

G-Cloud 12 Call-Off Contract

This Call-Off Contract for the G-Cloud 12 Framework Agreement (RM1557.12) includes:

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Part A: Order Form

Buyers must use this template order form as the basis for all call-off contracts and must refrain from accepting a supplier's prepopulated version unless it has been carefully checked against template drafting.

Digital Marketplace service ID num-		
ber	239118660412228	
Call-Off Contract reference	957	
Call-Off Contract title	Development and Operation of the NHS Test and Trace COVID-19 Contact Tracing Application	
Call-Off Contract description	Deliver NHS Test & Trace COVID-19 Contact Tracing Mobile App Programme including Incident Management and Support	
Start date	Monday 15 th March 2021	
Expiry date	Tuesday 30 th September 2021 unless extended by the Buyer in accordance with the terms of this Order Form	
Call-Off Contract value	The total value of this Call Off Contract is £10,230,842 (including discounts defined below) for the period up to 30 September 2021.	
	Plus, agreed expenses up to a maximum of	
	All costs exclude VAT.	
	If the Buyer exercises its right to extend the Call Off Contract, the Charges for the Extension Period(s) are set out in Schedule 2.	
Charging method	Fixed Price and Time and Materials	
Purchase order number	[Enter purchase order number]	

This Order Form is issued under the G-Cloud 12 Framework Agreement (RM1557.12).

Buyers can use this Order Form to specify their G-Cloud service requirements when placing an Order.

The Order Form cannot be used to alter existing terms or add any extra terms that materially change the Deliverables offered by the Supplier and defined in the Application.

There are terms in the Call-Off Contract that may be defined in the Order Form. These are identified in the contract with square brackets.

From the Buyer	The Secretary of State for Health and Social Care acting as part of the Crown through the Department of Health and Social Care Buyer's main address: 39 Victoria Street Westminster London SW1H 0EU	
To the Supplier	ZUHLKE ENGINEERING LTD Telephone Number: 020 7113 5000 Supplier's address: 25 Moorgate, London, EC2R 6AY United Kingdom Company number: 04103211	
Together the 'Parties'		

Principal contact details

For the Buyer:

Title:	
Name:	
Email:	
Phone:	

For the Supplier:

Title:	
Name:	
Email:	
Phone:	

Call-Off Contract term

Start date	This Call-Off Contract Starts on Monday 15 th March 2021 and it shall continue for 28 weeks ending on 30 September 2021 unless extended by the Buyer.	
Ending (termina- tion)	The notice period needed for Ending the Call-Off Contract is at least 30 Working Days from the date of written notice for undisputed sums or at least 30 days from the date of written notice for Ending without cause.	
Extension period	This Call-Off Contract can be extended by the Buyer for 2 periods of up to 3-month.	
	Extension Period 1	
	An extension to on or before 31st December 2021 requiring the Buyer to give the Supplier 30 days' written notice before the 1 October 2021.	
	Extension Period 2	
	An extension to on or before 31st March 2022 requiring the Buyer to give the Supplier 30 days' written notice before the 31st December 2021.	
	Costs	
	The costs for each Extension Period are outlined fully in Schedule 2 and included separately as part of the Call Off Contract Value.	

Buyer contractual details

This Order is for the G-Cloud Services outlined below. It is acknowledged by the Parties that the volume of the G-Cloud Services used by the Buyer may vary during this Call-Off Contract.

G-Cloud lot	This Call-Off Contract is for the provision of Services under: • Lot 3 - Cloud support.
G-Cloud services required	The G-Cloud services to be provided by the Supplier under this Call-Off Contract are to continue to build and operate the NHS Test and Trace COVID-19 Contact Tracing App and supporting systems. They are described at a high-level here and in detail in Schedule 1.

The NHS Test and Trace COVID-19 Contact Tracing App and supporting systems are defined as:

- NHS COVID-19 Mobile App
- NHS COVID-19 App Cloud Services
- NHS COVID-19 App Public Dashboard
- Self-Isolation Payment Gateway
- QR Poster creation and administration system
- Amazon AWS Cloud Infrastructure required to support the above systems

The Supplier will provide executive management and senior technical oversight free of charge during the Term.

The Buyer may request in writing that the Supplier shall provide ad hoc consulting and engineering services relating to the scope of the Services if required. These services will be agreed on a case-by-case basis and will be charged as Time & Materials.

Fixed Price Services

The Supplier will maintain systems that are no longer under active development (as listed below) for a fixed monthly fee.

The systems covered under Fixed Price Services are:

- Amazon AWS Cloud Infrastructure
- Self-Isolation Payments Gateway
- QR Poster creation and administration system

Changes to scope, or the development of additional features, of any elements of the Fixed Price Services will be managed through a Change Control process. If the Supplier becomes aware of any required changes to scope or other factors that alter the basis of the project estimates used, the Supplier will document any changes to scope and estimate in accordance with the process below. This process will be followed as good practice even if the change of scope has no impact upon the budget.

The Supplier will present any changes described above and the amended costs to the Buyer in the form of a Change Control Request detailed in Schedule 1. No further work will be conducted on areas of the Fixed Price Services which is the subject of the Change Control request without either written approval of the Change Control Request by the Buyer, or written agreement that the variation remains out of scope.

