



Statement of Work

Customer

Customer	REDACTED REDACTED REDACTED 61 Colindale Avenue LONDON Middlesex NW9 5EQ UNITED KINGDOM
Sites	Phase I <ul style="list-style-type: none">• Colindale Lab• Porton Lab Phase II <ul style="list-style-type: none">• Bristol Lab• Manchester Lab• Birmingham Lab• Leeds Lab• Cambridge Lab
Agilent	Agilent Technologies LDA UK Limited 5500 Lakeside Cheadle Royal Business Park Stockport, Cheshire SK8 3GR Tel: +44 (0) 345 712 5292
Project	Statement of work for on-premise solution

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1 Overview of Proposal

This proposal documents the scope of work for Customer

This Scope of Work is governed by the terms and conditions set forth in the SLIMS Supplementary Terms & Conditions / SLIMS Cloud Software Master Agreement (as appropriate) and the Quote.

2 Agilent

- Agilent may select qualified and reputable subcontractors to perform consulting services and/or provide deliverables upon approval by Customer and such approval will not be unreasonably withheld.
- Agilent is not responsible for providing any other Services other than those described in section 4.
- All Quote Items in our official Quote document referring to Services are, unless specifically stated otherwise, post-paid Services that will be invoiced upon completion and acceptance per milestone. The statement "NET 30 days" relates to the payment of said milestones 30 days after invoice reception.
- Annual license subscription payments are paid upfront for each upcoming 1-year subscription period. Example: If a Subscription is ordered for 3 years Upfront, we will send 3 invoices in total, one at the beginning of every subscription period. The prices within this 3-year subscription will remain the same for any extension of this order (e.g. additional User licenses), independent of any list price changes during this period. License Subscription will start at the subscription milestone as defined in this SOW.

3 Customer

- Customer acknowledges that Agilent 's ability to deliver the software deliverables is dependent upon Customer's full and timely cooperation with Agilent, as well as the accuracy and completeness of any information and data Customer provides to Agilent. Therefore, Customer will provide Agilent with access to, and use of, all information, data, documentation, computer time, facilities, working space and office services as agreed to by Agilent and Customer.
- Customer will be responsible at all times for the supervision, management and control of the deliverables and any results obtained from the deliverables, including without limitation all activities necessary to enable Customer to use the deliverables.
- A Customer Project Manager will provide prompt liaison with Customer and have the necessary expertise and decision-making authority will be assigned to this Project. The Customer Project Manager and the Agilent Project Manager will work collaboratively to manage the Project.
- Customer will provide timely access to Customer subject matter experts as required for the project.
- For new projects: subscription will start at the subscription milestone, Milestone 1

4 Service Packages

Service Package: SLIMS Remote Installation and IQ Part number: R4532A	
Description	The SLIMS installation service comprises the installation of a single version of a single SLIMS instance on an on-premise server provisioned by the customer. The SLIMS team will meet online with IT department, determine the desired setup (database, file store, authentication system) and communicate minimal requirements for the server. After provisioning by the customer, the SLIMS

team will remotely deliver an installation and configuration of SLIMS components on the server and verify correct functioning. Correct installation will be verified by performing an installation qualification (IQ). After this service, a SLIMS instance is installed on the server and users can log in. No configuration or customization is included.

Prerequisites

- Customer identifies key IT personnel
- Customer provisions server meeting minimal requirements for SLIMS
- Customer provides remote access and shares connection details
- Networking bandwidth, and firewall configuration are provisioned by customer.
- If applicable, customer provisions supported database system and provides connection parameters
- If applicable, customer provisions supported file store system and ensures access of the file system by the SLIMS server.
- If applicable, customer provisions a supported authentication system and provides connection parameters.
- If applicable, customer shares authentication details and connectivity parameters for database and authentication system

Deliverables

- SLIMS Installation requirements document
- Server installation
- Installation qualification Acceptance SLIMS Server is installed criteria
Installation is qualified Documented Signed IQ document evidence

Service Package: SLIMS Single Workflow Service Part number: R4535A	
Included	The SLIMS Single Workflow service comprises the configuration of a workflow without any customization (this means we only use SLIMS core functionalities to implement the workflow). The workflow is configured with standard components only and does not include any automation or customization such as plugins, advanced field expressions or reports. Therefore, execution of the configured workflow may include some manual steps such as entering data, doing computations and attaching files. A workflow is assumed not to contain more than 10 separate protocols, and a protocol is assumed not to contain more than 5 steps,

