

WORK PACKAGE - AGREEMENT FOR DELIVERABLES UNDER THE PROJECT CONTRACT

AREA OF THE PROJECT	Move to the cloud feasibility study and network review
WORK PACKAGE NUMBER	002
SERVICE COMMENCEMENT DATE FOR WORK PACKAGE	8 th March 2018 to 30 th March 2018

This Work Package forms part of the agreement for services in relation to the Project between the Authority and the Supplier (the "Agreement"). Capitalised terms used in this Work Package shall have the meaning given to them in Schedule 1 (Definitions) of the Agreement.

1. BACKGROUND AND REQUIREMENTS

1.1 Background

1.1.1 During the procurement for the Agreement, the Authority provided the Supplier with information about its proposal to move its IT infrastructure to the Cloud (see Annex 7 to volume 3 of ISFT). In their response to ISFT, the Supplier provided an outline solution for how they could meet the Authorities requirements as set out in Annex 7 as a case study. The Supplier also provided pricing for their solution in the financial response template to ISFT.

1.1.2 The Authority does not wish to contract for the solution provided by the Supplier in its response to ISFT at this stage. However, it does wish to undertake a study to help it understand the costs and benefits of implementing a Cloud based solution.

1.1.3 The Supplier should respond to this work package on the basis that the information provided in Annex 7 is still correct. The only change is that the Supplier should make recommendations for moving all of Authority's IT architecture to the cloud not just the priority systems identified in Annex 7. This should include identifying the logical groupings/stages for moving the estate across. Annex 7 is clear that the Authority is open to using any cloud based solution in order to meet its needs; however it is recognised that Annex 7 does predominantly reference the Microsoft Azure solution. For the avoidance of doubt, the Authority is open to considering all solutions and the report should identify the most cost effective solution.

1.1.4 The Authority also wishes the Supplier to undertake a review of its network architecture. The Appendix to this Work Package is a basic network diagram which illustrates the Authority's current network and provides a description of the "as is". Broadly, the network connections include a connection between the Birmingham and London offices and to the internet. The Authority also use the Government's PSN.

1.2 Requirements

1.2.1 The Authority requires the Supplier to undertake a study to deliver the outcomes listed in section 1.3.1 for the cloud study and 1.3.2 for the Network Review. Both studies need to be completed and delivered by the 31st March 2018.

1.3 Outcomes

1.3.1 The cloud study produced by the Supplier shall deliver the following outcomes:

- a) An assessment of the Authority's current IT infrastructure and its suitability for being delivered through cloud based services,
- b) The benefits of delivering this IT infrastructure through cloud based services,
- c) An assessment of the Authority's existing server estate and the risks involved in not migrating to the cloud, the probability of those risk materialising, the impact of that happening and any potential mitigation,
- d) A recommendation (and explanation) as to the logical groupings for migrating all of the Authority's IT Infrastructure to the cloud,
- e) A detailed implementation plan (including both Supplier and Authority resources required along with timescales and confidence levels) for moving the services to the cloud in line with the recommendation,
- f) A clear set of cost options for delivering this plan. The costings can include ranges but the Authority would not expect the ranges to vary by more than 25%. The assumptions and costs drivers underlying the estimates should be clearly set out.
- g) The Supplier shall undertake one set of revisions to the study based on feedback provided by the Authority

1.3.2 The network review shall review the Authority's network link between London and Birmingham, its connections to the Intranet and its use of the PSN. The report following the network review shall:

- a) assess the suitability and resilience of the Authorities network connections for its current level and pattern of usage,
- b) assess the extent to which the current system will meet the Authority's future requirements taking into account the Authorities recently increased staffing level, the recommendations of the cloud study above, the Authorities desire to increase its usage of Skype for Business and

other VOIP communications and the Suppliers knowledge of how the demands on the Authority's network are likely to increase based on trends in comparable organisations

c) make recommendations to address the issues identified in a and b (and any other issues connected to the network) in order to improve its resilience and/or effectiveness and/or reduce its cost,

d) shall provide costings for implementing the recommendations in c). The costings can include ranges but the Authority would not expect the ranges to vary by more than 25%. The assumptions and cost drivers underlying the estimates should be clearly set out.

e) The Supplier shall undertake one set of revisions to the study based on feedback provided by the Authority

