

**0819 - Fund application - Alpha project : Entry #  
1617**

**2. Lead authority details**

**1.1 Lead authority name**

London Borough of Lambeth

**Full name**

Catherine Neal

**Role**

Business & Programme Delivery Manager

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**Phone number**

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**Full name**

Robert Bristow

**Role**

Assistant Director Planning, Transport & Development

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**Full name**

Christina Thompson

**Role**

Strategic Director, Finance and Investment

**Email address**

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**3. Project details**

**3.1 Title of the project to appear on the Local Digital website**

Reducing invalid planning applications: a service pattern for digital planning submissions

**3.2 What are the proposed ideas that you will test arising from your previous research phase?**

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This alpha does not follow-on from a single discovery project, but is the result of insights that have become clear during other projects by the partners and their collaborators. These include [an automated digital planning guide](#), [a digital planning submissions service](#) and [a back office planning case management system](#).

We now have a clear picture of the extent to which validation work and invalid applications represent a common problem for all planning authorities (see Research Overview [here](#)). We can also clearly see how the paradigm shift from *documents* to *data* has the potential to reduce and eventually even eliminate this problem. That is the main hypothesis.

The second hypothesis relates not to the solution itself, but to making that solution useful across multiple councils.

– Planning is a very content-intensive service. It includes legislation, policy, guidance and case law, at both national, regional and local scale. Some of this is common to all councils, and some is unique.

– Planning content is constantly changing. It is not realistic to rely on every council having a full-time team of web developers to customise and update all content.

– Much of the knowledge required is in the heads of planning officers, most of whom do not write code, and may be sceptical of digitising services unless they can see and control the content directly.

All this points towards the need for a planning submission service pattern that:

1. Uses structured data wherever possible, instead of documents.
2. Can be customised by planning officers using 'low-code' dynamic forms platforms.
3. Is structured in a modular way (eg separating national, regional and local content), allowing updates to be collaboratively shared using a ['git'](#) system.

Many of these are already features of our previous projects, but have not yet been applied to the problem of invalid planning applications.

### Key research and design questions for this alpha:

1. What dynamic form components are needed to cover most types of planning information?
2. What are the data schemas that can capture most of the required information for most planning submissions?
3. Can we design a core service 'super pattern' for planning submissions that covers most types of project in most contexts, allowing for the differing local information requirements? This design pattern must be able to be altered, evolved and extended.
4. How can we ensure that such a content-heavy digital service is legible and navigable for users?

### 2.3 Describe how you will research the problem area and user needs arising from it?

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Every year, councils receive thousands of planning submissions, either directly via email / post or indirectly via planning portal. Each submission must be manually checked to ensure it is 'valid'. This means checking that no required documents are missing, incomplete or incorrectly formatted.

Our understanding, based on conversations with 40+ councils, is that typically 50% or more of all applications are 'invalid', meaning the application needs to be resubmitted. This is hugely frustrating and costly for applicants, and also represents a major burden on councils.

Given the significance of the problem, many people are surprised to learn how mundane and avoidable most of the reasons for invalidity are. ([Please refer to data on reasons for invalid applications, attached](#))

So far, approaches to tackling this problem have included:

- **Publishing separate checklists, guides and calculators on websites.** These make some, but little difference, since they rely on users wading through even more documents.
- **Web forms with field validations that recognise whether a piece of information has been provided or not** These are powerful, but are limited in scope because they are largely non-dynamic (one-size-fits-all), and in reality the required information will depend on the project
- **Machine-learning software that automatically reads documents to check them.** This is impressive, but is a very complex, laborious way around the problem, with limited reliability.

However, there is a simpler approach. The web allows us to shift from sharing information within *electronic documents* to sharing it directly as *structured data*, readable by both humans and machines.

So, wherever possible, instead of asking users to upload documents, they can complete dynamic web forms that ask them to provide key pieces of machine-readable information directly, often within predefined schemas. Using dynamic forms, users need only be asked for information that is relevant for their project, based on the information they have already given.

So instead of developing technology to check documents for errors, we can avoid the need for many documents in the first place.

