentage <sup>2</sup>
Pre-trial bail	The courts can impose electronic monitoring (using curfew or GPS tags) once the police has charged a suspect and where the suspect is awaiting a court hearing.	5,662	37.1
Community orders	The courts can impose electronic monitoring (using curfew or GPS tags) on offenders as part of their Community Order or Suspended Sentence Order.	4,129	27.0
Post release	Prison governors or the Parole Board can impose electronic monitoring (using curfew or GPS tags) on prison leavers as part of their license conditions. This includes releases under General Licence, Home Detention Curfew or on Temporary Licence.	3,144	20.6
Immigration	HM Prison & Probation Service provides services on behalf of the Home Office for subjects held on immigration bail and for foreign national offenders who have been released from prison.	1,440	9.4
Specials	Used by the Home Office, police and the Probation Service to monitor (usually using GPS tags) high-risk offenders.	47	0.3
Alcohol monitoring	Can be used as part of community sentence and as a license condition for prison leavers where alcohol was a factor in the offence. Tags measure alcohol concentration in sweat and sends an alert if the wearer has consumed alcohol.	860 <sup>3</sup>	5.6
<b>Total</b>		<b>15,282</b>	

**Notes**

- 1 Actively monitored caseload data is at 31 March 2022 and is provisional. The Ministry of Justice has reported that HM Prison & Probation Service's tagging expansion programme has created challenges with data recording on its suppliers management information systems. It has applied manual adjustments to the data to more accurately capture the numbers of actively monitored offenders, including manual manipulation of datasets. It plans to put in place an automated process for adjustments in future statistical releases, which may result in some revisions to these figures.
- 2 Figures may not sum due to rounding.
- 3 Alcohol monitoring caseload data excludes offenders who are dual tagged. As at 31 March 2022, 40 offenders were monitored with both an alcohol monitoring and either a radio frequency or a GPS tag.

Source: National Audit Office analysis of HM Prison & Probation Service documents and Ministry of Justice Electronic Monitoring Statistics Publication 2021-22

**Figure 2**  
 Tagging caseload volumes by cohort, November 2016 to March 2022<sup>1</sup>  
 The use of tagging as a condition of offenders' bail conditions increased markedly from the onset of the COVID-19 pandemic

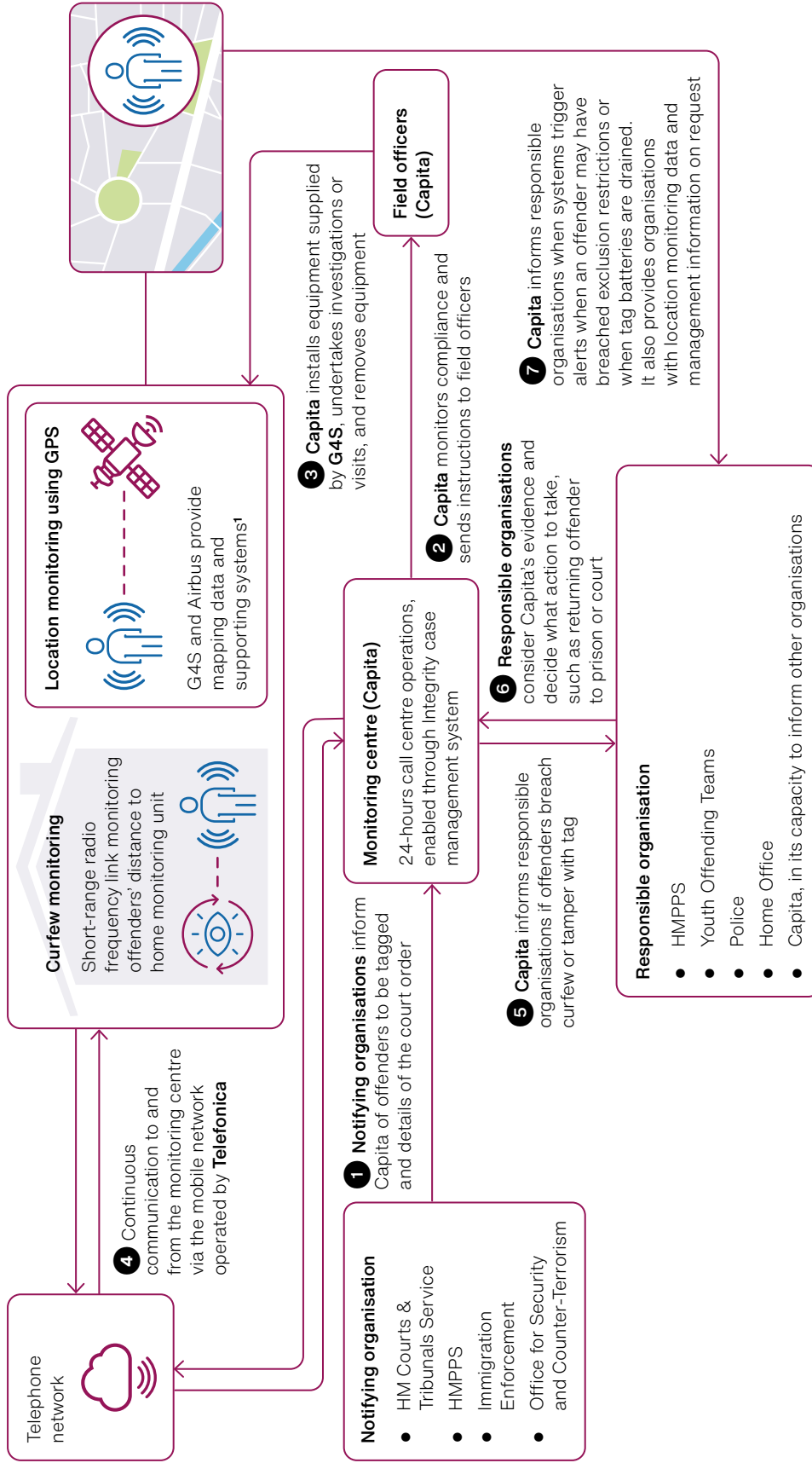


**Notes**

- 1 Actively monitored caseload data displayed in this figure reflect data at month end. April 2017 to March 2022. Data covering April 2021 to March 2022 is provisional. The Ministry of Justice has reported that HM Prison & Probation Service's tagging expansion programme has created challenges with data recording on its suppliers' management information systems. It has applied manual adjustments to the data to more accurately capture the numbers of actively monitored offenders, including manual manipulation of datasets. It plans to put in place an automated process for adjustments in future statistical releases, which may result in some revisions to these figures.
- 2 Alcohol monitoring caseload data excludes offenders who are dual tagged. As at 31 March 2022, 40 offenders were monitored with both an alcohol monitoring and either a radio frequency or a GPS tag.

**Figure 3**  
Overview of the live tagging service in England and Wales

HM Prison & Probation Service (HMPPS) delivers tagging services through a range of suppliers whose work is interdependent



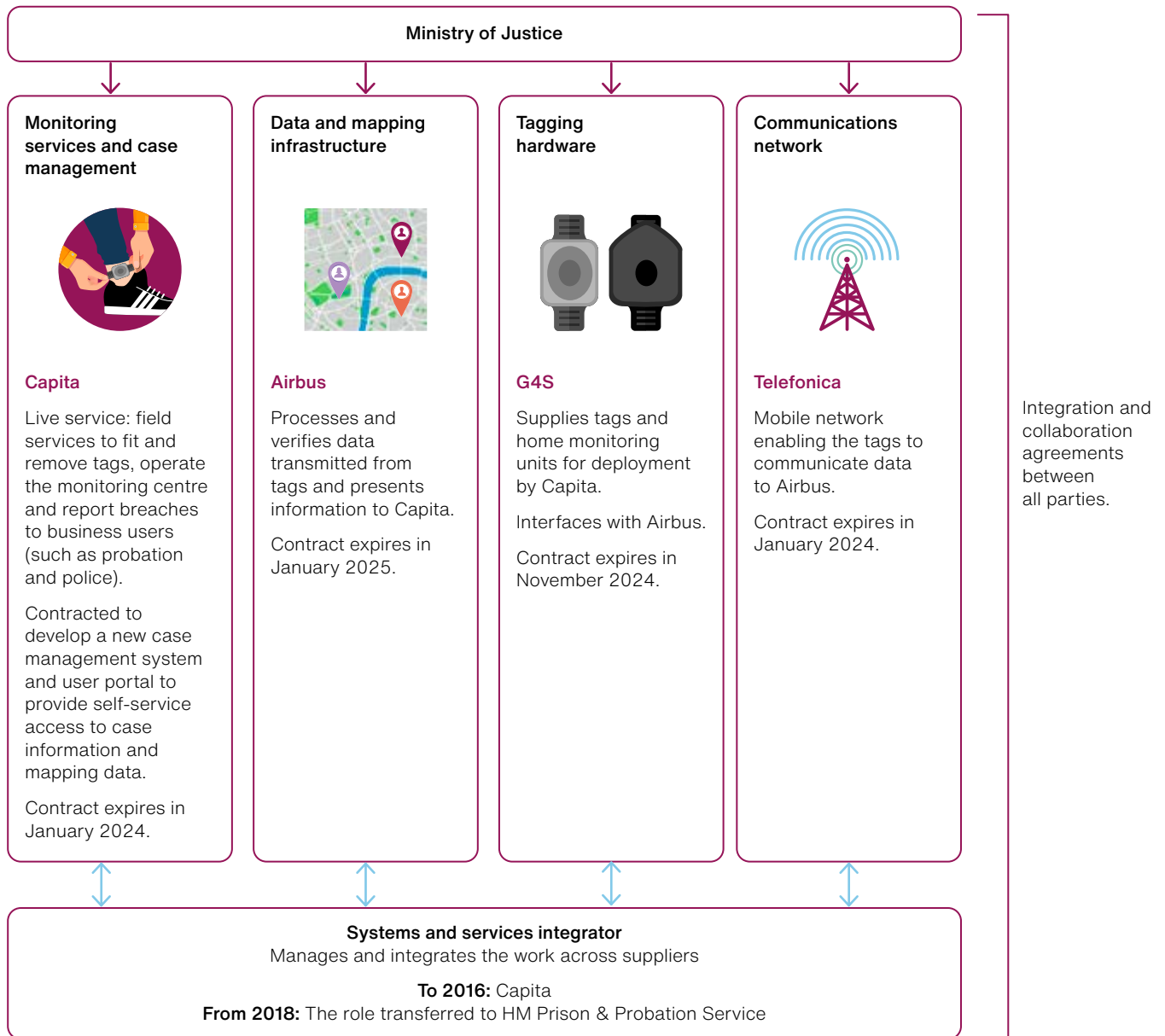
**Notes**

- 1 G4S provides mapping data and supporting systems in HMPPS's location monitoring service. For HMPPS's acquisitive crime pilot, this data is integrated with Airbus's systems.
- 2 This figure illustrates a broad overview of how the tagging case management process interacts with suppliers' roles, data and systems. It is not exhaustive and excludes (1) HMPPS's case management process for its alcohol monitoring service which is managed under separate arrangements and (2) HMPPS's and the Home Office's arrangements for Foreign National Offender prison leavers, who are tagged in prisons or Immigration Removal Centres upon release.

**Figure 4**

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



→ Contractual link

↔ The integrator interacts with the suppliers to bring together their work and deliver an end-to-end service

**Note**

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

## Main events since 2017

**1.4** HMPPS reset its transformation programme in February 2017 with revised objectives and timescales and restarted it in June 2017. It expected to transform services by the end of 2018, by which time it hoped it would begin to realise savings of 55 pence per offender per day through a more efficient operating model. We estimate that this corresponds to around £2.9 million per year, based on average caseload volumes in 2021-22. However, after recurring setbacks, in May 2021 HMPPS decided to suspend development of one element required to achieve its transformation: a new case management system ('Gemini') and user portal. It terminated its contract for Gemini in December 2021. It closed the transformation programme in March 2022, with net costs of £153 million between 2011-12 and 2021-22.<sup>3</sup>

**1.5** Government recently re-affirmed its commitment to tagging. It regards it as a cost-effective alternative to custody and a significant contributor to its goals to protect the public and reduce reoffending. In 2020, in parallel to its transformation programme, HMPPS launched a new 'expansion' programme, to further widen use of tagging, procure new contracts, develop the evidence base and improve data. It anticipates a significant rise in tagging in the next few years, with total caseload expected to exceed 21,000 by 2024 (compared with some 15,282 as at the end of March 2022). Its total estimated cost is £1.2 billion over the next 10 years, 19% of which is for expansion initiatives and 71% for running the live service. A single senior responsible owner and portfolio board oversees both these programmes. **Figure 5** overleaf sets out HMPPS's key objectives and activities in its transformation and expansion programmes. **Figure 6** on page 25 summarises actual and planned events across both programmes.