1.4 Term

1.4.1 The study shall be completed (including revisions) by 31st march 2018

1.5 Capability required

1.5.1 The Supplier to identify appropriately skilled resources to deliver the work package.

1.6 Insurances – No additional insurances are required.

1.7 Charges

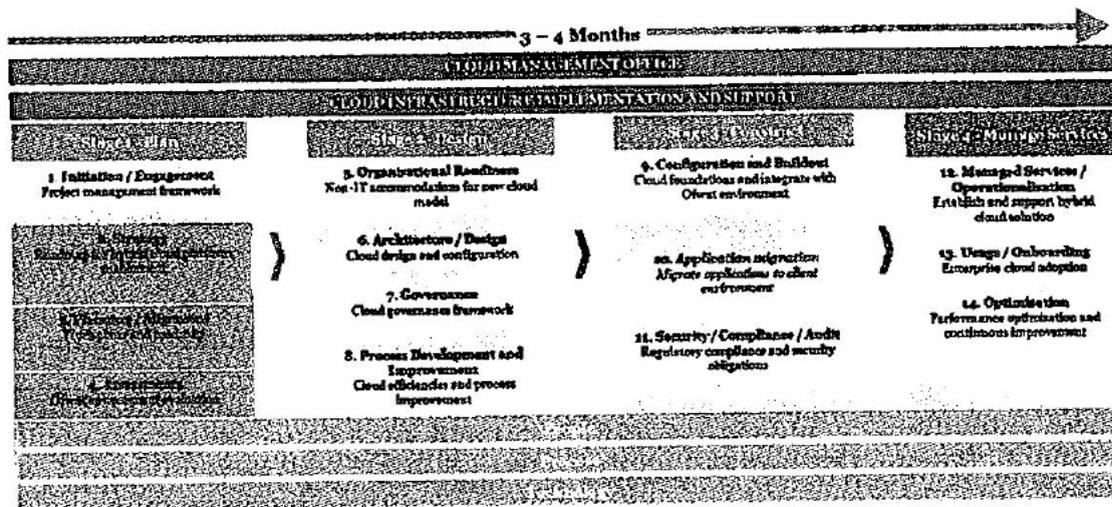
1.7.1 The Payment Mechanism for this Work Package is milestones. The Pricing Mechanism for this Work Package is a Firm Price and subject to the provisions of Schedule 5.1 of the Contract.

2. SOLUTION AND SERVICES

2.1 Solution

The scope of the existing Ofwat IT infrastructure including in this work package is understood to be the applications hosted on the 65 servers owned and operated by the Ofwat IT team. These servers support the core business systems including Fountain, the finance applications and core office productivity systems such as printer and file sharing.

The work package will be based on Stage 1, and the relevant activities to Stage 1, of the 4 stage process that PwC have developed for cloud transformation projects as illustrated below.



To begin Stage 1, a Project Kick-off meeting will be organised to initiate the project agreeing timescales, deliverables, and resources as part of developing the Project Management Framework.

Specifically, considering the work completed in the case study during the Competitive Dialogue process and the required outcomes for this work package the focus will be on Stage 1 – Plan, which incorporates the following steps as highlighted in the diagram above:

- 1. Strategy** – defining the target benefits for migrating applications to cloud base solutions considering current know technology issues or limitations of business use
- 2. Planning / Alignment** – grouping and sequencing the migration of applications to mitigate risks and to pull forward the realisation of benefits
- 3. Assessments** – considering the suitability of migrating existing applications to cloud platform (PaaS) or infrastructure (IaaS) services as well as the potential to replace any applications with cloud based business solutions (SaaS). The assessments will also determine any cases where it is not appropriate to migrate the existing application to a cloud alternative. Included in the assessments will be desktop review of the current network services to consider potential changes required to support the transition to cloud services.

To undertake this work package the existing applications and the associated technology infrastructure will be assessed to understand any risks associated with current operations and the potential risks of migrating the applications to the most appropriate public cloud landing zones (e.g. SaaS, PaaS or IaaS) or whether the application is not suitable for public cloud migration and therefore an alternative approach is required (e.g. sustaining the application in the current environment). Key to this analysis will be the identification of risks and associated potential mitigation actions both for retaining the application with the current infrastructure and migrating it to the public cloud (e.g. AWS, Azure, etc).

For any applications considered suitable for migration to the public cloud the grouping and sequencing of the migration will be described as an implementation plan, with resource (from Ofwat and PwC) requirements identified.

