TfL Wi-Fi Data Connectivity Pilot

Project Name TfL Wi-Fi Data Connectivity Pilot

Project Description

Countries United Kingdom

Division Other

Project Labels Wi-Fi, Customer data, Journey data

Created By

Date CreatedAug 18, 2016Last ModifiedNov 16, 2016Project Age91 days

Project Lead

Approvers

- Approved Nov 16, 2016 4:36:20 PM

- Approved Nov 16, 2016 4:37:33 PM

Respondents



Project Status 12 - Completed

0 - In Progress

0 - Not Started

Issues by Risk

Tasks 6 - Done

0 - Pending

Assessment

Will TfL be processing personal data?

Below are some categories of personal data routinely processed by TfL. Please select all of those that will be processed in connection with this project or initiative. If it involves the processing a category of personal data not included as an option, please select "Other" and provide further details.

| Status | No Issues |
|----------------|--------------------------------------|
| Response | Media Access Control ("MAC") address |
| Recommendation | - |
| Comments | No comments |
| Attachments | No attachments |

Will information which falls within any of the following special categories of sensitive personal data be processed as a result of this project or initiative?

| Status | No Issues |
|----------------|----------------|
| Response | No |
| Recommendation | - |
| Comments | No comments |
| Attachments | No attachments |

Personal Information Custodian approval

3

| Do you have approval from the Personal Information Custodian(s) to proceed with this project or initiative? | |
|-------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Status | No Issues |
| Response | Yes |
| Recommendation | Please obtain approval from the relevant Personal Information Custodian(s) to proceed with this project or initiative. If you do not know who their identity please contact privacy@tfl.gov.uk (mailto:privacy@tfl.gov.uk). |
| Comments | No comments |
| Attachments | No attachments |

3.1

Please confirm the name(s) and job title(s) of the Personal Information Custodian(s) who approved this project or initiative? Please attach appropriate evidence, for example an email approval or signed SOW/PID.

| initiative? Please attach appropriate evidence, for example an email approval or signed SOW/PID. | |
|--------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Status | No Issues |
| Response | Head of Analytics Integrated Customer Data Management, Customers, Communication & Technology This project has been approved at Customer Experience Gate 0 by the Senior Management Team in July 2016, where sits as a senior manager representative. |
| Recommendation | - |
| Comments | commented d on 8/18/16 12:14 PM commented d on 8/18/16 12:17 PM |
| Attachments | added Wi Fi Gate 0 Ryan Sweeney.doc on 8/18/16 12:14 PM added Project Execution Plan (PEP) - WIFI.doc on 8/18/16 12:17 PM |

Overview and business case

4

Please provide a brief description of this project or initiative and attach a simple data flow diagram below. You can also attach a copy of your business case, statement of works ("SOW") or project initiation document ("PID").

| Status | No Issues |
|----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Response | Data collected from the London Underground station Wi-Fi network could benefit TfL and our customers. We propose to run a four week station pilot of 54 LU stations, where we will analyse anonymised Wi-Fi connection data collected from devices detected by Wi-Fi access points in the stations. The pilot will run from Monday 10 October to Monday 7 November inclusive. Our pilot will be exploratory exercise designed to (a) test the accuracy/reliability of the data and confirm that we can extract the kind value/benefits from it that has been outlined in the business case; and (b) monitor customer perceptions and responses to Wi-Fi data collection on the Tube. We want test whether we can use the data to better understand: a. Route choice between stations; b. Crowding on trains, on platforms and other areas of our stations; c. How customers move around our stations. d. How we can use the sample of data collected to represent all customers. e. The impact of mobile network connectivity (3G, 4G, GPRS) availability on Wi-Fi on sample size. We are committed to being open and transparent with customers on how we use data. A range of communication methods will be used to ensure customers are aware that we are colleting data and the rationale for this. We are working with the various teams in TfL to ensure we communicate the pilot to all our customers We will only collect Wi-Fi connection data for four weeks. We will begin the analysis of the data during the pilot but this analysis will continue beyond the data collection period. The review will consider whether the data collected can meet our requirements and the feedback we receive from customers, governing and regulatory bodies and specialist interest groups Based on the outcomes of the pilot we will make a decision on roll-out and update stakeholders. |
| Recommendation | - |
| Comments | Ryan Sweeney commented d on 8/18/16 12:18 PM Project Execution Plan attached in section 3.1 Ryan Sweeney commented d on 8/18/16 12:18 PM Wifi gate 0 attached in section 3.1 |
| Attachments | No attachments |