Time and Materials Services

The Supplier will continue to provide ongoing analysis, design and development of new features for those systems listed below that remain under active development on a Time and Materials basis. The systems covered on Time and Materials are:

- NHS COVID-19 Mobile App
- NHS COVID-19 App Cloud Services
- NHS COVID-19 App Public Dashboard

There may be a need for flexibility in terms of the number of staff deployed to best meet the Buyer's requirements for the project. The Supplier will work with the Buyer to agree any changes to the indicative allocation of staff set out in Schedule 2 so as not to exceed the stated contract value and permitted Term.

On agreement in writing between the Buyer and the Supplier and based on exceptional circumstances, the team will work weekends and holidays (where legally permissible) to meet specific project delivery dates for Time and Materials Services. This may exhaust the stated Call-Off Contract value earlier than the Expiry Date of this Call-Off Contract.

Incident Management Services

The Supplier will provide response, recovery and resolution of production incidents as per the defined service levels for the following systems:

- NHS COVID-19 Mobile App
- NHS COVID-19 App Cloud Services
- NHS COVID-19 App Public Dashboard
- Self-Isolation Payment Gateway
- QR Poster creation and administration system
- Amazon AWS Cloud Infrastructure required to support the above systems

The Supplier will provide staff available for 24x7 for on-call and out-of-hours support.

Key Personnel

Removal/Replacement of Supplier Key Personnel by Supplier. Without Buyer's prior written consent (not to be unreasonably withheld or delayed), the Supplier shall not: (i) undertake any action with respect to any Supplier Key Personnel that would substantially result in the alteration or reduction of time expended by such Supplier Key Personnel in performance of Supplier's duties hereunder; or (ii) transfer, reassign or otherwise re-deploy any Supplier Key Personnel for the duration of their assignment to Services under this Agreement, except in the case where the relevant individual has terminated their employment or the Supplier has terminated their employment

or else with Buyer's written consent (not to be unreasonably withheld or delayed).

If any one of Supplier Key Personnel becomes incapacitated, terminates his/her employment with the Supplier (and/or any of Supplier's Affiliates or Subcontractors), is terminated by Supplier or is transferred, reassigned or redeployed with the prior written consent of Buyer, Supplier shall promptly replace such person with another person (subject to reasonable approval by Buyer) that is at least as well qualified as the person being replaced and shall bear any and all costs associated with knowledge transfer etc. For purposes of this Clause, the assignment by Supplier of Supplier Key Personnel from the employ of Supplier to an Affiliate or a Subcontractor of Supplier shall be considered a reassignment requiring Buyer's prior written consent (not to be unreasonably withheld or delayed) and not a cessation of employment.

The Supplier Key Personnel are:

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- •
- •
- •

Additional Services	N/A
Location	The Services will be performed at the Buyer's offices in London, 17 Smith Square, London SW1P 3JR or from the Supplier's offices or approved remote locations (including home working with approved locations) in each case as reasonably agreed between all parties.
Quality standards	The quality standards required for this Call-Off Contract will

align to industry good practice.

Technical standard	The technical standards required for this Call-Off Contract will align to Good Industry Practice. As well as the applicable standards listed within the G-Cloud service offerings.

Service level agreement

The service levels for Services covered under this contract described at a high-level here and specified in detail in Schedule 1.

Incident Management Services

- **Zero** incidents will be associated to a failed or incomplete Production deployment performed by the Supplier
- Average Incident Response, Recovery, and Resolution Times per calendar month will not exceed the times specified in Schedule 1

Fixed Price and Time and Materials Services

- As described in Schedule 1, the Supplier will maintain a Product Roadmap of planned features and their scheduled release dates.
- The Supplier guarantees that all features planned for a scheduled release will be made available for assurance testing by the Buyer at least 5 working days before the scheduled release date, unless agreed otherwise by the Buyer in writing.

The Supplier will not be deemed in breach of the above service levels if the scope of any feature is incomplete or changed by the Buyer after development work is scheduled to begin in the agreed delivery plan for the release, as described in Schedule 1.

 Any defects identified by the Buyer during quality assurance testing that prevent a production release will be resolved by the Supplier before the scheduled release date unless specifically accepted by the Buyer or an alternative timescale is agreed by the Buyer, in both cases in writing.

The Supplier will not be deemed in breach of the above service level if the Buyer fails to report the defect at least **2** full working days before the scheduled release date.

Remediation

Where an incident occurs as the result of the Supplier performing an incomplete or failed Production deployment, any remedial work required to correct the cause of the issue will be carried out at the Suppliers expense. If any remedial work

is required elsewhere in the organisation, the Supplier will make recommendations for improvements. There are occasions where recovery of incidents or resolution of problems are impacted by factors outside of the control of the Supplier (e.g., app store publication lead times or thirdparty incidents). In these occasions, the clock will be paused until dependency has been resolved. Where Average Incident Response, Recovery, and Resolution Times per calendar month exceed the times specified in Schedule 1, service credits will be calculated and opportunity to "earn back" service credits in subsequent months before issuing to the Buyer. Service credit and "earn back" mechanism is detailed in Schedule 1. **Buyer Personnel Dependencies** The Supplier will not be liable for any failure to achieve service levels caused by personnel who are not employees, contrac-

tors, suppliers, agents, sub-contractors or anyone acting under the control or direction of the Supplier.