PwC understands the importance of planning and that a key differentiator for any Cloud solution is seeing that the right strategy is in place that defines the necessary Cloud capabilities to meet the business need. This stage will specifically help Ofwat capture the necessary brief requirements for the migration plan and any specific inputs that would be sought. This stage would build on the work we have completed during dialog and consider the full IT estate.

The Assessment of the Fountain application will be required to answer the following key questions:

- Application compatibility – analyse if the application is architecturally fit for Windows Azure or AWS before moving.
 - External / internal dependencies – check if there are any external application dependencies and need to analyse and if those are accessible through Azure or AWS.
 - Application integration – check whether candidate application is integrated with other on-premise applications and shared services.
 - Database compatibility – analyse whether the existing database is best fit to migrate to Azure or AWS.
 - Application maintenance / management – identify how the logs are maintained and where they are stored.
 - Scalability / elasticity – identify whether the application design supports scalability as Azure supports it.
 - Compliance requirements – check if there are enterprise compliance and regulations that govern whether the data can be moved / stored outside the enterprise's control.
 - Security – clarify whether the same level of security can be provided after migrating to Windows Azure or AWS in terms of:
 - Data security
 - Authentication
 - Authorisations
- Network connectivity – clarify the user access requirements

2.2 Key Personnel – list named individuals performing key roles, if applicable.

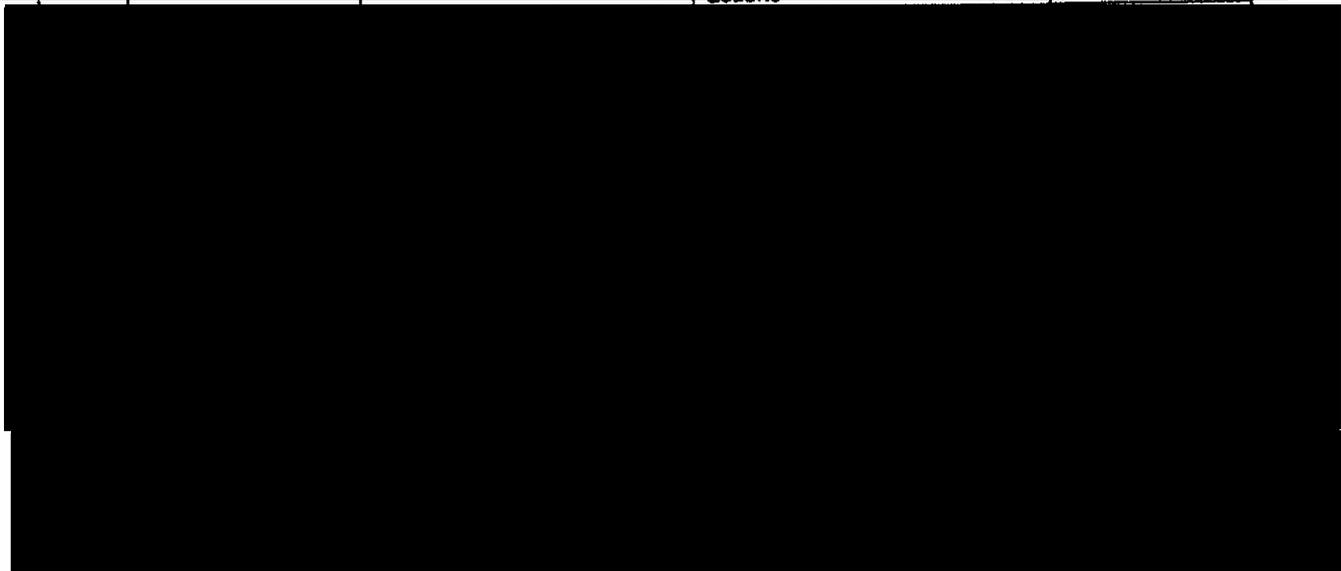
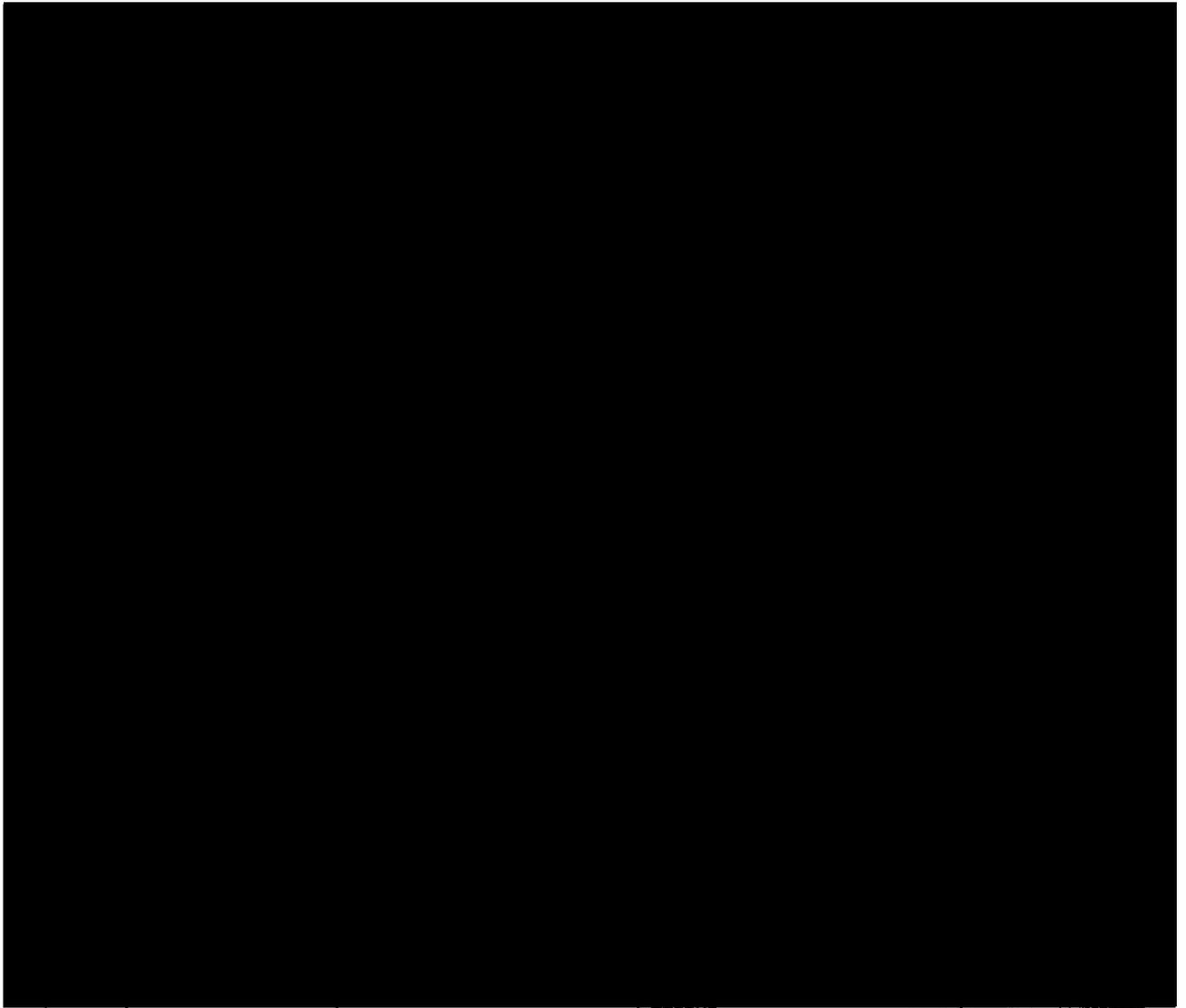
The table below outlines the Supplier's resources which will deliver the Move to the Cloud feasibility study and network review project. The project will up to four weeks.

Role	Name	Days	Responsibilities
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

2.3 Implementation services and delivery plan

The dates used in the following table are used as examples based on current assumptions and have potential to change.

#	ACTIVITY / MILESTONE	DELIVERABLE / OUTPUT (i.e. document produced, workshop arranged/completed...)	ACCEPTANCE CRITERIA FOR DELIVERABLE	DUE DATE (Example Milestone Dates)
1	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]



3 100

100 100

2.4 Authority Responsibilities

We have made the following assumptions for Authority responsibilities in preparation of this work package. Changes in these assumptions may impact the timing, scope, fees, and other aspects of the engagement.

The Authority is responsible for the overall programme and for all management functions and decisions, including establishing and maintaining your internal controls, evaluating and accepting the adequacy of the scope of the Services in addressing the Authority's needs and making decisions regarding whether to proceed with recommendations.

