

CYBERSECURITY GAP ANALYSIS REPORT - LONDON BOROUGH OF HAMMERSMITH & FULHAM COUNCIL

By Ayman Boucheneb

Contents

Organisation Type	2
Business activities	2
Critical assets (London Borough of Hammersmith & Fulham, 2024):.....	2
In-scope systems	2
Out of scope	3
Findings	3
Data Protection	3
Access Control	3
Data Management	6
Surveillance	7
Organisational Procedures	8
Conclusion	8
References	10

Organisation Type

H&F council is a London council that provides public services to residents, businesses and visitors (London Borough of Hammersmith & Fulham, 2023).

Business activities

- Building affordable homes to ensure residents have accommodation (London Borough of Hammersmith & Fulham, 2022).
- Enhancing civil life by helping residents to improve their own neighbourhoods (London Borough of Hammersmith & Fulham, 2025a).
- Reforming services to enable cutting costs without affecting quality and to manage finances with stability (London Borough of Hammersmith & Fulham, 2015).
- Improving natural environment by increasing wildlife and recycling, and lowering air pollution (www.lbhf.gov.uk, n.d.).
- Economic development by attracting investment, creating jobs and fostering innovation (London Borough of Hammersmith & Fulham, 2025b).

Critical assets (London Borough of Hammersmith & Fulham, 2024):

Data is given by residents and other H&F service areas, suppliers and partners

1. Name and contact details – email addresses, telephone numbers
2. Work role, working location, delivery addresses
3. IP addresses and user credentials – user IDs, passwords, inventory asset numbers
4. Biometric data – fingerprints, facial recognition
5. Health data
6. Bank account details

In-scope systems

- H&F's public council website – used by the council to directly communicate information to the users about updates
- H&F "My Account" portal – handles personal information of the resident within the council's geographical boundaries
- H&F's Online forms – see what data is gathered by the council in a form, and why it is gathered
- H&F staff – email staff about how their security systems work, and see what responses they give

Out of scope

- Social Media accounts – behave as a PR channel and are not responsible for handling data
- Internal H&F technology systems – staff-only access, not accessible as a university student

Findings

Data Protection

Training Staff to handle data safely

On H&F's page titled "H&F Privacy Notice", the council mentions that it trains its staff so "they're aware how to safely handle information" (London Borough of Hammersmith & Fulham, 2025c). This also carries the risk of human error if the training is not followed correctly. However, the council is following procedures by training its staff to ensure that the data stored is kept safe from cyber risks. The council doesn't specify the type of staff preparation it provides, meaning it is unclear how the staff are trained. To fill this gap, the council should specify the type of awareness practice provided to ensure it follows the procedures for keeping data safe.

Testing Systems and procedures.

On the same page, H&F also mention that they regularly test their IT systems and procedures. This is done to reduce vulnerabilities. This results in no gaps for the council to fill, allowing them to follow procedures correctly. Regular testing by the council ensures that policies and frameworks are being implemented and that any potential risks are identified and addressed. H&F must continue this practice always to mitigate potential cyber risks and comply with the procedures.

Access Control

Logging In Attempts & Verification

Log in

The screenshot shows a login form with two input fields: "Registered email address" containing "aymanboucheneb@gmail.c0m" and "Password" containing masked characters. Below the fields are three red buttons: "Log in", "Register", and "Cancel". A blue link "Forgotten your password?" is located below the "Log in" button.

Log in

The screenshot shows the same login form as the previous one, but with an error message at the top: "You could not be logged in. Please check your username and password." in red text. The input fields are empty. Below the fields are three red buttons: "Log in", "Register", and "Cancel". A blue link "Forgotten your password?" is located below the "Log in" button.

Photo 1: Attempting to log in with an incorrect email address, which resulted in an unsuccessful attempt to enter with unauthorised access

My Account

You are logged in to your online account.

Council tax and benefits accounts

To access your council tax or benefits accounts in the new service you just need to add your account via the [My Services Dashboard](#) and follow the links to add a service. You will need to do this even if you already manage your council tax or benefits account online in the old system.