5

Please provide an overview of the benefits to TfL and its stakeholders (including customers and/or employees) and explain how those benefits outweigh any potential impact on the privacy of the individuals whose data will be processed. Include any regulatory, operational or commercial benefits.

| Status | No Issues |
|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Response | Data collected as a by-product of WiFi service provision has the potential to give us a far greater understanding of customer behaviour so we can improve the operation, planning and information provision on London Underground. Wi-Fi data could provide richer information about customer travel patterns than what we can currently collect from our ticketing system and surveys. We identified a number of potential use cases where Wi-Fi data would provide considerable business benefits. 1. Customer – providing better customer information for journey planning and congestion avoidance; 2. Medium and Long Term Planning – Ensuring optimal and evidence-based decision-making for a range of potential investments ranging from the number of new trains procured, station upgrades, timetabling and event management, superseding current survey based methods (e.g. RODS); 3. Operational & Safety – Enable us to manage disruptions and events, deploy staff to best meet customer needs and ensure a safe environment for all who use our network; and 4. Financial –increasing revenue from our advertising assets, reducing spend through more efficient working practices and reduced surveys. The customer research we have conducted demonstrates a strong customer interest in TfL undertaking this. One comment from our focus groups was that "We need to give TfL something in order for TfL to do something to us." and another being "I like that one. I would just wait for the next train, I hate the crowded trains". Overall the response to using this data was seen a having a strong tangible benefit to customers and that TfL was being very clear and Transparent about its purpose |
| Recommendation | - |
| Comments | No comments |
| Attachments | No attachments |

Please provide details of any previous DPIA (or "Privacy Impact Assessment") carried out in relation to any elements of this project or initiative. You can also attach a copy below.

| Status | No Issues |
|----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Response | In 2014, TfL approached the Information Commissioners Office (ICO) to discuss using data generated from the TfL in-station Wi-Fi access points. The aim of using this data was to improve both the operation of the London Underground network and provide better customer information. TfL conducted a Privacy Impact Assessment as part of this to identify and reduce any risks or privacy concerns this could have generated. Whilst Wi-Fi data was considered initially, the proof of concept, which assessed passenger crowding on the Victoria Line was delivered using train telemetry data, Rolling Origin Destination Survey (RODS) data and Oyster smartcard ticketing data instead of Wi-Fi data. |
| Recommendation | - |
| | |

| Comments | commented d on 8/18/16 11:27 AM |
|-------------|--------------------------------------------------------------------------------------|
| Attachments | added 2014-10-25 PIA screening questions re use of LU wifi data v0.3.docx on 8/18/16 |

Stakeholders

7

Has everyone directly involved in the design and delivery of this project or initiative completed TfL's "My role in privacy and data protection" (http://intranet.tfl/our-organisation/information-governance/managing-personal-information/training-and-awareness.aspx)eLearning course?

Status

| Status | No Issues |
|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Response | Yes |
| Recommendation | - |
| Comments | commented d on 8/18/16 4:07 PM Understand directly involved to be Analysts and Developers working with the data, project managers, delegated sponsor and project team. |
| Attachments | No attachments |

8

From the list provided, please identify all of the relevant internal stakeholders for this project or initiative.

Status No Issues

Response Press OfficeCyber Security and Incident Response Team (CSIRT)LegalInformation and Records Management TeamOtherCommercial Development

Recommendation Please specify

Comments commented d on 8/18/16 1:53 PM

Marketting and Communicatins

No attachments

No attachments

8.1

Please provide details of any other relevant internal stakeholders, outside of your immediate team/department.

| Status | No Issues |
|----------------|-----------------------|
| Response | Please see list above |
| Recommendation | - |

| Comments | No comments |
|-------------|----------------|
| Attachments | No attachments |

| From the list provided, please identify all of the relevant external stakeholders for this project or initiative. | |
|-------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Status | With Issues |
| Response | External service provider(s)Local authorities (including GLA and London Boroughs) Information Commissioner's OfficeCustomers and/or members of the public |
| Recommendation | Please confirm |
| Comments | commented d on 8/18/16 4:08 PM Halo and Fujitsu have been invovled in meetings to discuss technical compoenents around consuming the data |
| Attachments | No attachments |

