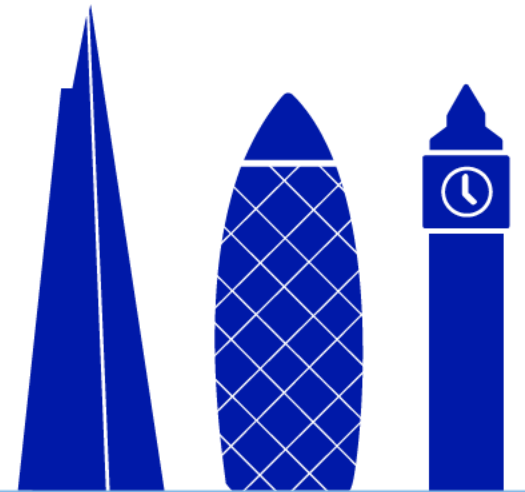


WiFi Data Insights Project Board



Agenda

No	Agenda Item	Lead
1.	Project Summary	[REDACTED]
2.	Product Summary	[REDACTED]
3.	Risks & Issues	[REDACTED]
4.	Current Status	[REDACTED]
5.	Gate2 Readiness	[REDACTED]
6.	Plan on a Page	[REDACTED]



6460 - Wi-Fi data insights

05/09/18

T&D Project Manager		Sponsor		Overall RAG	A
T&D Programme	3.Networks & Analytics	T&D Sponsor		Delivery Confidence	3 - Successful delivery is feasible
T&D Product Manager		Project Stage	3 - Concept Design/Contract	Approval Board	T&D Delivery Meeting
T&D Service Owner	To be agreed	Characterisation	Commercially critical	Decision(s) Required	No

Project Scope	Link to Project Site	Explanation of RAG/ Delivery Confidence
<p>This project is delivering a solution which supports the collection and analysis of station WiFi data. It creates a data reference system to geographically map WiFi access points allowing WiFi connection data to be used to track passenger numbers and movement through stations and the network, providing enhanced information for customer benefit products. It will also relate passenger numbers and movement to advertising asset data which has commercial benefits.</p>		<p>Amber RAG: The customer benefits deliverable has not been defined and the total cost is likely to be higher than the budget.</p> <p>Delivery confidence medium.</p>
Progress to Date	Upcoming Activities	
<p>Completed data ingestion development apart from some areas dependant on other teams.</p> <p>Agreed approach to the customer benefits deliverable with TfL Online - subject to Gate 0 approval.</p> <p>Obtained the first maps showing advertising assets. Began adding assets to the CAD models.</p> <p>Investigated options to deliver the CAD models in time for the project.</p> <p>Progressed the prioritisation of interface development with Tech Dev teams.</p> <p>Agreed a poster campaign on alternative routes to be delivered in September 2018 as an initial customer benefit deliverable.</p> <p>Agreed an approach to gathering test data without requiring explicit publicity at each station.</p>	<p>04/09/18 Start discussions with the Service Transition team to develop a service model and service transition plans.</p> <p>13/09/18 Initial values for all estimates including ongoing OPEX costs.</p> <p>11/10/18 Complete Gate 2.</p> <p>05/12/18 Data processing software complete.</p>	

Schedule - RAG Green				
Key Milestones	Baseline End Date	Forecast/ Actual Date	RAG	Commentary
Establish gate 2 schedule	29/06/18	31/08/18	A	Product roadmap is still being refined - this will inform delivery scope & plan
Complete data ingestion build	-	29/08/18	C	Completed expect where dependant on other teams.
Complete CAD station models	28/09/18	30/11/18	A	Can now only be delivered by outsourcing.
Poster campaign goes live	-	28/09/18	G	This is based on data from the pilot which is already captured.
Complete data processing build	07/11/18	05/12/18	G	Development work in sprints 99,100,101,102.
Deploy production ready algorithms	-	19/12/18	G	This is new development of algorithms and not just refining the pilot algorithms
API development complete	-	06/01/19	A	It is unclear which team has the skills and capacity to create the API.
Go live of commercial development product	-		G	
Go live of customer benefit product		TBC		Needs to be agreed with relevant stakeholders upon establishing scope