For example, instead of asking applicants for a Location Plan, they can add the property boundary onto a digital map as location data.

Similarly, instead of asking users to work out the correct fee for themselves, it can be calculated automatically based on the information they have provided.

This same approach can apply to all submission forms, many planning reports, and perhaps – one day – even to scheme drawings too.

### 3.4 Describe the scale of economic and financial benefits from addressing the problem, both at a local and national level, and how you will estimate future costs and benefits from a potential solution.

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The benefits can be broadly divided into two categories.

### Savings to applicants and their agents

We do not have any precise data for this, however we can make some informed estimates.

If we conservatively estimate that validation typically costs **1** day of an agent's labour, at a **£400** cost, then for the **447,934** planning applications received in England alone last year, this project could drive savings of around **£179m**. This will especially benefit homeowners and SMEs.

There are also indirect cost savings that are inestimable, such as the costs of project delays, disputes and lost opportunity. On average, an invalid application causes a delay of 34 days. Around 10% are withdrawn entirely.

### Savings to councils

The average authority in England receives **1400** planning applications per year. (In reality this does not include some smaller types of submission, so the actual number is higher. For example, Lambeth Council receives 2100 applications per year, but around 4900 submissions.)

Each submission has to be manually validated, and typically around 50% have to be returned and re-validated, in some cases up to 9 times.

The time to validate, report, return and revalidate submissions varies, but we can estimate that validation takes, on average, **5** hours per submission (the PAS benchmark is 4). It is not unrealistic to imagine this could be reduced to **2** hours. At a typical hourly cost of **£50** per hour (including overheads), then that would free-up at least **£210,000** of resources per year for the average planning authority.

Across the whole of England\* this represents an annual saving of **£67m**. Allowing for all submissions, the actual figures may be double this.

### Indirect savings

The shift from documents to data will not only reduce the burden of validation. It will also allow some automated policy compliance assessment. A huge proportion of the content of PDF planning submissions is, in reality, superfluous (eg a council's own policies regurgitated back at them), so reducing this assessment overhead could reduce officer workload by over **5** or more hours on average per submission (**£112m+** nationwide).

Again, this excludes other potential indirect economic benefits, such as increased revenue, reduced failure demand and communication overheads, improved user satisfaction and trust, training and staff retention, or cost savings from collaboration.

\*We have used England as a benchmark based on the availability of statistics. But we would expect it to be adapted by councils throughout the UK.

### 3.5 How will you set up the project to ensure a collaborative, iterative approach between all partners?

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Our objective – of course – is to keep the project as lean as possible for everyone involved. Since we feel we have a good understanding of what the project is trying to achieve, and the nature of the problem it is seeking to address, it should be possible to move quickly into design, research and development, then iteratively use the outputs to identify issues.

The partners will each assign a project leader as a point of contact (POC) for the project. Fortnightly 1 hour show-and-tells will be held. These will be held at the offices of one of the partners, and any partner representative or invitee may attend in person, but with an expectation that most will join by video call. There will also be a slack channel for partners where project updates can be shared, issues discussed and questions asked.

Testing workshops and 1-to-1 sessions with officers may also be held at partners' offices.

As soon as possible, each partner council will have its own test instance of a platform running the service, for interested stakeholders to explore, test and improve or flag issues.

### **3.6 Who are the relevant service owners and senior stakeholders that will need to be bought into the project to ensure its success?**

As well as the main point of contact (POC) (who may or may not be one of the below) the primary stakeholders in each Council – in order of priority will be:

#### **Head of planning**

The owner of the planning service, who would be ultimately responsible for whether the service pattern is valid as a means for submitting and validating planning applications.

#### **Validation officers**

At least one officer who has practical knowledge and experience of the validation process, and an understanding of, for example, statutory submission requirements for schemes and the required information checklists.

#### **Digital transformation / IT systems lead**

The person responsible for successfully delivering new digital services across the council, and with some oversight of interoperability between products, services and data.

All will be invited and encouraged to attend fortnightly show-and-tells. If and when their specific input is required, the relevant POC may organise a workshop session with the project delivery team.