The deliverables will be provided in the Authority branding. The Authority will take responsibility for reviewing, accepting and taking ownership of the deliverables.

The deliverables are solely for the benefit of the Authority and may not be shared with any third parties unless specifically agreed with the Supplier in writing first.

The Authority are also responsible for the results achieved from using the Services or Deliverables. The Authority will designate a competent member of its management to oversee the Services and to coordinate the work for/ with the Supplier team. The Authority will provide timely, accurate, and complete information and reasonable assistance, and the Supplier will perform the engagement on that basis.

To facilitate the Supplier's work, the Authority agrees to provide the following assistance:

Supplier personnel will be provided reasonable access to appropriate facilities not limited to safe and secure work spaces, systems (computer, communications etc.) and tools to complete their responsibilities. This includes the Authority ensuring appropriate back-up, security and virus-checking procedures in place for any computer facilities the Authority provides or which may be affected by the Services.

The appropriate information, reviews and approvals required of the Authority's employees will be obtained in a reasonably timely manner.

The Authority will provide the Supplier with all relevant documentation, as well as access to systems and people, to support this engagement, including relevant subject matter resources having suitable knowledge and expertise to perform their respective roles.

Any access to the Authority premises requested by the Supplier and if so the proposed terms of access

2.5 Detailed Services/Deliverables:

See above within project plan for details of services and deliverables.

3. CHARGES FOR WORK PACKAGE

3.1 Proposed Payment Mechanism (select from below)

Payment Mechanism

(Tick one box)

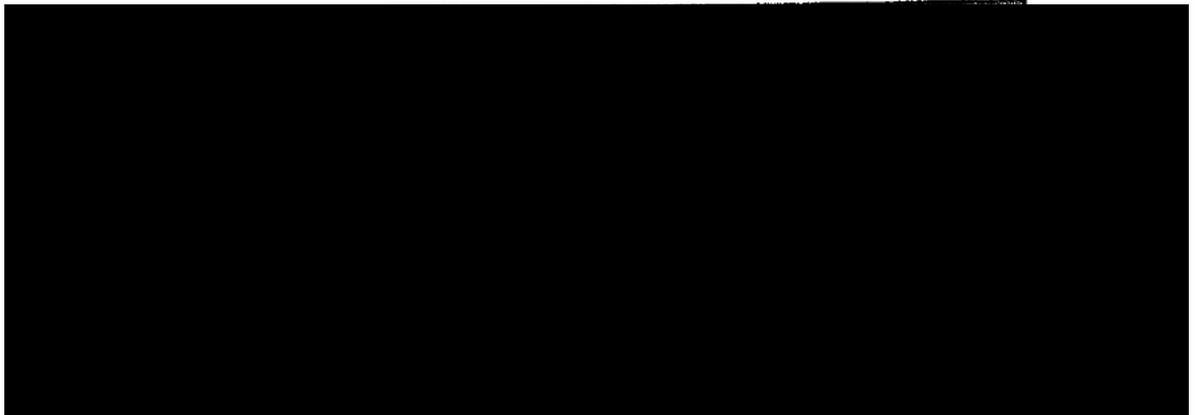
<input type="checkbox"/> Service Charges
<input type="checkbox"/> Milestone Payment

Pricing Methodology

(Tick boxes as applicable)

<input type="checkbox"/> Time and Materials
<input type="checkbox"/> Fixed Price
<input type="checkbox"/> Firm Price
<input type="checkbox"/> Estimated Price

The firm price for the project is £41,500 excluding VAT. The Authority shall have the right to call for and pay an interim bill even if a Milestone has not yet been reached.



3.1.1 Estimate of Total Charges

N/A – see above.

