IoT Sprint Accelerator Week - Planning Document

Invitation:
https://www.eventbrite.co.uk/e/loti-iot-sprint-accelerator-week-tickets-93475647177

Background blog
https://medium.com/loti/london-iot-in-a-week-sprint-bf7434c2aea8

Briefing for Researchers
https://docs.google.com/document/d/1fTlfV4S9K_NpcLl4LHPeaIW1CrO24HomszdRuF6ED-Q/edit?usp=sharing

Guest List
https://docs.google.com/spreadsheets/d/1kNumwuSVB_ineutnVn8quYsx-j3-iqIF7ZMArFtqGFk/edit?usp=sharing

Idea in a nutshell
"How can boroughs use IoT-enabled smart street infrastructure for the benefit of all Londoners?" The London Office of Technology and Innovation (LOTI) and the GLA invite you to take part in an accelerator week to explore this question and help address the biggest challenges facing London boroughs' use of the Internet of Things (IoT) in Smart Street Infrastructure.

Challenge
Internet of Things devices are being deployed in a growing number of public sector contexts. Yet as this is a rapidly evolving and relatively new area of innovation for the public sector, London boroughs are seeking guidance on how to approach the use of IoT in smart street infrastructure where specific opportunities and challenges arise.

Key areas that need to be addressed include:
1. **Business Case and Effectiveness:** How can boroughs make informed decisions about which (if any) IoT technologies can play a role in delivering their desired outcomes? How should this shape their engagement with the market?
2. **Interoperability of Data and Insights:** Given that the data collected by smart street infrastructure often relates to issues that require a pan-London response, how can we ensure comparable data is available from across many boroughs to gain valuable insights for the whole of London?
3. **Ethics & Public Trust:** How can we ensure that IoT data collection in public spaces is done for the benefit of citizens in a way that is transparent, ethical and engenders citizens' trust and confidence?

There have been multiple pilots and studies carried out on these challenges already at an EU, national and city level, which have gone some way to addressing these challenges. However, navigating the findings from these sources is difficult and time consuming. There is a need for this information to be curated and tested by London boroughs.

Format

The whole event will be framed around the challenge: "How can boroughs use IoT-enabled smart street infrastructure for the benefit of all Londoners?" The event will be delivered as a design sprint over the course of a week with an element of hack day methodology thrown in. The event will aim to rapidly discover what issues need to be addressed, curate existing frameworks, guidance and support that already exist, and then present a solution (or solutions) to a panel of LOTI boroughs at the end of the week.

The planned timetable would be as follows:
- **Monday:** Representatives from organisations involved in this field will gather to hear the key challenges facing London and talk about the insights that are already available. The afternoon will focus on establishing a list of the key specific questions boroughs most wish to answer, and invite all participants to share what they know about them.
- **Tuesday-Thursday:** Those questions will be researched and curated by three teams, each of which will have a facilitator; a subject matter expert; a local government representative and an academic. They will be joined by other interested parties who wish to support this work.
- **Friday.** At the end of the week, a public Show and Tell will be held to share the best answers to each question. Feedback and next steps will be shared by a panel of made London boroughs and chaired by London's CDO, Theo Blackwell.

The ask from and role of each supporting organisations:

Boroughs:
- Lead borough CIOs to attend on the Monday and Friday sessions, helping frame the questions to be answered and join the assessment panel after the final show and tell.
- To dedicate officer time to engage in the research during the week. Officers must be senior enough to be involved in commissioning and procurement activities. Officers will be sought from (and not limited too) public realm, sustainability, highways, policy teams and digital/smart teams.
- To prepare examples of IoT that they have commissioned or hope to commission

Academic institutions and think tanks:

- To provide research and specialist support to the event in order to discover, curate and design. This will be from the areas of IoT and digital services, AI, public realm design, policy design and smart city technologies.
- Bring to the event knowledge and examples of IoT in the public sector and its impact.
- Develop reports and materials during the event to present to the panel.

GLA:
- The Chief Digital Officer will chair the panel and the Smart London Team will provide policy support to the CDO.
- The Smart London Team to provide policy and content support to the event, providing examples of IoT Commissioning and learning from the Sharing Cities programme.
- Support LOTI on the logistics and organisation of the event
- Work with LOTI to ensure that the outputs from the event are developed further and adopted as part of ongoing LOTI and GLA work.
- Feed in outputs from event to the national conversation via UK Smart Cities Advisory Group and the BSI project.

LOTI:
- LOTI will lead on the organisation and logistics of this event and be the main point of contact.
- Commission an experienced facilitator
- Organise a panel of experts from the boroughs, Chaired by the GLA's Chief Digital Officer, to launch the challenge and 'judge' the final outputs.
- Develop the content needed prior to the event
- Work with LOTI to ensure that the outputs from the event are developed further and adopted as part of ongoing LOTI and GLA work.