### Scope of this report

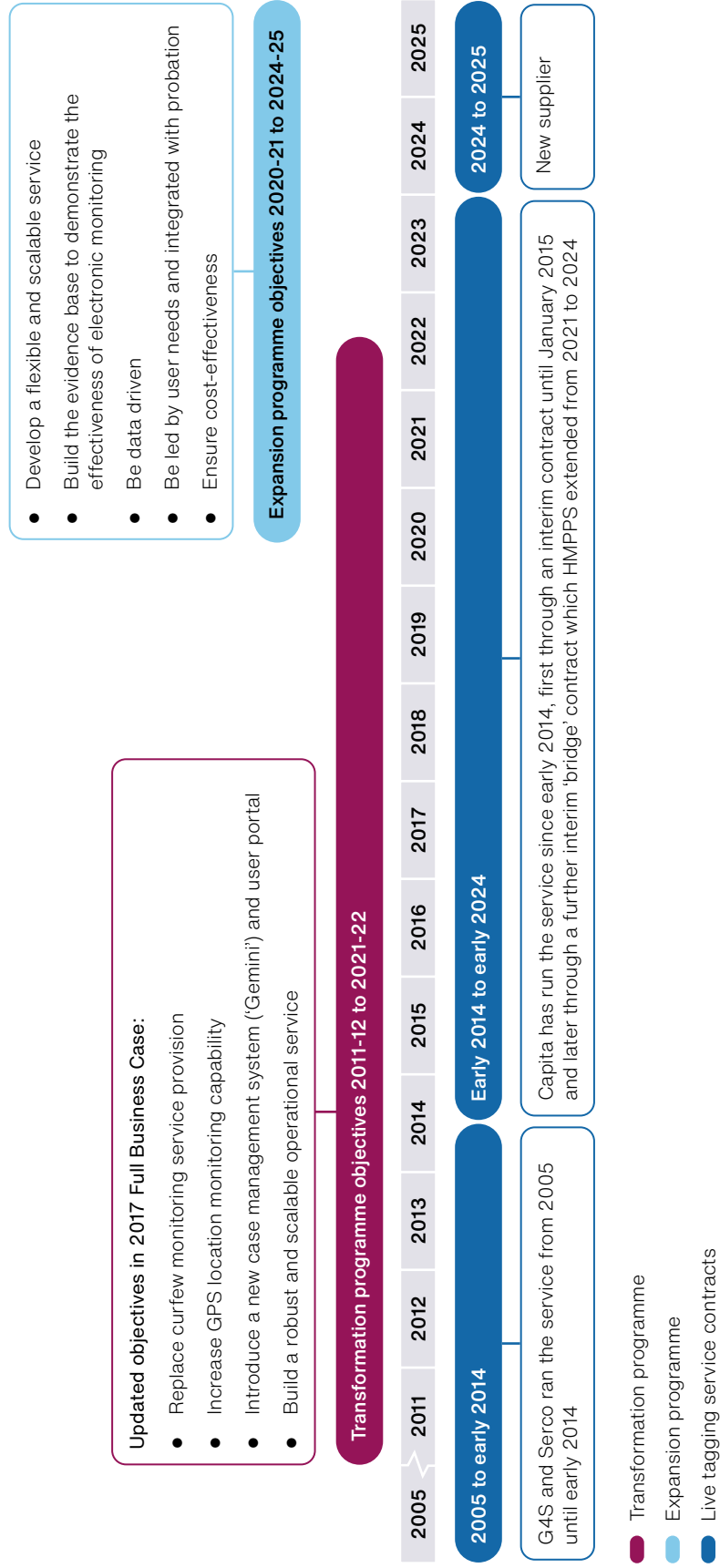
**1.6** In the rest of this report, we focus on:

- HMPPS's progress in delivering its transformation programme (Part Two);
- why HMPPS failed to achieve transformation (Part Three); and
- how HMPPS is applying lessons to its expansion plans (Part Four).

<sup>3</sup> Note that net costs up to 2021-22 were lower than the £157 million spend up to 2020-21 due to compensation received from Capita (see paragraphs 2.5 and 2.17).

**Figure 5** Overview of HM Prison & Probation Service's objectives in its transformation and expansion programmes and contracts for the live service, 2011-12 to 2024-25

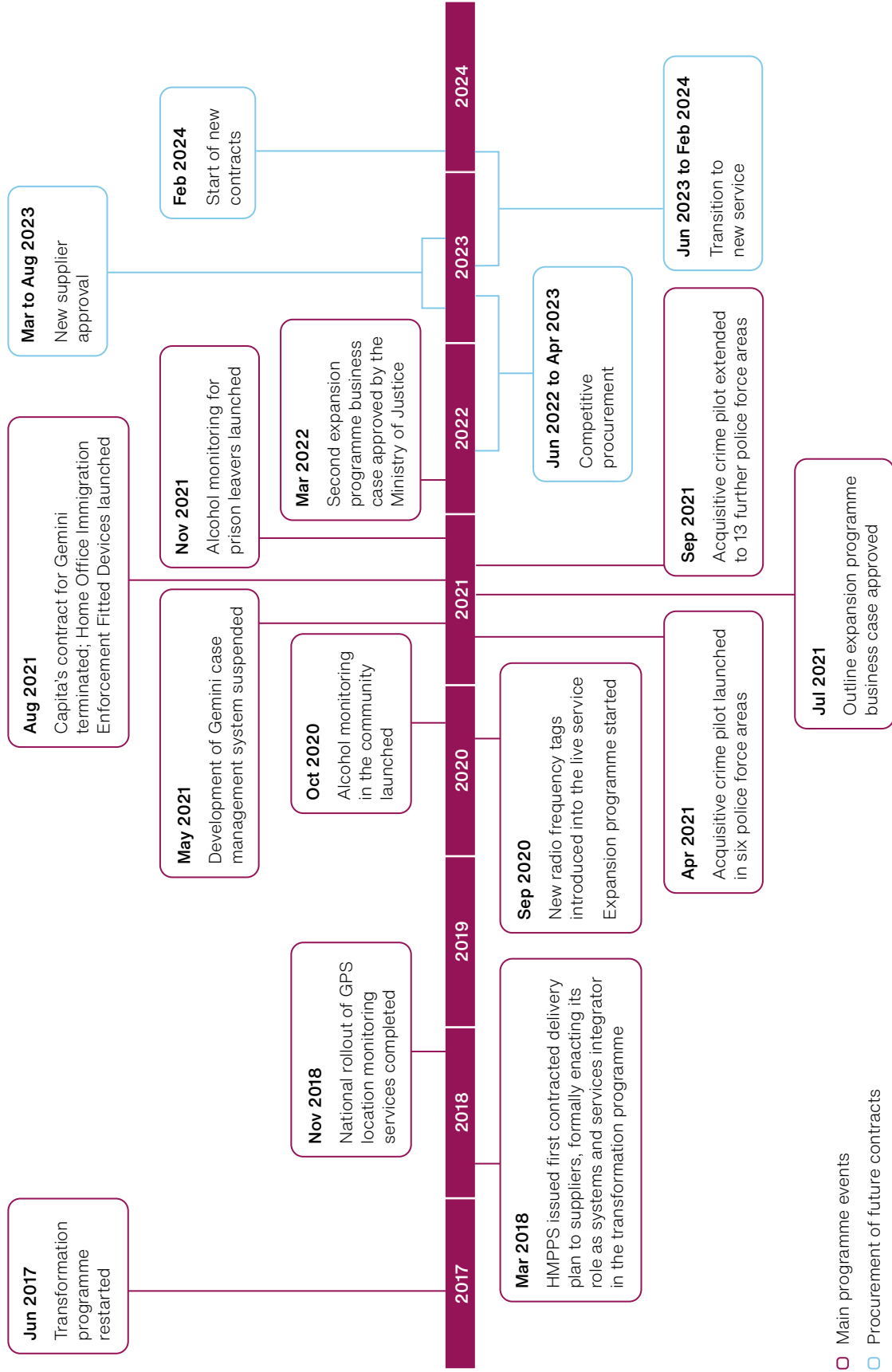
HMPPS has relied on Capita's interim contract for the live service for a long period



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



**Figure 6** Timeline of actual and planned events in HM Prison & Probation Service's (HMPPS's) tagging programmes since 2017  
 HMPPS has rolled out new tagging expansion initiatives while managing problems in its transformation programme



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

## Part Two

### HM Prison & Probation Service’s progress in delivering its transformation programme

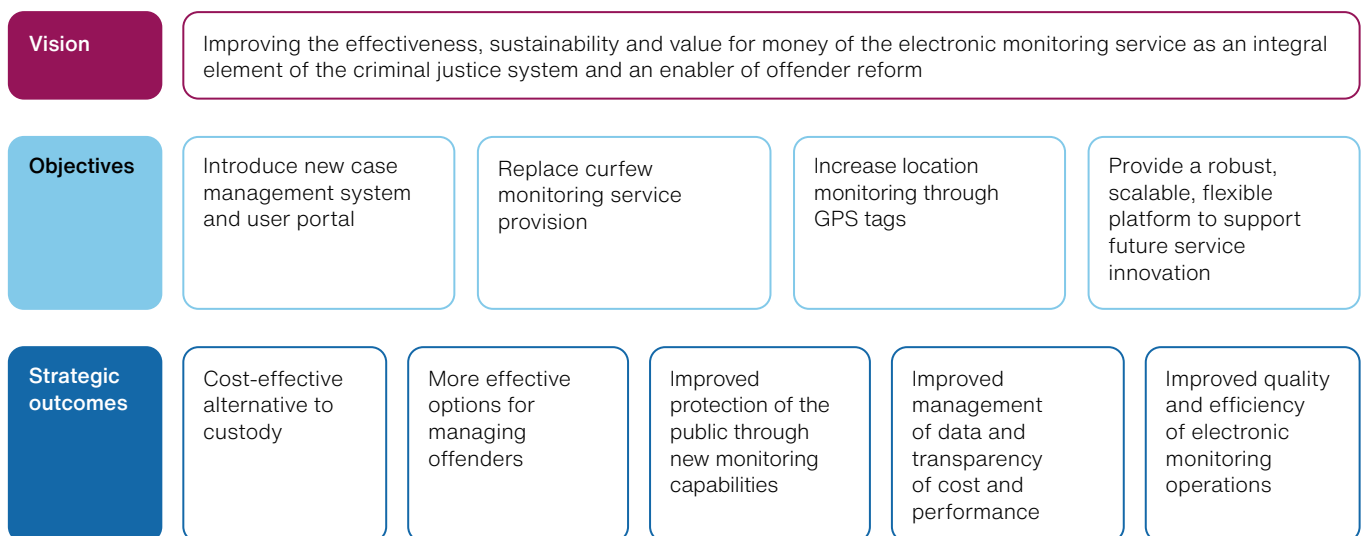
**2.1** This part examines what HM Prison & Probation Service (HMPPS) has achieved in its transformation programme against its updated 2017 business case objectives. It also outlines the consequences of delays in developing a new case management system (‘Gemini’) and HMPPS’s decision to terminate it.

**2.2** **Figure 7** summarises HMPPS’s vision, objectives and intended strategic benefits. HMPPS has not achieved its vision for transformation: it intended its delivery of new tags and tagging services to be part of its transformed system. Instead, it has rolled these out using legacy technology, a marked departure from its original aims.

#### Figure 7

HM Prison & Probation Service’s (HMPPS’s) 2017 vision for transformation, objectives and expected strategic benefits

HMPPS had four objectives and planned to achieve five key strategic outcomes in its transformation programme



Source: National Audit Office analysis of HM Prison & Probation Service’s Full Business Case for its transformation programme

## Performance against programme objectives

### New case management system and user portal

**2.3** The development of the case management system Gemini and the user portal were crucial to achieving HMPPS's vision for transformation. **Figure 8** overleaf outlines the intended functionality and benefits of these systems for the live service and business users, such as police and probation officers. It was intended to provide users with a single version of case management records, controlled information access and, where applicable, access to historical and real-time mapping data on offenders' movements. HMPPS contracted these projects from Capita but retains the ultimate risk associated with their failure.

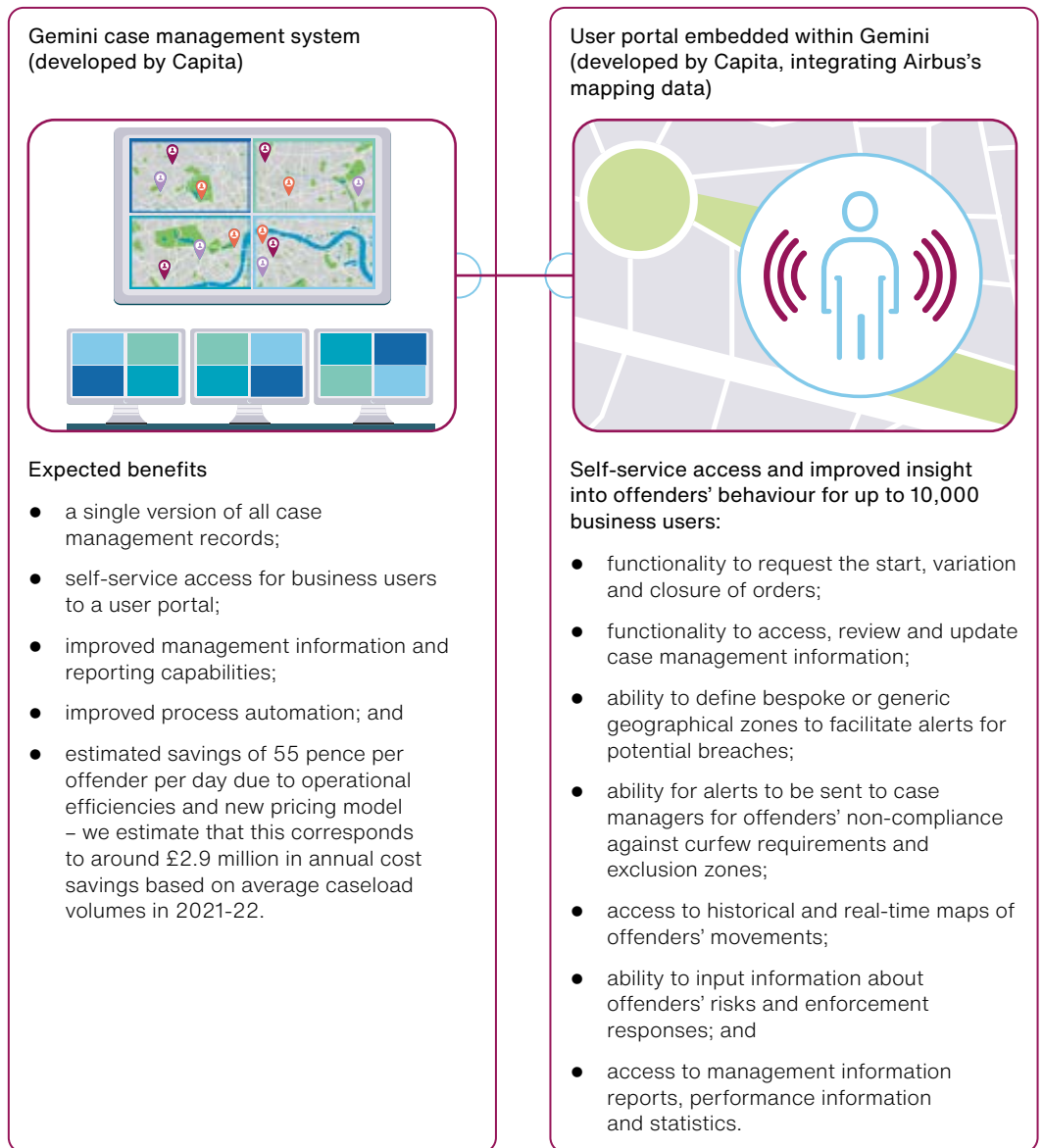
**2.4** HMPPS's ineffective performance as integrator combined with Capita's slow progress led to the delays in the development of Gemini and the user portal (paragraphs 3.2 to 3.5). HMPPS originally aimed to deploy these in September 2018. However, HMPPS had to delay delivery following its appointment of G4S and a better understanding of the changes Capita and Airbus had to implement to integrate the new tags with their technology. Capita told us that HMPPS and other suppliers were responsible for delays but HMPPS does not agree that other suppliers were major contributors. There were three main periods of delay (**Figure 9** on pages 29 and 30):

- **Delivery against first contracted plan.** HMPPS issued its first delivery plan in March 2018 using timescales provided by Capita. This included launching Gemini in August 2019, 11 months later than HMPPS's business case assumptions. The August 2019 launch date was not achieved, and HMPPS had to agree a new re-baselined timetable with suppliers.
- **Delivery against re-baselined contracted plan.** HMPPS proposed a delivery plan in July 2019, again using dates provided by Capita. However, HMPPS did not agree a revised plan until November 2019. This allowed Capita more time to complete its testing work in exchange for £10 million in compensation to HMPPS for its delays. Ultimately, Capita did not meet HMPPS's requirements for its system integration testing activities, so could not meet the reforecast delivery date of August 2020.
- **Capita's proposed plan.** HMPPS and Capita agreed on a new launch date of February 2021. Capita sought to accelerate its work and deliver testing phases in parallel. However, this launch date was not achieved. This would have been a 29-month delay against HMPPS's business case assumptions.