3.2 Fixed Price Work Packages or Firm Price Work Packages

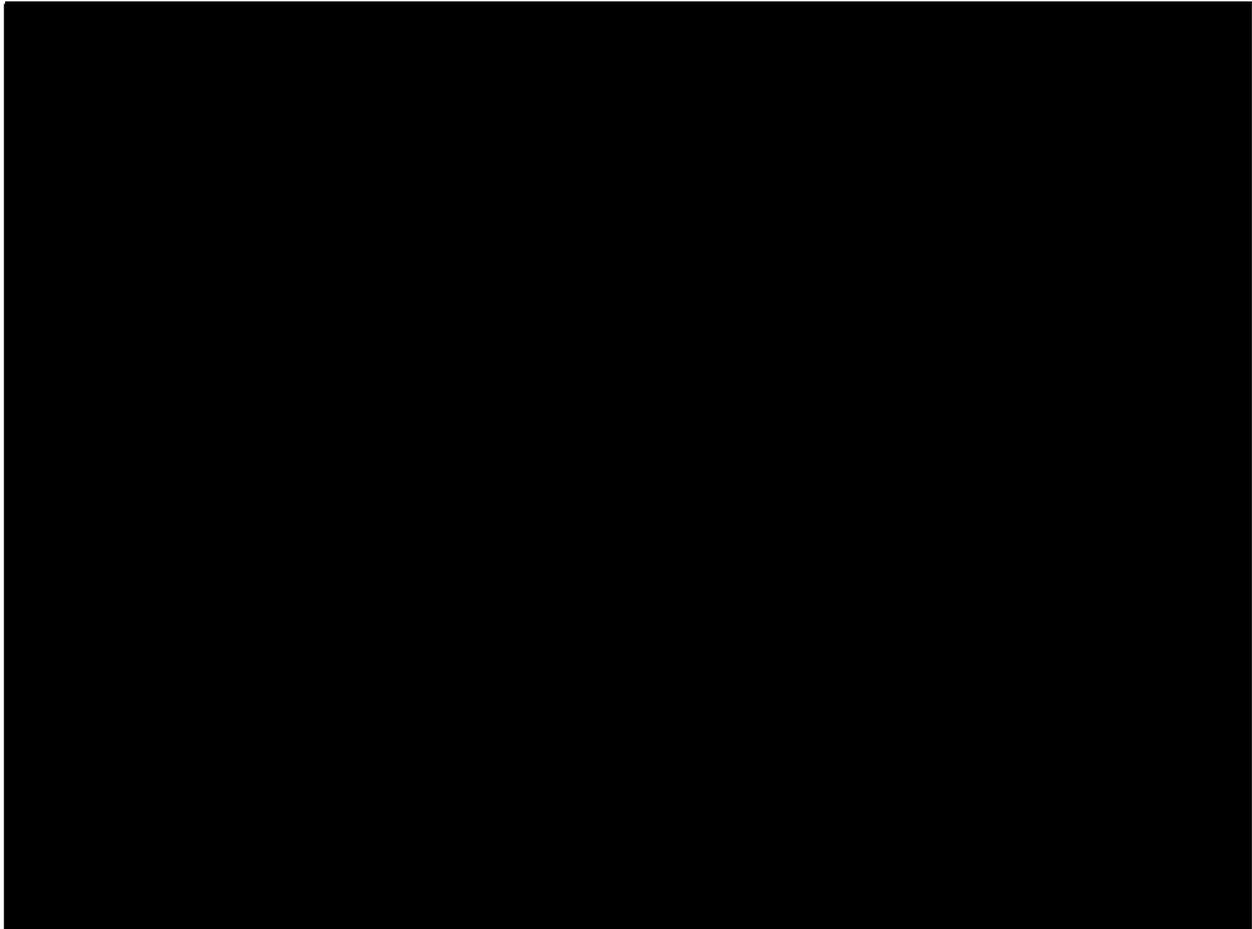
3.2.1 Milestone Plan (for Fixed Price or Firm Price Work Packages)

Given this project will run for up to 4 weeks, we will have one milestone for measurement and payment at the end of the work package completion.

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3.3



3.4 Reimbursable Expenses

There are no reimbursable expenses applicable in this work package; the expenses that will be incurred here are to be absorbed within the ratecard provided.

3.5 Assumptions

At the Authority's request, the Supplier has based the approach, responsibilities and fees outlined in this work package on the assumption basis that the information provided in Annex 7 is still correct. Further specific assumptions for this project are as follows:

Assumption	Impact on Charges if assumption proves untrue
Server estate in scope is 65 servers as per the details shared during dialogue	Risk that more effort or time is required to assess the current estate for risks and applications mapping to landing zones.
Applications in scope are described in the Infrastructure data sheet shared during dialogue	Risk that more effort or time is required to assess the current estate for risks and applications mapping to landing zones.