9.2

Please select the type of consultation exercise conducted with customers and/or members of the public. Please also attach any supporting evidence/outcomes (research reports etc).

| Status | No Issues |
|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Response | Focus groups |
| Recommendation | - |
| Comments | commented d on 8/18/16 10:57 AM 3.2 We have tested our concept on a small number of customers through a series of commissioned focus groups. The feedback from these sessions has been positive, but our proposed pilot will be the best opportunity to judge how our pioneering concept is perceived. commented d on 8/18/16 10:58 AM We will be using a variety of communication channels (in station signage, press releases, staff briefings etc) to inform users of our network that data is being collected commented d on 8/18/16 11:00 AM |
| Attachments | added TfL mobile data and privacy debrief FINAL100216 - Library.pptx on 8/18/16 11:00 AM |

Have you already notified all of the internal and external stakeholders identified in your responses to questions two and three, about this project or initiative?

| Status | No Issues |
|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Response | No |
| Recommendation | - |
| Comments | commented d on 8/18/16 11:01 AM We are in the process of notifying all stateholders and have confirmed dates when we will have engaged all stakeholders. Currently we are yet to inform the GLA but this will take place on the 30th August. Station staff and customers will be notified after this. |
| Attachments | No attachments |

10.1

Please summarise or attach your stakeholder communications plan. This should indicate when you are intending to notify stakeholders about this project or initiative.

| Status | No Issues |
|----------------|----------------------------------------------------------------------------------------------------|
| Response | See Integrated Communications Plan. This will be shared with the GLA in September |
| Recommendation | - |
| Comments | commented d on 8/18/16 4:10 PM |
| Attachments | added Integrated Communications Plan WiFi data collection AM 09.08 - Final.docx on 8/18/16 4:10 PM |

11

Have any of the internal or external stakeholders for this project or initiative expressed any concerns or reservations about the way in which TfL is intending to process personal data?

| Status | No Issues |
|----------------|-------------|
| Response | No |
| Recommendation | - |
| Comments | No comments |

| Attachments | No attachments |
|-------------|----------------|
|-------------|----------------|

Suppliers and third parties

As part of this project or initiative, will any external service provider(s) be involved in processing personal data on behalf of TfL?

| Status | No Issues |
|----------------|----------------|
| Response | No |
| Recommendation | - |
| Comments | No comments |
| Attachments | No attachments |

Will personal data be disclosed to any third party organisation(s) on a routine basis as a result of this project or initiative? Please select all that apply from the list below.

| Status | No Issues |
|----------------|----------------|
| Response | None |
| Recommendation | - |
| Comments | No comments |
| Attachments | No attachments |

Benchmarking

14

Are you aware of any other TfL business area(s) currently undertaking similar processing of personal data? Status With Issues Response N_a Recommendation Confirm who. Comments No comments Attachments No attachments

15

Have you identified any other organisation(s) currently undertaking similar processing of personal data? Status No Issues Response Y ... Recommendation Confirm who

Comments

commented d on 8/18/16 12:09 PM

We are aware that a number of private commercial organisations are using Wi-Fi data for analysis. A number of airports and shopping centres undertake this collection and processing. Dublin & JFK international airports both use an "automated technology" system to ensure passengers spend no longer than half an hour in the queue for security checks. This technology tracks the length of time that passengers carrying Bluetooth or WiFienabled devices spend in the queue. Sensors are placed in the roof of the security area that record the time the device and the passenger enters and leaves the queue. By triangulating the data on smartphone locations, the system gets a bird s⁻eye view of travel times, dwell times, and movement patterns through the airport. The new, improved wait times are displayed on screens throughout the terminal. The data is fully anonymised and no personal information is recorded or stored. Visitors to Hyde Park were tracked via their mobile phone signals in a trial undertaken by the Royal Parks to analyse footfall last year (2015). If a zone of the park contained more than 50 people at once, it was possible to "drill down" to the aggregated demographic data (gender, age) of visitors to that area too, creating a detailed picture of how different people used the park in previous months. The visitor data Park officials saw as part of this project was several months old and was simply dots on a screen which showed the flow of visitors. Knowing how visitors use the park can help with the provision of activities and amenities, and to protect park wildlife. At least a dozen UK shopping centres have installed Wi-Fi systems which collects mobile signals. Visitors to

| | centres who have their phone's Wi-Fi turned on are picked by the system which logs the unique ID of the phone. The system enables centres to see whether a shopper's phone has visited before, how long it stays, and how far into the centre it goes. If visitors register to use the centres' free Wi-Fi and voluntarily pass over contact information this information can then be used to target bespoke emails relating to specific genders or age groups and communicate real-time offers at specific retail outlets that will appeal to specific audiences |
|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Attachments | No attachments |