Onboarding

The team are already fully onboarded, please see Figure 2 in Schedule 2 for a full list of grades and their start dates.

For team changes and rotations during the term of this contract, new team members will be onboarded via the PMO onboarding JIRA Kanban board.

Offboarding

The Supplier will work with the Buyer to reduce the team size for Time and Materials Services in-line with the Buyer's planned product roadmap. Team capacity and composition will be reviewed at monthly account management meetings.

The Buyer will give 30 days' notice in writing to the Supplier for any required change to the volume of Supplier's personnel.

The Supplier will work with the Buyer on any transition activities required during this Call Off Contract required to handover to permanent staff or another supplier. Transition activities and any impact on the delivery schedule to be agreed between the Buyer and Supplier in writing in advance.

Collaboration agreement	N/A
Limit on Parties'	The annual total liability of either Party for all Property defaults will not exceed The annual total liability for Buyer Data defaults will not exceed of the Charges payable by the Buyer to the Supplier during the Call-Off Contract Term (whichever is the greater). The annual total liability for all other defaults will not exceed the greater of of the Charges payable by the Buyer to the Supplier during the Call-Off Contract Term (whichever is the greater).
Insurance	 The insurance(s) required will be: professional indemnity insurance cover to be held by the Supplier and by any agent, Subcontractor or consultant involved in the supply of the G-Cloud Services. This professional indemnity insurance cover will have a minimum limit of indemnity of £10,000,000 for each individual claim or any higher limit the Buyer requires (and as required by Law) employers' liability insurance with a minimum limit of £5,000,000 or any higher minimum limit required by Law
Force majeure	A Party may End this Call-Off Contract if the other Party is affected by a Force Majeure Event that lasts for more than 25 consecutive days. For the avoidance of doubt Covid-19 is not a Force Majeure Event to the extent it concerns the Supplier deliverable obligations, however the Supplier may rely on Force Majeure in case it is prevented from delivering due to other parties' Force Majeure events caused by Covid-19.
Audit	The following Framework Agreement audit provisions will be incorporated under clause 2.1 of this Call-Off Contract to enable the Buyer to carry out audits.

Buyer's responsibilities

- Granting access to the relevant sites on prior request
- Providing a safe working environment for the Supplier staff if onsite
- Fulfilling the Buyer roles defined within any agreed operating model
- Providing an accountable Product Owner authorised to define and approve work to be delivered by the Supplier
- On a best endeavours basis to confirm and communicate high-level requirements of new features at least 2 weeks before the scheduled start of development of those features
- On a best endeavours basis to confirm and communicate detailed requirements of changes to existing features 1 week before development of those features (including copy and language translations)
- Provide access to developer and product management tooling (HALO) required by the Supplier to perform their obligations under this contract
- Provide privileged user access to secured systems when needed as agreed with the Authority and in line with Data Protection Schedule in Annex 1 to investigate production incidents and release software updates.
- Provide integrations and tooling to alert relevant team members to incidents requiring support
- Provide product direction and vision in line with Government policy.
- Provide and validate copy, including translations into the required languages.

The Supplier will not be deemed in breach of any service levels defined in this contract caused by the Buyer failing to meet any of the responsibilities listed above.

Buyer's equipment

The Supplier will supply laptops for their staff to use in delivery of the Services.

The Buyer's equipment to be used with this Call-Off Contract currently includes:

- JIRA Service Desk
- JIRA
- Confluence
- Service Now
- Opsgenie
- Github
- Figma
- Google Firebase Test Lab
- Miro
- Splunk
- Slack
- MS Teams
- MS Office

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Supplier's information

DocuSign Envelope ID: 2375B820-9BA8-4C2D-9B0F-07B8C854ABF2

Subcontractors or partners

Zühlke Engineering AG

Zürcherstrasse 39j 8952 Schlieren (Zurich) Switzerland

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Open Inclusion

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Fluent Interaction Itd

6a-7a Albermarle Way, London EC1V 4JB

Call-Off Contract charges and payment

The Call-Off Contract charges and payment details are in the table below. See Schedule 2 for a full breakdown.

Payment method	The payment method for this Call-Off Contract will be Fixed Price and Time and Materials.
Payment profile	The payment profile for this Call-Off Contract is monthly in arrears.
	For the Managed Services the monthly fee is outline in Schedule 2.
	For the Time and Materials Services, the rates are based on the G-Cloud rate card, standards for consultancy day rates and are outlined in Schedule 2.
Invoice details	The Supplier will issue electronic invoices monthly in arrears. The Buyer will pay the Supplier within 30 days of receipt of a valid invoice.
Who and where to send invoices to	Invoices will be sent to:
	Accounts Payable Department of Health & Social Care 39 Victoria Street London
	And a copy invoice emailed to:
Invoice infor- mation required	All invoices must include a purchase order reference and Supplier project reference C25949.
manon required	All invoices must be supported by a completed timesheet, approved by the Supplier, for all personnel on the project working on Time and Materials services. Any claims for T & S will be paid in line with Department of Health & Social Care (DHSC) and accompanied by the necessary receipts.
Invoice frequency	Invoice will be sent to the Buyer monthly in arrears together with a report of the work and hours performed.