Current network services and topology is accurately documented	Risk that more effort or time is required to assess the current network services for suitability for the planned cloud services.
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4. PERFORMANCE MANAGEMENT

There are no specific performance management requirements

5. PROGRESS REPORTING

Progress reporting will be aligned to overall account management and Project Curve where applicable.

The tools and the reporting cycle will be:

- Detailed project plan - will be formally updated every week
- High level status report - will be updated every week
- Risk and Issues log - continually updated
- Action Log - continually updated
- Communications plan - continually monitored

The key meetings to review and monitor Performance will be:

- Steering Group - monthly
- Project teams formal status review - weekly

For all meetings, the Authority shall agree the meeting's agenda and attendees with the Account Manager in the first instance.

6. INTELLECTUAL PROPERTY RIGHTS

In relation to Intellectual Property Rights (IPR), we will be using pre-existing IPR in the Cloud Transformation process methodology, accelerators, and associated tools. This is pre-existing IPR which the Authority can use for the purposes of the work package, however it will remain our IPR and cannot be shared or licensed with other parties.

7. DATA PROTECTION PARTICULARS

7.1 Each of the Parties acknowledges and agrees that the following is an accurate description of the Data Protection Particulars:

- 7.1.1 the subject matter, nature and purpose of the Processing shall be the Processing of the Personal Data in connection with the provision by the Supplier to the Authority of Move to Cloud Assessment and Plan as shall be more specifically set out in subsequent Work Package documentation;
- 7.1.2 the Supplier shall Process the Personal Data for the duration of the provision by the Supplier to the Authority of the services to be delivered under this Work Package documentation or as otherwise specified under Clause 25;
- 7.1.3 the type of Personal Data that will be Processed by the Supplier under this Agreement will be contact details and calendar availability information.
- 7.1.4 the categories of Data Subjects whose Personal Data will be Processed by the Supplier under this Agreement will be Authority employees and directors.

8 CONFLICT OF INTEREST

There are no specific actual, potential or perceived conflicts of interest identified for this work package.

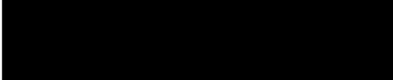
9 EXIT MANAGEMENT

There are no specific exit obligation required for this work package.

10. SIGNATURE PAGE

10.1 Approvals

The below approve the services detailed within this Work Package are required and approve the Supplier to commence this work.

Name	Role	Date of Approval
Caroline Gregory	Director of IT and Digital	8/3/2018
		

11. POST COMPLETION

Approval that services within this work package have been successfully completed.

Documents: *insert acceptance criteria*

Meetings/Workshop: *insert acceptance criteria*

ACTIVITY	Deliverable/Outcome (i.e. document produced, workshop arranged/completed, ...)	DUE DATE (linked to milestone dates in project plan)	DATE COMPLETE D	ACTIVITY SIGNED OFF BY AUTHORITY Work Package Lead (including comments)

NB: Attach exit summary report if at the end of the contract/supplier exiting – ensuring knowledge / activities successfully transferred to Authority staff or new supplier

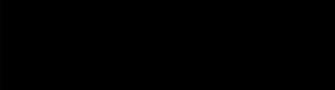
12. SIGN OFF

The below approves that this work package has been completed within scope, quality and cost.

Name	Role	Date of Approval
[insert job descriptions of individual responsible for confirming completion of services covered by Work Package]		

ANNEX 2

WORK PACKAGE AUTHORISATION NOTE

PROGRAMME AREA	WORK PACKAGE REFERENCE	WORK PACKAGE DATE
FINAL WORK PACKAGE PROPOSAL TO BE ATTACHED TO THIS WORK PACKAGE AUTHORISATION NOTE		
CONFIRMATION THAT NO TERMS OF THE AGREEMENT HAVE BEEN AMENDED AS A RESULT OF THIS WORK PACKAGE (If a Contract Change relating to this Work Package has been agreed, the relevant Change Authorisation Note should be attached to this Work Package Authorisation Note)		
SIGNED ON BEHALF OF THE AUTHORITY:		SIGNED ON BEHALF OF THE SUPPLIER
Signature: 		Signature: 
Name: CAROLINE GREGORY.....		Name: 
Position: [Commercial Director] DIRECTOR OF ICT + DIGITAL		Position: [Contract Manager] PwC Partner
Date: 8/3/2018.....		Date: 8/3/2018.....

ANNEX 3

BASIC NETWORK DIAGRAM