15.1

Please specify which organisation(s) and tell us if you have already engaged with them to discuss this project or initiative.

| Status | No Issues |
|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Response | We have briefed the Information Commissioners Office on our plans via a briefing note and met them on 11 August 2016 to discuss the plans. From a technical perspective, we have met with Cisco, who supply the WiFi access points where they demonstrated some of the tools they use and how they are processing this data for clients. We simply wanted to understand any technical limitations that may prevent us from a pilot |
| Recommendation | - |
| Comments | No comments |
| Attachments | No attachments |

16

Are you aware of any external data privacy or security standards, guidelines or codes of practice which are relevant to this project or initiative?

| Status | No Issues |
|----------------|----------------|
| Response | Yes |
| Recommendation | Confirm what |
| Comments | No comments |
| Attachments | No attachments |

16.1

Please provide details and include a hyperlink (if available online) or attach copies.

| Status | No Issues |
|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Response | We have referred to the Information Commissioners Offices wifi guidelines when planning this project (https://ico.org.uk/media/for-organisations/documents/1560691/wi-fi-location-analytics-guidance.pdf). We submitted an engagement document to the ICO in July (attached) and met them on August 11 to discuss our plans. |
| Recommendation | - |
| Comments | commented d on 8/18/16 11:07 AM |
| Attachments | added TfL Wifi Pilot Proposal.pdf on 8/18/16 11:07 AM |

Fairness and transparency

17

How will individuals be notified that their personal data is being processed as a result of this project or initiative? For example, using a privacy notice presented at the point of collection (on an online or paper form), signage, an audio announcement, a webpage, etc. Please attach copies of any relevant drafts/designs.

| Status | No Issues |
|----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Response | We are committed to being open and transparent with customers on how we use data. A range of communication methods will be used to ensure customers are aware that we are colleting data and the rationale for this. TfL Press Office brief key media outlets (potentially the Evening Standard and Sky News / BBC National) under embargo about the fact that TfL will begin an innovative pilot of collecting. Broadcast media will be offered filming opportunity and interview with senior project stakeholders A media briefing will be prepared for issue to media once the embargo is lifted. The TfL Press Office will also secure a third-party endorsement to help ensure that any concerns that could be raised are acknowledged and addressed. Key stakeholders such as the ICO, London Travel Watch and London Assembly will also be briefed in advance to reduce the chance of negative comment. A Metro newspaper article will be released in advance of the pilot reiterating the key messages from the press release. Following the press release, we will begin deploying posters on each platform and each station entrance of the stations included. This is a total of 190 double royal platform posters and circa 150 entrance posters. A current sample is attached although "connection" will be changed to "connectivity". A new website page will be developed on www.tfl.gov.uk/privacy with further details of the pilot and responses to frequently asked questions. Our station posters and press releases will direct people to this for further information. We will brief social media teams and our Contact Centre staff to enable them to respond to any questions customers may ask. Briefings to TfL staff working at stations impacted will be managed through existing channels. Station staff will be advised of the link to the TfL privacy page where frequently asked questions are listed to ensure a consistent response. We will use intranet resources to brief all TfL staff who may not be directly impacted by the pilot. |
| Recommendation | - |
| Comments | commented d on 8/18/16 4:15 PM commented d on 11/16/16 4:35 PM If the proposed four week pilot is successful and transitions into BAU, TfL would look to implement a more permanent solution with regards to in-station signage (i.e. in stead of posters) and periodic audio announcements. This would be analogous to our existing approach to CCTV. |
| Attachments | added Draft Signage.pdf on 8/18/16 4:15 PM |

| Which of the following processing conditions will apply to this project or initiative? | |
|----------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Status | No Issues |
| Response | Processing is necessary in connection with TfL's public functions (ie exercising our powers under the GLA Act) |
| Recommendation | - |
| Comments | Based on the available options I have selected "Individuals will be asked for their explicit consent" as it seemed the most appropriate. We will be communicating to customers through a variety of means, entrance and on station posters, press releases, new TfL website page informing them that we are collecting this data and informing them how to opt out. |
| Attachments | No attachments |