[View and manage your council tax or benefits account](#)

Parking permits

The old permit system has been replaced. You can now manage and apply for parking permits online by creating a separate account (**not part of My Account**) using the link below.

[Parking permits portal](#)

For help using this new portal please visit our [parking permit help page](#).

Photo 2: View of the portal when logged in

When logging into your account through the personal portal, please ensure you enter the correct email address and password. If at least one of them isn't accurate, then access is denied. Else if both are correct, you enter the portal. The password is the only factor required to log in and access the portal, which is a gap in authorised access to the portal that contains personal information of residents within the borough, such as tax records and parking permits, which can reveal the resident's address. To improve the security of the residents' accounts, H&F should implement an extra step of verification that prevents an unauthorised user from logging in, such as "Enter the code sent to email" or entering a "Secret Answer" to a question the authorised user would know.

Timeout while filling in a form

Am I registered to vote in Hammersmith & Fulham?

[About this form](#)

If you want to check if you are registered to vote in Hammersmith & Fulham, you can fill in this form.


For security reasons, if there is no activity on this site for 40 minutes you will be logged out, and your form will not be saved.

Photo 3: Warned that I will be logged off if I am inactive for 40 minutes before checking my registration status to vote.

Before I fill out the form so H&F can verify if I am registered to vote, I am warned that I will be logged off if I am inactive for 40 minutes while the form is open. While this is a good practice because having an active session can result in someone else having unauthorised access to it if spotted, 40 minutes is too long. H&F should implement a shorter timeout, such as 25-30 minutes, because it decreases the chances of someone having unauthorised access to an active session. It alerts the user even more that they should return as soon as possible because they have less time to allow themselves to be inactive.

Filling in personal data in form to check voter registration in portal

Am I registered to vote in Hammersmith & Fulham?

About this form Your details 

Title
Select...

First name *

Last name *

Telephone number *

Email address *

Enter a postcode or street to find your address in Hammersmith & Fulham. *

Choose address *
Select...

No matching addresses found

Date you moved to your current address *

Have you moved since last September? *
☐ Yes ☐ No

☐ I confirm that I am the person named in this form and am not attempting to access this electoral role information unlawfully.

[< Previous](#) [Cancel](#) [Submit](#)

Photo 4: Warned that I will be logged off if I am inactive for 40 minutes before checking my registration status to vote.

H&F council requests personal information as displayed in Photo 4 above. This information is used to confirm whether you are registered to vote within the borough. An email was sent in response to confirm that I was registered at the address I provided when completing the form.



Photo 5: Warned that I will be logged off if I am inactive for 40 minutes before checking my registration status to vote.

The email confirmed that I was registered at the home address I entered and provided me with my elector number. This shows that H&F used the records they collected about me from the critical assets they store, such as my email address, name & delivery address. This is good practice because it ensures that my records are up to date, which complies with the Data Protection Act 2018. H&F is also attempting to ensure this by conducting annual

canvases to update household data in the event of any changes (London Borough of Hammersmith & Fulham, 2025d).

Viewing the rateable values of a property in the portal

Rateable Values Search

Please enter either a postcode or an address *

Enter postcode

SW66SN

(e.g. DT4 8TA)

Rateable Values Search Results

Search result on postcode 'SW66SN' is as follows:

Address	Rateable Value	Gross Charge
FULHAM CROSS ACADEMY, KINGWOOD ROAD, LONDON, SW6 6SN	239000	£137425.00

Photo 6: 2 screenshots containing the postcode of the property(above), and the result of the search consisting of the property and its value(below)

On the personal H&F portal, you can search for the rateable value by entering the postcode or address of the place. Although you can research data about property that doesn't belong to you, it is by UK law that properties should have their rateable value disclosed to the public (GOV.UK, 2025)

Data Management

Data collected by the council & reasoning

On the council's "Digital services privacy notice" page, a list of personal information gathered by H&F about residents is provided. This includes data such as name, work role, IP addresses, biometric data & bank account details. The reasons for this are communicated later, for example, to provide an accessible IT platform so workers can perform their jobs & monitor potential abuses of H&F's policies. It should maintain this standard, as informing residents about how their data is used is a requirement under the Data Protection Act 2018 (UK Government, 2025). Individuals also have a right to know what data is collected, according to the UK GDPR law (Information Commissioner's Office, 2023).