### **3.7 Describe how your project team will have the skills and time available to deliver the project in an iterative / agile, and user-centred way?**

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### Experience

Many of the project partners have experience of successfully delivering digital projects in an agile, iterative way, including the projects that were listed in 2.2, and also have a deep understanding and domain knowledge of planning. We have found that this combination of perspectives is crucial.

Some partners also bring their own particular areas of knowledge to the project, for example Wycombe Council are collecting detailed metrics of officer workflow, and Southwark Council through their work on a back-end planning case management platform.

### Suppliers

We expect to be working with Open Systems Lab (UK non-profit 9152368) as a supplier. Their team are uniquely positioned to help deliver this project, since they have already developed the PlanX infrastructure that can support this service, and the Digital Planning Guide, which is being adopted by multiple councils. They can leverage this know-how to deliver this project. Their project team includes designers and developers with experience in user-centered design, data architecture and agile development and testing of digital services. They have also been working alongside other suppliers and discovery projects in this space, which means they have an in-depth understanding of the digital planning ecosystem, and their work places a strong emphasis on openness, flexibility, adoption and interoperability between platforms.

Given their unique capability to help deliver this project, and their ongoing relationship with the lead partner, we do not intend to launch a bidding process, but rather, to engage the supplier's services through the Digital Marketplace. This has the advantage of allowing us to move quickly into delivery.

All project outputs will be openly published and licensed, documented such as to allow the service pattern to be adopted by the Planning Portal or any dynamic forms platform supporting a digital planning submissions service.

Their team would deliver the alpha, overseen by the lead partner and guided by the other partner POCs. OSL have prepared an outline project plan [here](#).

### Capturing lessons

Through initial workshops and testing with officers we would also seek to identify issues, as well as gain a better, more detailed understanding of the likely cost savings that could result from developing this solution beyond alpha.

Initial testing with users will allow us to identify usability issues and strengths of weaknesses compared to other planning submission services. These lessons and explanations will be summarised and documented in a user report.

### 3.8 Describe any additional support you might need to run the project beyond the award of grant funding.

We do not anticipate the need for formal training as part of this alpha, or require explicit work from any other organisation.

However, we will seek to draw on the expertise and guidance of others in the many related departments and teams with knowledge of for example, [the national requirements regarding planning information and validation](#), digital planning, data standards for planning and digital government services, such as the Local Digital Collaboration Unit, Digital Land, fellow-travellers such as Connected Places Catapult, and other suppliers. We may also invite the advice of relevant bodies such as the Planning Inspectorate, the Planning Advisory Service, the GLA and the RTPi.

We would also welcome all and any support in disseminating outputs to councils and their suppliers throughout the UK.

All and any interested parties from such organisations will be invited to join project show-and-tells.

### 3.9 How will you share openly the learning and outputs from the project as the work develops, both with the sector and MHCLG?

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### Fortnightly Show-and-Tells

As described in 2.5, project partners will be invited to fortnightly show-and-tells, whether in person or by video conference. Invitations will be extended to any interested party. This is an opportunity to report on progress, anticipate and discuss issues, but also for others to provide feedback.

### Slack channel

A slack channel will essentially act as an everyday extension of the Show-and-Tells. Any interested member of the community will be invited to join. The channel will be terminated at the end of the project.

### GitHub

Code components will be published on GitHub, along with other supporting documentation about components, the service pattern, content guides, data schemas, flowcharts and the slides from each Show-and-Tell.

### Explorable prototype

An explorable prototype of the service running on PlanX will be made available at a shareable URL as soon as possible.

### 3.10 How much funding are you applying for to complete the project?

£98,500

### 3.11 How will the total project budget be used?

Resource (e.g. staff time, supplier, contractor, etc.)	Time / Quantity	Total cost / Value	Who will pay (e.g. Local Digital funding or a particular project partner)
Supplier	521 days	£98,500	Local Digital

### 3.12 What do you think will be your biggest barriers to success?

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### Interoperability with legacy systems

The single most significant barrier the project will face lies beyond a successful alpha. Even though it may be possible to build a planning submissions service that is capable of receiving and documenting planning submissions as granular, structured data, the current back-office case management software that would be expected to receive those submissions would not be able to accept them. They were designed for documents, not data, and the nature of the suppliers' business model often gives them little incentive to allow flexibility or evolution.