Call-Off Contract value

The total value of this Call Off Contract (excluding any extension period) is £10,230,842 which includes the discount defined below.

The costs consist of:

- •
- •
- •

An additional expenses budget of is capped and scoped for the procurement of testing hardware, and/or general expenses as agreed in advance with the Buyer in writing and incurred in accordance with policy travel and expenses referenced below. Items purchased will be billed on actuals with no mark-up.

The Supplier will maintain and provide an Asset Register to the Buyer of all assets purchased (including software and hardware assets). This is to be reviewed as part of the monthly account meetings.

Travel and expenses to be paid in line with Department of Health and Social Care Travel and Expenses policy v4 October 2019.

Charges applicable to any Extension Period are specified in Schedule 2 (Charges).

Call-Off Contract charges

A full breakdown of all Supplier costs, including personnel grades, rates and sub-contractor rates is set out in Schedule 2.

Fixed Price Services

Managed Services will be charged as a Fixed Price of inc. discount) per month before any discounts.

Time and Materials Services

Time and Materials Services will be charged at a Day Rate per team member based on the following Supplier Rate Card.

SFIA Level	Supplier Grade	Day Rate
-		
-		_
	1	

If weekend or bank holiday delivery work is required to meet a delivery schedule that cannot be met by working normal working hours, this is to be agreed in advance and in writing between the Buyer and Supplier and charged at the Day Rate in the above table.

Estimated Time and Materials charges for each workstream after discounts are as follows:

Out-of-Hours Charges

Additional Buyer terms

Performance of the Service and Deliverables	All of the Specific Deliverables are defined in Schedule 1.
Guarantee	N/A
Warranties, representations	N/A
Supplemental requirements in addition to the Call-Off terms	N/A
Alternative clauses	N/A

Buyer specific amendments to/refinements of the Call-Off Contract terms	1.1	The Supplier must obtain prior written consent from the Buyer to release any public facing announcements, press releases, social media posts, publicity videos or any other form of communications relating to Supplier's involvement in the Test & Trace app development or the wider Test & Trace programme.
	1.2	The Buyer reserves the right to request the Supplier retrospectively removes any public facing announcements, press releases, social media posts, publicity videos or any other form of communications relating to the Supplier's involvement in the Test & Trace app development or the wider Test & Trace programme.
Public Services Network (PSN)	N/A	
Personal Data and Data Subjects	For the purposes of this Call-Off Contract Annex 1 of Schedule 7 is being used.	

1. Formation of contract

- 1.1 By signing and returning this Order Form (Part A), the Supplier agrees to enter into a Call-Off Contract with the Buyer.
- 1.2 The Parties agree that they have read the Order Form (Part A) and the Call-Off Contract terms and by signing below agree to be bound by this Call-Off Contract.
- 1.3 This Call-Off Contract will be formed when the Buyer acknowledges receipt of the signed copy of the Order Form from the Supplier.
- 1.4 In cases of any ambiguity or conflict, the terms and conditions of the Call-Off Contract (Part B) and Order Form (Part A) will supersede those of the Supplier Terms and Conditions as per the order of precedence set out in clause 8.3 of the Framework Agreement.

- 2. Background to the agreement
- 2.1 The Supplier is a provider of G-Cloud Services and agreed to provide the Services under the terms of Framework Agreement number RM1557.12.
- 2.2 The Buyer provided an Order Form for Services to the Supplier.

Signed:	Supplier	Buyer
Name:		
Title:		
Signature:		
Date:	16.03.2021	25/03/21

Signed:	Supplier
Name:	
Title:	
Signature:	
Date:	16.03.2021

Schedule 1: Services

Fixed Price Services

The Supplier will maintain and implement small changes as agreed through the change control process for the following COVID-19 App systems for a fixed monthly fee:

Amazon AWS Cloud Infrastructure

The Supplier will continue to operate a scalable platform based on AWS infrastructure and services. This platform is tightly coupled to the COVID-19 App Cloud Services component to provide the resources and integrations necessary for those services to support the day-to-day operation of the COVID-19 Mobile App.

Specific work on this platform includes:

- Operating, and maintaining necessary security policies and firewall rules as required by Buyer.
- Work with the NHS Digital Cyber Defence Operations Centre (CDOC) on security integrations
- Setting up and performing account-level monitoring and alerting
- Maintaining the AWS accounts used to support the app, QR website, SIP gateway, and analytics systems
- Create and maintain Quicksight dashboards as requested and appropriate
- Perform user management for Quicksight dashboards

Self-Isolation Payments Gateway

The Self-Isolation Payments Gateway is the public website the users of the COVID-19 App are redirected to when applying for a Self-Isolation Payment. It consists of the web pages that make up the payment journey and the APIs that support those pages. APIs are deployed to the Amazon AWS Cloud Infrastructure.

The Gateway includes integrations with NHS Login for authentication and the CTAS system to create the payment request records. The Supplier will not be held responsible issues caused by failures of these external systems.

QR Poster creation and administration system

The Poster creation website is a public website that allows owners of venues to create and download QR posters to be displayed at their premises. A record of each poster and its associated venue is stored within the system.