	<p>involving not more than 10 SOP's in total (making a total of 50 steps to be spread over 10 protocols). More complex workflows can be delivered in a separate SLIMS Consulting service.</p> <p>The service will be overseen by a project manager, who will oversee the execution of the service, perform kick-off meeting and organize progress meetings.</p> <p>At the start, an administrator training is performed on site. This training focuses on providing an initial understanding of SLIMS use and SLIMS configuration admin modules. This training establishes a common vocabulary and understanding of the possibilities of the platform. After this training, requirements for the workflow are collected during a remote session, for determination of requirements and acceptance criteria for:</p> <ul style="list-style-type: none"> • content types and fields • location structure • workflow overview <p>Subsequently, the SLIMS team works to implement those requirements using configuration only and verifies and documents the acceptance criteria. Finally, a one-day training is organized with focus on the implemented functionalities in order to enable the customer to fine tune and adapt configuration to future needs.</p>
Prerequisites	<ul style="list-style-type: none"> • Active SLIMS license subscription • Customer SLIMS Server has been installed and is available before training • Customer identifies main contact for admin training and requirements analysis • Availability of appropriate staff for providing information during requirements analysis • On premise training server available and accessible during the training, or connection to Agilent training server has been verified prior to admin training • SLIMS team have access and necessary privileges to the test system • SOP's are delivered as PDF documents
Deliverables	<ul style="list-style-type: none"> • Training material (PDF document on slides) • Training provided
Acceptance criteria	<p>Training has been delivered</p> <p>Requirement analysis complete and mutually agreed Acceptance criteria for implementation met</p>
Documented evidence	<p>List of participants for training sessions</p> <p>Training certificates for attendees of training sessions</p> <p>Written requirement document containing acceptance criteria Evidence for meeting acceptance criteria (such as: successful test cases)</p>

Service Package: SLIMS Time & Materials Task (only applicable for Milestone 6) Part number: R4531A

Included	This is a time and materials engagement. No result commitment of any kind, beyond the delivery of the consulting time, is included. Agilent will
	engage trained SLIMS engineers to perform SLIMS consultancy based on customer requests. Requests can be by email, in writing or by using the Agilent Informatics Service Desk ticketing system. The work will be carried out by Agilent staff or subcontractors at the sole discretion of Agilent. The work will be performed remotely. Any on site visits will need to be agreed upon by both parties and will require separate quoting for travel expenses and approval by the Customer. The milestone will be considered completed once the agreed service credits, as measured in service hours, are consumed or at the latest 2 years after ordering this package, whichever comes first. Invoicing of performed service credits will happen on a quarterly basis. Any estimate of time provided in the context of a time and materials milestone is based on reasonable effort and is not binding. Any requests for fixed price deliverables will be the subject of a separate quote and SOW.
Prerequisites	<ul style="list-style-type: none"> • Active SLIMS license subscription • Customer assigns a primary contact
Deliverables	<ul style="list-style-type: none"> • Exports from Agilent time tracking system available on request
Acceptance criteria	This milestone is considered complete when the number of service credits have been used by Agilent. Agilent time tracking systems are accepted as proof.

Grid export using common exporter plugin Part number: R4531A	
Included	SLIMS features a standard export to excel/csv function for all grids. Additionally, SLIMS contains a common, freely available, exporter plugin that can be configured to export grids into a more custom textual format. The plugin is configured using the “grid template” module, plugin YAML configuration and Thymeleaf expressions. The plugin can only be used for the export of text files that are “simple”: see prerequisites. Additional automation with custom logic will require a separate SLIMS Consulting Service.

Prerequisites	<ul style="list-style-type: none"> • Active SLIMS license subscription • Customer identifies and makes available key stakeholders • Customer SLIMS Server has been installed and configured to an extent that manual extraction of the data is possible • File format documentation is made available • Example files are made available • The file format is a readily legible with format TEXT, HTML or XML • The file name has a static value, with the possibility to include the export date as variable • The file name extension is limited to the possible exportable formats: .csv (TEXT), .html (HTML) or .xml (XML) • The target entities in SLIMS that can be included in the exported file are Content or Result values linked to a protocol run step • The exported file will be downloaded but can also be saved automatically on a shared folder accessible by the SLIMS Server.
Deliverables	<ul style="list-style-type: none"> • Data to export is configured as a grid template
	<ul style="list-style-type: none"> • Common exporter plugin is assigned to the relevant protocol step and configured using YAML and Thymeleaf expressions • Correct functioning is tested
Acceptance criteria	Exported file contains correct data from the grid in the designed format
Documented evidence	Documentation by screenshot or text of the configuration (grid template, YAML, Thymeleaf) Test report