19

As a result of this project or initiative, will TfL be processing personal data for the purposes of profiling individuals (eg to segment or categorise them based on predetermined criteria)?

| Status | No Issues | |
|----------------|----------------|--|
| Response | N₀ | |
| Recommendation | - | |
| Comments | No comments | |
| Attachments | No attachments | |

20

Please provide (or attach) details of the process or mechanism which will allow individuals to access their own personal data (which will be processed as a result of this project or initiative)

| Status | No Issues |
|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Response | It will not be possible for an individual to request a copy of their data as we will have pseudonymised (de-personalised) and encrypted all of the WiFi connectivity data we collected to prevent anyone from identifying the original MAC address and device. As we will not be able to identify the original MAC address, we will not be able to identify and provide a copy of the WiFi connectivity data generated by a specific device. |

| Recommendation | - |
|----------------|----------------|
| Comments | No comments |
| Attachments | No attachments |

Will there be a process or mechanism which will allow individuals to transfer their personal data to another service provider (eg a train operating company or public transport authority) in a machine readable format?

| Status | No Issues |
|----------------|----------------|
| Response | No |
| Recommendation | - |
| Comments | No comments |
| Attachments | No attachments |

22

Please provide (or attach) details of the process or mechanism which will allow individuals to restrict or prevent the on going processing of their personal data (which will be processed as a result of this project or initiative). For example, opt-out/unsubscribe preferences or the ability to ask for their personal data to be deleted via a dedicated email address or online form.

| Status | No Issues |
|----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Response | We are informing customers that if they do not want TfL to collect their MAC address, they can either turn off WiFi on your device or put the device into airplane mode whilst in one of the 54 London Underground stations included in the pilot. Once they have left the station simply switch their device back on or turn off airplane mode to re-enable WiFi connectivity. |
| Recommendation | - |
| Comments | No comments |
| Attachments | No attachments |

23

Are there any plans to combine personal data processed as part of this project or initiative with externally sources data sets (eg bought-in marketing lists or mobile phone tracking data provided by telecoms service providers)?

| Status | No Issues |
|--------|------------|
| | 110 133003 |

| Response | No |
|----------------|----------------|
| Recommendation | - |
| Comments | No comments |
| Attachments | No attachments |

Data minimisation and disposal

24

What will be done to ensure that personal data processed as a result of this project or initiative, is relevant and necessary for its stated purpose(s)? For example, cleansing the data to remove any irrelevant content not required to achieve those stated purpose(s).

| Status | No Issues |
|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Response | No personal data will be stored in the data warehouse. All data will be encrypted Based on specific use cases we have identified we are only collecting data we require to test these, We are also limiting our data collection to 54 stations and a 4 week data collection period. We will use a MIB file to ensure we only collect essential data • The user Mac address – so we can identify individuals consistently • The APN they connected to –so we understand where they are • The date of the connection – so we know the date they connected • The timestamp of the connection (hh:mm:ss) – so we know at what time they were in said location • The device type - so we can understand if we are getting a representative sample or any impacts of the data • The trap type – So we understand whether a user has connected and on platform or has not connected and is moving by. This will also help us understand representativeness of the data • The event type – So we understand whether a user has connected and on platform or has not connected and is moving by. This will also help us understand representativeness of the data • The network (ee, 222, Vodafone) |
| Recommendation | - |
| Comments | No comments |
| Attachments | No attachments |

25

Will any techniques be used to minimise the amount of personal data being processed as a result of this project or initiative? For example, hashing, tokenising, aggregating or pseudonymising it?

| Status | No Issues |
|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Response | Yes |
| Recommendation | - |
| Comments | commented d on 8/18/16 3:48 PM Each MAC address collected during the pilot will be pseudonymised/hashed. After the pilot, data will be aggregated to counts and indiviual transaction data deleted. |
| Attachments | No attachments |

25.1

Please describe the data minimisation techniques or methodologies you will be using; and the categories of personal data to which they will be applied.