**Figure 8**

HM Prison & Probation Service’s (HMPPS’s) intended functionality and benefits of the Gemini case management system and user portal

**HMPPS expected a range of financial and operational benefits for the live tagging service and business users through deploying Gemini and the user portal**

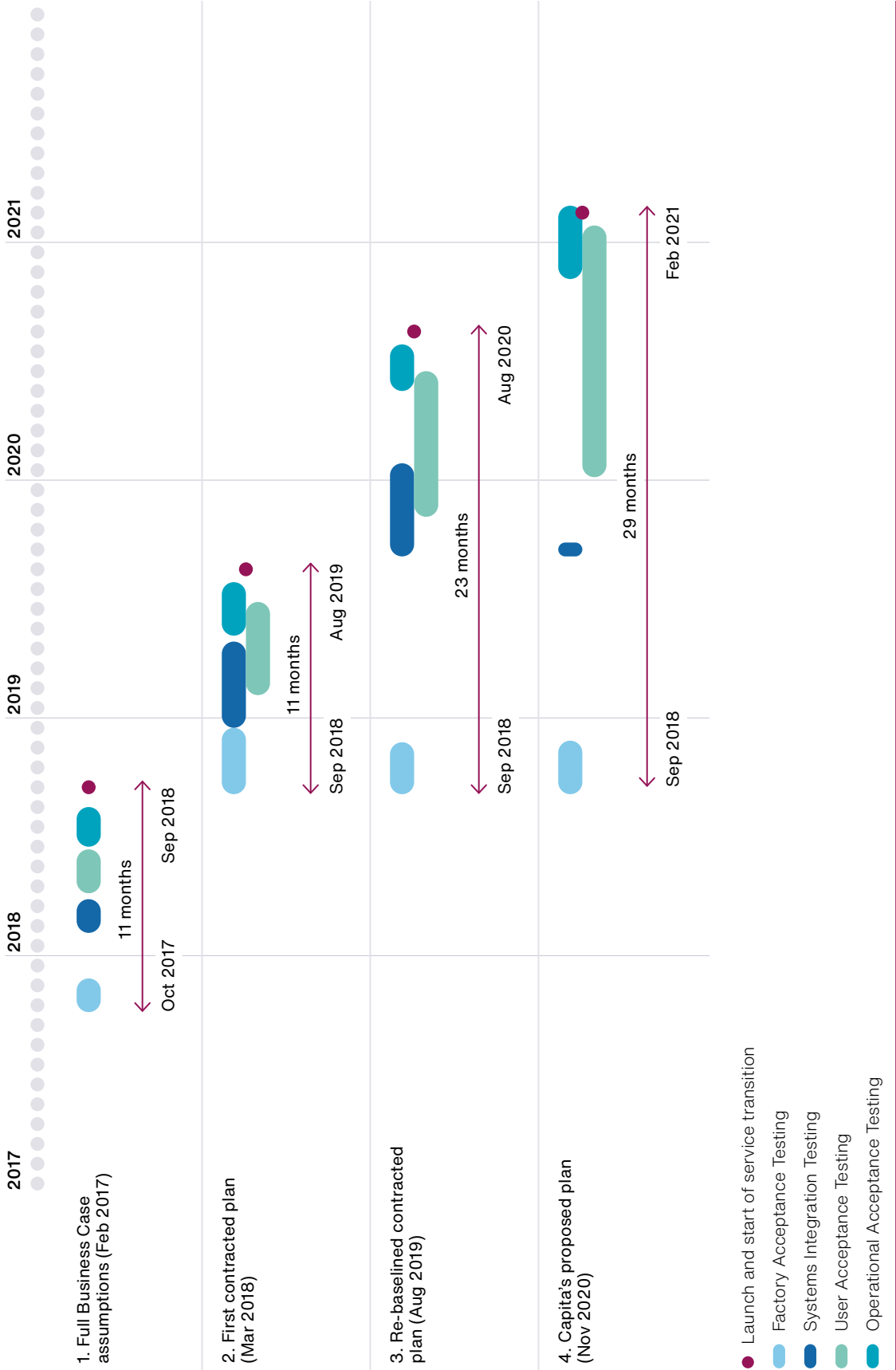


**Note**

1 Business users include criminal justice stakeholders such as police and probation officers, and central staff involved in reporting and analysing management information.

**Figure 9** HM Prison & Probation Service's (HMPPS's) and Capita's targeted testing and service launch milestones for the Gemini case management system, February 2017 to November 2020

Had HMPPS achieved the February 2021 launch date for Gemini, this would have represented an 18-month delay against the first contracted plan and a 29-month delay against HMPPS's business case assumptions



**Figure 9** *continued*

HM Prison & Probation Service's (HMPPS's) and Capita's targeted testing and service launch milestones for the Gemini case management system, February 2017 to November 2020

**Notes**

- 1 This figure sets out HMPPS's assumptions for its delivery timetable at Full Business Case stage, Capita's contracted plans and its proposed plan which set out its aim to complete Gemini by February 2021.
- 2 Factory Acceptance Testing focuses on ensuring that equipment and systems meet the intended design specifications.
- 3 Systems Integration Testing focuses on the interactions and interfaces between different systems including those provided by external organisations.
- 4 User Acceptance Testing focuses on validating the fitness for use of systems by intended users in a real or simulated operational environment.
- 5 Operational Acceptance Testing focuses on the operational aspects of system performance, such as data loading and performance testing.

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

**2.5** In its January 2021 review of the readiness of Gemini, the Infrastructure and Projects Authority (IPA) issued a 'red' delivery confidence assessment, finding that the February 2021 launch date and deployment approach appeared 'unachievable'. It reported that the project should not proceed until issues were managed to an acceptable level of risk. HMPPS subsequently considered its options, concluding that deploying Gemini in the live service presented an unacceptable level of risk to the live service and no longer represented value for money. It was concerned about the impact of unresolved defects on its ability to investigate and manage offenders' non-compliance, security and information assurance, and system performance. It considered that continuing with its existing system ('Integrity') would be more stable and sustainable. It suspended the Gemini project in May 2021. At this point, suppliers had still not completed their integrated testing activities. Capita believed that September 2021 was a more realistic launch date. HMPPS terminated Capita's contract for Gemini in December 2021 and HMPPS and Capita settled their claims against each other. Capita has paid a further £12.8 million in compensation to HMPPS to settle claims for delays, while HMPPS has paid £6.5 million to Capita for its partial delivery of services under the contract.<sup>4</sup>

### Replacing curfew monitoring service provision

**2.6** Our 2017 report set out HMPPS's severe delays in appointing a tagging hardware supplier. This delay meant that HMPPS had to set up an interim 'bridge' contract with Capita in January 2015 to ensure the continuity of the live service. This contract – initially due to expire in 2021 but recently extended by HMPPS to 2024 – uses legacy IT systems from the previous contracts (operated by Serco and G4S from 2005).

<sup>4</sup> Throughout the contract Capita has paid HMPPS around £32 million arising from settlement agreements finalised in 2016, 2020 and 2021.

**2.7** HMPPS intended to address key shortcomings in its curfew monitoring service by integrating G4S's new tags with Gemini. It expected to achieve operational efficiencies such as improved process automation and improved data and management information for business users. However, without Gemini, HMPPS has not been able to make these changes.

**2.8** HMPPS also planned to replace curfew tags to avoid risks associated with the old technology. In its business case, HMPPS assumed that it would have rolled out new curfew tags by March 2019, but this did not begin until September 2020. It intended data from Airbus and G4S to be hosted in a new data centre run by Capita, a key enabler of rolling out the tags. However, this project was also delayed, so in July 2019 HMPPS took a pragmatic decision to move suppliers' applications and data to a new cloud-based data centre. HMPPS successfully mitigated the obsolescence risks through this approach.

### Introducing location monitoring

**2.9** HMPPS expected location monitoring – tagging which monitors the wearer's movements and locations – to provide opportunities to enhance offender management and improve public protection. HMPPS piloted location monitoring between October 2016 and March 2018. It published quantitative findings and a process evaluation.<sup>5</sup> However, due to limited resources, it did not measure the impact of tagging on demand for prison places or on reoffending as planned.

**2.10** In its business case, HMPPS aimed to introduce location monitoring nationally from September 2018 to coincide with its launch of Gemini. Given delays in Gemini's development, in March 2018 HMPPS opted to launch location monitoring using a 'minimum viable product' – location tags with the minimum basic features required to provide the service but delivered without all the available service capabilities such as improvements to self-service reporting. It intended this to be a 'stepping-stone' to transformation, aiming for national coverage in April 2019 and full integration with Gemini in March 2020.

**2.11** The IPA found that HMPPS's approach was low-risk given the tags' integration with existing technology and found that engagement between suppliers was positive. HMPPS launched location monitoring services on schedule in November 2018, achieved national coverage in April 2019, before completing the rollout of the new tags using legacy systems in October 2019 with caseloads marginally below targeted levels.<sup>6</sup> As at 31 March 2022, 3,890 offenders were monitored through GPS tags, 27% of the total tagging caseload (excluding alcohol monitoring).

5 Ministry of Justice, *Process evaluation of the Global Positioning System (GPS) Electronic Monitoring Pilot: Quantitative Findings*, 2019; Ministry of Justice, *Process evaluation of the Global Positioning System (GPS) Electronic Monitoring Pilot: Qualitative Findings*, 2019.

6 On 1 October 2019, 414 offenders were on tag – HMPPS's target was 500.

**2.12** HMPPS applied learning from the pilots to the national rollout effectively. Key lessons included: adopting a steady and phased approach to reduce delivery risks; extensive engagement with a diverse stakeholder base; investment in staff training; and constructive support for offenders on tag. In our view, HMPPS's stakeholder engagement work proved to be the most significant enabler of the rollout, as securing police support was an important consideration for sentencers when imposing tagging orders for pre-trial court bail.

**2.13** However, without Gemini there are limitations to HMPPS's location monitoring service. These include stakeholders lacking access to the planned portal (paragraph 2.19 and Figure 8) and unresolved inefficiencies. Consequently, HMPPS did not achieve the full capabilities of location monitoring as it intended.

### A robust, flexible and scalable platform for future innovation

**2.14** HMPPS expected its transformed operations to provide a robust and scalable service, accommodating additional suppliers and new types of tags in the future. HMPPS did not define clear baselines or measurable parameters for this objective. Except for its alcohol monitoring service, which has separate case management arrangements (Part Four), HMPPS has gone ahead and used its legacy systems to launch new services such as location monitoring (paragraphs 2.9 to 2.11) and its expansion projects, although this is a marked departure from its original vision for transformation.

## Outcomes achieved

### Achievement against planned benefits

**2.15** Government's projects and programmes can only be considered a success if they achieve the intended aims. Benefits management involves identifying, defining, documenting, realising and optimising benefits and should be undertaken throughout a project or programme's lifecycle. While the programme team developed detailed plans to deliver benefits in early 2018, they did not monitor them.

**2.16** HMPPS will not achieve six out of 12 planned benefits because of its termination of Gemini and the user portal (**Figure 10** on pages 33 and 34). Unrealised benefits include efficiency savings, improved productivity of staff and improved effectiveness of contract management. HMPPS did not monitor the remaining six benefits. Furthermore, HMPPS lacked adequate baseline data to measure future progress, in part because of fundamental shortcomings in data which we outline further in paragraph 2.18. Consequently, it has relied heavily on anecdotal – rather than systematic – evidence for the effectiveness of tagging in supporting offender management and rehabilitation.