The long term strategy to mitigate this barrier lies in working alongside other projects and suppliers developing an interoperable, back office case management platform that uses structured data, such as the one Southwark Council are developing an alpha for. However, in the short and medium term it will be necessary to find workarounds for operability with existing legacy systems, for example by automatically generating documents containing links to the original data. This is something we would look to address at beta stage.

### Legal compliance

Planning information will still need to meet all compliance requirements for planning submissions, regardless of its format. Our research so far suggests this will not be an insurmountable barrier, but this is something the alpha will help test.

### Larger, strategic projects

In the case of major, strategic projects, validation requirements may become more complex and specific. We will mitigate this by beginning with householder and minor planning submissions that can be standardised and that comprise the majority of the work burden.

### Usability / navigability

Very few digital services have to ask users for such a large volume of such complex varied information. It is very likely that conventional web-page forms or even fluid, dynamic form interfaces may become overwhelming or disorientating for users. Mitigation of this will be one of the main design challenges of the alpha.

### Video conferencing

As banal as it may seem, inviting all participants to join fortnightly show and tells by video conference is not as easy as it sounds, since many council's firewalls will block common video conferencing tools. This will be mitigated first by surveying partners and seeking a service that is accessible to most partners. If not, workarounds will be found. In any case, a single, simple joining protocol will be agreed and communicated in advance, so any issues with video conferencing do not interrupt or delay proceedings.

## 4. Further details

### 4.1 Region:

- 36

### 4.2 Services to which this proposal applies:

- 49

## 5. Project partner details

### 5.1 List all the project partners working on the project, and the single point of contact person for each:



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Project partner name	Name of single point of contact	Role of single point of contact	Email of single point of contact	Phone number of single point of contact
London Borough of Lambeth	Catherine Neal	Business & Programme Delivery Manager	cneal@lambeth.gov.uk	020 7926 4024
Wycombe District Council	Peter Forrest	Commercial & Change Manager	Peter.Forest@wycombe.gov.uk	01494 421765
London Borough of Southwark	Jack Ricketts	Planning Officer	jack.ricketts@southwark.gov.uk	07523 505 036
London Borough of Lewisham	Christopher Dale	Service Group Manager	christopher.dale@lewisham.gov.uk	020 8314 3979
London Borough of Camden	Daniel Pope	Chief Planning Officer	Daniel.Pope@camden.gov.uk	020 7974 4620

**Name of project partner**

London Borough of Camden

**Full name**

Richard Limbrick

**Role**

Planning Solutions Manager

**Email address**

[Richard.Limbrick@Camden.gov.uk](mailto:Richard.Limbrick@Camden.gov.uk)

**6. Agreement with MHCLG**

**6.1.1 A business case or benefits case that explains the cost of the problem and the potential for savings - both to the councils involved and on a national scale.**

- I agree

**6.1.2 An updated user research report, justifying the projects conclusions.**

- I agree

**6.1.3 An accessible prototype that shows others how to implement it.**

- I agree

**6.1.4 A conclusion justifying why the project should either move into a beta phase, extend the alpha phase, repeat alpha with a redefined scope, or if the project should stop altogether.**

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- I agree

**6.1.5 A funding application for a subsequent phase of development, if appropriate.**

- I agree

**6.2.1 We are happy for MHCLG to publish this application online so that local authorities can see what we are working on. This will include the name and email of the single point of contact of the lead authority to enable potential partners to contact you directly.**

- I agree

**6.2.2 We are happy for all outputs from this project to be published under open license with a view to any organisation accessing, using or adopting them freely.**

- I agree

**6.2.3 We understand that our application will only be considered if all the project partners on this application have signed the Local Digital Declaration by the time our application is reviewed.**

- I agree

**6.2.4 We agree to work collaboratively with MHCLG's lead contact, share project related data , take part in MHCLG organised events as appropriate and have regular meetings and open conversations about project scope, delivery and outputs.**

- I agree

**stage**

alpha

**round**

round3