Key Risks			Link to Risk Register	
Description	Impact and Mitigation	Resolution Date	RAG	Owner
Product scope	Potential scope creep due to realtime requirements from customer benefit product. Product Manager has been working with digital & TDM to define customer benefit product deliverable.	31/08/18	G	
Schedule risk	Go live may be delayed due to development time overruns as our Azure development skills are not mature yet. Continuous monitoring and control to ensure that any slippages are addressed.	Ongoing	A	

Key Issues			Link to Issue Register	
Description	Impact and Mitigation	Resolution Date	RAG	Owner
CAD station model development behind schedule	The CAD team have suffered resource issues which mean they cannot complete the link-node models in the time needed. They have recommended outsourcing this package of work.	10/09/18	R	
Development responsibility for interfaces	It is unclear which team can/should develop core components of the TrackerNet interface and the external API for commercial use. The TrackerNet interface is needed to complete the Data Ingestion build. We are looking at workarounds to mitigate the expected delay.	07/09/18	R	
No BAU process for tracking station and access point changes	There is no centralised process for maintenance of station and access point changes and without this our CAD maps would go out of date causing inaccurate results. We are working with the relevant parties and T&D service transition to establish an agreed BAU process.	14/09/18	A	
Project architecture is based on the Data & Analytics Platform (DAP) framework, which is an evolving standard	On premise design and development is mature whereas design and development of the DAP framework in cloud is still evolving (areas such as data quality, scheduling, monitoring, interface control documentation etc.). This will be built up as the project progresses.	Ongoing	A	
	Costs are still being gathered, but a budget has already been set based on incomplete ROM costs and	13/09/18	A	

Finance - RAG Amber							Actuals to end P4	
Funding approved to	Gate 6	Total	Prior Years	2018/19	2019/20	2020/21 +	Funded by	Commercial Development
Approved Funding (inc risk)							Cost commentary	
Estimated Final Cost (inc risk)		£0		TBC			The total project costs are currently being estimated for Gate 2. Spend to Date is to the end of P4.	
Risk Provision (within app funding)		£0		£0				
Spend to Date (Value of Work Done)		£149,427	£102,028	£47,399				
Variance (Approved - Estimated Cost)			Spend to go (EFC-Spend to Date)					



Key Risks and Issues - Updates / Discussions – 1 of 2

CAD Station Model Issue

- CAD team are severely behind schedule developing the station models
 - Higher effort than originally expected
 - Resource issues and constraints
- Cannot complete by end of November using internal resources
- Proposed solution is to use a framework agreement to outsource most of the work
 - CAD team to remain responsible for quality control
 - Engagement with Commercial team to use the framework
 - Procurement Strategy required

Development Responsibility for Interfaces

- Two interfaces need C# and AIP skills:
 - TrackerNet interface to provide train movement data
 - External interface to allow EM to receive data
- Initial response from [REDACTED] was that the Data Analytics team should acquire the skills for these interfaces
- Engagement with Tech Dev teams to provide estimates and resource
 - The relevant teams have their own capacity constraints
 - Likely to require prioritisation against existing planned work for the Integration and TrackerNet teams
 - Need to accelerate this process

Key Risks and Issues - Updates / Discussions – 2 of 2

Ingestion of Test Data

- [REDACTED] has engaged with the Privacy and Data Protection Team

- [REDACTED]
 - 1. [REDACTED]
 - 2. [REDACTED]
 - 3. [REDACTED]
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 - 100. [REDACTED]

- [REDACTED]
- Not all costs have been estimated yet.
- Some costs (e.g. CAD) will be higher than originally estimated.
- The ROM costs had many exclusions (Interface development, infrastructure, support, etc).
- Some costs (e.g. development) may be lower than originally estimated.
- We have recently started receiving actual costs from the finance partner.