**Figure 10**

## Status of planned benefits in HM Prison &amp; Probation Service's (HMPPS's) tagging transformation programme

Three out of 12 of HMPPS's planned benefits have been negated or partly negated through its decision to terminate the Gemini case management system and user portal, while three no longer apply. HMPPS did not monitor any of its remaining benefits as planned

Planned benefit	Baseline data	Status at programme closure
<b>Benefits negated or partly negated:</b>		
More cost-effective curfew service (like-for-like)	HMPPS expected savings of 55 pence per offender per day through efficiency improvements and a new pricing model	<ul style="list-style-type: none"> <li>Planned benefit negated through decision to terminate Gemini case management system</li> </ul>
Improved insight into offenders' behaviour	No baseline data	<ul style="list-style-type: none"> <li>Planned benefit partly negated through decision to terminate development of Gemini and user portal</li> <li>HMPPS has not undertaken surveys as planned</li> <li>HMPPS has emulated some of the intended functionalities of Gemini and the user portal through modern reporting software (paragraph 2.19)</li> </ul>
Enhanced data to increase efficiency for enforcement officers	No baseline data	<ul style="list-style-type: none"> <li>Planned benefit partly negated through decision to terminate development of Gemini and user portal</li> </ul>
<b>Benefits which no longer apply:</b>		
Improved effectiveness of Ministry of Justice contract management	Contract management performance scorecard	<ul style="list-style-type: none"> <li>This benefit no longer applies: HMPPS planned to compare contract performance before and after its launch of Gemini in the live service</li> </ul>
Improved productivity of staff	HMPPS's performance baseline is 85% contract compliance	<ul style="list-style-type: none"> <li>This benefit no longer applies: HMPPS planned to compare contract performance before and after its launch of Gemini in the live service</li> </ul>
Improved reliability of technology platform (reduced business continuity risk)	Minimising system downtime and maximising availability to at least 85%	<ul style="list-style-type: none"> <li>This benefit no longer applies: HMPPS planned to measure system performance following its launch of Gemini</li> </ul>

**Figure 10** *continued*

Status of planned benefits in HM Prison & Probation Service's (HMPPS's) tagging transformation programme

Planned benefit	Baseline data	Status at programme closure
<b>Remaining benefits:</b>		
Additional offenders appropriately diverted from custody or re-integrated post-custody	HMPPS assumed that 15% of tagging caseloads on bail or community sentences would otherwise have been remanded or sentenced to custody, and 15% of offenders released from prison would otherwise be in custody	<ul style="list-style-type: none"> <li>● HMPPS has not retained records for its business case assumptions</li> <li>● HMPPS does not have sufficient caseload volumes to form reliable control groups to isolate the impact of tagging from other factors which affect sentencing decisions. Recent increases in caseloads are mainly attributable to court closures and backlogs from the COVID-19 pandemic</li> <li>● HMPPS has not undertaken surveys as planned. It has collated anecdotal case studies to raise stakeholders' awareness of tagging and gathered feedback</li> </ul>
Modifications of offenders' behaviour to reduce reoffending	No baseline data	<ul style="list-style-type: none"> <li>● HMPPS has not undertaken surveys as planned but has gathered feedback from stakeholders</li> </ul>
Faster deployment of innovation in tagging services	No baseline data, although HMPPS recorded a commitment to capture its timescales for launching location monitoring services to produce a baseline for future measurement	<ul style="list-style-type: none"> <li>● HMPPS did not record its timescales to serve as a baseline to measure its timeliness in launching new services</li> </ul>
Improved collaboration with partner agencies	Planned reports to measure attendance, collaboration and communications	<ul style="list-style-type: none"> <li>● HMPPS did not implement the reports but has gathered feedback from stakeholders</li> </ul>
Effective options for managing young people who have offended in the community	No baseline data	<ul style="list-style-type: none"> <li>● HMPPS has not analysed caseload volumes or undertaken surveys as planned</li> <li>● Government envisages allowing sentencers to impose location monitoring requirements on young people instead of short custodial sentencers through the Police, Crime, Sentencing and Courts Bill</li> </ul>
Effective options for managing females who have offended in the community	No baseline data	<ul style="list-style-type: none"> <li>● HMPPS has not undertaken surveys as planned or taken forward any tailored actions for women on tag</li> </ul>

**Notes**

- 1 HMPPS finalised its benefits realisation plan in February 2018.
- 2 HMPPS closed its transformation programme in March 2022.

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

## Consequences of failing to deliver Gemini and the user portal

### Losses to the taxpayer

**2.17** HMPPS's failure to deliver Gemini and the user portal have cost the taxpayer £98 million, 63% of the programme's sunk costs between 2011-12 and 2020-21 (**Figure 11**). In its 2020-21 accounts, it disclosed these losses as 'fruitless payments', meaning no material public benefit had been obtained. Around 60% of losses related to payments to Capita and Airbus, while around 41% related to costs incurred by HMPPS between 2011-12 and 2016-17 before it restarted the programme (**Figure 12** overleaf). In terminating the project, HMPPS has prevented further losses to the taxpayer. For example, it estimates that had it continued to proceed with the project through to January 2024, it could have incurred additional net costs of around £35 million without certainty that Gemini would ever be delivered. HMPPS's net costs at the point of its closure of the programme was £153 million – incurred between 2011-12 and 2021-22 – a lower figure than in the previous year due to compensation received from Capita (paragraph 2.5).

### Figure 11

Taxpayer losses and value retained through HM Prison & Probation Service's (HMPPS's) decision to terminate the Gemini case management system and user portal, 2011-12 to 2020-21

**HMPPS's failure to deliver Gemini and the user portal cost the taxpayer £98 million, 63% of its total spending on its tagging transformation programme by March 2021**

Cost category	Loss <sup>1</sup>	Value retained <sup>2</sup>	Total
	(£m)	(£m)	(£m)
Payments to Capita	37.5 <sup>3</sup>	12.2	49.7
Payments to Airbus	20.9	4.2	25.0
Payments to G4S	0	9.0	9.0
Payments to Telefonica	0	5.5	5.5
Programme administration costs	39.9	27.7	67.6
<b>Total</b>	<b>98.2</b>	<b>58.6</b>	<b>156.8</b>

#### Notes

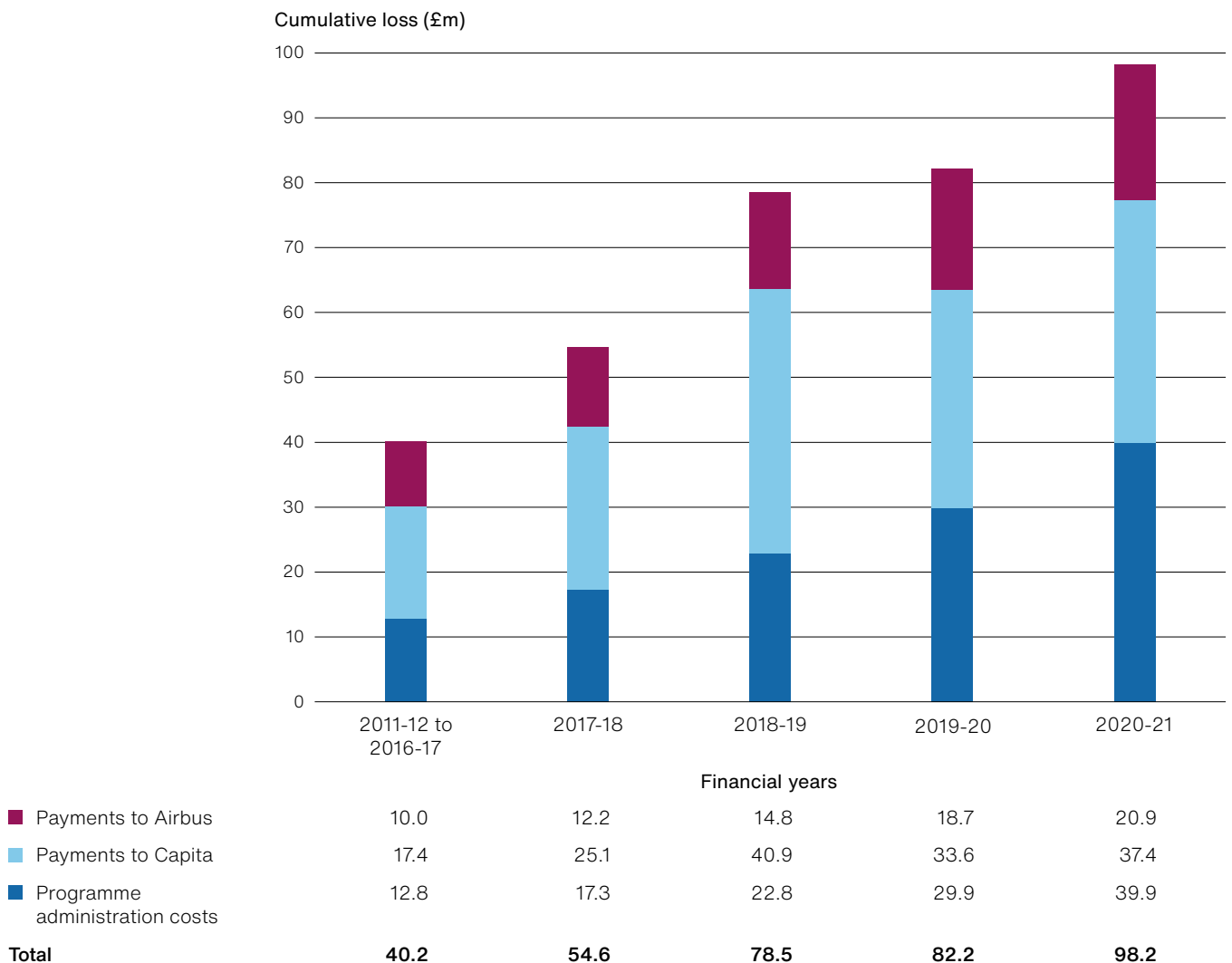
- 1 Losses relate to HMPPS's expenditure on the Gemini case management system and user portal between 2011-12 and 2020-21. As HMPPS has terminated these projects, it disclosed this expenditure as 'fruitless payments' in its 2020-21 accounts, a type of loss where no material public benefit had been obtained.
- 2 Value retained relates to where HMPPS's previous expenditure provides ongoing value, such as its purchase of new tags, costs covering IT systems used in the live tagging service, and resource costs involved in launching national location monitoring services.
- 3 This is a net position which includes £10 million paid by Capita to HMPPS for delays in 2019.
- 4 Totals may not sum due to rounding.

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

**Figure 12**

Cumulative losses to the taxpayer through HM Prison & Probation Service's (HMPPS's) failure to deliver the Gemini case management system and user portal, 2011-12 to 2020-21

**£40 million of losses – 41% of the total – relates to expenditure between 2011-12 and 2016-17, prior to HMPPS restarting its tagging transformation programme in June 2017**

**Notes**

- 1 Losses relate to HMPPS's expenditure on the Gemini case management system and user portal between 2011-12 and 2020-21. As HMPPS has terminated these projects, it disclosed this expenditure as 'fruitless payments' in its 2020-21 accounts, a type of loss where no material public benefit had been obtained.
- 2 HMPPS received £10 million in compensation from Capita in 2019-20.

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

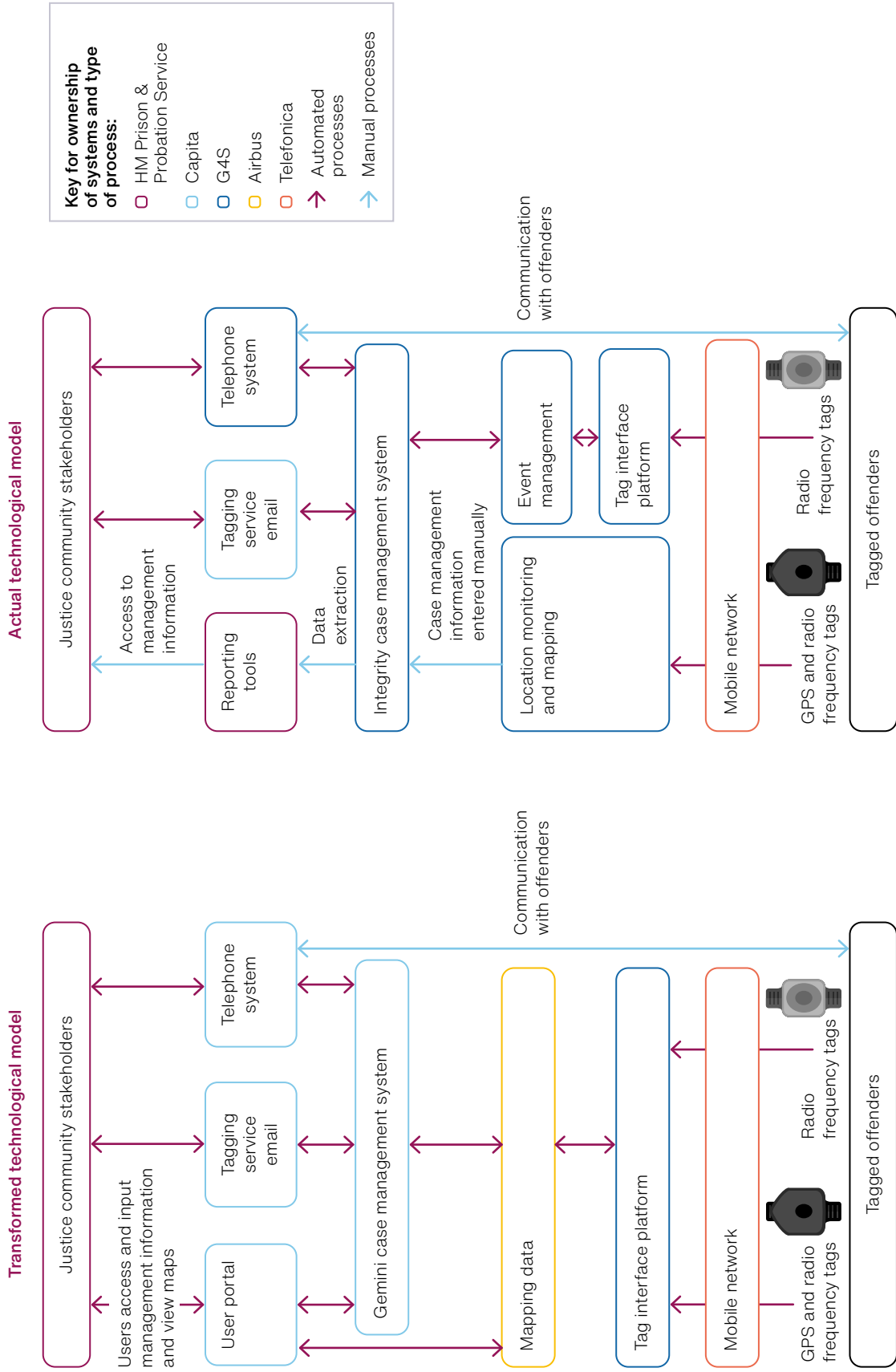
## Operational impacts

### **Unresolved shortcomings in data quality and availability**

**2.18** HMPPS intended Gemini to resolve long-standing and fundamental shortcomings 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 (**Figure 13** overleaf);
- **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;
- **limited data capture and access** – only data on offenders' age and gender are captured, so HMPPS does not know whether its use of tagging is applied proportionately to offenders with other protected characteristics, such as ethnicity. HMPPS did not include in the contract a requirement for full and direct access to data and relies on Capita to supply data from Integrity on a 'reasonable endeavours' basis. HMPPS and other business users are unable to directly access these data or make changes outside of agreed reporting arrangements; and
- **siloed data and systems** – Integrity is entirely separate from other systems used in the criminal justice system. HMPPS cannot reliably link data between systems to provide insights into tagged offenders' journeys, nor can it measure reoffending or form robust control groups to attribute the effect of tagging on offenders' diversion from prison.

**Figure 13** HM Prison & Probation Service's (HMPPS's) current and intended technological models in tagging services  
 HMPPS expected technology in its transformed system to be seamlessly automated. Its actual model relies on high volumes of manual processes



### Limited insights for business users

**2.19** Delays in developing Gemini and the user portal means that the planned capability was out of date and no longer offered a ‘step-change’. HMPPS has taken advantage of new software to emulate some of the intended functionality of the portal. It has created reports to present weekly information on caseload trends, allowing business users to see offender data, for example to identify instances of non-compliance. However, the reports do not provide real-time data on offenders’ movements, which limits their usefulness for ensuring public protection while Capita manually inputs the data. HMPPS launched these new reporting tools – for police forces in September 2019 – and plans to roll it out to probation staff. Part Four examines HMPPS’s use of new technology in tagging services and its plans to improve data and develop the evidence base.