Venues:
Monday - Coin Street Neighbourhood Centre
Tuesday and Wednesday - GLA (map area)
Thursday - London Councils
Friday - Coin Street Neighbourhood Centre

Monday Agenda (General Admission)
Coin Street Neighbourhood Centre

08:30	**Team Arrival**
09:00	**Guest arrival**
09:30	**Welcome and Introductions** Eddie Copeland ● WHY are we doing this?? Not IoT for IoT's sake ● We don't want this to be City-led tech, not tech-led. ● LOTI = outcomes focused ● Basecamp
09:40	**London's Aspirations** Theo Blackwell
09:50	**Fireside Chat 1: How can boroughs make informed decisions about which IoT technologies can help deliver their desired outcomes?** **Panellists** ● Nathan Pierce - GLA Sharing Cities (*confirmed*) **CHAIR** ● Jemma Hoare - Greenwich (*confirmed*) ● Graham Colclough - Urban DNA *(confirmed)* ● Steve Turner - Arup (*confirmed*) ● Phil Saw - Infrastructure and Projects Authority *(confirmed)* Link to brief: Focus on case studies, and commissioning / market engagement
10:30	**Fireside Chat 2: How can we ensure IoT data delivers real insights that benefit the whole of London?** **Panellists** ● Eddie Copeland - LOTI - **CHAIR** ● Paul Hodgson - GLA London Datastore (*confirmed*) ● Neil Hoose - Imperial College London *(confirmed)* ● Miranda Sharp - Ordnance Survey *(confirmed)* ● Trevor Dorling - Greenwich *(confirmed)* *Focus: Technically joined up* *Balance of cybersec v benefits of data insights*
11:10	**Break**
11:30	**Fireside Chat 3: How can we deploy IoT technology in a way that engenders citizens' trust?**

	Panellists: ● Eddie Copeland - LOTI - **CHAIR** ● Tom Symons - Nesta *(confirmed)* ● Lauren Sager Weinstein - Transport for London *(confirmed)* ● Gavin Summerson - Connected Places Catapult *(confirmed)* ● Olivier Thereaux - ODI *(confirmed)* *Where is doing this well?* *How do we avoid the pitfalls*
12:10	**Briefing**
12:15	**Exercise 1: Identifying key questions to be answered** **Review the list of questions crowdsourced before the event:** ● What's missing? ● Should any questions be broken down / made more specific? **Strategy:** Ben Goward, Nathan Pierce **Business Case:** Steve O'Connor, Ed Parkes **Data and Insights:** Paul Hodgson, Genta Hajri **Public Trust:** Pierre Venter, Sandy Tung
13:00	**Lunch** *All facilitators to receive briefing* *LOTI Team / GLA to prepare questions so they're legible* Remove duplicates?
14:00	**Briefing: Introducing Ed and David** Which are the most important questions for boroughs? **Exercise 2: Crowdsourcing ideas, resources and advice:** ● What do we already know? ● Contribute existing examples, ideas, resources and contacts ● What would most help boroughs out of this week? **Strategy:** Ben Goward, Nathan Pierce **Business Case:** Steve O'Connor, Ed Parkes **Data and Insights:** Genta Hajri **Public Trust:** Pierre Venter, Sandy Tung
16:00	**Feedback and wrap up** What do you think we should do for the next three days?

16:30	**Event close** **Organisers review output**
17:00	**End**

Tuesday Agenda (Research Groups Only)

Tuesday GLA

9:00	**Team Arrival**
9:45	**Briefing on previous day's outcomes** led by Ed Parkes (Facilitator) **Daily standup -** led by Ed Parkes (Facilitator) Researchers take questions from backlog created on Monday and decide how they research each one and what output will be created.
10:00	**Research -** supported by Ed Parkes, GLA and LOTI *(Be as specific as possible)* *What tools, guidance and information already exists?* *Are they (where are they) used?*
12:30	**Lunch**
13:30	**Research -** supported by Ed Parkes, GLA and LOTI *(Be as specific as possible)* *Who would interact with the tool in boroughs and how would you redesign this tool in a way that boroughs can use it?*
15:00	**Daily Show and Tell and Retrospective -** led by Ed Parkes (Facilitator) - A slide - A photo - A prototype
15:30	**Consolidation of findings** - LOTI & GLA
17:00	**Depart**

Wednesday: GLA

9:00	**Team Arrival**
9:45	**Briefing on previous day's outcomes** led by Ed Parkes (Facilitator) **Daily standup -** led by Ed Parkes (Facilitator) Researchers take questions from backlog created on Monday and decide how they research each one and what output will be created.
10:00	**Research -** supported by Ed Parkes, GLA and LOTI