Current Status

Work Stream	Current Status	Next Steps
Customer Benefit Product	Scope agreed	Gate 0 paper required
CAD station maps (including BAU update process)	<p>The CAD team successfully completed development of CAD models for initial 7 stations (excluding advertising assets) and are starting work on 20 more. However, due to resource issues they cannot complete the work in the time required. See Issue.</p> <p>Station mapping process has been updated to include advertising assets.</p>	<p>Complete the process of extracting data from the initial 7 stations in the format required by the data science team – [REDACTED]</p> <p>Complete the stations in the order requested by Commercial development – PM</p> <p>Further sessions to be scheduled to drive mapping of to-be process for capturing any station changes including access points, advertising assets – PM</p>
Data Ingestion	<p>Data Ingestion development complete except those components dependent on other teams.</p> <p>Work has started on automation components.</p>	Continue to review progress.
Data Processing	All development work expected to complete by sprint 102.	
Data Science		<p>Verify CAD data when it is received – [REDACTED]</p> <p>Commence development of algorithms in the Azure DAP once all data sources are in place – [REDACTED]</p>





Work Stream	Current Status	Next Steps
Data Presentation (including API)	After escalating, the Integration team (Azure AIP skills) and TrackerNet team are reviewing specifications and will provide estimates for developing the TrackerNet interface and the external interface.	Providing additional detail on functional and non-functional requirements – [REDACTED]
Testing	Testing will be carried out within the development team	Confirm whether this is sufficient to support end to end testing – PM
Service Design & Transition	Not started	Meeting scheduled with [REDACTED] to commence service design and transition activities – PM
Privacy / Data Protection	DPIA completed for Gate2. Data Governance Manager [REDACTED] has approved DPIA for Gate2.	Clarify the wording about subscription and re-approve. Continued engagement with ICO
Communications	Established comms schedule with TDM [REDACTED]	Continued engagement with TDM to ensure the progress of the following activities: Phase 1: Pilot data customer information trial Go live September 2018 [REDACTED]



Gate2 Readiness

Work Stream	Current Status	Next Steps
Estimates/PET	In progress. Received estimates for D&A delivery. Current estimates are over the project budget of [REDACTED]	Need to validate estimates for API development Need to validate first year support costs Obtain sign off from sponsor and programme manager
PEP	Draft in place	Updated draft PEP
Security questionnaire	Completed in consultation with CSIRT analyst and solution architect. Approved by CSIRT from gate2 perspective	No further work from Gate2 perspective
HLD	HLD presented at ARB and ARB had no concerns with the design approach.	No further work from Gate2 perspective
Requirements	Reviewed and agreed by relevant stakeholders except for customer benefit product	Update with additional requirements from EM, after verifying they are deliverable. Obtain sign off from sponsor and other approvers.
Privacy impact assessment	DPIA reviewed and approved by Data governance manager	No further work from Gate2 perspective



Plan on a Page

Project Plan



(Key Takeaways & Actions *from last meeting*)

Key Takeaways & Actions

Testing	Testing will be done by the D&A developers as part of the build and will include regression testing. No additional resources/funds required for testing
CAD station maps dependency on development of algorithms	Clarify the extent of CAD station maps to be completed to enable development and testing of the algorithms Action: PM to confirm with Graeme the extent of CAD station maps to be completed to enable end to end development and testing of data science algorithms, 06/07
██████████	Action: ████████ to check with ██████████ and update the group, 06/07
API development	Action: PM to set up meeting b/n ██████████ and ██████████ to clarify ownership of API development, 06/07
Communication	Action: PM to check with Marketing, TDM regarding the integrated marketing plan, 06/07
DPIA	Action: PM to check with ██████████ regarding the need for additional approval from Information Governance , 06/07
Estimates and Gate 2 schedule	Action: PM to input any placeholder estimates and present a plan for Gate 2, 06/07
Finances	Action: ████████ to share Commercial Development Finance Business Partner contact, 06/07