**2.20** Having up-to-date information on offenders’ compliance is important for police and probation services, particularly in higher-risk cases requiring rapid decision-making to protect the public. In the absence of the portal, HMPPS relies on Capita manually processing business users’ requests for data. HMPPS and Capita have agreed service levels for sharing information with offender managers, for example when an offender breaches an order. However, HMPPS does not have data to report on ad-hoc requests for location monitoring data. In its thematic inspection of the use of tagging in probation work, HM Inspectorate of Probation (HMIP) found that:

- practitioners find accessing information about cases is frustrating, and the process to request data is time-consuming;
- communication channels with Capita to request data are complicated; and
- maps received can be difficult to interpret, hindering responsive case management.<sup>7</sup>

**2.21** HMIP recommended that HMPPS should make immediate changes to Capita’s contract to ensure more rapid notifications of prison leavers’ licence violations, improved response times to probation practitioners’ enquiries, improved timeliness of providing location data (to within 24 hours), and automated curfew violation notifications for offenders posing higher risks of harm. HMPPS has committed to assess the impact of meeting these recommendations but noted the need for contract variations and additional costs. It is cautious about introducing further changes, given work under way to develop future contracts. It has committed to improve service standards to better support public protection (Part Four).

<sup>7</sup> Her Majesty’s Inspectorate of Probation, *The use of electronic monitoring as a tool for the Probation Service in reducing reoffending and managing risk*, January 2022.

### **Reliance on legacy technology**

**2.22** Legacy systems expose government to what is likely to be an uncertain but high level of financial risk from potential operational and cyber-related incidents.<sup>8</sup> HMPPS has been using its current case management system ('Integrity') since 2012 and must now rely on it until at least 2024. In July 2021, HMPPS reviewed its systems' ability to operate until 2024 and to accommodate higher caseloads. HMPPS set up the following workstreams to address specific risks and aims to complete the work by November 2022, including:

- **telephone system** – the 16-year-old telephone system – critical to enabling timely contact with offenders and business users – had reached capacity limits and lacked functionality such as the ability to record calls or enable remote working. There have already been six major incidents affecting the telephone system since May 2021. HMPPS considers there is a 'medium risk' that it could fail in the next three years, causing a 'serious outage'. HMPPS plans to replace the system by September 2022;
- **stability** – many applications including infrastructure, hardware, software and operating systems covering both G4S- and Capita-managed components are no longer supported by manufacturers. Suppliers have work under way to refresh, upgrade and replace applications up to November 2022; and
- **scalability** – the existing system handled a peak caseload of around 15,000 cases in March 2022, which could increase by 6,000 to more than 21,000 by the end of 2023-24 (see Figure 19 on page 59). HMPPS has decided it cannot test such volumes 'live' within its existing budget, so is using a monitoring system to track system performance and responsiveness to enable HMPPS and suppliers to detect any emerging problems and intervene. This reactive approach carries risks, given the need for early alert and prompt fixes to emerging problems. A less risky approach to understand future resilience would involve simulating volume increases and increased loads across the IT network in a testing and development environment.

<sup>8</sup> Comptroller and Auditor General, *The challenges in implementing digital change*, Session 2021-22, HC 575, National Audit Office, July 2021.



**2.23** A second HMPPS-commissioned IT review identified a range of risks which could impact on the live service without remedial action, including unsupported operating systems, missing system updates and outdated and vulnerable hardware and software. Up to that point, HMPPS was not aware of the level of obsolescence within the case management system. System upgrades had been kept to a minimum as Integrity was meant to be retired and replaced, leading to an eight-year maintenance backlog. HMPPS identified that the remediation work was “more comprehensive and time-consuming” than envisaged and now expects it to run to November 2022 at an estimated cost of £9.8 million. This means HMPPS will still be handling issues around legacy technology well into its expansion programme, while the capacity and resilience of its systems to accommodate higher caseloads remains unclear.

## Part Three

### Why HM Prison & Probation Service failed to achieve transformation

**3.1** This part examines why HM Prison & Probation Service (HMPPS) failed to achieve its vision in its electronic monitoring transformation programme. Shortcomings in the programme relate to ongoing issues arising from its chosen delivery model, as well as the way it managed suppliers' work and governed the programme. We examine:

- HMPPS's 'tower' delivery model (paragraphs 3.2 and 3.3);
- HMPPS's role as systems and service integrator (paragraph 3.4);
- optimistic ambitions and timeframes (paragraph 3.5); and
- lack of scrutiny and challenge (paragraphs 3.6 to 3.8).

#### **The enduring effects of HMPPS's 'tower' delivery model**

**3.2** We previously reported that HMPPS failed to anticipate and resolve the implications of its 'tower' delivery model, where different suppliers are responsible for different systems and technology that need to join up into an end-to-end service. In its August 2021 review of the programme, HMPPS's Audit and Risk Committee concluded that there were "fundamental mistakes" with this delivery approach. HMPPS remained reliant on complex interdependencies between projects and suppliers, which made integration challenging, while technology and personnel changed over the long duration of the programme. Since we last reported, this delivery model has continued to have consequences for the programme. For example, it contributed to the long time it took for HMPPS to agree delivery plans with suppliers, given the complexity of developing compatible proposals. In its revised 2017 business case, HMPPS aimed to start cross-supplier integration testing in January 2018 and to launch the new service in September 2018. In fact, HMPPS did not agree its first proposed delivery plan until August 2018. These delays were mainly attributable to:

- the volume of interdependencies between suppliers' technical solutions, which meant suppliers were often dependent on the availability of other suppliers' work;

- the changes Capita had to implement to accommodate G4S's technology; and
- Capita's delays in developing the data centre.

**3.3** Subsequent negotiations to agree re-baselined delivery plans followed a similar trajectory. For example, following delays with its integration testing work, Capita issued a revised delivery plan to HMPPS in July 2019, but the contractual plan was not agreed until January 2020.

### **HMPPS's role as systems and service integrator**

**3.4** Government digital projects delivered through multiple suppliers require effective coordination to ensure that interfaces between suppliers work effectively. A system integrator has to agree requirements, establish a design, obtain assurance on technical feasibility, ensure coherence of suppliers' contributions and resolve integration issues. HMPPS took on the systems and service integrator role from Capita following a dispute and settlement in 2016, because it was dissatisfied with Capita's performance, but did not perform this role effectively:

- **Setting requirements** – we frequently find that departments do not spend enough time exploring requirements with commercial partners at an early enough stage and ask suppliers to commit to contracts without a reasonable understanding of what they are expected to deliver. HMPPS set detailed and prescriptive requirements for Gemini, which introduced inflexibility and limited innovation. In contrast, on the user portal, beyond setting out its broad expectations for functionality, HMPPS left Capita to develop detailed designs and solutions. At the point of project suspension in May 2021, an assurance review found that neither HMPPS or Capita had sought to check the portal design against the specification in the contract, nor did documentation describe how users would engage with the system. However, Capita shared evidence with us showing that it did check the design back to contractual requirements. Agreeing requirements upfront requires detailed input from digital specialists, but there was a lack of involvement from the Ministry of Justice's (the Ministry's) Digital and Technology function.
- **Integrating G4S's and Airbus's solutions** – HMPPS achieved integration between these suppliers in 2020 by implementing a more cost-effective cloud-based solution for the data centre, where data are stored in the live service. It pursued this to remove its dependence on Capita's data centre, which was delayed.

- **Resolving integration issues between suppliers** – in August 2021, a HMPPS-commissioned technical review found that HMPPS’s had suitably qualified and experienced staff doing testing assurance work but it did not intervene early enough to resolve cross-supplier integration issues. The programme relied heavily on external consultants to provide technical assurance on suppliers’ work (consultancy made up 11% of administration costs between 2017-18 and 2020-21) but this support did not extend to providing strategic advice or challenge to the programme team.
- **Assuring Capita’s performance and readiness** – the technical review found that Capita’s approach to testing and resolving defects was not “inherently unprofessional”. Still, its inability to resolve defects was a key contributor to its failure on the Gemini case management system. HMPPS’s performance as integrator may have compounded these problems. It noted that HMPPS had allowed Capita to commence integrated testing work before it was ready to do so. For example, HMPPS permitted Capita to proceed past its early internal testing when only 61 of 126 defects were agreed as resolved. In hindsight, HMPPS now believes that a lack of defect resolution early on contributed to a high volume of defects identified later. Capita told us that the rigidity of HMPPS’s approach to testing management was a key source of delay, and its early requirement to have all defects resolved before proceeding to the next testing stage lacked pragmatism. In later integrated test phases, it considers that it was held to account for delays which it was not always wholly responsible for. It also told us that HMPPS’s change in tagging supplier and changes to its system designs, and its management of integration issues across suppliers, were the primary reasons for delay.

### **Optimistic timetable**

**3.5** We often find that government pursues optimistic target delivery dates for its major projects and programmes. HMPPS’s business case set a September 2018 launch date for its transformed tagging service and even aspired to accelerate delivery. However, there were several uncertainties at this time, including: how existing suppliers could accommodate G4S’s tags and what changes may be required; Capita’s readiness to deploy a system in its data centre to enable interfaces between G4S and Airbus’s mapping software; and the feasibility of completing integrated testing as planned. Good practice emphasises the importance of using ranges in early stages of a project’s lifecycle to better reflect the boundaries of possible cost and schedule outcomes. HMPPS re-started the programme without having a clear view on suppliers’ readiness to proceed. In addition, it deliberately did not build any contingency into its first contracted delivery plan, which meant that day-to-day delays were continually pushing the forecast launch date back.

## Lack of scrutiny and challenge

**3.6** Given Capita's delays in developing Gemini against the programme's first delivery plan (paragraph 2.4), HMPPS identified that further slippage would require another extension to its interim 'bridge' contract, which comprised both its responsibilities to manage the live service and to develop Gemini. In late 2019, it prepared an addendum to its 2017 Full Business Case to achieve this. This briefly highlighted Capita's poor performance against the Gemini-element of its contract to date and a commercial dispute, but it did not surface the programme's progress, the risks it faced or the likelihood of meeting its new target launch date of August 2020. At the point of finalising the business case addendum in December 2019, the programme was tracking an 'Amber/Green' delivery confidence assessment because HMPPS had reached agreement on a new delivery plan with suppliers. This was a marked improvement from previous months. The programme board continued to report 'Amber/Green' assessments in January 2020, despite senior members' views that there remained a "very strong likelihood of slippage". Earlier, the programme team raised doubts about Gemini's capability and the potential to default to its existing case management system ('Integrity') in June 2019, 23 months before it suspended development. **Figure 14** on pages 46 and 47 sets out a timeline of events leading to HMPPS's decision to extend Capita's contract.

**3.7** HMPPS's use of an addendum to the existing business case complied with minimum approval requirements but involved more limited support and challenge than would have been the case if it had been formally reconsidered. In its July 2021 review of programme governance, the Government Internal Audit Agency (GIAA) concluded that extending Capita's interim contract was a significant departure from the programme's original aims and should have prompted a revised business case. Despite the programme team's recording of persistent 'Black'- and 'Red'-rated risks, it found that there were no tolerances set – such as delays and cost overruns – to inform whether the business case should have been reconsidered by the Ministry. There was no formal requirement set by the Ministry for HMPPS to escalate risks in this way. HMPPS asked the Ministry's Investment Committee to 'note' its addendum, an approach the Committee was content with. Ultimately, HM Treasury approved the addendum in the same month based on affordability only. Had HMPPS terminated Capita's contract for Gemini at the end of 2019-20, taxpayers' exposure would still have been significant: 84% of losses (£82 million) disclosed in its 2020-21 accounts related to expenditure between 2011-12 and 2019-20.

**3.8** The GIAA also noted the programme board's long-standing membership and pointed to the possibility of 'group think', where the team's determination to see the programme completed may have impeded its ability to reflect and fully challenge its decision-making. It found the programme would have benefited from a 'critical friend' or challenge panel. The Ministry's Digital and Technology function was not closely involved, in part due the programme's reputation for being a "challenging deliverable" so people often did not want to be associated with it. In February 2022, HMPPS started using a challenge panel for electronic monitoring.

**Figure 14**

## Timeline of events relating to HM Prison &amp; Probation Service's (HMPPS's) extension of Capita's contract, 2019-20

The programme team reported 'Amber' or 'Amber/Red' delivery confidence assessments throughout most of 2019-20

April 2019	Amber	<ul style="list-style-type: none"> <li>Capita missed its planned completion of systems integration testing (SIT)<sup>1</sup></li> </ul>
May	Amber/Red	<ul style="list-style-type: none"> <li>HMPPS's delivery confidence declines due to SIT activities being suspended, identifying that Capita's incomplete work on the data centre was the primary cause</li> </ul>
June	Amber/Red	<ul style="list-style-type: none"> <li>Capita provides its first proposed new delivery plan and a contract extension proposal to HMPPS</li> <li>The programme team identifies that, at the current rate of progress, Capita would not complete its work before its contract expires in January 2021</li> <li>HMPPS explores three options for continuing with the programme:               <ul style="list-style-type: none"> <li>stop the programme, extend 'bridge' contracts and 'bolster' GPS location monitoring;</li> <li>continue with the current approach and wait for Capita to deliver; and</li> <li>adapt the programme by integrating Airbus's and G4S's systems to a new cloud-based data centre, removing its dependence on Capita's data centre and remaining on legacy systems</li> </ul> </li> </ul>
July	Amber/Red	<ul style="list-style-type: none"> <li>Capita runs early integration testing which revealed new system defects</li> <li>Capita provides a second proposed new delivery plan to HMPPS</li> <li>Programme exhausts contingency budget for Capita's development of the case management system ('Gemini') and user portal</li> <li>Programme board endorses delivery option 3: adapt the programme</li> <li>Commercial negotiations between HMPPS and Capita commence</li> </ul>
August	Amber/Red	<ul style="list-style-type: none"> <li>Negotiations between HMPPS and Capita continue</li> <li>The Ministry of Justice's (the Ministry's) Investment Committee approves the release of £5.5 million to enable Capita to complete development of the Gemini system and user portal</li> </ul>
September	Amber/Red	<ul style="list-style-type: none"> <li>Programme enters SIT following suspension</li> <li>Negotiations between HMPPS and Capita continue</li> </ul>
October	Amber	<ul style="list-style-type: none"> <li>HMPPS reports increased confidence in the quality of Capita's solutions, due to more complete coverage of solutions in testing activities and reductions in the volume and severity of defects</li> <li>HMPPS identifies a risk of further slippage in Capita's software and data centre</li> <li>HMPPS agrees with suppliers to move Airbus's and G4S's systems and hardware into a new cloud-based data centre</li> </ul>

**Figure 14** *continued*

Timeline of events relating to HM Prison & Probation Service's (HMPPS's) extension of Capita's contract, 2019-20

November	Amber	<ul style="list-style-type: none"> <li>• Programme commences user acceptance testing<sup>2</sup></li> </ul>
December	Amber/ Green	<ul style="list-style-type: none"> <li>• HMPPS reaches agreement with its suppliers on a re-baselined delivery plan</li> <li>• HMPPS and Capita conclude negotiation for a £10 million settlement agreement to be paid by Capita</li> <li>• HMPPS finalises an 'addendum' to its 2017 Full Business Case</li> </ul>
January 2020	Amber/ Green	<ul style="list-style-type: none"> <li>• HMPPS asked the Ministry's Investment Committee to 'note' rather than approve its addendum</li> <li>• The Ministry's Investment Committee noted and endorsed HMPPS's addendum</li> <li>• HM Treasury approved the addendum</li> </ul>
February	Amber/ Green	<ul style="list-style-type: none"> <li>• Settlement agreement approved by ministers</li> <li>• Completion of SIT further delayed – the programme team identify likely delays to the new planned launch date of August 2020</li> </ul>
March	Amber/ Green	<ul style="list-style-type: none"> <li>• Capita pays HMPPS £10 million in compensation as part of the settlement agreement</li> </ul>

#### Notes

- 1 Systems integration testing focuses on the interactions and interfaces between different systems, including those provided by external organisations.
- 2 User acceptance testing focuses on validating the fitness for use of systems by intended users.
- 3 Shading indicates HMPPS's assessment of delivery confidence: Amber/Green – successful delivery appears probable; Amber – successful delivery appears feasible, but significant issues exist; Amber/Red – successful delivery of the project is in doubt, with major risks or issues apparent in a number of key areas.