	(Be as specific as possible) *What tools, guidance and information already exists?* *Are they (where are they) used?*
12:30	**Lunch**
13:30	**Research -** supported by Ed Parkes, GLA and LOTI *(Be as specific as possible)* *Who would interact with the tool in boroughs and how would you redesign this tool in a way that boroughs can use it?*
15:00	**Daily Show and Tell and Retrospective -** led by Ed Parkes (Facilitator) - A slide - A photo - A prototype
15:30	**Consolidation of findings** - LOTI & GLA
17:00	**Depart**

Thursday: London Councils

9:00	**Team Arrival**
9:45	**Briefing on previous day's outcomes** led by Ed Parkes (Facilitator) **Daily standup -** led by Ed Parkes (Facilitator) Researchers take questions from backlog created on Monday and decide how they research each one and what output will be created.
10:00	**Research -** supported by Ed Parkes, GLA and LOTI *(Be as specific as possible)* *What tools, guidance and information already exists?* *Are they (where are they) used?*
12:30	**Lunch**
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15:00	**Daily Show and Tell and Retrospective -** led by Ed Parkes (Facilitator) - A slide - A photo - A prototype
15:30	**Consolidation of findings** - LOTI & GLA

17:00	**Depart**

Friday Agenda

9:00	**Arrival**
9:30	**Daily standup -** led by Ed Parkes (Facilitator) Research teams plan tasks for their Show and Tell sessions
10:00	**Show and Tell Preparation** Research teams prepare their Show and Tell
12:00	**Public arrive for Show and Tell**
12:15	**Show and Tell** The week's findings are presented
13:15	**Feedback from boroughs and GLA**
13:30	**Networking Reception**
14:30	**Close**

Invitation wording

Academics

Budget

Budget

Useful resources

Sharing Cities

Sharing Cities is a Horizon 2020 programme on smart cities that spans 34 partners, 6 cities (Greenwich, Milan, Lisbon, Bordeaux, Warsaw and Burgas) and received 24 million euro in funding to test smart tech in the areas of mobility, building retrofit, energy systems, smart lampposts, data platforms and citizen engagement. It is currently in the process of capturing learning from the work it has done and feeding into wider GLA work on smart infrastructure. This presentation gives an overview of some of the use cases that have been tested and the projects that were undertaken.

Humble lamppost

- A spin out from the Sharing Cities programme is the Humble Lamppost project, a summary of which is set out in this document.

Connected Places Catapult - The Future of Street Lighting

This report presents the progression of smart lighting infrastructure from the adoption of LED bulbs, to the creation of a distributed smart city platform. It investigates a number of applications that can be hosted through street lights, detailing use cases, benefits and potential business models, as well as providing examples of real-life case-studies.

South London Partnership InnOvaTe Project

In October 2018, the South London Partnership boroughs were awarded £4 million for a South London multi-purpose 'Internet of Things' platform project to help people live better, healthier lives and to generate economic growth. This website provides an overview of the project (also called "The InnOvaTe Project") and aims to keep various stakeholders updated on progress.

BSI Future Cities project

A proposed project by the British Standards Institute that will explore what cities need when it comes to standards in IoT and smart technology with a view to building practical, multi-themed support.

EU CEF Digital Building Blocks

To support the EU Digital Single Market in succeeding, the Connecting Europe Facility (CEF) programme is funding a set of generic and reusable Digital Service Infrastructures (DSI), also known as Building Blocks. The CEF Building Blocks offer basic capabilities that can be reused in any European project to facilitate the delivery of digital public services across borders and sectors. Currently, there are eight Building Blocks: Big Data Test Infrastructure, Context Broker, eArchiving, eDelivery, eID, eInvoicing, eSignature and eTranslation.

Horizon 2020 Smart Cities Information system

The Smart Cities Information System (SCIS) has grown out of the Horizon 2020 smart city projects and is a knowledge platform that provides a range of examples of smart tech that have been tested through Europe. SCIS brings together project developers, cities, research institutions, industry, experts and citizens from across Europe.

[Open and Agile Smart Cities](#)

Open & Agile Smart Cities (OASC) is a non-profit, international smart city network that is at the forefront of tomorrow's standards for city data, services, and technology. OASC is driven by implementation and focused on open platforms and citizen engagement. And aims to establish the Minimal Interoperability Mechanisms (MIMs) needed to create a smart city market. MIMs are simple and transparent mechanisms, ready to use in any city, regardless of size or capacity. By implementing MIMs cities increase the speed and openness of innovation and development, whilst decreasing cost and inefficiency. In essence, MIMs allow cities to engage in global digital transformation.