| Status | No Issues |
|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Response | We are conducting a pilot where we only collect data at 54 of the 250 London Underground stations. This will only run for 4 weeks. We will be using a MIB file to process the data which limits the amount of information collected to MAC address, connection status, AP connected to and date and time |
| Recommendation | - |
| Comments | No comments |
| Attachments | No attachments |

26

Have you already identified the retention periods which will be applied to the personal data which will be processed as a result of this project or initiative?

| Status | No Issues |
|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Response | No |
| Recommendation | - |
| Comments | commented d on 8/18/16 1:37 PM Only 4 weeks of data will be collected. We will analyse and process this data during and after the review. For the review we will consider whether the data collected can meet our requirements and the feedback we receive from customers, governing and regulatory bodies and specialist interest groups. Once we have completed the review and made a decision on this we will delete all transaction data collected and only store aggregate counts. We consider the analytical activity will take around 3 months effort for 3 FTEs. We dont currently have a set date when we will complete the review |
| Attachments | No attachments |

Data accuracy and quality

27

What will be done to ensure that the personal data processed as part of this project or initiative is as accurate as possible (for example a validation process and/or allowing individual data subjects to update their details using an online account)?

| Status | No Issues |
|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Response | All data collected will be pseudonymised/hashed to ensure TfL isn't able to identify individual customers. As data is pseudonymised we will not be able to validate it. We will conduct an analytics task to understand station level volumes and volumes by time of day to understand how representative our data collection is in terms of the number of unique wifi users versus the number of customers we know use our stations |
| Recommendation | - |
| Comments | No comments |
| Attachments | No attachments |

Data storage and security

28

How will personal data processed as a result of this project or initiative be stored? Please select all of the relevant locations.

| Status | With Issues |
|----------------|------------------------------------|
| Response | On premise - TfL IT infrastracture |
| Recommendation | - |
| Comments | No comments |
| Attachments | No attachments |

29

Where will personal data be physically located whilst being processed (including stored)?

| Status | With Issues |
|----------------|--------------------------------|
| Response | UK |
| Recommendation | Please confirm what countries. |
| Comments | No comments |
| Attachments | No attachments |

30

Who will have access to personal data processed as a result of this project or initiative? Please provide the names of relevant roles and teams (within TfL and any external service providers or partner organisations identified in Question 12), not the names of specific individuals.

| Status | No Issues |
|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Response | We will be using a salted hashing mechanism so that individual mac addresses are hashed but before hashing they have a consistent string added to make the data more secure. Very few people will know the salt string. Our Operational Research team will only have access to the hashed data and not any personal data Data will be stored in an on-estate secure data warehouse A limited number of analysts will have access to the data during the pilot. These analysts are required to complete annual tests on Privacy and Data Protection, and Information Security. Analysts accessing this data are familiar dealing with personal and |

| | sensitive data through their access and management of the Oyster and Contactless Payment Card data |
|----------------|-----------------------------------------------------------------------------------------------------|
| Recommendation | - |
| Comments | No comments |
| Attachments | No attachments |

Will individuals with access to personal data as a result of this project or initiative be subject to any screening or vetting? For example, Disclosure and Barring Service ("DBS") or financial probity checks.

| Status | No Issues |
|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Response | Only named individuals in our Operational Research Team and our System Administrator will have access. All individuals with access have completed required Data Protection and Information security training |
| Recommendation | - |
| Comments | No comments |
| Attachments | No attachments |

32

How will access to the personal data processed as a result of this project or initiative be restricted and controlled? Please select all that apply.

| Status | No Issues |
|----------------|------------------------------------------------------------------------|
| Response | Password protected user accountsOtherUser activity audit trails |
| Recommendation | - |
| Comments | commented d on 8/18/16 1:42 PM |
| Attachments | added RE WiFi Data Approval from Michele Hanson.msg on 8/18/16 1:42 PM |

32.1

Please describe the other safeguards which will be used to restrict and control access to the personal data.

| Status | No Issues |
|--------|-----------|

| Response | We have worked with Cyber Security so that our server is configured to listen to the 14 controllers as a named server but other servers are not able to listen to the data |
|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Recommendation | - |
| Comments | No comments |
| Attachments | No attachments |

If an individual (including the data subject themselves, a colleague from a business area or service provider that doesn't normally have access to the data, or any other third parties) requests access to personal data processed as a result of this project or initiative; will a there be a procedure in place to verify their identity and ensure that they are authorised to see it?