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

## Adversarial relationships

**3.9** To date, there have been three formal disputes between HMPPS and Capita. The technical review found that there was a breakdown of trust between HMPPS and Capita, who disputed each other's performance. It saw evidence on both sides "where past history is referenced in place of current realities and perceived 'facts' reported verbally have not been borne out by the documentary evidence". It found that despite signing a collaboration agreement in September 2018, HMPPS and Capita did not always work together effectively, with missed opportunities to reset adversarial behaviours. Both HMPPS and Capita told us that they have restored their relationship, which is now constructive and collaborative. At the point of contract termination, there were no open disputes.

## Part Four

### Expanding electronic monitoring services

#### Goals of expansion

**4.1** In 2020, in response to policy aims, HM Prison & Probation Service (HMPPS) set up three new projects which extended electronic monitoring (tagging) services to wider groups of offenders. In September 2020, HMPPS brought these projects together into an expansion programme in an initial business case. Its vision for the programme is to build trust and confidence in community supervision by expanding the impact, use and efficacy of electronic monitoring as a flexible tool for criminal justice practitioners to effectively manage offenders – and contribute to better outcomes for reducing reoffending and protecting the public. It expects to spend £1,214 million between 2021-22 and 2030-31, including £232 million to continue delivering expansion projects, £55 million to procure new contracts and £808 million to roll out an enhanced service that develops the impact and effectiveness of tagging.

#### Early progress

**4.2** HMPPS has expanded tagging to new groups of offenders by launching new initiatives on alcohol monitoring, acquisitive crime and Home Office Immigration Enforcement (**Figure 15**). HMPPS also plans to undertake a pilot using tagging for domestic abuse offenders in late 2023. It has begun to outline how it will develop the evidence base and improve data standards within the programme.

#### Expansion projects

##### Rolling out alcohol monitoring

**4.3** Alcohol consumption is strongly associated with serious and violent crime and anti-social behaviour. HMPPS aims to tackle offending by monitoring people where alcohol was a factor in the offence. Alcohol Monitoring Systems Ltd supplies the tags and monitoring service, while Capita manages tag installation and removal.



**Figure 15**

## Summary of HM Prison &amp; Probation Service's (HMPPS's) current tagging expansion projects

HMPPS has so far rolled out three new tagging expansion projects

Project	How it works	Number of tagged offenders at the end of March 2022
<b>Alcohol monitoring</b> (launched October 2020)	Can be used as part of a community sentence and as a licence condition for prison leavers where alcohol was a factor in the offence. Tags measure alcohol concentration in sweat and sends an alert if the wearer has consumed alcohol.	900 <sup>1</sup>
<b>Acquisitive crime</b> (launched April 2021)	Uses location monitoring as a licence condition for adult offenders convicted for theft, robbery or burglary offences, and who have served a prison sentence of 12 months or more. Participating police forces send data to HMPPS's system, which matches where offenders have been within a defined proximity.	656
<b>Home Office Immigration Enforcement</b> (launched August 2021)	Uses location monitoring for Foreign National Offenders (FNOs) who are subject to deportation proceedings.	1,435 <sup>2</sup>

**Notes**

- 1 Alcohol monitoring caseload data includes offenders who are dual tagged. As at 31 March 2022, 40 offenders were monitored with both an alcohol monitoring and either a radio frequency or a GPS tag.
- 2 HMPPS and the Home Office's objective in the project was to transition FNOs from curfew to location monitoring supervision. Figures do not include FNOs on curfew orders. The Ministry of Justice has identified quality issues with data for this cohort. Data includes small numbers for individuals held on immigration bail who are not FNOs.
- 3 Actively monitored caseload data is at 31 March 2022 and is provisional. The Ministry of Justice has reported that HM Prison & Probation Service's tagging expansion programme has created challenges with data recording on its suppliers' management information systems. It has applied manual adjustments to the data to more accurately capture the numbers of actively monitored offenders, including manual manipulation of datasets. It plans to put in place an automated process for adjustments in future statistical releases, which may result in some revisions to these figures.

Source: National Audit Office analysis of HM Prison & Probation Service documents and Ministry of Justice Electronic Monitoring Statistics Publication 2021-22

**4.4** Since the start of the project, HMPPS faced significant pressure to deliver quickly. HMPPS launched the community-based service in Wales on time in October 2020. HMPPS's approach avoided integration risks it has faced in its transformation programme by developing a simple case management system with basic functions only. HMPPS then developed an enhanced case management system which can accommodate higher caseloads and deployed it as a part of the rollout in England in March 2021. HMPPS benefited from strong support from sentencers for its aims, resulting in demand exceeding expectations. It expected an average community-based caseload of 260 offenders in 2021-22: by 31 March 2022, it had 900 live cases. HMPPS started expanding this scheme in November 2021 to include alcohol monitoring as a licence condition for eligible prison leavers in Wales, although demand has been lower than expected to date. Overall, in 2021-22, HMPPS spent £9.9 million out of its budget of £14.7 million.

**4.5** Early information on the effectiveness of the alcohol tags is positive. HMPPS recorded high compliance among both community-based offenders and offenders on licence with an alcohol abstinence requirement, achieving an overall sobriety rate of 97.2% and 95.6% respectively.<sup>9</sup> HMPPS does not yet know how this scheme promotes offenders' longer-term abstinence or reductions in alcohol-fuelled offending. HMPPS is developing an evaluation strategy for alcohol monitoring on licence but believes caseload numbers will be too low to conduct robust impact evaluation. Instead, HMPPS plans to monitor management information to understand offenders' outcomes. It is not clear how it intends to monitor reoffending given that it cannot reliably link data to measure this (paragraph 2.18).

#### Acquisitive crime

**4.6** HMPPS's acquisitive crime pilot can impose location monitoring as a licence condition for adult offenders convicted for theft, robbery or burglary offences, who have served sentences of 12 months or more. Acquisitive offenders have among the highest levels of reoffending across all offence types.<sup>10</sup> As part of the pilot, participating police forces send data on alleged acquisitive crimes to HMPPS. Using software developed by Airbus, HMPPS successfully rolled out an innovative tool which automatically compares offenders' locations with police crime data, producing alerts when there is a potential match.

**4.7** HMPPS launched the first phase of the acquisitive crime pilot in six police force areas in April 2021. As with alcohol monitoring, there was significant ministerial interest in the project. Although HMPPS launched the project on time, it did so without completing all planned testing activities involving users. In September 2021, HMPPS launched the second pilot phase in a further 13 police force areas and engaged with stakeholders effectively to identify and implement improvements to the service. Overall, in 2021-22, HMPPS spent £15.5 million of its budget of £23.3 million.

<sup>9</sup> Percentage of total monitoring days between October 2020 and March 2022.

<sup>10</sup> For example, adults convicted for theft had a 46% reoffending rate between January and March 2020, more than 21 percentage points higher than the overall proven reoffending rate during the same period.

**4.8** Despite the innovative capability HMPPS has achieved, it has not sought systematic data from police forces on outcomes, such as the number of exonerations, arrests and convictions following matches. As at February 2022, HMPPS has anecdotal evidence that 14 offenders in the pilot have been arrested – 12 of whom were charged – out of around 2,500 matches produced by more than 154,000 automated mapping searches. It plans to compare reoffending rates between police forces involved in the pilot against all police forces nationally, to consider whether the scheme imposes a sufficient deterrent effect. Provided it has sufficient sample sizes to measure reoffending, it plans to finalise an evaluation report in August 2023 to inform future investment decisions.

### Home Office Immigration Enforcement

**4.9** The Home Office's Immigration Enforcement project aims to implement location monitoring for Foreign National Offenders (FNOs) who are subject to deportation proceedings. HMPPS leads on supplier relationships, while the Home Office retains responsibility for funding and primary responsibility for governance. HMPPS aimed to launch two types of location monitoring devices by August 2021: fitted and non-fitted. It intended for the non-fitted device to be worn as a watch and to capture wearers' biometric data – facial recognition scans – at irregular intervals throughout the day. While it introduced fitted location monitoring devices from G4S on time – transitioning 174 FNOs from radio frequency to GPS tags between January and February 2021 – its development of a non-fitted device for lower-risk FNOs has been severely delayed.

**4.10** HMPPS decided to pursue a non-fitted location monitoring device being developed by G4S in December 2020, as it was, at the time, considered to be the fastest route to market. G4S overcame challenges during development, which improved the device's biometric accuracy. However, in November 2021 – 11 months after HMPPS decided to pursue G4S's solution – the Ministry of Justice's (the Ministry's) Security Function advised that the device should no longer be pursued as it used an operating system that did not meet Government Cyber Security Standards. Both HMPPS and the Home Office were unaware of this. The Home Office decided to suspend its pursuit of G4S's solution in December 2021. HMPPS and the Home Office have now sourced an alternative option with delivery forecast for autumn 2022.

**4.11** **Figure 16** sets out tagging caseloads across HMPPS's expansion projects.

### **Improving data and the evidence base for tagging**

**4.12** A key assumption underpinning tagging is that it deters reoffending and offers a low-cost alternative to prison in appropriate circumstances. HMPPS's initial business case for expansion illustrated the scale of impact it would need to justify its investment. By 2025-26: around 5,000 offenders would need to be diverted from prison; or offenders would need to be deterred from around 9,000 reoffences.

**4.13** The lack of evidence for the efficacy of tagging is a long-standing issue and HMPPS acknowledges that the evidence base remains weak. In 2006, the Committee of Public Accounts recommended that government should establish how tagging affects reoffending. However, HMPPS has yet to overcome data availability and quality issues (paragraph 2.18) and is therefore currently heavily reliant on anecdotal information.

**4.14** HMPPS has committed to improve data standards and develop the evidence base for tagging with support from the Ministry's analytical and digital teams. It has established a data and management information working group to identify areas for improvement and has identified its fundamental requirements for the future, including: control over what data should be collected and ability to vary requirements over time; full ownership of and control of data; more timely access to suppliers' data; and the ability to report on all data held by suppliers. It has also committed to improve the programme's analytical capabilities, with 12 of 17 full-time equivalent vacancies now filled. Further, HMPPS has plans to operate an £18.5 million 'Innovation Fund' to test the effectiveness and efficacy of new technology and tagging initiatives over the next three years.

**4.15** HMPPS has formally committed to evaluate the impact of all its current and future expansion initiatives, including on reoffending, other rehabilitative outcomes and whether the schemes provide a positive return on investment. Significant work remains to strengthen the evidence base and demonstrate the value of electronic monitoring.

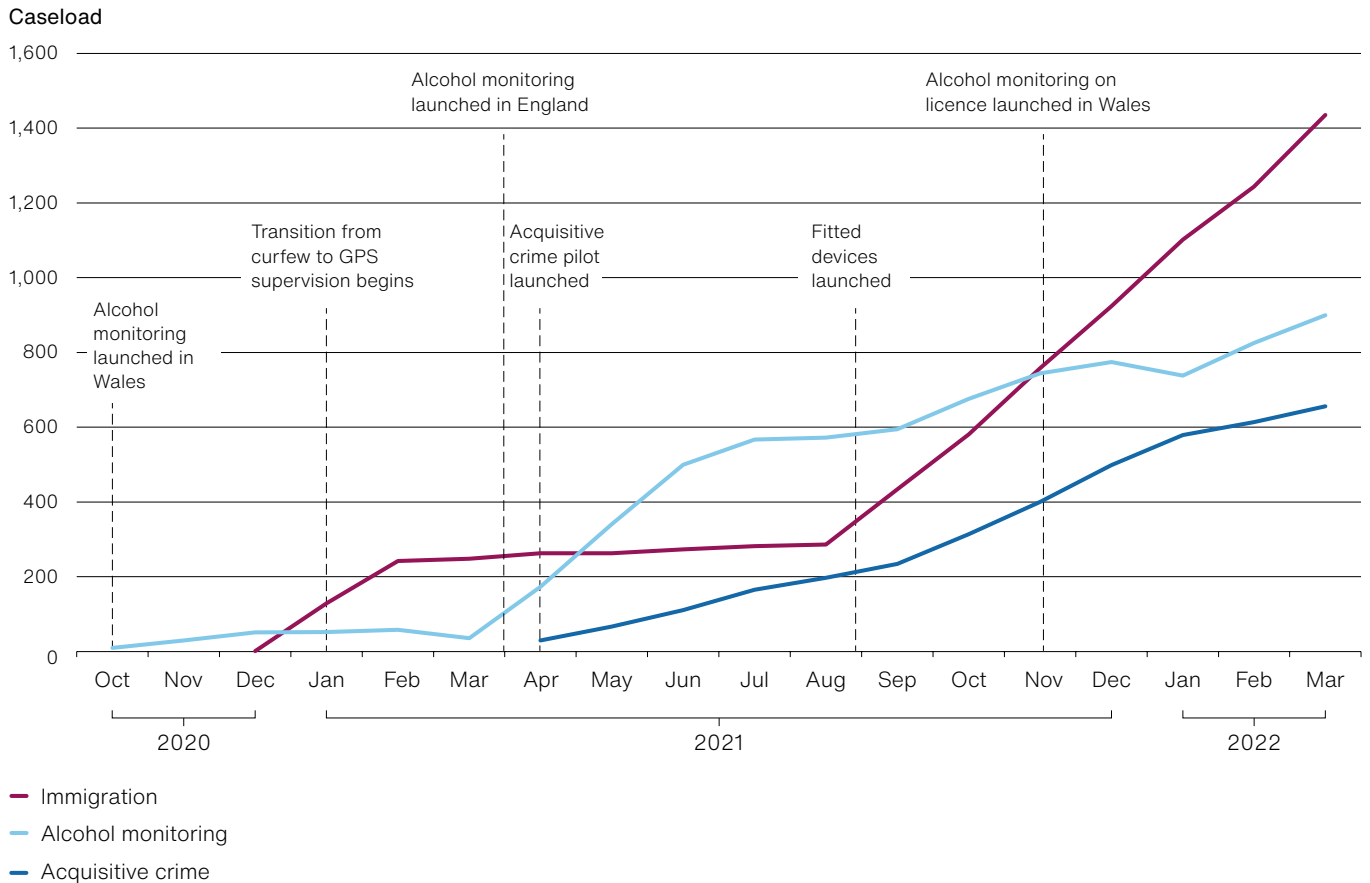
### **Procuring new contracts under a new delivery model**