The administration system allows PHE users to login and view the poster database and trigger a request for the COVID-19 App to display a message to users who have visited that venue.

Only the website and administration systems of the QR journey are covered by Managed Services. Check-in and notifications are part of the COVID-19 App system and are covered under the Time and Materials services.

Activities

The Supplier will provide a managed team of engineers that will provide ongoing support

and maintenance of the systems covered. This work will include:

- Ongoing improvements to ensure the systems continue to meet the defined service levels
- Ongoing monitoring of systems to identify potential issues
- Minor changes to functionality if agreed in advance through the Change Control process (30 to 40 person-days will be made available for minor changes each working week)
- Delivery management of the engineering team allocated to Managed Services

Change Control

The systems maintained under Fixed Price Services will be operated and supported as is. Any change in scope or functionality requested by the Buyer will be managed through the following Change Control process.

The Supplier will document any change to scope and estimate the change based upon any change to scope. This process will be followed as good practice even if the change of scope has no impact upon the budget.

The Supplier will present any changes and the amended costs to the Buyer in the form of a Change Control Request. No further work will be conducted on areas of the Fixed Price Services that are impacted by the Change Control Request without either prior written approval of the Change Control Request by the Buyer, or written agreement between the Parties that the variation remains out of scope.

The Change Control Request will take the form of a document outlining the following:

- Detailed description of the change to be implemented, including scope, risks, dependencies and assumptions
- An estimate of the effort required to implement the change in person-days
- If the required change cannot be completed within the available capacity of the Fixed
 Priced Services team an estimate of the amended costs to the Call Off Contract.

If any change cannot be delivered within the available capacity of the Fixed Price Services team, the Buyer can request for the change to be delivered under Time and Materials Services or agree a Variation to the Call Off Contract to cover the work. Costs will be based on the agreed Supplier Rate Card.

Time and Materials Services

The Supplier will continue to provide ongoing analysis, design and development of new features on a Time and Materials basis for the following systems:

NHS COVID-19 Mobile App

A mobile application for the iOS and Android operating systems designed to support the Test & Trace contact tracing programme. The application makes use of the joint Google/Apple Exposure Notification framework to identify proximity contacts between devices, and alert users in the case of exposure to another user who has used the app to record a positive COVID-19 diagnosis.

The app provides additional features to users, including:

- Postcode-based risk alerting
- QR-based venue check-in
- Isolation countdown
- In-app test ordering

- Symptom checker
- Multiple language support
- Exposure Notification framework interoperability with other UK contact-tracing apps
- Devolved authority branding and virology integration
- Usage analytics

COVID-19 App Cloud Services

AWS-hosted APIs built to support the features provided by the NHS COVID-19 Mobile App. Existing integrations include:

- JBC-provided local authority risk levels, i.e., "Tier system"
- QR admin system for sending venue alerts
- Virology for test ordering and result entry
- Statutory Isolation Payment gateway
- Usage analytics

Activities

The Time and Materials Services estimate in Schedule 2 includes capacity to provide software development services as and where required to provide flexible capacity to develop the above systems.

Programme Management and Governance

- Overall delivery leadership of the Supplier delivery teams working closely with the Buyer delivery management team and senior stakeholders
- Overall product roadmap planning and capacity management in close collaboration with the Buyer product ownership and policy teams
- Release management working closely with the Buyer release team to plan, prepare and execute the release of new versions of the system
- Technical support for the Buyer medical compliance team providing expert advice in the technical and engineering delivery aspects of ensuing the COVID-19 App meets the requirements of a class 1 medical device
- Ongoing GDS compliance of all systems
- Ongoing WCAG compliance of all public facing systems

Product Design and Discovery

The Supplier will provide product management, UX design and UI design and architecture capabilities to work with the Buyer to continuously develop and refine a Product Roadmap of features, enhancements, and improvements.

The Product Roadmap will document the current release schedule of planned features. The Supplier and Buyer will regularly review and update the Product Roadmap to ensure it is aligned to the overall goals of the programme.

The Supplier will perform Discovery activities for all new features and changes requested by the Buyer. As input to Discovery the Buyer will provide problem statements for each new feature or change defining the requirements in detail. Discovery activities may include:

- User research and validation (see below)
- UX & UI design
- Technical feasibility assessment

- Architectural design (system design and integration requirements)
- High-level estimation of effort

Once Discovery activities have been completed and a high-level estimation of effort has been provided, the Supplier will work with the Buyer to update the Product Roadmap to include any changes to the release schedule.

The Supplier will refine upcoming features from the Product Roadmap into a detailed Backlog of Work Items suitable for development and will manage this backlog in the Buyer's JIRA system. This refinement may include:

- Detailed analysis of requirements (including workflows, edge cases, etc.)
- Detailed UI designs
- Work Items sized and prioritised
- Acceptance criteria defined and agreed by the Product Owner

Feature Delivery

The Supplier will deliver features from the Backlog in an agile, iterative and incremental way. The Supplier will organise the engineering teams into small teams that will each work on specific areas of functionality. The composition of these teams and the allocation of work will be at the Supplier's discretion. Each team will be managed by a Supplier delivery manager.

The Supplier will maintain a delivery plan, specifying the Work Items that are planned for development in upcoming iterations. The delivery plan will be documented in Buyer's Confluence and Jira systems and agreed with the Buyer during regular planning meetings.