[Mayors High Street Strategy](#)

From page 137-151 there is a section on using data insights on the high street, examining the case study of Dalston and putting forward some proposals for digital services on the street.

[London Datastore](#)

The London Datastore is a free and open data-sharing portal where anyone can access data relating to the capital. Whether you're a citizen, business owner, researcher or developer, the site provides over 700 datasets to help you understand the city and develop solutions to London's problems. In 2018 the Datastore gained the capability to share 'secure' data (restricted and/or licensed data including permission, privacy, publication and distribution; as well as data that is presently held privately).

With the adoption of sensors we're starting to see live feeds of data being shared through the Datastore, a change from the usual static tables of data in a CSV or excel format. An example of this has been the EU-funded Sharing Cities project where the GLA and Greenwich council are working together to trial new technologies such as smart lampposts and energy management systems in council housing. These data feeds are then shared privately between the different organisations working on the project.With new use cases such as these, the Datastore can no longer be

considered simply a repository of open data. So in 2019 we undertook a discovery exercise with help from the Open Data Institute (ODI) to help us redefine the Datastore's evolving mission.

London Development Database Automation Project

The London Development Database Automation Project will streamline how planning application data travels from applicants, through London's 35 local planning authorities (LPAs), to City Hall, and out to the public. Our ambition is to create a 'live hub' of planning and development information, accessible to all Londoners by reforming the information we collect and the way we collect it. We will request the data we need for monitoring up front, on the initial planning application. This data will pass seamlessly into authorities' improved back-office systems, where planners will verify it, and then automatically out of those systems to City Hall and onto a public website.

GLA Combined Planning Data Standard

The GLA Planning Data Standard sets out the additional information that is required to be submitted as part of any planning application in the GLA area. This combined standard includes the information required by the London Data Standard, together with the information sought for the work being carried out by MHCLG for the development of a single planning register together with additional information required for the monitoring of the Housing Delivery Test. This information is required to enable the monitoring of development taking place in London and enable efficient spatial planning to take place.

London Infrastructure Map (IMA 3.0)

The London Infrastructure Map is an interactive tool which lets you explore current and future development and infrastructure projects. It gives utilities, boroughs, and developers a clear picture of what developments are taking place, so that they can plan better for new housing and other changes.

It also helps them to collaborate effectively - for example, to dig up a particular road together, rather than one after another - reducing disruptions and costs.

Private sector networks

There are a number of working groups and networks that also exist in this area which are coordinated by private sector bodies. For example:

- Connected Places Catapult - a standards working group
- ARUP - naming standards projectBritish Land - explore a common framework

Invitees

Organisation	Name	Role / department	When
ODI	Olivier Thereaux	Head of Technology	Days 1-5
Nesta	Tom Symons	Head of Government Innovation Research	Days 1-5
Alan Turing institute			Days 1-5
Westminster	Ben Goward	CIO	Days 1 and 5
Westminster	Paul McDonald		Days 2 - 4 Days 1 and 5
Kingston and Sutton	Steve O'Connor		Days 1 and 5
Kingston and Sutton	Pierre Venter		Days 2 - 4 Days 1 and 5
Greenwich	Trevor Dorling / Sarah Butler		Days 1 and 5
GLA	Theo Blackwell	CDO	
UCL (CASA)	Profs: Andy Hudson Smith; Duncan Wilson	Researchers, graduates	
Imperial		Researchers, graduates	
Connect Places Catapult Digital Catapult	Francesco Marchant		

BSI	TBD - they will send a presenter for the monday and someone from their Standards Labs' for the tue-thurs		
LOLEG	Dean Wendelborn	Chair	
LEDNET	Kate Hand	London Councils	Days 1-5
London Councils			Days 1,2,3,5
OASC	Martin Brynskov	Chair	1

How can IoT foster growth

A quick note for those of you planning to join us tomorrow for the final show and tell of IoTWeek…

If you've been following proceedings on [Twitter](#), you'll have seen that teams of volunteers from boroughs, industry, academia and other third sector organisations have been exploring some the key challenges that were discussed at the conference on Monday and will be presenting prototypes of ideas that speak to those challenges tomorrow.

Please arrive **at midday at Coin Street Neighbourhood Centre, 108 Stamford Street, London SE1 9NH**. Details on how to find the venue are here: https://coinstreet.org/contact-us/coin-street-neighbourhood-centre/.

The show and tell will start promptly at 12:15pm. We'd be pleased if @Steve @Ben and @Trevor would say a few words in response to those ideas. (And @Theo if your flight lands in time!). There will be a networking reception with canapes from 1:30pm-2:30pm. We look forward to welcoming you then.

Thanks for all your support for #IoTWeek!

Best wishes,
Eddie