Result import using common importer plugin Part number: R4531A	
Included	SLIMS contains a common, freely available, importer plugin that can be configured to import manually uploaded csv (or similar) format files into SLIMS result values. The plugin is configured using the “grid template” module and plugin YAML configuration. The plugin can only be used for the import of CSV files that are “simple”: see prerequisites. Additional automation with custom logic will require a separate SLIMS Consulting Service.

Prerequisites	<ul style="list-style-type: none"> • Active SLIMS license subscription • Customer identifies and makes available key stakeholders • Customer SLIMS Server has been installed and configured to an extent that manual input of the data is possible • File format documentation is made available • Example files are made available • The file format is a readily legible, comma or tab separated table, that contains a header line at a fixed position • Each file contains a single table with a number of values for a single test. Each line allows to uniquely identify the target sample (e.g. barcode or unique position). • The target entities in SLIMS are result values linked to a content record • The input files for SLIMS are assumed to be manually uploaded into the relevant protocol step
Deliverables	<ul style="list-style-type: none"> • Mapping is configured as a grid template • Common importer plugin is assigned to the relevant protocol step and configured using YAML • Correct functioning is tested
Acceptance criteria	Result values are imported after manual file upload and attached to the correct content record
Documented evidence	Documentation by screenshot or text of the configuration (grid template, YAML) Test report

5 Deliverables

5.1 Milestone 1

Test instance installation

SLIMS Remote Installation and IQ Part number: R4532A

5.1.1 Description of work, Prerequisites, Deliverables and Acceptance criteria and documented evidence

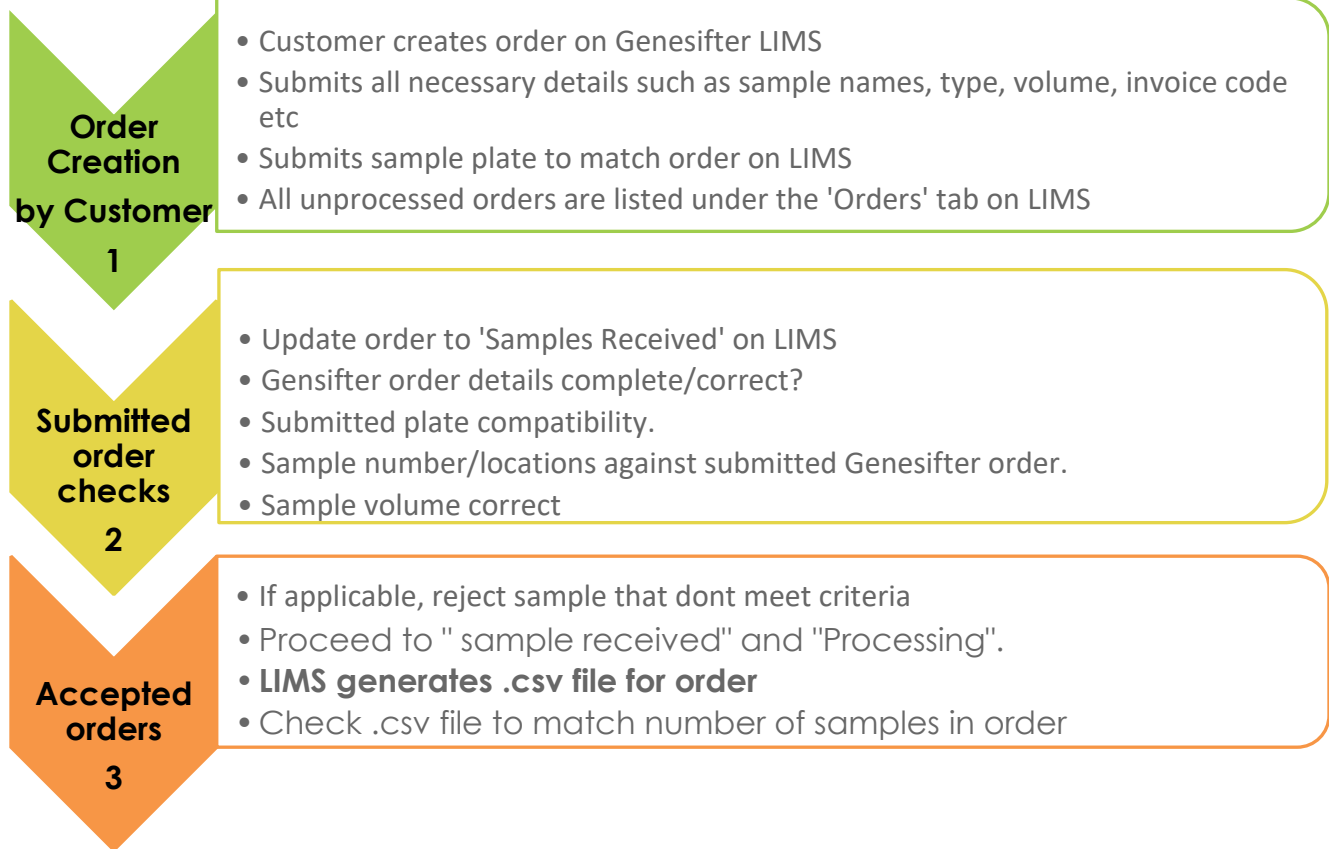
As described in section 4 (SLIMS Remote Installation and IQ Part number: R4532A)