The Supplier teams will work in short iterations delivering working software into a test environment at the end of each iteration. Delivery activities during these iterations will include:

- Implementation and system testing of Work Items from the Backlog
- Development of build tooling to support continuous and automated testing
- Implementation and maintenance of automated regression tests
- Instrumentation to monitor stability and performance
- Refactoring of existing code to improve overall system performance, maintainability and resilience
- Support of Discovery activities for upcoming work
- Support any planned release activities
- Retrospective meetings to identify and action improvements to ways of working

Before each planned release the Supplier will hand over the software to the Buyer's quality assurance team for testing and sign-off. Any defects identified by the Buyer will be assigned a priority as defined in the Incident Priority table below.

Along with each release of the software the Supplier will make all source code available publicly as Open Source.

<u>User Research</u>

The Supplier will provide user research for any planned feature to ensure product decision are based on user feedback in line with GDS guidelines.

The Supplier will provide qualitative and quantitative user research to inform the Buyer about how the app is likely to be received or is being used by users of the app. This research may include:

- The recruitment of participants for user research
- Remote usability testing
- In depth interviews
- Surveys
- Ad hoc user research methods

The Supplier will recruit and provide incentives for participants to take part in user research sessions, support with user experience design and will provide advice and input to the team during team workshops, delivery ceremonies and stakeholder communication sessions.

Inclusive Insight and User Testing

The Supplier will provide professional inclusive design support to the Buyer to test concepts or find solutions to identified accessibility and inclusive design issues as and when needed. These activities may include:

- Recruit participants that represent a range of different access needs and interaction types in line with the objectives of the test.
- Find additional inclusive usability challenges and delights.
- Advice and inclusive perspectives for new design directions
- Categorised, prioritised summary of areas of difficulty or delight noted by journey/ task

Non-functional Requirements

The Supplier will continue to work with the Buyer to build in all essential non-functional requirements required by the Buyer for the production of the Test and Trace contact tracing mobile application. These requirements include:

- Scalability The NHS COVID-19 Cloud Services and infrastructure have been built to support at least 50m individual app installations
- Performance The Supplier will work alongside the Buyer's performance testing teams to understand, document, and meet the required performance of each current and newly-built API
- Security The Supplier will work with Buyer's security and penetration testing teams, including the NHS Digital Cyber Defence Operations Centre (CDOC), to operate security policies defined and required by the DHSC
- Availability –The NHS COVID-19 Mobile App is built in such a way that it will continue
 to operate core functionality even in the event of API failures. API outages that affect
 end users will be treated as incidents as described in Schedule 1 and addressed via
 the service levels described below

Research & Data Science

The Supplier will work closely with the Buyer, Google and Apple, to implement enhancements to the contact tracing implementation based on current and future versions of the EN APIs. This work may include but is not limited to:

- Unscented Kalman smoothing algorithm in iOS and Android
- Field testing
- Implement and trial privacy preserving indoor/outdoor determination
- UWB investigations
- Statistical estimation of BLE Rx/Tx calibration loss
- Implement full probabilistic risk scoring
- Implement epidemiological estimation procedures

Deployment Management

The supplier will ensure that all changes to the production environment follow the approved ITSM change management process including receiving explicit approval to proceed with any production change. Supplier's employees failing to follow this process can be subjected, at the request of the Buyer, to a range of sanctions including temporary loss of deployment rights through to the employee in question being asked to cease their involvement in the program.

Certification Assurance and Testing Services

The Supplier on request by the Buyer and subject to agreement of a variation notice, will provide architecture, assurance and testing services for any certification requirements within the Test and Trace programme or in other areas of DHSC such as NHSX. Any additional costs required to deliver this work will be agreed in advance and will be based on the Suppliers agreed Supplier Rate Card specified in Schedule 2 under Time and Materials excluding VAT and expenses.

Incident Management Services

The Supplier will provide Incident Management Services for all production systems under both Fixed Price Service and Time and Materials Services.

The Buyer will be responsible for running, maintaining and providing the overall Incident Management for the systems in production. The Supplier will provide engineering and Incident Management Services to respond to and resolve production incidents raised by the Buyer's Service Management team.

The Supplier will provide staff available for 24x7 on-call and out-of-hours support making use of the Suppliers teams in Asia and Europe to ensure the majority of incidents occur during core working hours. Out-of-hours shifts will be staffed by an assigned incident manager, a primary support engineer and a secondary support engineer. The Supplier's staff will resolve any incidents raised by the Buyer within the service levels below.