Cookies

The H&F website uses cookies to collect information on how sites are used and compile it into a report. The cookies collect statistics in an anonymous form and do not contain personal data (London Borough of Hammersmith & Fulham, 2025e). There are no security concerns related to this, as H&F notifies users about how cookies are used on their web pages.

Annual Request for Information

The Resident Experience Team manages **FOIA, EIR & SAR** to ensure compliance with legal requirements. The Information Management Team ensures the borough's compliance with **FOIA 2000, EIR 2004 & Data Protection Act 2018** (London Borough of Hammersmith & Fulham Annual Request for Information Report 2024-2025, n.d.). This team structures show H&F's commitment to always following the necessary procedures and laws. This also carries the risk of a threat from an insider, who may choose to abuse their position. The council must maintain its current team structure and implement very rigorous checks for each user within its network to mitigate the potential risk that a threat actor may carry.

Freedom of Information Act (FOIA)	Creates the right to access information recorded by UK public authorities.
Environmental Information Regulations (EIR)	Provide public access to environmental information held by public authorities.
Subject Access Requests (SAR)	Law that defines the process for a request for access to data
Data Protection Act 2018	Law that governs how personal data is managed by organisations & authorities

Surveillance

H&F operates a CCTV control room with roughly 1,850 cameras across the borough, which is monitored continuously (London Borough of Hammersmith & Fulham, 2025f). While this is done to ensure lower crime rates, it raises privacy concerns due to 24/7 surveillance, which may be perceived as a privacy intrusion into residents' activities. The council doesn't mention a backup plan for the CCTV system in case it shuts down. To address these issues, H&F should strike a balance between transparency and privacy safeguards and ensure that a documented backup system is in place.

Organisational Procedures

Information Request – Staff Access & Security Controls at H&F Council

Ayman Boucheneb <aymanbouch... Mon 29 Sept, 11:25 (4 days ago) ☆ 😊 ↩ ⋮
to press.office@lbhf.gov.uk ▼

Dear H&F Council,

I am currently working on a project on cybersecurity frameworks and how they are implemented in public sector organisations. Currently in my research, I am looking into the physical and digital access controls in place for staff.

Could you please clarify:

- Physical Access – How staff are authenticated when entering council offices (e.g., staff ID cards, fobs, biometric systems).
- System Access –
 - What authentication methods are used for staff logins within the network?
 - Whether multi-factor authentication is required for remote or sensitive system access.
 - Are staff are allowed to use their personal email accounts for work purposes?
 - Whether there are published policies for staff on password usage, account security, and device protection.

Your response will be only be used for academic purposes and will be summarised in high-level, non-sensitive terms within my report.

Thank you for your time and assistance

Kind regards,
Ayman Boucheneb

Photo 7: Email I sent to H&F council about physical staff access and remote network access

To obtain actual information within the council regarding how their operations function, I sent them an email. I asked about how their physical access procedures work to ensure only authenticated staff have the necessary access they should have. Alongside this, I asked about what policies they implement within their network system. Unfortunately, I haven't received a response from the council, meaning these practices cannot be analysed and evaluated.

Conclusion

Using frameworks such as NCSF's Cyber Assessment Framework and ISO 27001, the London borough of Hammersmith & Fulham Council's procedures were examined to analyse how the council manages its data security operations.

Overall, the council does an exceptional job of complying with legal laws, such as the Data Protection Act 2018, to ensure that data is protected from risks and used wisely when necessary. It also clearly communicates this to the borough's users and residents. The team structure is also well-implemented as it has different teams responsible for their own roles, and staff are trained to maintain the safety of the data.

Despite these great processes, they do carry the slight risk of a threat actor, which the council should strictly monitor the actions of staff within the software network. There are also several weaknesses in authorised access to the portal. There are not enough verification steps to ensure authorised logins, alongside a shorter timeout notice to decrease the

chances of an active portal activity being caught. The final risk is constant surveillance, which compromises privacy, and there is no mention of a backup system.