**4.16** HMPPS is developing requirements for future tagging services and contracts. Its objectives are to put in place an effective replacement electronic monitoring service which builds on progress to date, addresses key service gaps, delivers value for money and ensures continuity of services as current contracts expire. Its current contracts begin to expire from January 2024, including Capita's 'bridge' contract for field operations, which HMPPS has extended to its maximum period, and this is driving HMPPS's demanding timetable for transitioning to new services. It plans a phased transition to the new contracts, starting with a competitive procurement from June 2022. New contracts are expected to be in place by summer 2023, which will mark the start of a six-month transition period between suppliers.

**Figure 16**

Caseloads under HM Prison & Probation Service's (HMPPS's) tagging expansion projects, October 2020 to March 2022

#### HMPPS's expansion initiatives have prompted increases in caseloads



#### Notes

- 1 This figure sets out monthly actively monitored caseload data. Data covering April 2021 to March 2022 are provisional. The Ministry of Justice has reported that HMPPS's tagging expansion programme has created challenges with data recording on its suppliers' management information systems. It has applied manual adjustments to the data to more accurately capture the numbers of actively monitored offenders, including manual manipulation of datasets. It plans to put in place an automated process for adjustments in future statistical releases, which may result in some revisions to these figures.
- 2 Alcohol monitoring caseload data includes offenders who are dual tagged. As at 31 March 2022, 40 offenders were monitored with both an alcohol monitoring and a GPS tag (either through acquisitive crime or immigration bail orders).
- 3 HMPPS's objective in the Acquisitive Crime pilot is to impose trail monitoring as a licence condition location monitoring tags for adult offenders convicted of theft, burglary and robbery offences. It aims to reducing reoffending by deterring criminal activity and supporting the investigation and detection of further offences.
- 4 HMPPS's alcohol monitoring project comprises two types of orders: Alcohol Abstinence Monitoring Requirement for offenders in the community and Alcohol Monitoring on Licence for prison leavers. Alcohol monitoring tags measure alcohol concentration in sweat and sends an alert if the wearer has consumed alcohol.
- 5 HMPPS's Home Office Immigration Enforcement project introduced location monitoring for Foreign National Offenders (FNOs) who are subject to deportation proceedings. HMPPS and the Home Office's objective was to transition FNOs from curfew to location monitoring supervision. Figures do not include FNOs on curfew orders. The Ministry of Justice has identified quality issues with data for this cohort. Data includes small numbers for individuals held on immigration bail who are not Foreign National Offenders.

Source: National Audit Office analysis of Ministry of Justice Electronic Monitoring Statistics Publication 2021-22

**4.17** In line with good practice, HMPPS has explored prospective suppliers' capability, experience and potential technical solutions. It considered nine potential delivery models in detail before shortlisting four options in its May 2022 business case:

- maintaining its current 'tower' model;
- a dual-supplier model separating provision of technology (devices and systems) and monitoring services;
- a tri-supplier model with two tag suppliers and one monitoring services contract; and
- a prime supplier model – where the supplier retains responsibility for managing and integrating the work of its sub-contractors.

**4.18** HMPPS discounted a prime supplier model as it considered that it reduced its ability to develop partnerships with suppliers and work with them on innovation, while also creating a dependency on a single supplier. Its preferred option is a dual-supplier approach as it expects this to provide better transparency in delivery and reduce costs, as well as providing more control over managing suppliers (**Figure 17**). Under this approach, one supplier will provide the field and monitoring services and the other will supply tagging hardware.

### **Applying lessons**

**4.19** HMPPS has sought to apply lessons from the transformation programme. To avoid previous mistakes and mitigate potential risks, HMPPS plans to:

- ensure suppliers demonstrate they have proven technology in place that requires minimal bespoke configuration;
- adopt a phased approach to confirming requirements for the technical interfaces between suppliers, by fully understanding the tagging provider's systems first and then those of the other supplier.

Both of these approaches appear prudent given past experience.

**4.20** HMPPS previously assigned the systems integration role to Capita, the monitoring services supplier in the transformation programme but had to take over as systems integrator in 2016. It decided that it does not have the capacity or capability to undertake this role in the new contracts and plans to outsource this function to its new field and monitoring services supplier, who will fit the tags. HMPPS has sought to apply lessons and avoid similar systems integration issues. To avoid previous mistakes and mitigate potential risks, HMPPS plans to:

- develop its integration approach with prospective suppliers to ensure market views, capability and experience are factored into its final strategy;
- evaluate bidders' capability and experience of systems integration;

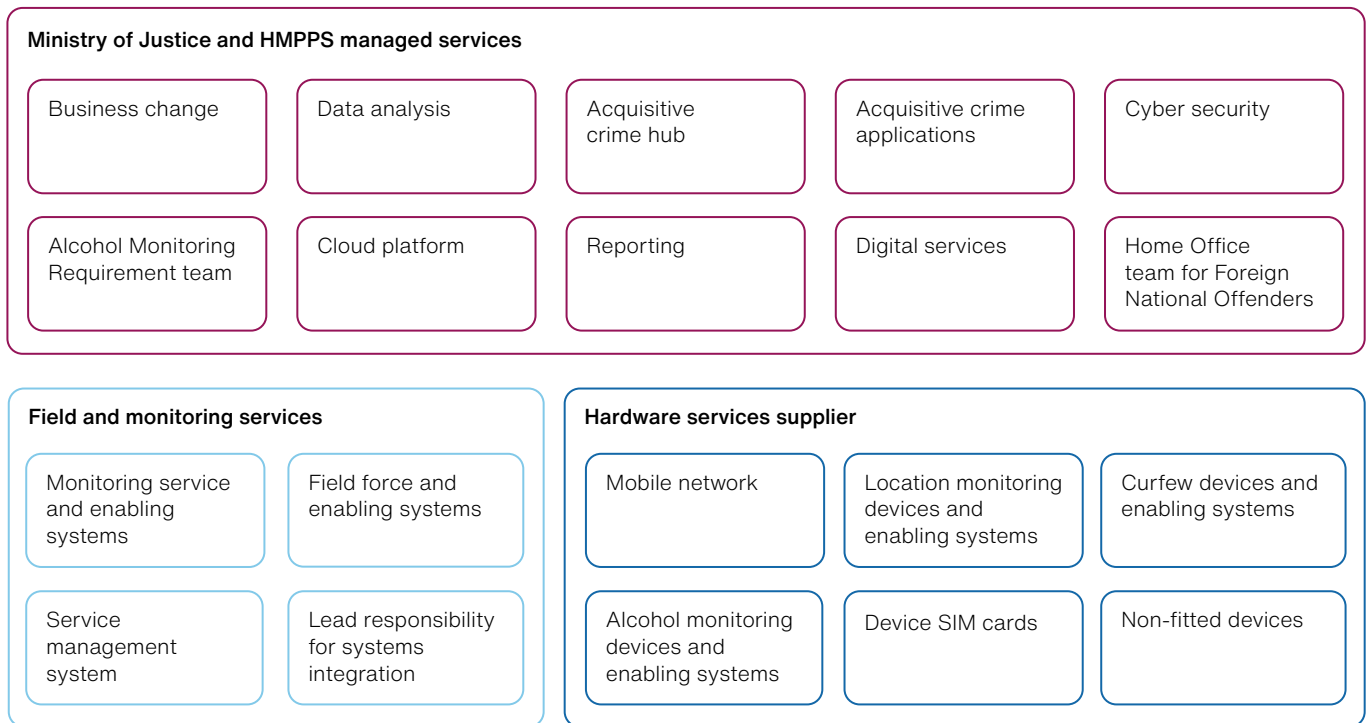
- ensure an effective integration assurance function and risk escalation framework are in place; and
- clearly define roles, responsibilities and interfaces in contracts.

**4.21** In outsourcing the integrator role, HMPPS will have to manage the same risks it faced earlier in its transformation programme. For example, it will need to ensure that it and its suppliers have a shared understanding of responsibilities and must clearly articulate where accountability sits if problems arise. This is challenging in areas dependent on more than one organisation. In addition, the integrator will not have contractual oversight of the tagging hardware supplier or the associated leverage this brings. The potential for disputes is always a risk but is heightened when working to demanding timescales. HMPPS expects its suppliers to integrate their systems in six months, although it has not yet tested the systems or the ease of their integration. It plans to run the old and new systems in parallel for six months after this date. Finally, HMPPS will need to be prepared to intervene if there is a real or perceived conflict of interest, given that its field services supplier will be responsible for delivering substantial work while integrating others' work.

**Figure 17**

HM Prison & Probation Service's (HMPPS's) preferred delivery model for its Expansion Programme

HMPPS plans to contract two suppliers to deliver the tagging service from 2024, with the field and monitoring service provider leading on systems integration



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

**4.22** HMPPS has identified other lessons and is seeking to apply them to expansion. It has run workshops, commissioned external reviews, gathered stakeholder views and documented the lessons it will need to apply, mainly related to benefits management, governance and scrutiny, technical integration and relationships with suppliers. HMPPS has taken pragmatic steps to act on the main areas of weakness in its transformation programme which we examined in Parts Two and Three.

**Figure 18** on pages 57 and 58 outlines how HMPPS is addressing these or taking a different approach.

### **Opportunities and risks to future delivery**

**4.23** There is strong policy ambition to expand the scale and scope of electronic monitoring further across the criminal justice system. In its most recent business case seeking approval for its plans from HM Treasury, HMPPS presented projections formulated for its 2021 Spending Review bid. It estimated an additional 5,000 cases on top of its routine caseload this year, rising to a peak of around 7,900 in 2024-25 (**Figure 19** on page 59).<sup>11</sup> There are uncertainties with these projections, such as how ongoing police recruitment and the courts' recovery from the COVID-19 pandemic will influence future demand for tagging services. HMPPS is currently updating its projections.

**4.24** Caseload increases will be occurring over the same period in which HMPPS will be putting in place new contracts and transitioning to new suppliers. There are significant risks associated with this approach, including: pressure on resources and capacity within HMPPS to handle the workload; ongoing uncertainty about the stability of legacy systems to accommodate higher case volumes; and difficulties with defining contract requirements on a service that is expanding. To mitigate this, HMPPS plans to avoid introducing any service changes from six months before the contract starts to three months after.

**4.25** The new contracts offer opportunities for HMPPS to improve the service. HMPPS can redefine how it oversees the services, standardise and streamline processes and improve transparency over service performance. It can seek greater control and access to offender data to help it understand better how offenders respond to tagging – this could inform its evidence base and enable a more responsive service for users.

<sup>11</sup> HMPPS presented these data in its March 2022 business case based on analysis from June 2021 and revisions in January 2022. Actual caseloads for 2021-22 are lower than these forecasts.



**Figure 18**

## HM Prison &amp; Probation Service's (HMPPS's) key commitments in delivering its tagging Expansion Programme

**HMPPS has made a range of commitments for its tagging Expansion Programme**

Area of weakness	Commitments
Weak evidence base, data and benefits management	<p>HMPPS has:</p> <ul style="list-style-type: none"> <li>● secured funding for 17 data analysts to enhance the programme's analytical capability and develop the evidence base;</li> <li>● established an innovation fund to finance the improvement of the evidence base and evaluation of new technologies;</li> <li>● begun developing evaluation strategies for its expansion projects, although the feasibility of attributing the impact of tagging on diverting offenders away from prison remains unproven;</li> <li>● appointed a benefits manager to systematically track programme benefits, although it has not yet identified what metrics it will use;</li> <li>● established a data and management information working group to improve data quality;</li> <li>● gathered detailed requirements from stakeholders to inform the configuration of its future systems; and</li> <li>● committed to owning all electronic monitoring data after re-procurement.</li> </ul>
Policing and criminal justice stakeholders' lack of timely access to location monitoring data	<p>HMPPS will:</p> <ul style="list-style-type: none"> <li>● agree information sharing agreements with police and criminal justice stakeholders; and</li> <li>● explore whether it can harness a user portal developed for its acquisitive crime pilot for stakeholders' wider use.</li> </ul>
Reliance on legacy systems and technology	<p>HMPPS has:</p> <ul style="list-style-type: none"> <li>● reviewed the risks associated with using legacy systems and technology until 2024 and has work underway to address risks; and</li> <li>● decided to use legacy systems and technology until re-procurement.</li> </ul>
Shortcomings in HMPPS's 'tower' delivery model	<p>HMPPS has:</p> <ul style="list-style-type: none"> <li>● committed to pursue a dual supplier model that aims to reduce costs and simplify supplier management; and</li> <li>● limited the number of contracted work packages to facilitate easier systems integration.</li> </ul>
Difficulty in integrating suppliers' solutions	<p>HMPPS has:</p> <ul style="list-style-type: none"> <li>● developed an evaluation approach to test prospective suppliers' capabilities ahead of awarding contracts, but has not yet begun testing potential solutions or the ease of their integration in detail; and</li> <li>● decided that its future field and monitoring services supplier will also act as the systems integrator for the programme.</li> </ul>