Support activities include:

- End-to-end incident and problem management across Supplier's entire scope
- Maintenance of the operational ticket backlog and providing regular updates to support partners such as NHSBSA
- Maintenance of a clear, accessible knowledge base, including runbooks and reference documentation
- Assisting Buyer or Buyer's appointed suppliers with ad-hoc service requests
- Implementation and maintenance of active monitoring of apps, services, and system events
- Tracking and reporting on key support metrics via the monthly service management report
- Ongoing service improvements based on learnings from support drills and incidents
- For any P1/P2 (Major) incidents, provide a fully documented root cause analysis to the Buyer within 3 working days of the incident's recovery

Service Level Agreement Definitions & Targets

The service level definitions for incident response and recovery as well as problem resolution are defined as follows:

SLA	Definition
Response	The time taken by the Supplier to take ownership (i.e. a response in
	the ticketing tool) of an incident or problem and acknowledge re-
	ceipt- this could be verbally on a bridge call, via email or via desig-
	nated ticketing tool. Response must be recorded in ticketing tool.
Recovery	The time the Supplier takes to restore service to end users. Recov-
	ery methods could include activation of panic procedures or utilising
	temporary workarounds with more detailed investigations following
	the conclusion of the event.
Resolution	The time the Supplier takes to providing a permanent fix for the de-
	fect / incident.
Update	The frequency at which the Supplier commits to providing updates
	on either the recovery of the incident or resolution of the problem.

Incident priorities are defined as follows:

Priority	Definition	Incident Examples
Priority P1	Definition A total failure of or significant disruption to a core user journey that impacts the majority of users (over 30%) OR a significant defect that could have clinical or security implications	 Android users cannot complete the registration process, regardless of their phone make/model All users are unable to log that they are experiencing COVID symptoms All users are not seeing the current COVID risk level for their area App is crashing for all iPhone users following a new release of the iOS app Following an App updates, Clinical advice to end user is incorrect A security incident where the data stored on the central platform is compromised Platform alert identifying service is down due to infrastructure failure e.g. network connectivity
		 Outage of Integration between NHS COVID-19 App platform and Virology Test Results for more than 6 hours
P2	A total failure of or significant disruption to a core user journey that impacts a subset of users (more than 50%) e.g., specific smartphone model OR materially degraded service impacting all users OR	 A proportion of users cannot complete the registration process on a specific model of phone that should be compatible A proportion of users are unable to log

	risk of significant negative media coverage	that they are experiencing COVID symptoms on a specific model of phone that should be compatible
		 Following an App update, a UI defect that means important text is being "cut off" across all Android phones
		 Material degradation in the time taken to register a user is experiencing symptoms
		Outage of Integration between NHS COVID-19 App platform and Virology Test Results for less than 6 hours
		Incorrect foreign language translation
		 Accessibility issue impacting AA standard
		 Incorrect clinical advice being provided to App users
P3	A minor degradation or cos- metic defect that does not im- pact app usability or perfor-	There is a minor spelling mistake or typing error in the text
	mance however does impact the majority of users (over 30%) OR a total service fail- ure impacting a small subset of users (less than 20)	 Reports from a small number of users, identify need for additional FAQ guidance to be published on website to support end user queries
P4	A minor degradation or cos- metic defect that does not im- pact app usability or perfor- mance that impacts a subset	For a specific model of phone, there is a minor app aspect ratio issue where some non-critical text is cut off
	of users e.g., specific smartphone model OR a total service failure impacting a single user	 The quality of an image used appears blurred/pixelated, no impact to use journey
		 Reports from 10 users, identify need for additional FAQ guidance to be published on the website to support end user queries
		Single user reports an issue installing phone on a specific model of phone that should be compatible

The Service Delivery Manager may escalate an Incident to a higher priority in the event of an exceptional situation not falling within the definitions above or has the potential to cause reputational damage.

The Supplier commits to meeting the following service levels for the above incident priorities are as follows.

Priority	Hours	Response	Recovery	Resolution	Update
P1	24x7	30 mins	2 hours	2 Working Days	Every hour
P2	24x7	1 hour	4 hours	5 Working Days	Every 4 hours
P3	8x5	4 hours	3 Working Days	20 Working	Every
				Days	Working Day
P4	8x5	1 day	10 Working Days	40 Working	Every 5
				Days	Working Days

The parties acknowledge that there are occasions where recovery of incidents or resolution of problems are impacted by factors outside of the control of the Supplier (e.g. app store publication lead times or third-party incidents). In these occasions, the applicable service level clock will be paused until the dependency has been resolved.

The parties agree that the above service levels are contractually binding and failure to meet the service levels will result in the Supplier being required to issue the Buyer service credits to compensate. The Supplier must report on service level performance on a monthly basis as part of the Service Review process. The Supplier shall have the opportunity to "earn back" any due Service Credits in subsequent months.

Service Credit Calculations

- The supplier is required to complete the attached service level Scorecard as part of their monthly Account Management meeting
- Service Credits are applicable to the following service levels
 - o P1 Response
 - o P1 Recovery
 - o P1 Resolution
 - o P2 Response
 - P2 Recovery
 - o P2 Resolution
- Each service level has been given a "weight" to indicate its relative importance to the program. E.g., P1 recovery being the most important
- Service credits are capped at 10% of the total value of this contract for one calendar month
- Service level performance shall be calculated using the project's operational ticketing tool(s)
- Measurements are taken as a calendar month mean average for that given metric
 i.e., all tickets that match the criteria of P1 or P2 that are raised/created between the
 first and last calendar day of a given month
- Any service credit calculated will be accrued during the length of this contract and provided as a discount off the final contract month invoice.



