



# loti

## London IoT Declaration

Creating conditions for IoT data collaboration across London's public bodies.

# London IoT Declaration

## Introduction

**This joint endeavour was initiated by the Greater London Authority (GLA), London Office for Technology and Innovation (LOTI), and a collection of London local authorities to work together in an innovative way.**

We invite all London local authorities and the organisations we collaborate with to join us by signing the Declaration and committing to delivering it.

**This declaration affirms our collective ambition for the use of and the generation of data from Internet of Things (IoT) solutions by local public services, e.g measuring air quality, assessing damp and mould within homes, monitoring the level of flooding or controlling street lights. It commits us to working together to:**

- Protect Londoners' privacy and security
- Design our IoT services in such a way that data can be shared across London for the better delivery of services to our residents and to support innovation

- Challenge the technology market to offer the flexible tools and services needed
- Provide consistency of requirements to suppliers to reduce their costs of bidding into London.
- Deliver better value for money by ensuring that experience and knowledge is shared between boroughs to reduce rework

**We feel that IoT solutions require their own declaration as a result of its unique characteristics and challenges:**

- IoT data is generated by a wide variety of devices, each with its own set of sensors and data formats, rather than human sources.
- IoT data is often generated in real-time or near real-time.
- IoT data often has a high volume and velocity.
- There is a greater possibility of IoT data from different organisations being difficult to combine and gain insight from, which prevents a wider opportunity to explore the generation of new insights previously unobtainable.



## The Opportunity

**The cost of IoT devices has now dropped to a level where they offer a real opportunity for public bodies to redesign their services around actual real world data either to inform strategic decisions or operational ones in real time.**

This is an opportunity not only for individual public organisations, but also at a pan-London level, if the data can be aggregated and shared.

Great work has already been done to transform our services using digital tools and technology, but we have an opportunity to do more with IoT devices and data sharing.

## Our Ambition

**We want to co-create the conditions for public bodies across London to work together to reduce duplication of effort, avoid the likelihood of data silos, but also help transform how data is used in London.**

**This requires:**

- Sharing of experience and business cases between bodies to reduce the duplication of effort and unnecessary repetition of pilots and deliver the most efficient and effective spend of public money.
- Agreeing common minimum requirements to be used in the procurement of IoT solutions to ensure best practice and that data can be easily accessed.
- Agreeing how IoT solutions can be implemented to solve London's problems without impacting on the privacy and security of our resident's data
- Agreeing common minimum data standards for specific IoT use cases so that data can be shared and collated meaningfully
- Our working together to deliver solutions for problems that span organisational and geographical boundaries



**Our ambition requires both a culture shift and a technology shift, and we've agreed 6 principles to help us do it:**

### **Principle 1 – Protecting Privacy:**

We will not store any personal data unless the specific use case necessitates this. Where we will need to store personal data, we will be clear about what data we are going to hold, why we are holding it, what we are going to do with the data and when we will dispose of it.

### **Principle 2 – Build Public Trust:**

To foster trust and enable accountability, we will be transparent about the technology used, including why and how it is used, what decisions will be made with it, and who is making those decisions. This should be easily accessible and locatable by the public. We will use ethical frameworks to assess if proposed solutions meet resident expectations.

### **Principle 3 – Data Ownership:**

We will own all of the data generated, and contracts will not be entered into with suppliers where this is not the case.

### **Principle 4 – Flexible, Modular IoT Solutions:**

We will implement solutions that are flexible and are able to integrate effectively. This entails using modular building blocks for IoT devices and IT infrastructure, and adopting open standards to unify the data generated by these devices. We will ensure that these values are embedded into our tender processes, such that all suppliers are clear regarding their commitments & obligations. This will be in terms of data ownership / security, and how it shall be handled in line with current data protection legislation.

### **Principle 5 – Sharing Information:**

We will operate on a share-by-default basis, where we will attempt to share data internally, between boroughs or other interested parties, if it is legal, ethical and in the public's interest. Where data is non-personal and can be classified as 'open data' we will publish this data. For non-personal data, we will operate on a share-by-default basis, where we will share data internally, between boroughs or other interested parties. We will share use cases, insights and documentation relating to project delivery to speed up implementation across London.

### **Principle 6 – Secure:**

We will design and maintain our IoT infrastructure to ensure an appropriately high level of security, following the suggested guidance from the Secure Connected Places Playbook.

## Our Commitments

**As signatories, we will work collaboratively to deliver the ambition for London outlined in this document, specifically we commit to:**

**As the GLA and LOTI,**

- Play a leadership role advocating for the approach set out in this declaration, and work with signatories as equal partners to create the tools and conditions for achieving the ambition set out in this declaration.
- Provide a place for the shared data, standards and documents that are created as part of this declaration.

**As Local Authorities, sub-regional partnerships, and other public / private sector commissioners we collaborate with to**

- Publish our case studies, share lessons learnt and talk publicly about things that have, and have not worked.
- Work together and share potential uses for data that is collected through IoT.
- Get our Commercial Teams to:
  - help create standard requirements for IoT procurements that will embed our ambitions and help shape the market to ensure open data comes as standard and is free to use and share
  - use the standard requirements when procuring systems
  - encourage the use of frameworks to speed up procurements.
- Get our Data Governance teams to agree on a data standard (such as FIWARE) that we will use to specify APIs and data schemas so that data from different organisations is compatible and can be collated to provide greater insight.

- Get our Information Governance Teams to work together to agree standard Data Protection Impact Assessments (DPIAs) and information governance approaches that can be used by organisations implementing use cases. This will speed the implementation of IoT solutions and reduce the need to ask citizens for the same information multiple times.
- Revisit this declaration annually to reaffirm our commitment and to see if it needs to be revised based on what we learn, and recognising that any field of innovation evolves.

**And, as a supplier,**

- Will work with London local government and applicable organisations to deliver solutions in accordance with the principles outlined above.
- Provide data access via the standard API's and data schemas so that data can be more easily shared.