To conclude, the council has implemented effective measures for managing data securely by following the framework and the law. Alongside ensuring staff members perform the tasks they are required to. However, there is still work to be done to improve security and ensure equal access to users' portal accounts, alongside the maintenance of its surveillance systems.

References

- London Borough of Hammersmith & Fulham. (2023). *About Hammersmith & Fulham Council*. [online] Available at: <https://www.lbhf.gov.uk/councillors-and-democracy/about-hammersmith-fulham-council> [Accessed 22 Sept. 2025].
- London Borough of Hammersmith & Fulham. (2022). *Building homes and communities*. [online] Available at: <https://www.lbhf.gov.uk/housing/building-homes-and-communities> [Accessed 15 Sep. 2025].
- London Borough of Hammersmith & Fulham. (2025a). *Doing things with residents, not to them*. [online] Available at: <https://www.lbhf.gov.uk/councillors-and-democracy/about-hammersmith-fulham-council/doing-things-residents-not-them> [Accessed 15 Sep. 2025].
- London Borough of Hammersmith & Fulham. (2015). *Being ruthlessly financially efficient*. [online] Available at: <https://www.lbhf.gov.uk/councillors-and-democracy/about-hammersmith-fulham-council/being-ruthlessly-financially-efficient> [Accessed 15 Sep. 2025].
- www.lbhf.gov.uk. (n.d.). *Climate and ecological emergency | London Borough of Hammersmith & Fulham*. [online] Available at: <https://www.lbhf.gov.uk/environment/climate-and-ecological-emergency> [Accessed 15 Sep. 2025].
- London Borough of Hammersmith & Fulham. (2025b). *Upstream London*. [online] Available at: <https://www.lbhf.gov.uk/upstream-london> [Accessed 15 Sep. 2025].
- London Borough of Hammersmith & Fulham. (2024). *Digital services privacy notice*. [online] Available at: <https://www.lbhf.gov.uk/councillors-and-democracy/data-and-information/hf-privacy-notice/digital-services-privacy-notice> [Accessed 15 Sep. 2025].
- *H&F Privacy notice (2025c) London Borough of Hammersmith & Fulham*. Available at: <https://www.lbhf.gov.uk/councillors-and-democracy/data-and-information/hf-privacy-notice> [Accessed: 25 Sep. 2025].
- London Borough of Hammersmith & Fulham. (2025d). *Annual registration canvass*. [online] Available at: <https://www.lbhf.gov.uk/councillors-and-democracy/elections/annual-registration-canvass> [Accessed 29 Sep. 2025].
- GOV.UK (2025). *Find a business rates valuation*. [online] GOV.UK. Available at: <https://www.gov.uk/find-business-rates> [Accessed: 03 Oct. 2025].
- UK Government (2025). *Data Protection Act*. [online] Gov.uk. Available at: <https://www.gov.uk/data-protection> [Accessed: 25 Sep. 2025].
- Information Commissioner's Office (2023). *Right to be informed*. [online] ico.org.uk. Available at: <https://ico.org.uk/for-organisations/uk-gdpr-guidance-and-resources/individual-rights/individual-rights/right-to-be-informed/> [Accessed: 03 Oct. 2025].
- London Borough of Hammersmith & Fulham. (2025e). *Cookies and IP addresses*. [online] Available at: <https://www.lbhf.gov.uk/councillors-and-democracy/data-and-information/cookies-and-ip-addresses> [Accessed: 25 Sep. 2025].
- London Borough of Hammersmith & Fulham Annual Request for Information Report 2024-2025. (n.d.). Available at: <https://www.lbhf.gov.uk/sites/default/files/2025-07/annual-rfi-report-2024-2025.pdf> [Accessed 29 Sep. 2025].
- London Borough of Hammersmith & Fulham. (2025f). *CCTV*. [online] Available at: <https://www.lbhf.gov.uk/crime/cctv> [Accessed 29 Sep. 2025].