- If the Supplier has fallen short of one of their service levels in a given month, an "earn back" mechanism is in place which allows the Supplier to "void" the service credit by meeting or exceeding their performance target (score of 9 or 10 for the same metric) in the next two consecutive months
- For example, if the supplier fails P1 recovery in month 1 however scores 9 and 10 in months 2 and 3, the service credit will be deemed "void" and no longer part to the accrued Service Credit balance
- Zero incidents for a given priority in a calendar month will score a 10 for that priority in that month
- If the Supplier fails to meet or exceed the target score (9 or 10) in any of the two
 consecutive months following the failure, the service credit remains part of the
 accrued Service Credit balance
- For the avoidance of doubt, earn back applies on a per metric basis

Transition Support

The Supplier agrees, that in the last 60 calendar days of the contact, if requested by the Buyer, the Supplier will prepare and execute a transition plan to the new service provider. Note, transition activities may impact the delivery schedule of planned upcoming features. The Supplier will work with the Buyer and new supplier(s) to replan the delivery schedule to take into account the transition work.

Transition activities should include but are not limited to:

- Handover of all applicable technical documentation (architecture diagrams, requirements documents, etc.) for the apps and all supporting services
- A series of knowledge transfer sessions towards new supplier(s) explaining all aspects of the app and platform from architecture through to operational support
- Handover of Source code for all applications and supporting services
- Handover of all test scripts and any test automation
- Handover of all operational documentation (run books, play books, deployment procedures, etc.)
- Handover of all applicable admin accounts (e.g., AWS infrastructure)
- Transition and knowledge transfer of operational tools such as JIRA dashboards and Opsgenie

Account Management

The Supplier and Buyer will ensure the reporting and monitoring procedures described below are set up and complied with.

The Supplier and Buyer will attend monthly account and service management meetings on a mutually agreed upon date within the month to review the engagement.

These meetings will review the following:

- Progress made on the delivery of the planned Product Roadmap
- Supplier performance against the service levels defined in this Call Off Contract and agreement of any remediation plans where a failure to meet agreed service level(s) has occurred
- Supplier performance against the following KPIs calculated within the service management tooling:

- Throughput number of stories & defects (measured in story points) completed per time period
- Lead time the average time taken for features to transition from idea to production release
- Cycle time the average time taken for features to transition from ready for development to ready for deployment
- Mean Time to Recovery (MTTR) the average length to time taken for the system to recover from production incidents
- Defect rate number of defects raised per time period (a defect is defined as, a story marked as done that fails to meet its defined acceptance criteria)
- Failed Deployment Rate number of deployments in the calendar month that directly caused a platform incident up to 7 calendar days after release to the live platform
- Time to Respond to Level 1 the average time taken by Supplier to provide a meaningful response (not just an acknowledgement) to the Level 1 Customer Helpdesk. The trend for the previous 5 months should also be shown with this metric
- Problem Record Trend number of open problem tickets / defects and how this number is trending over time
- Created Vs Resolved Incidents number of newly created incidents in the given calendar month versus the number closed. This should be shown as a month-by-month trend to show how this metrics changes over time
- Ongoing team capacity and technical skills
- Supplier teams average daily working hours
- Feedback on the Buyer and the Supplier personnel
- Risks, Assumptions, Issues and Dependencies (RAID)
- Review the asset register
- Future programme plans and requirements
- Any other business

The Supplier will document the outcomes of these meetings in a monthly review report. These reports will be distributed by the Supplier to all parties within 5 Working Days of the meeting. These monthly review reports are not official until the Buyer approves them. Monthly review reports are to be accepted, rejected or edited by both Parties as an accurate reflection of the meeting within 2 Working Days of receipt of the report. Monthly review reports are approved when both parties sign them off as accepted. If no feedback or rejections are received from both Parties after 5 Working Days, the report will be deemed to be accepted. The Supplier will then send the approved monthly review reports to the Buyer as evidence of Services being received and support the Buyer's receipt request process to enable invoices to be paid.

Schedule 2: Call-Off Contract charges

For each individual Service, the applicable Call-Off Contract Charges (in accordance with the Supplier's Digital Marketplace pricing document) cannot be amended during the term of the Call-Off Contract.

The detailed Charges breakdown for the provision of Services **including any agreed discounts** during the Term are as follows:

Fixed Price Services

The Supplier will charge a fixed monthly fee for the Managed Services outlined in Schedule 1 of ncluding discount. The total fee for Managed Services for the Term (not including any extension period) will be ncluding discount.
The Fixed Price cost for Extension Period 1 to cover the period between
The Fixed Price cost for Extension Period 2 to cover the period between

The size and make-up of the team required to deliver Managed Services is at the Supplier's discretion. However, team members will be onboarded on to NHS systems in line with the onboarding process described in this contract. As at the date of this Call off Contract there are **18** Supplier Personnel in the Fixed Price Service team.

Time and Materials Services

For Time and Materials Services, the Supplier will charge a Day Rate per team member based on the agreed Supplier Rate Card set out below.

Based on the current understanding of the programme plans the estimated costs for services are broken down into work streams below. Note, the following team sizes are indicative, the Supplier may move staff between work streams in-line with the needs of the Buyer.

Estimated person-days are based on a total of

Programme Management and Governance

The Supplier will provide Director level (SFIA 7) management and technical oversight free of charge.

SFIA Level	Supplier Grade	Staff	FTE	Day Rate	Total
				Total	
				Discounted	

Product Design and Discovery