**Figure 18** *continued*

HM Prison & Probation Service's (HMPPS's) key commitments in delivering its tagging Expansion Programme

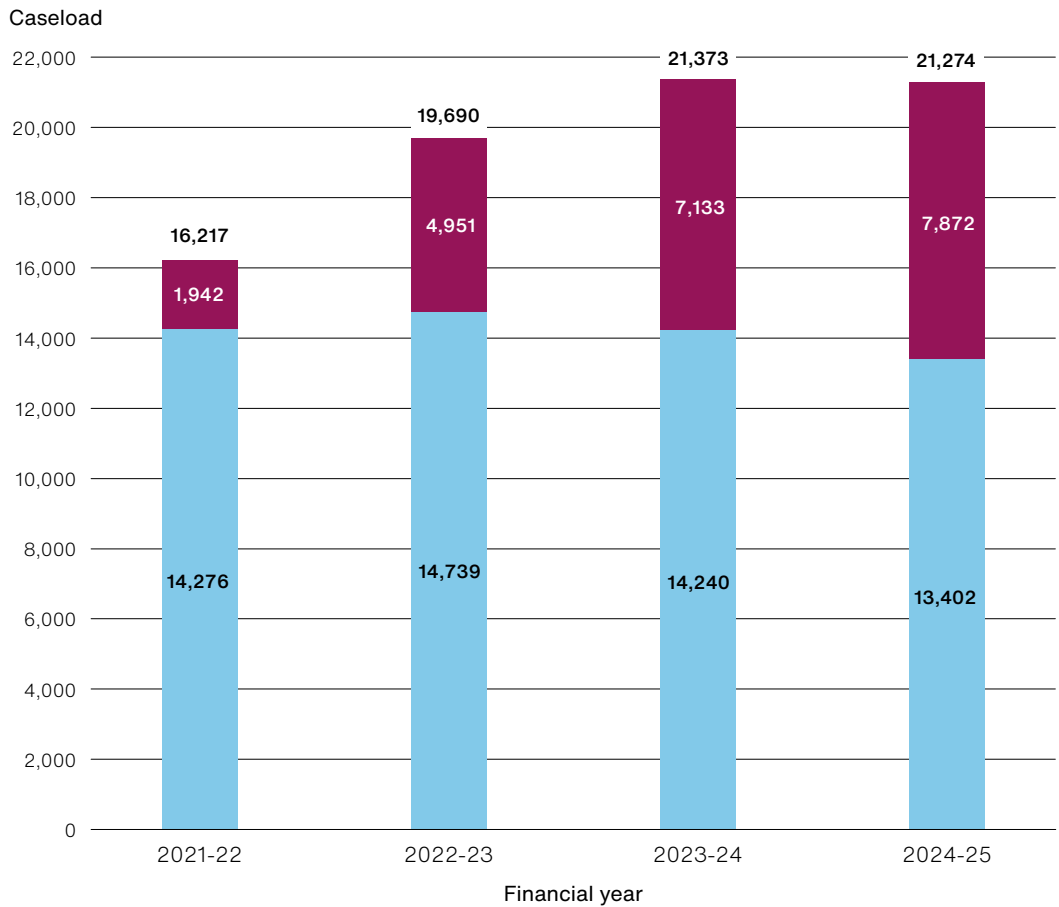
Area of weakness	Commitments
Unrealistic timeframes and optimism bias	HMPPS has: <ul style="list-style-type: none"> <li>● reviewed the timescale for both expansion and integration with external stakeholders, building in contingency, but has not developed ranges to better reflect the boundaries of possible cost and schedule outcomes in line with good practice.</li> </ul>
Lack of scrutiny and challenge	HMPPS has: <ul style="list-style-type: none"> <li>● established a new governance structure that includes internal and external oversight of the programme and enables independent assurance reviews; and</li> <li>● outlined an escalation framework with specified tolerance thresholds for time, cost and quality to inform when matters should be reported.</li> </ul>
Poor commercial relationships	HMPPS has: <ul style="list-style-type: none"> <li>● outlined plans to facilitate joint access to shared information and documents;</li> <li>● decided to create a programme board with suppliers where issues can be raised and discussed; and</li> <li>● committed to greater flexibility in future contracts.</li> </ul>
Problems developing novel technology	HMPPS has: <ul style="list-style-type: none"> <li>● committed to pursue tried and tested technology where available rather than developing bespoke systems; and</li> <li>● pledged to use the innovation fund to stimulate the market into developing new electronic monitoring technologies.</li> </ul>

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

**Figure 19**

HM Prison & Probation Service's (HMPPS's) forecast tagging caseloads, 2021-22 to 2024-25

HMPPS forecasts nearly 8,000 additional offenders on tag through its expansion initiatives by 2024-25 in its March 2022 business case, reaching a peak caseload of more than 21,000



■ Expansion caseload

■ Baseline caseload

**Notes**

- 1 HMPPS's baseline forecasts comprise offenders monitored through curfew, location and alcohol orders.
- 2 HMPPS's expansion forecasts comprise offenders monitored through existing and forthcoming initiatives, including acquisitive crime and domestic violence pilots. It excludes additional caseloads through its Home Office Immigration Enforcement project.
- 3 HMPPS presented this data in its March 2022 business case based on analysis from June 2021 and revisions in January 2022. Actual caseloads for 2021-22 are lower than these forecasts.
- 4 We did not audit HMPPS's analysis. It is currently updating its projections.

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

# Appendix One

## Our audit approach

**1** This report builds on our 2017 report *The new generation electronic monitoring programme*. In 2017, HM Prison & Probation Service (HMPPS) revised its strategic objectives for its electronic monitoring (tagging) transformation programme (examined in Parts One and Two). Since 2020, HMPPS has been developing its plans for expanding tagging services (examined in Part Four).

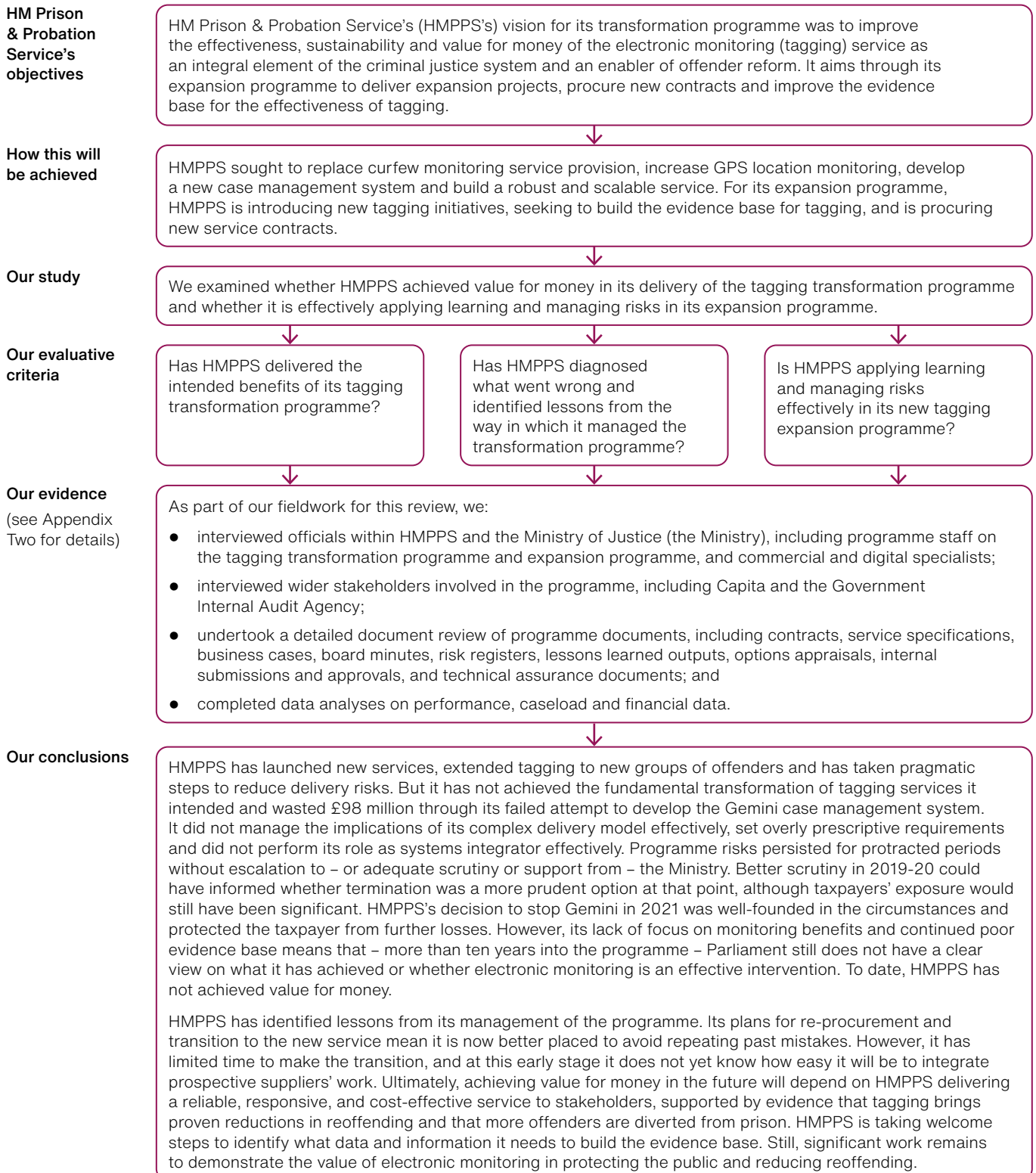
**2** We decided to undertake a value-for-money study on tagging in May 2021 following HMPPS's decision to suspend development of its new case management system ('Gemini') and user portal. This provided an opportunity for us to examine the causes, and explain the consequences, of the failure of these projects. In addition, due to the long duration of HMPPS's transformation programme and its planned closure in March 2022, this provided a timely opportunity to examine what benefits HMPPS has delivered and its progress in evaluating the effectiveness of tagging. We therefore examined whether HMPPS:

- delivered the intended benefits of its tagging transformation programme;
- diagnosed what went wrong and identified lessons from the way in which it managed the transformation programme; and
- is applying learning and managing risks effectively in its new tagging expansion programme.

**3** Our audit approach is summarised in **Figure 20**. Our evidence base is described in Appendix Two.

**Figure 20**

## Our audit approach



# Appendix Two

## Our evidence base

1 We reached independent conclusions on whether HM Prison & Probation Service (HMPPS) has achieved value for money in its management of the electronic monitoring (tagging) transformation programme. We also determined whether it is applying learning and managing risks effectively in its plans for expanding tagging services. We did so based on analysis of evidence collated between May 2021 and February 2022. Our audit approach is outlined in Appendix One.

### Our approach

2 Throughout our work, we drew on internal expertise, our previous reports and good practice guidance across digital, commercial and major project domains of government service delivery. We drew extensively on published outputs to inform our audit questions and findings.<sup>12</sup>

3 We focused mainly on the period from February 2017, when HMPPS finalised its Full Business Case for the tagging transformation programme, to March 2022, when the transformation programme closed. Our main methods were document review, interviews, data analysis and financial analysis.

### Document review

4 During our fieldwork, we reviewed a wide range of documents across both programmes. This includes, but is not limited to, the following:

- HMPPS's 2017 and 2020 Full Business Cases for the transformation programme and Programme Business Cases for the expansion programme;
- programme board minutes from HMPPS's main decision-making authority – the Electronic Monitoring Authority Portfolio Board and selected board papers;
- outputs of the transformation programme's regular reporting, including risk registers and risk tracking outputs;

<sup>12</sup> Comptroller and Auditor General, *The new generation electronic monitoring programme*, Session 2017–2019, HC 242, National Audit Office, July 2017; Comptroller and Auditor General, *Challenges in using data across government*, Session 2017–2019, HC 2220, National Audit Office, June 2019; Comptroller and Auditor General, *Lessons learned from Major Programmes*, Session 2019–2021, HC 960, National Audit Office, November 2020; National Audit Office, *Framework to review programmes update April 2021*, April 2021; Comptroller and Auditor General, *The challenges in implementing digital change*, Session 2021–22, HC 575, National Audit Office, July 2021; National Audit Office, *Good practice guidance: managing the commercial lifecycle*, July 2021

- electronic monitoring project and pilot evaluation reports, such as the published GPS location monitoring pilots and unpublished acquisitive crime pathfinder report;
- caseload data and documentation for various electronic monitoring projects and tagging types;
- documents related to the Gemini case management system and user portal projects, including contracts, service specifications, delivery plans, outputs of internal and externally commissioned testing assurance work, and correspondence between HMPPS and Capita;
- external reviews by the Infrastructure and Projects Authority, Government Internal Audit Agency, HMPPS's Audit and Risk Committee, HM Inspectorate of Probation and HMPPS-commissioned specialist reviews; and
- documents setting out HMPPS's approach to benefits management such as benefit trackers and relevant strategies.

## **Interviews**

**5** We held semi-structured interviews with key parties involved with the delivery of the electronic monitoring service. These included:

- HMPPS – current and past members of the transformation and expansion programme teams, and the current senior responsible owner (SRO) for the electronic monitoring service;
- Ministry of Justice – leadership within the Ministry of Digital & Technology and Commercial functions;
- Home Office – the Satellite Tracking Services Programme team, who work with HMPPS in the Home Office Immigration Enforcement tagging expansion project; and
- Capita – the field and monitoring services contractor under the transformation programme.

## **Data analysis**

**6** We analysed two main sources of data:

- HMPPS case data to set out the trends in the number of people tagged over time.
- Programme risk and issues reporting to review the pattern and frequency of common risks.

## Financial analysis

**7** For financial data presented in this report between 2011-12 and 2020-21, we relied on the assurance obtained through our financial audit of HMPPS's 2020-21 accounts. In particular, in testing HMPPS's calculation of its disclosed losses, we concluded that:

- there was no indication of possible management bias in selecting the method to calculate losses;
- HMPPS's approach to identifying relevant costs was appropriate;
- we have previously audited expenditure in previous years; and
- HMPPS's assumptions on historical investment which provided ongoing value were appropriate and supported by documentary evidence.

**8** We have less assurance on financial data presented in this report relating to 2021-22. HMPPS provided financial data for this period in late April and we incorporated this into our report shortly after. We have not yet audited HMPPS's 2021-22 accounts, so the final financial outturn for the live tagging service and transformation programme is subject to change. However, we did perform some validation work on the 2021-22 financial data, including comparing outputs with data from previous years to ensure all cost categories in the programme had been provided.



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