5.2 Milestone 2

NGS Workflow implementation

SLIMS Single Workflow Service Part number: R4535A

A. Samples/Order checks against service requirements



B. Sample Quantification & Consolidation

**Sample
Quant**

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- Use sample .csv file to set up DNA quantification assay for Customer samples in Biomek 96-probe head Robot.
- Read Customer Quant plate on Fluorometer.
- Upload .csv file from fluormeter in output drive to update LIMS

**Sample
rejection**

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- Refresh LIMS to update samples with concentration values from quant .csv file.
- Reject samples and archive that do not meet the concentration criteria,
- Enter next workflow in LIMS.
- Check .csv file generated for correct sample numbers.

**Plate
Consolidation**

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- Use the .csv sample file to to consolidate Customer Plate/s and Control plate into Consolidation Plate.
- Create new Workset Name of consolidated plate on LIMS
- All current worksets are listed under 'Lab' tab on LIMS

C. Sample Dilution & Quant for Library preparation

Sample Dilution 7

- Replicate Consolidation plate into dilution plate by transferring 5 µl using Biomek robot. Update LIMS to reflect new plate for dilution ready.
- **Generates .csv with new dilution plate barcode.**
- Adjust sample concentration on .csv file to 30 (if over 30) and to 3 (if <3).
- Use amended .csv file to dilute samples in Dilution plate to ~1ng/uL (bacterial) or ~0.2 ng/uL (viral) in Span-8 Biomek robot.