| Status | No Issues |
|----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Response | No |
| Recommendation | - |
| Comments | commented d on 8/18/16 4:21 PM No data will be shared, except for where we receive a police request through the current procedures and TfL is mandated to release this data. We will not release data through any infomral requests. |
| Attachments | No attachments |

34

What other measures and controls will be in place to protect personal data processed as a result of this project or initiative? Please summarise the relevant safeguards under each of the following three headings:

Physical - access (eg secure office space and storage cabinets); clear desk policy; confidential waste disposal arrangements; etc

Technological - encryption; anti-virus; firewalls; intrusion detection; Data Loss Prevention ("DLP"); etc Organisational - documented policies and procedures; information asset registers; retention and disposal schedules; training; etc

| Status | No Issues |
|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Response | Physical - Controlled access to TfL buildings Technological - Highly secured data store on TfLs estate. Highly restricted named use access. Hashing of personal information. Organisational - Compliant with guidance from CSIRT and Information Governance |

| Recommendation | |
|----------------|----------------|
| Comments | No comments |
| Attachments | No attachments |

| Have you discussed your project or initiative with the TfL Cyber Security and Incident Response Team (CSIRT)? | | | |
|---------------------------------------------------------------------------------------------------------------|----------------|--|--|
| Status | No Issues | | |
| Response | Yes | | |
| Recommendation | - | | |
| Comments | No comments | | |
| Attachments | No attachments | | |

35.1

| Please provide (or attach) a summary of any information security appraisal or gap analysis provided by CSIRT | | | |
|--------------------------------------------------------------------------------------------------------------|----------------|--|--|
| Status | No Issues | | |
| Response | N/A | | |
| Recommendation | - | | |
| Comments | No comments | | |
| Attachments | No attachments | | |

Assurance and complaints

36

s there a documented process for addressing, escalating and resolving privacy and data protection related complaints from individuals whose data will be processed as a result of this project or initiative? Status No Issues Response N. Recommendation Comments commented d on 8/18/16 3:49 PM We will not be able to identify any individual devices or people from this WiFi connectivity data. We are trying to understand how customers as a whole interact with the transport network, not how specific individuals interact with it. We will not be able to identify any individual as we will have pseudonymised (de-personalised) and encrypted all of the WiFi connectivity data we collected to prevent anyone from identifying the original MAC address. We are making this clear on the new website page we are launching for this project commented d on 11/16/16 4:25 PM Whilst a documented process has not been created specifically for this project, any complaints or concerns submitted to TfL by data subjects regarding the initiative will be escalated to the TfL Privacy and Data Protection Team in accordance with existing and wellestablished procedures. Attachments added 2014-02-20 TfL Privacy and Data Protection Complaints Handling Procedure v3.0.pdf on 11/16/16 4:25 PM

37

Is there a documented process for monitoring on going compliance with privacy and data protection requirements as part of this project or initiative?

Status

No Issues

Response

No

Comments

commented d on 11/16/16 4:32 PM

| | individual will continue to closely monitor its progress and highlight any privacy and data protection issues which need to be addressed by the project team. If the four week pilot transitions into BAU a framework for the on-going assessment of privacy and data protection compliance will apply (in the form of an annual attestation of compliance and ad hoc audits). |
|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Attachments | No attachments |

Open data

38

Do you intend to make any data or analysis derived from the processing of personal data as a result of the project or initiative, available in connection with TfL's transparency and/or open data obligations?

| Status | No Issues |
|----------------|----------------|
| Response | No |
| Recommendation | - |
| Comments | No comments |
| Attachments | No attachments |

Tasks

Priority Task Name Type Assigned To Created By Due Date Status

Logs

| Date Created | Action | Taken By |
|------------------|----------------------|----------|
| 11/16/16 4:37 PM | Project Approved | |
| 11/16/16 4:37 PM | Approval Completed | |
| 11/16/16 4:36 PM | Approval Completed | |
| 11/16/16 2:02 PM | Acceptance Completed | |
| 11/16/16 1:59 PM | Manual Task Closed | |
| 11/16/16 1:56 PM | Manual Task Closed | |
| 8/18/16 4:22 PM | Survey Completed | |
| 8/18/16 4:21 PM | Survey Submitted | |
| 8/18/16 10:32 AM | Project Published | |
| 8/18/16 10:32 AM | Project Created | |