

LEDS Open Space:

Home Office Biometrics (HOB) Programme introduction to Open Space [v1.0, 22/11/18]

Discussion Document

This document has been written with the aim of stimulating discussion on the impact of the Home Office Biometrics (HOB) Programme's introduction to Open Space. The key issues of the paper are to:

- Provide Open Space participants with an introduction to the full scope of the HOB Programme, what is being delivered and what is not in the current scope but could be in the future
- Enable the Open Space participants to identify the opportunities where they would want to offer their input to the HOB Programme

It is not intended to be viewed as current Home Office policy or intention. It is to be circulated to and viewed only by members of the LEDS Open Space.

Purpose

The purpose of this paper is to provide an introduction to Open Space participants of the Home Office Biometrics (HOB) Programme; to outline the main projects within the programme; and to provide high level details of the HOB projects that will enable Open Space participants to identify potential areas of future discussion

This paper will be discussed within the LEADS Open Space on 5th December 2018 and will aim to:

- Provide Open Space participants with an introduction to the full scope of the HOB Programme, what is being delivered and what is not in the current scope but could be in the future
- Enable the Open Space participants to identify the opportunities where they would want to offer their input to the HOB Programme, and develop an agreed process for participants to do so

Summary

While HOB is working with the LEADS to deliver a new algorithm for facial matching (included in the programme details below), other than in this area, the programmes are separate in the capabilities that they are implementing for law enforcement. Nevertheless, HOB sees the LEADS Open Space as an important opportunity to build a broad engagement approach as potential new biometric capabilities open up to be explored. It is also intended, as a further benefit to all participants, that by opening up the scope of the LEADS Open Space rather than seeking to create a separate HOB process, we can offer participants full engagement across the programmes without over stretching their capacity to be involved.

The HOB Programme has a responsibility to provide biometrics related services to a wide range of Home Office and government users. This is currently Departments and agencies involved in immigration and law enforcement and the full list is outlined below.

Fundamental to providing these services will be a flexible and comprehensive biometric IT platform that will support different user groups, data sets, biometric modalities and stakeholder requirements.

There are a number of IT systems already in scope in the HOB Programme that provide such biometric services, but they do so in a siloed way:

- IDENT1 (Law Enforcement and Security Biometrics System)
- Immigration and Asylum Biometrics System (IABS)
- National DNA Database (NDNAD)

HOB is transforming the way it delivers biometric capabilities by moving to a modernised, common platform, supported by a new commercial structure. The current biometric capabilities are delivered through old and siloed systems for fingerprints and face which are now technically complex and expensive to run.

The new common platform, delivered through series of phased projects under separate commercial contracts, will offer greater flexibility in how biometrics capabilities are delivered, both commercially and technically, to support identification services, crime scene investigation, visa applications, passport applications, border control and counter-terrorism (for Immigration, Borders, Passports and Law Enforcement).

What this does not mean is that the transformation underway in HOB will combine all data into one giant database. While all the collections of data will be physically in one system they will be logically separated with role-based access controls (RBAC) allowing user access only to the data and activities they are permitted to access.

HOB is also building the replacement DNA database, but this is unlikely to move onto the strategic biometric platform in the lifetime of the programme.

Key questions posed by this paper

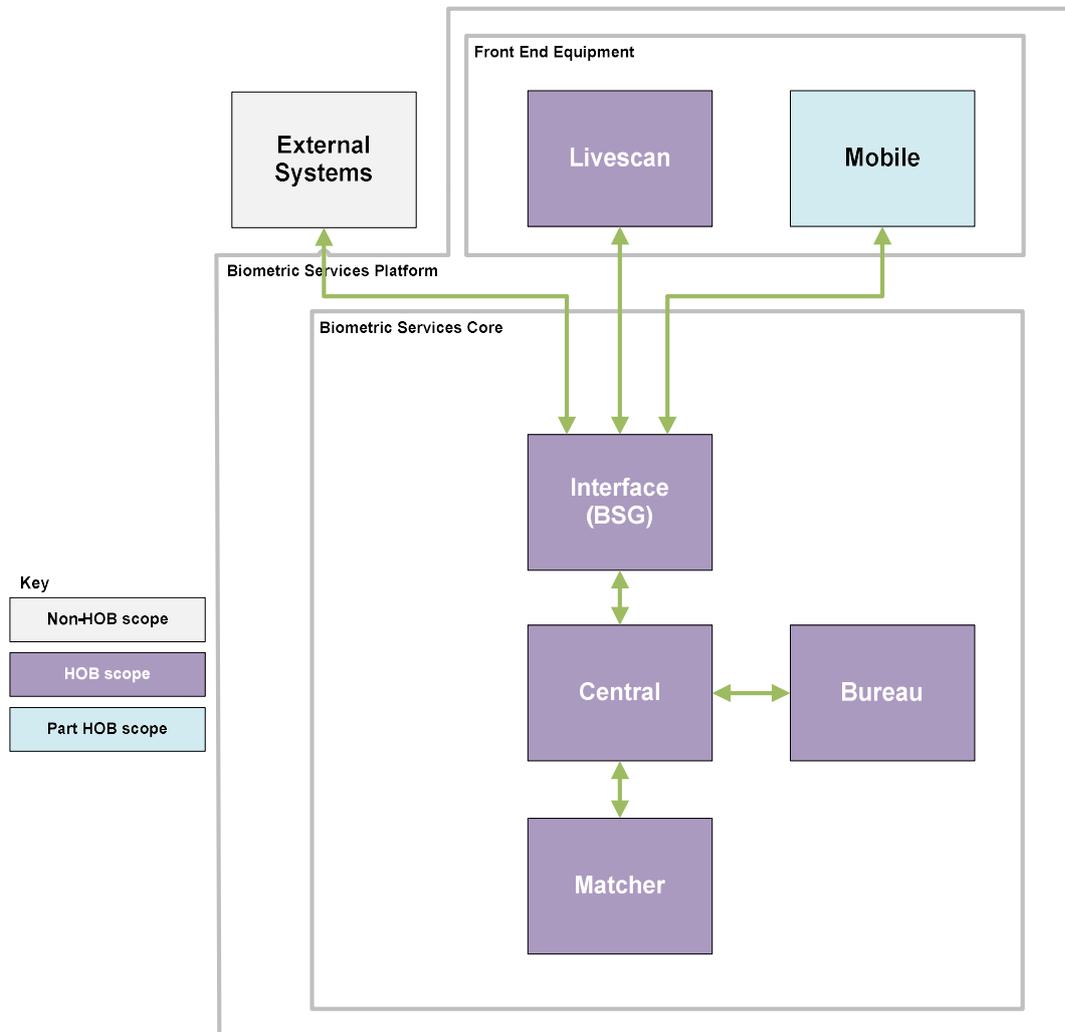
- Are Open Space participants clear about the HOB Programme and the scope of the biometric developments within the programme?
- Do participants also agree to the proposed introduction of the HOB Programme to Open Space?
- What areas of the HOB Programme do Open Space participants want to explore further at the next session in February?

Home Office Biometrics (HOB) Programme introduction to Open Space

1. The HOB Programme has a responsibility to provide biometrics related services to a wide range of Home Office and government users. This is currently Departments and agencies involved in immigration and law enforcement and the full list is outlined below.
2. Fundamental to providing these services will be a flexible and comprehensive biometric IT platform that will support different user groups, data sets, biometric modalities and stakeholder requirements.
3. There are a number of IT systems already in scope in the HOB Programme that provide such biometric services, but they do so in a siloed way:
 - **IDENT1 (Law Enforcement and Security Biometrics System)** – provides biometric enrolment, identification and identity management services within the law enforcement domain, principally for arrestees in the UK, but also covering other specialist data sets.
 - **Immigration and Asylum Biometrics System (IABS)** – provides biometric enrolment, identification, identity management and verification services within the immigration and citizenship domains. E.g. for visa applicants to the UK, biometric residency permit applicants, asylum applicants and passport applicants.
 - **National DNA Database (NDNAD)** – the NDNAD holds DNA profiles of subjects in criminal cases, some of whom have not been convicted of a crime and profiles of victims, as well as marks from crime scenes. The database also holds DNA profiles of vulnerable persons who fear they may be victims of a crime; volunteers who may be vulnerable to attack themselves if their details become known to the wider public; and police officers for elimination purposes. The missing persons and the contamination elimination databases are currently held on a different infrastructure. However, it is planned that the strategic DNA Service will store all data in a single database made up of multiple, logically separated collections.
4. HOB is transforming the way it delivers biometric capabilities by moving to a modernised, common platform, supported by a new commercial structure. The current biometric capabilities are delivered through old and siloed systems for fingerprints and face which are now technically complex and expensive to run. The new common platform, delivered through series of phased projects under separate commercial contracts, will offer greater flexibility in how biometrics capabilities are delivered, both commercially and technically, to support identification services, crime scene investigation, visa applications, passport applications, border control and counter-terrorism (for Immigration, Borders, Passports and Law Enforcement).
5. What this does not mean is that the transformation underway through the HOB Programme will be combining all data into one mega-database. While all the collections of data will be physically in one system, they will be logically separated with role-based access controls (RBAC) allowing user access only to the data and activities they are permitted to access.
6. HOB is also building the replacement DNA database, but this is unlikely to move onto the strategic biometric platform in the lifetime of the programme.

HOB Programme in detail

7. The Biometric Services Core, Front End Equipment and sub-system elements that make up the HOB Programme are shown in the diagram below.



8. External organisations who link to HOB systems through the Biometrics Service Gateway (BSG) are listed below:

8.1. At a high level **IABS** connects to:

- Foreign & Commonwealth Office Services (FCOS) and supporting UK Visas & Immigration (UKVI) services - visas etc.
- Home Office Immigration; Border Force, UKVI & Immigration, Compliance & Engagement (ICE)
- Immigration Platform Technologies (for Biometric Resident Permits)
- HM Passport Office
- Policing
- International Data Sharing Capability (IDSC)
- EURODAC
- IVACs (Irish Visas).

8.2. **IDENT1** Standard Bureau Services cover:

- All police forces in England, Wales, Northern Ireland & Scotland
- Specialist bureaux within law enforcement and government agencies including:
 - National Fingerprint Office (NFO)
 - Counter Terrorist Forensic Service (CTFS),
 - International Law Enforcement (via requests made to the National Crime Agency)
 - Ministry of Defence (MoD)
 - National Crime Agency (NCA)
 - HM Revenue & Customs (HMRC)
 - IDENT1 Training Suites
- Government agencies and Crown dependencies which do not have their own bureau have made arrangements to use a specific force's bureau. These include:
 - Department for Work & Pensions (DWP)
 - Royal Mail Investigations
 - RAF Police
 - Isle of Man
 - Jersey
 - Guernsey

8.3. Connectivity with IABS:

- IDENT1 (now provided via the Biometric Services Gateway)
 - UKVI
 - All police forces

8.4. Other organisations which have access to IDENT1

- ACRO Criminal Records Office

9. The projects within the scope of the HOB Programme are as follows:

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| Biometric Services Gateway (BSG) | <p>The universal 'front door' to HOB services:</p> <ul style="list-style-type: none"> • Reduces the complexity of the IT environment by introducing standards and common formats. • Reduces the future cost of integration between HOB and other systems/services. • Reduces ongoing run costs and increases system robustness, resilience and security of data. |
| Strategic Matcher | <ul style="list-style-type: none"> • Will provide a Biometric Matching Service delivering biometric search, identification and verification capabilities across multiple biometric modalities (initially fingerprints and face) and for multiple data sets (immigration, citizenship, law enforcement, etc). • The first algorithm will be a new matching capability for law enforcement for fingerprints which will enhance that capability, making matching faster and more accurate. |

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| | <ul style="list-style-type: none"> • The service has been procured and contracts awarded. The new system will be live in late spring 2019. |
| Strategic Central & Bureau Project | <ul style="list-style-type: none"> • Creation of a new HOB central platform which is at the heart of the strategic Biometric Service. This Central platform is the location of the key biometric data stores and also workflow which orchestrates all the other sub-systems. • While all the collections of data will be physically in one system they will however be logically separated with role-based access controls (RBAC) allowing user access only to the data and activities they are permitted to access. • The bureau platform is part of the same project and provides a platform onto which the bureau tools and applications will be deployed. • There is an active procurement underway for the SCBP |
| Strategic Mobile | <ul style="list-style-type: none"> • Enabling Police and Immigration to access Law Enforcement and Immigration biometric services from mobile devices as a data service consumed within operational mobile applications. • This marks a new approach for HOB as, instead of HOB providing the devices, Police Forces determine which mobile device to use. Forces may put the apps onto existing, work issued mobile devices. There is also the need to have a biometric peripheral for capturing the prints – this is a small device that attaches to the phone in order to take the scan of the index fingerprints from the individual. • Strategic Mobile began to roll out in February 2018 |
| Strategic DNA | <ul style="list-style-type: none"> • This project, to be delivered in 2019, will provide a secure, accredited and legislatively compliant profile storage, search and matching facility to replace the existing database. It will maintain current capabilities and the functionality available to the user today. • The solution will also deliver full, end-to-end automation for routine transactions, ensuring a more responsive service and delivering business efficiency. • The Strategic DNA project will also improve resilience of the platform and, in addition to future-proofing the solution, will provide a flexibility that supports customer process change, with a data model and components that are customisable. |

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| | <ul style="list-style-type: none"> The new system is unlikely to move onto the strategic biometric platform in the lifetime of the programme. |
| International data sharing | <ul style="list-style-type: none"> HOB is delivering part of the UK's commitments to the Prüm Council Decisions, specifically Prüm Fingerprints – sharing fingerprint records with EU nations for the purpose of law enforcement and counter terrorism. Prüm DNA, which will see DNA records shared with EU partners, is being delivered in partnership with the Metropolitan Police Service, adapting and reusing the solution which has been piloted. |
| Strategic Facial Matching for Law Enforcement | <ul style="list-style-type: none"> HOB is working with the NLED Programme on the SFMLE Project which will deliver a new algorithm for facial matching |

HOB approach to privacy and ethics

10. From an early stage HOB recognised the importance of maximising public safety and efficiency of delivery to the public sector whilst protecting the privacy of the individual and addressing any potential impact of data aggregation. HOB made a commitment to undertake a programme Privacy Impact Assessment (PIA), consisting of a suite of individual PIAs for each project as well as an overarching programme level PIA in the Home Office Biometrics Business Case. This commitment is also repeated in the Home Office Biometrics Strategy.
11. HOB recognises that there are significant ethical issues to consider in the collection and use of biometric information. At the request of HOB, in 2016 the independent Biometric and Forensic Ethics Group established a working group to provide robust ethical and privacy advice and challenge on each HOB project PIA.
12. Approved HOB PIA documents were published in July 2018 on the GOV.UK website. The published documents were:
 - HOB Overarching PIA (including the PIA Screening Questionnaire and legislative summaries)
 - Strategic Mobile PIA
 - Biometric Services Gateway PIA
 - Strategic Matcher PIA
 - Latent mark searches on immigration data PIA
13. The published PIAs are live documents and they will be reviewed and updated on an annual basis and by exception where required.
14. Now that the Data Protection Act 2018 has come into force, the HOB Programme PIA and existing project PIAs (which have been developed and approved under the 1998 Act as the programme has been in existence since 2014) will be reviewed on a rolling

schedule. All PIAs for capabilities going live after the new Act came into force on 25 May 2018, will be upgraded to the new Data Protection Impact Assessment (DPIA) before the go live date of the project and assessed against the new data protection principles. Any new developments and projects will be assessed using the DPIA template from the outset.

15. The DPIAs that are currently under development are:

- Strategic Mobile for Immigration Enforcement (approved by the HO DPO)
- Livescan Prison Pilot
- SCBP Project
- Strategic Facial Matching for Law Enforcement
- EU Exit
- DNA
- Prüm

16. Despite being a predominantly technology based programme, HOB has already looked beyond the standard privacy assessment to conduct due diligence on potential privacy or ethical risks when a capability is operationalised. For example, HOB worked with policing and Immigration Enforcement on the Strategic Mobile capability to develop operational guidance instructions for appropriate deployment of the technology and led discussions which resulted in a National Police Chief Council instruction to police to recommend Community Impact Assessments prior to roll out.

Future Open Space engagement with HOB

We acknowledge some of the questions that Open Space participants may be asking are:

- Why is the HOB Programme engaging with civil society groups now?
- Some of the Programme has already been delivered without input from the civil society groups
- If the procurement of the replacement system contracts is already launched how can the civil society groups influence the design?
- HOB has already published the HOB privacy impact assessments so what is left to comment on?
- HOB is a technological programme, but how can the policy behind future biometric uses be influenced?

However, HOB sees Open Space as a key forum where, now that the old biometric technology is being replaced, a broad engagement approach can develop as potential new biometric capabilities open up to be explored. This approach may include discussions on, but not be limited to:

- How future biometric data sets are collected, stored and used
- The future governance of biometric data to ensure appropriate oversight is maintained
- Performance of the biometric algorithms and the match results that they delivering to operations
- An awareness and input into future developments and design of biometric capabilities