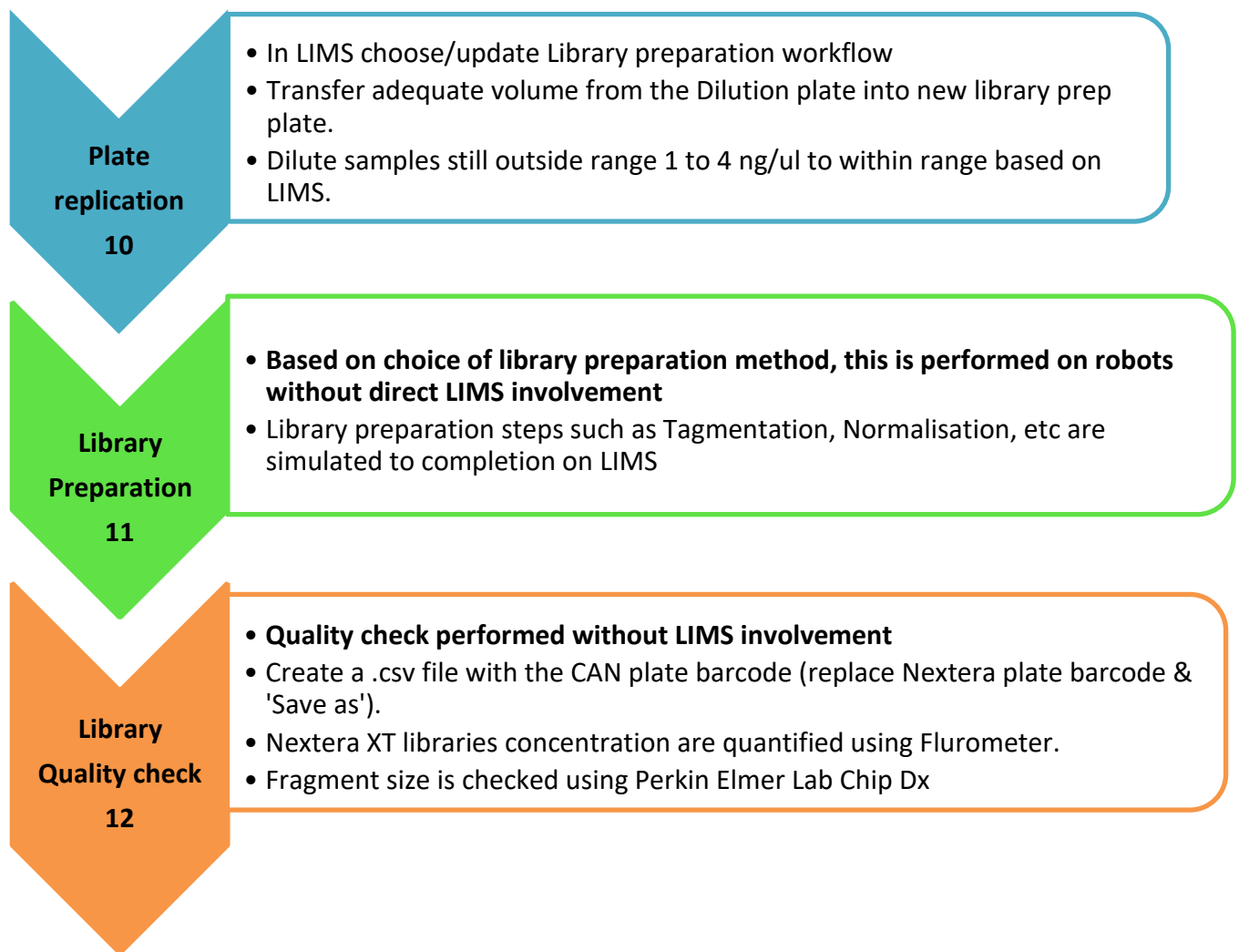
Dilution Quant 8

- Quantify dilution plate. Generate .csv file of Quant plate on Fluorometer.
- **Upload .csv file from fluormeter in output drive to update LIMS**
- Update LIMS to reflect all sample concentration

Update LIMS 9

- Update sample record on LIMS to 1 ng DNA concentration.
- **Enter next workflow in LIMS.**

D. Library Preparation and Quality Assurance of Library



E. Library Normalisation, Pooling and Choice of Sequencer

Library Normalisation

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- Replicate 5ul of the libraries from CAN plate to SGP plate
- Dilute/Normalise libraries in SGP plate if required to 2nM using Span-8 robot

Library pooling and Denaturation

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- Pool normalised libraries from SGP plate into a single well of PAL plate
- Manually dilute PAL samples to create a DAL tube.
- Denature DAL using NaOH (& Tris-HCl for NextSeq run).
- Add PhiX.

Create Run on LIMS

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- Simulate and complete pooling of workset on LIMS
- Create pool name on LIMS as PAL_WorksetName
- Complete Denaturation of PAL steps on LIMS
- Assign flowcell type (NextSeq/HiSeq) under 'Containers on LIMS'
- Input flowcell and run ID. Create and assign pooled workset to Flowcell.
- Create instrument run under 'Add instrument'
- Choose NextSeq/HiSeq instruments listed from menu
- **Generate and download sample sheet (.csv file) for sequencer.**

5.2.2 Prerequisites, Deliverables and Acceptance criteria and documented evidence

As described in section 4 (SLIMS Single Workflow Service Part number: R4535A)

5.3 Milestone 3

Production instance installation

SLIMS Remote Installation and IQ Part number: R4532A

5.3.1 Description of work, Prerequisites, Deliverables and Acceptance criteria and documented evidence

As described in section 4 (SLIMS Remote Installation and IQ Part number: R4532A)

5.4 Milestone 4

Grid export using common exporter plugin, Part number: R4531A

5.4.1 Description of work, Prerequisites, Deliverables and Acceptance criteria and documented evidence

As described in section 4 (Grid export using common exporter plugin, Part number: R4531A)

5.5 Milestone 5

Result import using common importer plugin, Part number: R4531A

5.5.1 Description of work, Prerequisites, Deliverables and Acceptance criteria and documented evidence

As described in section 4 (Result import using common importer plugin, Part number: R4531A)

5.6 Milestone 6 (Phase II)

Four Engineering days for consultancy activities (part number: R4531A)

Intended to expand SLIMS to regional labs with same workflow.

5.6.1 Description of work

No specific work will be described here, as it will depends on the needs.

5.6.2 Prerequisites

Public Health England creates a JIRA service desk ticket to request a configuration change. This is not a result commitment

5.6.3 Deliverables

Agilent is delivering time with time report provided on demand. Time can be consumed to answer requests through the JIRA service desk tickets.

5.6.4 Acceptance criteria and documented evidence

Budget is consumed. The purchased man days will expire and will be considered delivered in two years after order date.

5.6.5 Boundaries and disclaimers on scope and timeline

1. PHE will engage and use the appropriate resource to help, support and test SLIMS implementation. We (Agilent) usually expect someone at 50% during the implementation
2. We expect a centralized SLIMS installation on a shared network for all labs and instruments.
3. For regional hubs, to meet timeline and scope, we expect small and reasonable deviations from the workflow in Colindale to be performed within 3 days of consulting (one being used for training to use import/export plugins). This means all sites will use the same workflow, with parameters and workflow branching to satisfy regional labs.
4. We will assess the feasibility of the modifications as soon as we receive their specification. This scope could lead to a need for new consulting days (therefore a new quote) and an extended timeline
5. We also expect most of the modifications to be done by PHE super users
6. We must receive any new and related PO (such as user expansion, new consulting etc.) reasonably in advance to meet the timeline
7. We aim at providing an MVP (Minimum Viable Product) for the labs to be able to use SLIMS within the timeline. A more sophisticated implementation will be carried afterwards if necessary

6 Delivery Schedule

Milestone	Agilent Deliverables	Target Date
M0	Kick off meeting	Date
M1	SLIMS Remote Installation and IQ Part number: R4532A	M0 + 1 week
M2	SLIMS Single Workflow Service Part number: R4535A	M1 + 2 weeks
M3	SLIMS Remote Installation and IQ Part number: R4532A	M2 + 1 week

M4	Grid export using common exporter plugin, Part number: R4531A	M3 + 2 weeks
M5	Result import using common importer plugin, Part number: R4531A	M4 + 2 weeks
M6	Four Engineering days for consultancy activities (part number: R4531A	from M2, on-going

6.1 Expected timeline¹

Key Milestone	Completion Date	Tolerance Date	Measure of success (see section 4 <i>Service Packages</i>)
Business case approved	REDACTED	REDACTED	Project code issued
Procurement process live	REDACTED	REDACTED	Award published against the scientific framework
Procurement complete	REDACTED	REDACTED	PO raised
Detail Planning	REDACTED	REDACTED	Produce an excel plan
Supplier access PHE network	REDACTED	REDACTED	Remote Log in
Colindale Hub Go live	REDACTED	REDACTED	Implementation of NGS LIMS

¹ Please see boundaries, conditions and disclaimers for this timeline in section 5.6.5 "Boundaries and disclaimers on scope and timeline". Dates will be shifted depending on the reception of signed documents.

Go live with the mirroring system and upgraded IT network	REDACTED	REDACTED	Implementation of the mirroring system
Proton Hub Go Live	REDACTED	REDACTED	Implementation of NGS LIMS, estimated one week after Colindale. To confirm with supplier.
Regionals Hub	REDACTED	REDACTED	Implementation of NGS LIMS, to be confirm with supplier. Management to decided which lab configure first.

7 Contact Information

Agilent Contacts:

Name	Phone	Email	Function
REDACTED	REDACTED	REDACTED	Business Development Manager

Project manager and lead subject to change.

Customer Contacts:

Name	Phone	Email	Function
REDACTED	REDACTED	REDACTED	REDACTED

8 Signatures

For and on behalf of Agilent:	For and on behalf of the Customer:
Name: REDACTED	Name: REDACTED
Function: REDACTED	Function: REDACTED
)

Date: 20/05/2021	Date: 19th May 2021
Signature: REDACTED	Signature: