



# Master Subscription & Services Agreement

This Master Subscription and Services Agreement (the “**Agreement**”), effective as of **[Insert Date]** 2024 (the “**Effective Date**”), is entered into by and between Lifebit Biotech Limited (company number 10727859), whose registered office is at Office 4, 219 Kensington High Street, London, W8 6BD, United Kingdom (“**Lifebit**”) and CLIENT DETAILS (“**CLIENT**”). Lifebit and CLIENT are each referred to hereinafter as a “**Party**,” and collectively as the “**Parties**.”

WHEREAS, Lifebit is the proprietary owner of a platform (“**Lifebit Platform**”) that provides a federated platform-as-a-service subscription services as further defined herein (“**Lifebit Service**”) to which the CLIENT desires to subscribe and rely upon on the terms and conditions set forth herein or in separate Statements of Work / SOW.

NOW, THEREFORE, in consideration of the mutual covenants, terms and conditions set forth herein, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties agree as follows:

1. **Definitions.** For purposes of this Agreement, each word or phrase listed below has the meaning designated. Other words or phrases used in this Agreement may be defined in the context in which they are used.

“**Affiliate**” means any entity directly or indirectly controlling, controlled by or under common control with another entity, where “control” means ownership of more than 50% of the voting stock or other equity interests of an entity, or the right to direct the management of such entity.

“**Authorised User**” means (a) any employee, contractor, agent, or representative of a CLIENT listed in the SOW that is authorised to access and use the Lifebit Service.

“**Business Continuity and Disaster Recovery Plan**” means Lifebit’s contingency plans, recovery plans, including disaster recovery plans to ensure Lifebit’s continued performance under this Agreement, as such plans may be updated by Lifebit from time to time.

“**CLIENT Confidential Information**” means any information or data disclosed or made available to Lifebit hereunder, whether disclosed orally, visually or in writing, by way of any media, of CLIENT or any CLIENT Affiliate, or customer of either of the foregoing, or any third party which has disclosed such information to CLIENT or a CLIENT Affiliate on a confidential basis, which includes but is not limited to, CLIENT’s or CLIENT Affiliates’ business or financial affairs, trade secrets, technology, research and development, pricing, product plans, marketing plans, employee and candidate identities, client lists, customer lists, the types and amounts of products and services provided hereunder by Lifebit to CLIENT, and the terms or existence of this Agreement, and all copies, summaries, and compilations of any of the foregoing.

**“CLIENT Data”** means any information, or materials that are provided, submitted and/or otherwise inputted into the Lifebit Service, or as part of any Professional Services rendered, by CLIENT Entities and/or Authorised Users, including any personal data which Lifebit processes in connection with this Agreement, in the capacity of a processor on behalf of the CLIENT. CLIENT shall remain the owner of all CLIENT Data and nothing in this Agreement shall be construed as a grant of a licence or conveyance of such ownership rights to Lifebit.

**“CLIENT Affiliate”** means an Affiliate of the CLIENT.

**“CLIENT Indemnitees”** means the CLIENT Entities and their respective third-party service providers, officers, directors, employees, contractors, representatives, successors and assigns.

**“Confidential Information”** means CLIENT Confidential Information or Lifebit Confidential Information, as applicable.

**“Client”** means the CLIENT when referenced in any Statement of Work / SOW.

**“Data Privacy Laws”** means all Laws including all applicable data protection and privacy legislation in force from time to time in the jurisdiction in which the CLIENT operates or the Lifebit Services will be performed. Data privacy laws may include, without limitation: Cal. Civ. Code §§ 1798.80 et seq., 1798.100 et seq. and its implementing regulations (“CCPA”) and other state consumer privacy laws to the extent Lifebit processes data relating to identified or identifiable individuals or households and where applicable the General Data Protection Regulation ((EU) 2016/679); the Data Protection Act 2018; the Privacy and Electronic Communications Directive 2002/58/EC (as updated by Directive 2009/136/EC) and the Privacy and Electronic Communications Regulations 2003 (SI 2003/2426) as amended.

**“Data Processing Agreement”** means the Data Processing Agreement attached hereto at Schedule [4] and forming part of this Agreement.

**“Documentation”** means the user guides, user manuals and other written documentation describing the Lifebit Service that Lifebit makes available to a CLIENT or Authorised User.

**“Fees”** means the Platform Licence Fees and the Professional Services Fees, as applicable.

**“Force Majeure”** means any unforeseeable event beyond a Party’s reasonable control (including, without limitation, acts of God, pandemics, acts of terrorism, acts of civil or military authority including governmental priorities, fires, floods, wars, or riots).

**“Intellectual Property Rights”** means all present and future right, title and interest in and to, whether by virtue of direct ownership, exclusive or non-exclusive licence or otherwise, patents, inventions, utility models, trademarks, service marks, trade and service names, copyrights, database rights, Feedback and design rights (whether or not any of them are registered, and including applications for registration of any of them), rights in know-how, moral rights, trade secrets and rights of confidence and all rights or forms of protection of a similar nature or having similar or equivalent effect to any of them which may exist anywhere in the world, software programs, designs, mask works, drawings, training materials, any proprietary symbols, and service marks, trade names, logos, domain names, Universal Resource Locators (URLs), IP Addresses, and other designations used to identify a party’s products or services, and all other proprietary rights or derivatives thereof.

**“Law”** means (a) any national, state, local or other law or statute in any jurisdiction; (b) any international or transnational treaty, law, or statute; (c) any rule or regulation issued by a Regulatory Body; (d) any written or authoritative interpretation by a Regulatory Body of any such law, statute, rule or regulation; and (e) any enforceable regulatory guidance, any judicial, governmental, or administrative order, judgement, decree or ruling or written and enforceable requirements of industry self-regulatory bodies and organisations.

**“Lifebit Confidential Information”** means the Lifebit Service, Platform Learnings, Documentation, FeedBack and business or financial affairs, trade secrets, technology, research and development, pricing, product plans, marketing plans, client lists, customer lists, scientific, technical, or other information in any form whatsoever, whether electronic or otherwise, relating to methods, processes, formulae, compositions, systems, techniques, product information, inventions, know-how, trade secrets, ideas, blue prints, design rights, machines, computer programs, software, development codes and research projects, business plans, co-developer/ collaborator identities, data, business records of every nature, pricing data, project records, market reports, sources of supply, employee lists, business manuals, policies and procedures, information relating to technologies or theory and all other information which may be disclosed by Lifebit to the CLIENT or which the CLIENT be provided access by Lifebit, whether stored electronically or otherwise; and all copies, reproductions and extracts thereof, in any format or manner of storage, whether in whole or in part, together with any other property of Lifebit or acquired by the CLIENT or coming into the CLIENT 's possession or control in any manner whatsoever.

**“Lifebit Service”** means Lifebit's Platform as described in this Agreement, Schedules, and the SOW, that is provided by Lifebit to CLIENT hereunder.

**“Personal Information”** means any information that relates to a natural person and that could be used, either directly or indirectly, to identify such a person.

**“Platform Learnings”** means that information the Lifebit Platform and its associated Software may collect, develop, create, extract, compile, synthesis, analyse including associated statistics, benchmarks, measurements, and other information, which the Lifebit Service then uses to improve the Software and Lifebit Platform's performance and which Lifebit uses for its business purposes.

**“Purpose”**: the purposes for which the CLIENT Data is processed by Lifebit is limited to the provision of the Lifebit Service and in connection with this Agreement, in its capacity of a processor on behalf of the CLIENT.

**“Professional Services”** means that consultancy and/or advisory services provided by Lifebit to the CLIENT as set out under a SOW.

**“Regulatory Body”** means any governmental regulatory body having jurisdiction over the activities contemplated by this Agreement.

**“Services”** means the Lifebit Service, Support Services and/or the Professional Services and any other services provided by Lifebit to a CLIENT Affiliate hereunder.

**“Statement of Work / SOW”** means any projects agreed between the Parties from time to time pursuant to which Lifebit shall supply Lifebit Services and/or Professional Services to the CLIENT substantially in the form set out in Schedule 1.

**“Third Party Product, Software and/or Services”** means that product, software and/or services means any products or services not developed or owned by Lifebit.

2. **Delivery of Lifebit Service** will be set out under a delivery plan or as described in this Agreement and the SOW.
3. **Service Levels** are the service and support levels set out in this Agreement, Schedules / SOW.
4. **Software** includes the software program(s) underlying the Lifebit Platform licensed by Lifebit to CLIENT in accordance with the terms of this Agreement, exclusive of source code, including any modified, updated, or enhanced versions of such software programs.
5. **Feedback**. means feedback, suggestions, ideas, insights, enhancement requests, recommendations or other information provided to Lifebit by the CLIENT about its Confidential Information and/or products and Services. Lifebit shall be free to use or exploit the Feedback provided to it without further consideration or compensation to the CLIENT.
6. **Licence**.
  - 6.1. ***License Grant.*** Lifebit hereby grants the CLIENT and Authorised Users a term based non-exclusive licence to access and use the Lifebit Service pursuant to the terms of this Agreement and applicable SOW only during the Term.
  - 6.2. ***Restrictions.*** CLIENT shall not decompile, disassemble, modify, translate, adapt, duplicate, frame, mirror, republish, make derivative works of, reverse compile any part of the Lifebit Service; use any manual or automated software, devices or other processes to “scrape” or download data from any web pages contained in the Lifebit Services; access the Lifebit Services in order to build a similar or competitive product or service, copy, reproduce, or distribute any part of the Lifebit Services in any form or by any means; or remove or destroy any proprietary markings contained on or in the Services or otherwise attempt to discern the source code, algorithms, file formats, or interface protocols of the Lifebit Services including doing anything similar to Third-Party Product, Software and/or Services. The use rights granted under this Agreement to the CLIENT are limited and subject to the restrictions outlined in this clause 6.2.
  - 6.3. ***Lifebit IP & Title.*** The Software, Documentation and all Intellectual Property Rights contained therein including Lifebit Confidential Information, Platform Learnings, products, statistics, benchmarks, measures and other information arising out of any of the above (for example, documentation and quality processes), are and shall remain the exclusive and sole property of Lifebit. All rights in and to Lifebit IP not expressly granted to CLIENT in this Agreement or any SOW are reserved by Lifebit. No title to the Software or any updates, upgrades, enhancements or modifications thereto transfers to CLIENT under this Agreement or and SOW. Lifebit, as part of its AI technology may collect, develop, create, extract, compile, synthesise, analyse and commercialise statistics, benchmarks, measures and other information during the performance of the Services.
  - 6.4. ***CLIENT Data.*** Subject to Lifebit’s right to use and exploit the Lifebit IP the CLIENT retains all right, title and interest in and to the CLIENT Data. Subject to the terms and conditions of this Agreement, CLIENT grants to Lifebit a non-exclusive licence to use, copy, store, transmit and display CLIENT Data during the Term solely for the purpose of providing the Lifebit Service to CLIENT in accordance with this Agreement and for no other purpose whatsoever.

6.5. *Use of Third Party Product, Software and/or Services.* The Licence granted under this Agreement to the CLIENT to access and use the Lifebit Service may also include the right to use or access or benefit from Third Party Product, Software and Services owned by a third party ("**Third Party**") which may include cloud platform and hosting services. The CLIENT acknowledges and accepts that Lifebit may replace any Third-Party Product, Software and Services, as it may reasonably deem necessary for the ongoing delivery of the Lifebit Services however such replacement shall not derogate or materially impair the agreed Service Levels under the applicable SOW. Third Party Product Software and Services shall be made available to the CLIENT pursuant to the relevant Third Party's terms and conditions that will take precedence over the terms of this Agreement or any SOW. The CLIENT is responsible for ensuring its use, processing, reporting against, combination, commingling and manipulation of its CLIENT Data is compliant with its agreements with the Third-Party, and CLIENT will, indemnify and hold Lifebit harmless against any claims by such Third-Party providers arising from CLIENT's use of such Third-Party Product, Software and/or Services. The owner of the Third-Party Product Software and Services retains exclusive ownership and all right, title and interest in and to the Third-Party Product, Software and Services except to the extent permitted in law.

6.6. CLIENT shall not insert, introduce or include, or permit, enable or cause any third party to insert, introduce or include, any program code, programming instruction or set of instructions that may damage, interfere with, interrupt or otherwise affect Lifebit Services, data files or operations or enable any worms or so called "Trojan horses" or logic bombs, or any back door, trap door or other access means or portal which would enable an entity or device to access any programs, data, systems or communications devices or any other code typically designated to be a virus or other form of malicious code.

6.7. Lifebit may need to update, change or modify the Lifebit Platform. Any such updates, changes or modifications will be made at Lifebit's sole discretion using commercially reasonable efforts to ensure no material reduction in the level of performance, functionality, security or availability of the Lifebit Platform.

## **7. Services.**

7.1. *Professional Services.* As requested by CLIENT from time to time during the Term, Lifebit shall perform professional services described in one or more mutually agreed Statements of Work / SOW, for example training services. All Professional Services shall be carried out by resources that are skilled and knowledgeable acting in accordance with good industry practices. The CLIENT acknowledges and agrees that Lifebit is dependent on the CLIENT complying with its obligations and responsibilities set out in each Statement of Work / SOW.

## **8. Compliance & Audits.**

8.1. *Compliance with CLIENT Policies.* Lifebit will use its commercially reasonable efforts to comply with CLIENT's policies and procedures and applicable Laws, as such are amended from time to time.

8.2. Lifebit will furnish the CLIENT (and any of its authorised representatives) with relevant information, files and documents directly relating to the performance of the Lifebit Services that the CLIENT might reasonably require for its audit purposes, upon receiving 30 business days' notice from the CLIENT (such notice shall not apply

to any regulatory authority). The CLIENT originated audits shall be limited to one annually and shall not cause any material disruption to Lifebit's business. The CLIENT shall be liable for its own costs. Lifebit acknowledges that the CLIENT may be subject to regulation by regulatory authorities in the countries in which the CLIENT operates. Lifebit will give the CLIENT all necessary assistance that the regulatory body reasonably requires, at the CLIENT's cost, in order for the CLIENT to remain compliant and to the extent that such requirements relate to this Agreement or an SOW.

## **9. Fees.**

- 9.1. *Platform Licence Fees.* In consideration of the delivery of the Lifebit Service in accordance with this Agreement, CLIENT shall pay to Lifebit the licence fees set out in the applicable SOW.
- 9.2. *Additional Features.* Lifebit may introduce new functionality for which it charges an additional or separate fee and CLIENT may choose whether to purchase such new functionality at CLIENT's sole discretion. If Lifebit removes any features or functionality from the Software provided pursuant to this Agreement and subsequently offers those features or functionality in a new product, then the Software provided pursuant to this Agreement will be deemed to include (i) the portion of the new product that contains the original features, or (ii) if those features cannot be separated out, the entire new product.
- 9.3. *Professional Services Fees.* In consideration of the delivery of Professional Services in accordance with this Agreement and any Statement of Work, CLIENT shall pay to Lifebit the fees set forth in such Statement of Work.
- 9.4. *Invoicing.* CLIENT will pay all Fees (except Disputed amounts) within thirty (30) days of issue of Lifebit's invoice. Lifebit may suspend the Lifebit Service where the CLIENT fails to pay valid invoices and further Lifebit may charge interest on the past due amount at the rate of 5% per month calculated daily and compounded monthly.
- 9.5. *Taxes.* Lifebit and CLIENT agree that each Party shall be responsible for any taxes imposed on, or with respect to, its own income, revenues, gross receipts, personnel or real or personal property or other assets.
- 9.6. *Additional Terms.* Lifebit may charge interest on the past due amount at the rate of 5% per month calculated daily and compounded monthly and or suspend the CLIENT's access to the Software and Services. The CLIENT shall reimburse Lifebit for all costs incurred by Lifebit in collecting any late payments or interest, including legal fees, court costs and collection agency fees.

## **10. Data Privacy and Security Obligations.**

- 10.1. *Data Security and Privacy.* Lifebit will using commercially reasonable efforts: (a) establish procedures to protect the security and confidentiality of CLIENT Data and CLIENT Confidential Information; (b) protect against any anticipated threats or hazards to the security or integrity of such information; and (c) protect against unauthorised access to or use of such information. The CLIENT may not, (i) conduct security, integrity, penetration, vulnerability or similar testing on the Software, (ii) use any software tool designed to automatically emulate the actions of a human user (such tools are commonly referred to as robots) in conjunction with the Software, or

(iii) attempt to access the data of another Lifebit customer (whether or not for test purposes).

10.2. Each Party warrants that:

(a) it shall fully comply with its obligations under the Data Privacy Laws and under all other applicable laws, enactments, regulations, orders, standards and other similar instruments relating to the control and processing of Personal Data (as defined by the Data Privacy Laws).

(b) it shall comply with its obligations under the Data Processing Agreement.

10.3. The CLIENT acknowledges that Lifebit may engage providers of hosting co-location and computing infrastructure related services for portions of its Lifebit Services. With respect to such sub-processors, Lifebit shall endeavour to ensure: (i) that each of its sub-processors with access to Personal Data has implemented and maintains reasonable organisational, administrative, physical and technical safeguards for the protection of the security, confidentiality and integrity of personal data. The CLIENT acknowledges and agrees that Lifebit may engage new or additional providers of hosting co-location and computing infrastructure related services for portions of its Lifebit Services without further notification or approval from CLIENT provided such use shall not derogate and any agreed Service Levels under any relevant SOW.

10.4. By entering into this Agreement, the CLIENT consents to (and shall procure all required consents, from the data subjects including but not limited its personnel, representatives and agents, in respect of) all actions taken by Lifebit in connection with the processing of Client Data, provided these are in compliance with the then-current version of the Lifebit's privacy policy available at <https://www.lifebit.ai/privacy-policy/> ("Privacy Policy"). In the event of any inconsistency or conflict between the terms of the Privacy Policy and this Agreement, the Privacy Policy will take precedence.

10.5. Without prejudice of Clause 10.4, the CLIENT will ensure that it has all necessary appropriate consents and notices in place to enable lawful transfer of the CLIENT Data to Lifebit and lawful collection and processing of the same by Lifebit for the duration and purposes of this Agreement.

10.6. The CLIENT is responsible for the active security monitoring of the CLIENT Environment which for the avoidance of doubt excludes the Lifebit Environment. In the event that the CLIENT is alerted to any Security Incidents which are due to actual or suspected failures in the security of the Lifebit Environment or require Lifebit assistance, the CLIENT shall immediately inform Lifebit by emailing [incidents@lifebit.ai](mailto:incidents@lifebit.ai) and informing the Lifebit Client Success Manager.

## 11. **Confidential Information.**

11.1. *Treatment of Confidential Information Generally.* Each Party (the "**Receiving Party**") shall maintain as confidential and shall not disclose (except to: (a) with respect to CLIENT and each of its Affiliates', those employees, contractors,

consultants, Authorised Users, attorneys, accountants and other advisors and (b) with respect to Lifebit, the Lifebit Personnel ((a) and (b) collectively, “**Representatives**”), who have a right to use or a need to know such information in connection with this Agreement, and who have been informed of the confidentiality obligations hereunder), copy, or use for purposes other than the performance of this Agreement, any Confidential Information of the other Party (the “**Disclosing Party**”) which, in connection with the activities under this Agreement, the Disclosing Party discloses to the Receiving Party, or to which the Disclosing Party provides the Receiving Party with access, or is otherwise obtained by the Receiving Party. As the Receiving Party, each Party agrees to protect the Disclosing Party’s Confidential Information with the same degree of care a prudent person would exercise to protect its own confidential information of a similar nature and to prevent the loss or unauthorised or inadvertent use, disclosure, or publication thereof. As between Lifebit and CLIENT, CLIENT Confidential Information shall at all times belong solely and exclusively to CLIENT and Lifebit Confidential Information shall belong solely and exclusively to Lifebit.

- 11.2. *Exceptions.* Subject to applicable Law, for the purposes of this Agreement, Confidential Information of a Disclosing Party shall not include any information that is: (a) publicly known at the time of the disclosure by the Disclosing Party or subsequent to such disclosure becomes publicly known through no wrongful act or omission of the Receiving Party hereunder; (b) rightfully known by or in the possession of the Receiving Party prior to its receipt from the Disclosing Party; (c) subsequently disclosed to the Receiving Party on a non-confidential basis by a third party not, to the Receiving Party’s knowledge, having a confidential relationship with the Disclosing Party and which third party rightfully, to the Receiving Party’s knowledge, acquired such information; or (d) independently developed by the Receiving Party without the use of any of the Disclosing Party’s Confidential Information, as demonstrated by the Receiving Party’s written records kept in the ordinary course of its business.

**12. Warranties.** Lifebit warrants that:

- 12.1. The Lifebit Service, the Documentation and the Services do not infringe upon or misappropriate any Intellectual Property Rights, other proprietary right or contractual licence right of any third party.
- 12.2. Lifebit (a) is either the owner of, or authorised to use, all information and material provided to CLIENT Entities in connection with this Agreement, including, but not limited to, the Lifebit Service and the Documentation and (b) is fully authorised to grant CLIENT all rights and licences granted under this Agreement;
- 12.3. Lifebit will comply with all applicable Laws related to the Lifebit’s Services and performance its obligations under this Agreement;
- 12.4. The Services will be performed by qualified and skilled individuals with appropriate expertise, and in conformity with good industry standards.
- 12.5. SAVE FOR THOSE WARRANTIES SET OUT HEREIN THE SOFTWARE AND LIFEBIT PLATFORM IS PROVIDED “AS IS”. THE WARRANTIES SET OUT IN THIS SECTION 12 ARE IN LIEU OF ALL OTHER WARRANTIES BY LIFEBIT AND/OR ITS THIRD-PARTY SUPPLIERS AND VENDORS OF LIFEBIT, EXPRESS, IMPLIED OR STATUTORY, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF PERFORMANCE, MERCHANTABILITY, FITNESS FOR A

PARTICULAR PURPOSE. LIFEBIT CANNOT WARRANT THE SOFTWARE AND/OR SERVICE OR THIRD-PARTY SOFTWARE WILL BE UNINTERRUPTED, ERROR FREE OR FREE OF HARMFUL COMPONENTS AND THAT ANY CLIENT CONTENT OR DATA COULD BE LOST OR ALTERED. EACH PARTY DISCLAIMS ALL LIABILITY AND INDEMNIFICATION OBLIGATIONS FOR ANY HARM OR DAMAGES CAUSED BY ANY THIRD-PARTY PRODUCT OR SERVICES INCLUDING CLOUD HOSTING PROVIDERS AND/OR THIRD PARTY PRODUCTS.

**13. Insurance.**

13.1. Lifebit will, at its own cost and expense, obtain and maintain in full force and effect, with financially sound and reputable insurers insurance coverage relevant to the nature of the Lifebit Service provided under this Agreement.

**14. *Limitation of Liability***

14.1. SAVE WHERE PREVENTED BY LAW LIFEBIT SHALL NOT BE LIABLE TO THE CLIENT FOR ANY INDIRECT, CONSEQUENTIAL, SPECIAL OR PUNITIVE DAMAGES INCLUDING BUT NOT LIMITED TO LOSS OF PROFIT, DATA, CONTRACT, REPUTATION AND GOODWILL ARISING IN CONNECTION WITH THIS AGREEMENT OR ANY SOW, WHETHER IN AN ACTION IN CONTRACT, TORT, STRICT LIABILITY OR NEGLIGENCE, OR OTHER ACTIONS, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

14.2. SAVE FOR LIABILITY THAT CANNOT BE LIMITED BY LAW, BREACH OF CONFIDENTIALITY OR A THIRD PARTY CLAIM ARISING FROM A BREACH BY LIFEBIT UNDER SECTION 12.2 (ABOVE) WHERE LIFEBIT'S LIABILITY SHALL BE UNLIMITED IN ALL OTHER CIRCUMSTANCES LIFEBIT'S TOTAL AGGREGATE LIABILITY TO CLIENT HOWSOEVER ARISING OUT OF OR IN ANY WAY RELATED TO THIS AGREEMENT OR ANY SOW, THE LIFEBIT SERVICE, OR OTHER SERVICES PROVIDED HEREUNDER, SHALL BE LIMITED TO, IN ANY GIVEN TWELVE MONTH PERIOD, TO ONE HUNDRED PERCENT OF THE FEES PAID BY THE CLIENT TO LIFEBIT IN THE TWELVE MONTH PERIOD PRECEDING THE LIABILITY CLAIM. THE CLIENT SHALL USE ITS REASONABLE EFFORTS TO MITIGATE ITS LOSSES.

14.3. The CLIENT assumes sole responsibility for results obtained from the use of Lifebit Service and for conclusions drawn from such use. Lifebit shall have no liability for any damage caused by errors or omissions in any information, instructions or scripts provided to Lifebit by the CLIENT in connection with CLIENT's use of Lifebit Service.

14.4. Nothing in this Agreement excludes the CLIENT's liability for any breach, infringement, misappropriation and or misuse of Lifebit's Intellectual Property rights and other third party rights granted to the CLIENT and Authorised Users under Clause 6 of this Agreement. The CLIENT shall be liable for any Authorised User's breach of this Agreement.

**15. Term and Termination.**

15.1. *Term.* This Agreement shall commence as of the Effective Date and continue unless terminated earlier pursuant to Clause 15.2 (Termination for Material Breach), Clause 15.3 (Termination for Insolvency), or as otherwise provided in an SOW (the "**Term**"). Each SOW shall have its own term and associated renewal terms and

conditions, and each SOW shall continue for its term regardless the Agreement terminates.

- 15.2. **Termination for Material Breach.** Either Party may terminate this Agreement or any Statement of Work hereunder, in whole or in part, with immediate effect in the event of a material breach by the other Party which remains uncured for a period of forty-five (45) business days after receipt of written notice of the breach.
- 15.3. **Termination for Insolvency.** A Party may terminate this Agreement if any one of the following events occurs: (a) the other Party files a voluntary petition in bankruptcy or an involuntary petition is filed against it; (b) the other Party is adjudged bankrupt; (c) a court assumes jurisdiction of the assets of the other Party under a federal reorganisation act, or other statute; (d) a trustee or receiver is appointed by a court for all or a substantial portion of the assets of the other Party; (e) the other Party becomes insolvent, suspends business or ceases to conduct its business in the ordinary course; or (f) the other Party makes an assignment of its assets for the benefit of its creditors. Each Party will give prompt written notice of any such event relating to it.
- 15.4. **Effect of Termination.** Upon termination of this Agreement or any Statement of Work, Lifebit will provide an invoice to CLIENT for Fees and expenses related to Services completed in accordance with this Agreement prior to the effective date of termination. The CLIENT shall remain liable for all third party vendor costs in the provision or planned provision of the Services including cloud hosting costs that cannot be mitigated or cancelled due following the termination of this Agreement.
16. **Subcontractors.** Lifebit subcontracts certain services to third parties who include cloud hosting services providers such as AWS. Unless otherwise set out in this Agreement or under an SOW, Lifebit will notify the CLIENT if it subcontracts the supply of any material part of the Lifebit Services to a new third-party vendor. Unless otherwise set out in a SOW the subcontractors' terms and conditions of business shall prevail over the terms of this Agreement and the SOW.
17. **Force Majeure.** The performance of Lifebit or of CLIENT under this Agreement may be suspended to the extent and for the period of time that such Party is prevented or delayed from fulfilling its obligations due to a Force Majeure, provided the non-performing Party is without fault in failing to prevent or causing such default or delay, and such default or delay could not have been prevented or circumvented by the non-performing Party through the use of alternate sources, workaround plans or other reasonable precautions including, in the case of Lifebit, Lifebit's Business Continuity and Disaster Recovery Plan. After fifteen (15) consecutive business days of suspension on the part of Lifebit due to a Force Majeure, CLIENT may, at its sole discretion, terminate the Agreement without further obligation or liability. Notwithstanding the foregoing, a Force Majeure shall not excuse or suspend Lifebit's obligation to invoke and follow its Business Continuity and Disaster Recovery Plan.
18. **Dispute Resolution.** In the event of any dispute or difference arising out of or in connection with or in relation to this Agreement or the existence, validity, termination, application or interpretation of this Agreement or any of its provisions, both Parties shall use their best endeavours to settle the dispute informally by agreement between the Parties. Both Parties shall always act in good faith and co-operate with each other to resolve any disputes. Both Parties commit to escalating any dispute to senior executives within its organisation for resolution prior to filing

a complaint or other action in a court of law. An SOW may contain its own dispute resolution and contract governance processes and procedures.

19. **Governing Law: Venue.** This Agreement is deemed to be made under and shall be interpreted in accordance with the laws of England and Wales, excluding its conflict of laws provisions. The Parties hereby submit to the exclusive jurisdiction of London courts.

20. **General.**

- 20.1. *Publicity and Case Studies.* Lifebit may publish the fact that Lifebit has furnished or contracted to furnish to CLIENT the Lifebit Service and the CLIENT will act reasonably to support Lifebit with any requested case studies. Lifebit may also reference Customer's name and logo in its press releases or announcements, marketing, advertising, sales or other promotional materials and web site, as a customer of Lifebit.

- 20.2. Lifebit reserves the option to feature and market CLIENT Data Offering to prospective data consumers, with the understanding that any such activities will be subject to additional agreements regarding revenue sharing, to be mutually determined by Lifebit and the CLIENT.

- 20.3. *Entire Agreement.* This Agreement together with all of its Schedules and/or attachments constitutes the entire agreement between Lifebit and CLIENT relating to the subject matter hereof and supersedes all other such prior or contemporaneous oral and written agreements and understandings. Any modification or waiver of any provision must be made in writing and signed by authorised representatives of Lifebit and CLIENT.

- 20.4. *Assignment.* Save for the cloud software providers and software vendors relied upon by Lifebit to provide the Platform and the Lifebit Services neither Party shall assign or transfer (by operation of Law or otherwise) this Agreement or any of its obligations hereunder without the other Party's express, prior written consent, which consent shall not be withheld unreasonably.

- 20.5. *Non-Solicitation.* The CLIENT shall not (except with the prior written consent of Lifebit), during the term of this Agreement and for a period of nine (9) months thereafter, solicit the services of any officers or employees of Lifebit who have been engaged in the provision of the Services or the management of this Agreement or SOW or any significant part thereof. If the CLIENT is in breach, then the CLIENT hereby agrees to pay Lifebit, upon demand, a sum equal to fifty percent of the solicited staff members gross salary.

- 20.6. *Independent Contractors.* This Agreement is not intended to create, nor should it be construed as creating, an agency, joint venture, partnership, or similar relationship between the Parties. Lifebit will act solely as an independent contractor of CLIENT and neither CLIENT nor Lifebit will have the right to act for or bind the other Party in any way or to represent that the other Party is in any way responsible for any acts or omissions of such Party.

- 20.7. *Severability.* In the event any provision of this Agreement, in whole or in part, is invalid, unenforceable or in conflict with the applicable laws or regulations of any jurisdiction, such provision will be replaced, to the extent possible, with a provision

which accomplishes the original business purposes of the provision in a valid and enforceable manner, and the remainder of this Agreement will remain unaffected and in full force.

20.8. *No Waivers.* Failure of Lifebit or CLIENT at any time to enforce any of the provisions of this Agreement shall not be deemed to be a waiver of such or any other provision hereof.

20.9. *Negotiated Terms.* The Parties negotiated this Agreement in good faith and at arms-length. Any ambiguities in the language of this Agreement are not to be construed or resolved against either Party based on the fact that such Party was principally responsible for drafting this Agreement.

20.10. *Notices.* All notices under this Agreement and any SOW shall either be via email to the contact person set out herein or under the relevant SOW or where termination of the Agreement of SOW is under consideration then in writing, properly addressed and shall be: (a) mailed by first-class or express mail, postage prepaid; (b) sent by reputable overnight delivery service; or (c) personally delivered to the receiving Party. Each notice shall be deemed given upon receipt of such notice by the other Party. All notices shall be sent to the Parties at the registered address, or such other address as one Party may provide to the other in accordance with this Clause.

If to CLIENT:

- NAME

If to Lifebit:

- Mr. Thorben Seeger
- Chief Business Development Officer
- thorben@lifebit.ai
- 4th Floor, 28 -29 Threadneedle Street, London, EC2R 8AY.

20.11. *Counterparts.* This Agreement may be signed in counterparts, each of which shall be an original, with the same effect as if the signatures were upon the same document. A copy of this Agreement executed by a Party hereto that is provided to the other Party via post or DocuSign or similar electronic means.

20.12. *Construction.* The following rules shall apply to the construction of this Agreement, unless specifically indicated to the contrary: (a) wherever from the context it appears appropriate, each term stated in either the singular or plural shall include the singular and the plural; (b) the term "or" is not exclusive; (c) the term "including" (or any form thereof) shall not be limiting or exclusive; (d) all references to statutes and related regulations shall include any amendments of same and any successor statutes and regulations; (e) the words "Agreement," "herein," "hereof," "hereunder" or other words of similar import refer to this Agreement as a whole including the Schedules and/or attachments hereto as the same may be amended, modified or supplemented; and (f) all references in this Agreement to sections, Schedules and/or attachments shall refer to the corresponding sections, Schedule and/or and attachments of or to this Agreement.

20.13. *Cumulative Remedies.* Remedies provided for in this Agreement shall be cumulative and in addition to (not in lieu of) any other remedies available to either Party at law (subject to the limitations set forth in this Agreement) or in equity.

20.14. *Marketing Activities.* Following the execution of this Agreement, either Party may release a press announcement highlighting the relationship contemplated by this Agreement. Each SOW shall set out specific marketing activities agreed between the Parties.

20.15. *Headings.* The headings of sections of this Agreement are for convenience of reference only and will not affect the meaning or interpretation of this Agreement in any way.

20.16. *Equitable Relief.* Each Party acknowledges that any breach by a Party that could be subject to equitable claims, including a failure by a Party to perform its obligations under Clause 11 (Confidential Information) of the Agreement, may result in damage to the other Party, and such Party is entitled to seek specific performance or an injunction (without posting a bond) to enforce its rights in accordance with the terms of this Agreement or any Schedule and/or attachment because monetary damages may not be sufficient relief.

20.17. *Survival.* The terms and provisions of this Agreement that by their nature are designed to survive termination shall survive the termination of this Agreement.

**SIGNED** by a duly authorised representative on behalf of **LIFEBIT BIOTECH LIMITED**

Name	Thorben Seeger
Signature	
Position	Chief Business Development Officer
Date	

**SIGNED** by a duly authorised representative on behalf of [CLIENT NAME].

Name	
Signature	
Position	
Date	



# Schedule 1:

## Statement of Work

<b>Terms</b>	<p>This Statement of Work is an agreement between Lifebit and the Client and incorporates, by reference, all the terms and conditions contained in the Master Subscription and Services Agreement entered into between the Parties dated (“Agreement”).</p> <p>Unless separately defined in this Statement of Work, the defined terms used in this Statement of Work will have the same meanings as the defined terms in the Agreement.</p> <p>This SOW defines the general scope of the project (hereinafter referred to as the “Project”) initiated by the Client and outlines the services provided by Lifebit to complete the Project.</p>
<b>SOW Effective Date</b>	<p>Date of signature of this Statement of Work with Lifebit services estimated to commence circa [two (2)] weeks from signature. HOWEVER this commencement date may vary based on resource scheduling, implementation planning and assessment of data.</p>

<b>Duration</b>	The duration of this SOW shall be 2 year (Minimum Initial Term) and shall renew for successive one year renewal terms until terminated by either party serving a minimum of 90 days written notice prior to the commencement of any renewal term.
<b>Scope of Work</b>	<p>This SOW covers the deployment, project management, and services to be provided by Lifebit in support of the Client.</p> <p><b>TBC</b></p> <p>This SOW confirms the understanding of the scope, objectives, services, deliverables, timing, staffing, and fees for this SOW.</p>
<b>Representatives</b>	<p><b>Client</b> <b>[tbc]</b></p> <p><b>Lifebit</b> <b>TBC</b></p>
<b>Type of Work Performed</b>	TBC
<b>Deliverables</b>	<p>Unless otherwise stated, Lifebit will implement the Lifebit Platform and provide the following modules to the Client and its Authorised Users:</p> <ul style="list-style-type: none"> <li>• Connect</li> <li>• Airlock</li> <li>• Data Science</li> <li>• Advanced Analytics</li> <li>• Data Factory</li> <li>• <b>TBC</b></li> </ul> <p>Functional breakdown of each Lifebit Service module feature is set out in Schedule 3.</p>
<b>Client Infrastructure</b>	Amazon Web Services

<b>Client Data</b>	<p>Clients data contains but not limited to:</p> <ul style="list-style-type: none"> <li>• GWAS Summary Statistics</li> <li>• Annotated VCF</li> <li>• WES</li> <li>• Survey</li> <li>• Basic Phenotypic Data</li> <li>• Among others.</li> </ul>
<b># of Participants</b>	Currently, the Client possesses individual-level data for approximately 11 million patients, which they will incorporate into the platform at their discretion.
<b>Key Milestones</b>	See Schedule 4, titled "Lifebit Technical Delivery Plan", for a detailed overview of major milestones and delivery timelines for the Client which are dependant upon Client Responsibilities.
<b>Fees</b>	<p>Lifebit Platform Enterprise License is priced at \$450,000 for a 24-month period, inclusive of implementation and support as per Lifebit's Service Level Agreements (SLAs).</p> <p>Schedule 2 sets out service level support.</p>
<b>Payment Terms</b>	All invoices to be settled in full upon thirty (30) days of issue.
<b>Change Management</b>	<p>Lifebit will provide any updates or upgrades to the Lifebit Platform to the Client Entities that are released after the Effective Date. In the case of non-emergency updates, where the update is not necessary to maintain the security of the platform, Lifebit will notify the Client with a minimum of twenty (20) business days before performing any update or upgrade.</p> <p>Lifebit Daily Rate: \$1,800</p>

## **Client's Responsibilities**

The list below outlines the responsibilities the Client is expected to fulfil throughout the duration of the SOW, as relevant to the Scope of Work defined above:

1. permit Lifebit access to and use of the Data Custodians facilities and technology systems as reasonably necessary so that Lifebit can comply with its obligations under this SOW.
2. make available qualified personnel that are knowledgeable, trained, and skilled and made available to Lifebit so that Lifebit can provide the Lifebit Service.
3. make prompt, unambiguous, and concise decisions to allow Lifebit to proceed with its Lifebit Service without delay.
4. provide all data and information necessary for Lifebit to comply with its obligations under this SOW in particular data and information necessary to achieve any millstone delivery dates.
5. ensure all data, materials and information provided to Lifebit is accurate and complete and provided to Lifebit in the format and timelines set out within any delivery plan.
6. promptly and as fully as reasonably practicable, respond to all communications from Lifebit.
7. without delay review all documents provided by Lifebit and provide comments to Lifebit within the time periods reasonably set by Lifebit.
8. remain responsible for all actions and inactions of any third-party provider directly in its control or with whom it has a contractual relationship and with whom Lifebit is reliant upon to fulfil its obligations under this SOW.
9. where reasonably requested to fully support Lifebit in relation to any interaction required by Lifebit with any third-party vendor in relation to the provision of the Lifebit Service.
10. provide all necessary information related to connectivity to 3rd party systems plus related documentation including

## Critical Dependencies

### Access Permissions

- Client to create the following AWS Accounts within the same AWS Organizational Unit:
  - Data Admin, Networking, and a User Account.
  - Client to give access to Lifebit via IAM, with Administrator Access.
  - Lifebit to configure the client AWS accounts to make them compatible for use by the Lifebit Platform.
- Client to request AWS for vCPU limit increase (Limits specified by Lifebit)
- Client to share credentials/access to the AWS account with Lifebit through 1Password
- Client to share access to the data with the newly created 'Data Admin' account:
  - Share buckets with newly created AWS account
  - or
  - Deposit data into s3 buckets of the newly created aws account
- Data to be structured in agreed upon format

### Networking

- **VPCs**
  - **DEFAULT:** The ability for Lifebit to create VPC's, public subnets and instances using Public IPs
  - or
  - **CUSTOM:** Client to provide VPCs and Subnets that meet Lifebit requirements
- **Internet Availability**
  - Confirm Internet Access is enabled via the Instances/VMs within the VPCs and can access key resources
    - Access to pipelines/tools from private & public git repositories (BitBucket, GitHub, GitLab, DockerHub, Quay.io)
    - Access to public data sets via S3
    - Users to install tools and packages required for their analysis e.g. CRAN, ANACONDA & Python
- **Public Subnets**
  - **DEFAULT:** Lifebit can use Public subnets which allow Lifebit to create virtual machines with Public IPs
  - or
  - **CUSTOM:** Client to confirm Lifebit has permissions to create public endpoints accessible outside CLIENT network which can be used as proxy/bastion to

## Assumptions

The following Lifebit assumptions shall apply to this SOW and the provision of the Lifebit Service and Services:

1. Lifebit has based its ability to perform and achieve any agreed timelines, delivery plans or other dates set out in this SOW upon the assumption that the Client will provide timely and necessary access to all data, information, materials, resources, IT systems, applications, and environments including that of any third party as reasonably required by Lifebit in order for Lifebit to provide the Lifebit Service and Services in accordance with the terms and conditions set out under this SOW and the Agreement.
2. Lifebit assumes that all Client personnel assigned to and/or engaged with this SOW are appropriately skilled and will be available in a timely manner so as to ensure no delays are caused on Lifebit's ability to perform its Services and/or implement the Lifebit Service.
3. Lifebit assumes the Client has all necessary software and licenses in place that are required throughout the Term of the Contract that are required for the use of the Services or the Software. The Client is responsible for its own compliance of all laws applicable to its business whilst the Client will need to ensure it remains compliant with those laws applicable to its business.
4. any changes in scope of the deliverables, activities agreed under this SOW, the scope of the Lifebit Service or Services will require additional approval by both parties and agreement on associated costs and new delivery timelines.

## Conditions:

1. Lifebit shall not be obliged to take any action nor incur any expenditure which would satisfy each of the following conditions: (i) it would be manifestly and seriously harmful to Lifebit; (ii) the costs to Lifebit of taking such action or incurring such expenditure would be disproportionate to the other fees and charges under this SOW; and (iii) such action or cost would not have been reasonably foreseeable at the point when Lifebit Committed to the relevant objective.
2. During the term of this SOW Lifebit and the Client will work

## Public Relations & Marketing

In alignment with their strategic partnership, both parties agree to support joint PR and marketing efforts, including, but not limited to:

1. Use of the Client's name and the logo in Lifebit's marketing and promotional materials used online and offline
2. Collaboration on a joint press release to announce the formation of the partnership, including quotes from the Client and Lifebit, including an executive testimonial about the partnership from the Client's CEO
3. Collaboration and publication of case studies communicating the impact of the partnership
4. Client's participation as a speaker at Lifebit's events, including conferences and webinars
5. Recognition and attribution of the use of Lifebit's software in research published in academic and industry journals

All content produced about the partnership will be approved by both parties prior to publication.

[Signatures on Following Page]

**SIGNED** by a duly authorised representative on behalf of **LIFEBIT BIOTECH INC**

Name	Thorben Seeger
Signature	
Position	Chief Business Development Officer
Date	

**SIGNED** by a duly authorised representative on behalf of 23&Me Inc.

Name	
Signature	
Position	
Date	



## Schedule 2: Support & Service Levels

Version: v1.4 Last Updated: April/2024

1. **Definitions.** In this Service Level Agreement, the following terms have the meanings set forth in Article 1 (Definitions).
  - 1.1. Client Cause: means any of the following causes:
    - 1.1.1.any improper use, misuse or unauthorized alteration of Lifebit Platform by the Client;
    - 1.1.2.any use of Lifebit Platform by the Client in a manner inconsistent with the then-applicable MSA and/or SOW;
    - 1.1.3.the use by the Client of any hardware or software not provided and or approved by Lifebit for use by the Client in connection with Lifebit Platform.
  - 1.2. Good Industry Practice: means the exercise of that degree of skill, care, prudence, efficiency, foresight and timeliness as would be expected from a company within the relevant industry or business sector.
  - 1.3. Help Desk Support: means any support provided by help desk technicians sufficiently qualified and experienced to identify and resolve most support issues relating to Lifebit Platform.
  - 1.4. “Rectification” means a resolution of an Error that corrects and remedies such error without any degradation of performance or loss of functionality.
  - 1.5. “Error” is where Lifebit Platform has a failure in all or part of the platform that is not expected as part of normal operation.
  - 1.6. “Major incident (severity 1)” means any Error that renders Lifebit Platform or any material portion thereof inoperative, or materially impairs the Client’s use of Lifebit Platform in a production environment. Examples of Major incidents include, without limitation, situations in which Lifebit Platform is inoperable and causing users to experience a total loss of service, continuous or frequent instabilities, a loss of connectivity or inability to communicate as intended, or there is an inability to process transactions, a failure of Lifebit Platform to comply

with any applicable law, the creation of a hazard or emergency, or the inability to use a primary feature or function of Lifebit Platform.

- 1.7. "High priority incident (severity 2)" means any Error that substantially impairs the Client's use of one (1) or more features or functions of Lifebit Platform, which constitute less than a material portion thereof, in a production environment, or any Error occurring in a testing or other non-production environment that, if occurring in a production environment, would constitute a Severity Level 1 Error.
- 1.8. "Medium priority incident (severity 3)" means any Error that has a minimal impact on the performance or operation of Lifebit Platform.
- 1.9. "Support Period" the term of any MSA and or SOW in force at any given time.
- 1.10. "Operational Fault": means failure of Lifebit Platform to operate in all material respects in accordance with specifications and SOWs, including any operational failure or error referred to in the Service Level Table.
- 1.11. "Work Around" means a resolution, fix, or procedural change with respect to an Error that (i) remedies or circumvents such Error on a temporary basis pending a Rectification, (ii) causes Lifebit Platform to operate without any loss of functionality or material degradation of performance and (iii) is reasonably acceptable to the Client. Without limitation, a Work Around may consist of specific administrative steps, alternative programming or a temporary patch to Lifebit Platform.

2. **Objectives.** The following section outlines the objectives.

- 2.1. Lifebit service runs 24x7x365 with the exception of maintenance and upgrades that will take place outside of business hours unless agreed with the Client.
- 2.2. Objectives of the Agreement. The purpose of this Service Level Agreement is to describe the key services we provide and the quality standards we have agreed with our service users in terms of service delivery. This Agreement sets out:
  - 2.2.1. the services we will provide to the Client
  - 2.2.2. the overall standard which we aim to achieve in the provision of our services
  - 2.2.3. a mechanism for resolving any problems relating to the delivery of the service
  - 2.2.4. Objectives of the Service. The provision of ongoing support to the Client to ensure they are able to access, onboard, and fully utilize the tools provided by the Supplier as part of the contract signed by both parties.

3. **Description of Services.** The following section outlines the services.

- 3.1. Providing the following levels of access to Lifebit's Support Team:
  - 3.1.1. Initial point of Contact. Lifebit will provide Help Desk Support for Clients to log issues and help requests.
  - 3.1.2. Response times. The Client should initially contact Lifebit through the Help Desk portal. Lifebit will respond to the ticket based on the severity of the issue.
    - 3.1.2.1. Lifebit will response with ether:
      - 3.1.2.1.1. A rectification or a workaround to the issue(s) raised
      - 3.1.2.1.2. An estimated timescale for a solution to the issue(s) raised, or both a workaround and solution to the issue(s)

raised, in case the workaround is not provided immediately  
3.1.3. Other non-technical questions can be raised through a Jira ticket via Lifebit's Help Desk Support.

4. **Requirements.** The following section outlines requirements from the Client.
  - 4.1. The Client should initially contact the Supplier through the online Support channels (see above).
  - 4.2. The Jira ticket should include:
    - 4.2.1. A full and detailed description of the impact the issue is having on the business
    - 4.2.2. Client's contact details (email and/or phone)
    - 4.2.3. A full description of the issue, steps to reproduce and screenshots if applicable
5. **Errors, Responses & Resolutions.** The following section outlines errors, responses, and resolution timeframes and explanations.
  - 5.1. Lifebit will categorize the severity of an issue based on the impact statement provided by the client in the help desk ticket.
  - 5.2. For major incidents and high severity issues, Lifebit will carry out a root cause review and severity assessment to ensure that the ticket was prioritized correctly.
  - 5.3. Lifebit will provide the Client with regular updates on issue resolution until resolved. The primary communication will be via the Jira ticket.
  - 5.4. Issues that reside within the Lifebit Platform workspaces are limited to Severity 2 or 3 when assistance is required from Lifebit support.
  - 5.5. Lifebit engineering operates over two week sprints. For high and medium priority tickets it is expected that the majority of issues will follow the sprint process and further, will be subject to the Client release process. Timing is therefore variable and subject to change.
  - 5.6. Lifebit's core business hours are 09:00 to 18:00 (local jurisdiction). The table below is based on response times within Lifebit's core business hours.
6. **Support Services**
  - 6.1. During the Support period, Lifebit will perform the services in accordance with Good Industry Practice and as outlined in the Service Levels above.
  - 6.2. Lifebit shall not be in breach of this Service Level Agreement for any Client Causes nor be liable for delay in performing, or failure to perform, any of its obligations under this Service Level Agreement if such delay or failure results from events, circumstances or causes beyond Lifebit's reasonable control including but not limited to Client Causes. In particular the Client acknowledges that Lifebit has no direct control over the availability of bandwidth and that while Lifebit will use such reasonable endeavors as it deems appropriate to facilitate Lifebit Service Levels, Lifebit shall not be responsible for delays caused by network connectivity issues.

Incident Level	Service Impact	Initial Response	Estimated Return to Service	Estimated Rectification
<b>Major Incident (severity 1)</b>	Total loss of service regarding: deployment of analysis, monitoring of analysis, accessing data/ results from the analysis	2 business hours	12 business hours	Lifebit will aim to provide a permanent fix within 5 business days
<b>High Priority Incident (severity 2)</b>	Impact to one of more features that impact a small % of the overall users of the system.	4 business days	5 business days	Lifebit will aim to provide a permanent fix within 20 business days
<b>Medium Priority Incident (severity 3)</b>	Any other issues and malfunctions	4 business days	N/A	30 business days



## Schedule 3: Product Functionality & Specification

Below is a summary of the standard features of the Lifebit Platform each of which shall be considered a Deliverable under this Agreement.

### The Lifebit Core Platform

Features	User journeys
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<p><b>Workspace Management:</b></p> <p><u>Admins:</u></p> <ul style="list-style-type: none"> <li>• Invite &amp; manage workspace users &amp; specify roles &amp; permissions for cost &amp; resource management, and data access including read-only filters.</li> <li>• Carry out usage tracking &amp; management, including granular per user, analysis, pipeline/tool, workspace, for admin monitoring &amp; auditing</li> <li>• Integration with SSO's eg. Okta, Azure Active Directory and more to</li> <li>• Creation &amp; management of new compute environments and workspace AWS batch queues, so that no direct admin access to the AWS account is required.</li> <li>• Set cost limits per user and workspace</li> <li>• Restrict users' access to data on an individual-level basis.</li> <li>• Create inter-organization and intra-organization collaborative workspaces</li> </ul> <p><u>All users:</u></p> <ul style="list-style-type: none"> <li>• Work collaboratively with other users in segregated workspaces.</li> </ul>	<p>As an <u>admin</u>, I can:</p> <ul style="list-style-type: none"> <li>• Organize data and users by their company and limit access accordingly while managing users that do not have accounts with my organization.</li> <li>• Manage user access to a workspace &amp; to specific datasets (structured or file based) &amp; workflows</li> <li>• Invite and/or remove users from a workspace</li> <li>• Configure roles &amp; permissions</li> <li>• Track the usage and computing activity in a workspace or workspaces</li> <li>• Track the costs and billing for the activity in the workspace and set cost limits.</li> <li>• Create batch queues for users to allocate pipelines to, to be able to self-serve when selecting the required compute resources.</li> <li>• Set &amp; manage AWS cloud resource cost limits per organization, workspace or user.</li> <li>• Easily onboard and offboard users and organizations with controls on cost management, access, and nominated users</li> </ul> <p>As an <u>user</u>, I can:</p> <ul style="list-style-type: none"> <li>• Share my analyses, results and data with my collaborators in a secure, isolated workspace</li> <li>• Create, delete, browse, share, view and work or files within a project or workspace while conforming to access controls</li> </ul>
<p><b>Federated Data Management:</b></p> <ul style="list-style-type: none"> <li>• Connect/link publicly (GIAB, 1000Genomes, etc.) &amp; privately available data located in different cloud repositories (eg. S3 buckets), or upload data locally for analysis</li> <li>• Work on virtual copies of the data, thus eliminating storage/data duplications and data-loss/data-corruption risks</li> <li>• Easily navigate, copy, transfer &amp; export datasets and project results</li> <li>• Support federated authentication with a partner organization's identity provider and allow for creation of users without a federated identity provider.</li> <li>• Integration of Okta SSO for administrators and internal users</li> <li>• Deploy within the client's cloud environment and see fine-grain cloud expenses.</li> </ul>	<p>As a <u>user</u>, I can:</p> <ul style="list-style-type: none"> <li>• Bring my own datasets into the environment by linking public or private cloud repositories, or uploading my own data locally</li> <li>• Access and run analysis over publicly available datasets without needing to copy or move over the data to permanent storage due to federated capabilities</li> <li>• Easily access the Lifebit platform via a web browser</li> <li>• Access a virtual file system , which allows me to to compile data collections on demand without the need to leave the platform and without having to update the location, name of the file in the cloud storage provider</li> <li>• Directly pay my cloud provider while setting alerts &amp; placing limits on costs.</li> </ul>

The Lifebit Data Factory Module	
Features	User journeys
<b>Extract, clean &amp; ingest Source Data</b> <ul style="list-style-type: none"> <li>Profiling and correcting data issues that would otherwise grant the data unsuitable for ingestion to relational databases</li> <li>Visualisation of formatting issues with the initial dataset</li> <li>Ingest data to Lifebit's relational database.</li> </ul>	As a <u>user</u> , I can: <ul style="list-style-type: none"> <li>Import, clean and ingest data.</li> </ul>

The Lifebit Connect Module	
Features	User journeys
<b>Data Management</b> <ul style="list-style-type: none"> <li>Link any SQL database with custom or OMOP data</li> <li>Link Cloud Object Storage repositories (ie. S3 buckets) with publicly (GIAB, 1000Genomes etc.) &amp; privately available data located in different cloud repositories (AWS S3, GC buckets, Azure Blob Storage) (Federation I)</li> <li>Work on virtual-copies of linked data, thus eliminating storage/data duplications and data-loss/data-corruption risks (Federation I)</li> <li>Upload data from local computer</li> <li>Easily navigate, copy, transfer &amp; export allowed datasets and project results</li> </ul>	<b>Data Management</b> <ul style="list-style-type: none"> <li>As an Admin, I can Connect an SQL database with: <ul style="list-style-type: none"> <li>Custom data.</li> <li>OMOP standardized data.</li> <li>Purpose: Analyze internal data within the system.</li> </ul> </li> <li>As a user conducting data management, I can bring my own datasets into the environment via uploading or federated linking to public and private Cloud Storage repositories (ie. S3 buckets)</li> <li>As a user conducting data management, I can access and run analysis over existing cloud datasets in a secure federated manner without need for data duplication or movement</li> <li>As a user, I can transfer local data files from my computer for analysis, integrating</li> </ul>

<p><b>Lifebit Data Marketplace:</b></p> <ul style="list-style-type: none"> <li>• Browse through a catalog of biomedical data provided by different data custodians (ex: biobanks) on Lifebit's Biobank marketplace</li> <li>• Search and Filter biomedical datasets of interest using tags &amp; metadata.</li> <li>• Submit an application to external biomedical data providers and subscribe for access to their data</li> <li>• Manage data subscriptions, including adding select users to the data subscription and making specific datasets available for specific sets of researchers/ users</li> </ul>	<p>As a <u>user</u>, I can:</p> <ul style="list-style-type: none"> <li>• Browse external data repositories within Lifebit's Biobank data marketplace effortlessly.</li> <li>• Search and filter through datasets by: <ul style="list-style-type: none"> <li>◦ phenotypic variables.</li> <li>◦ Utilizing metadata.</li> <li>◦ Ensuring the presence of specific data required.</li> </ul> </li> <li>• Dive into individual repositories to uncover: <ul style="list-style-type: none"> <li>◦ Data descriptions.</li> <li>◦ Available data Types</li> <li>◦ Subscription costs and other relevant info.</li> </ul> </li> </ul> <p>As an <u>admin</u>, I can:</p> <ul style="list-style-type: none"> <li>• Initiate subscription requests to external biomedical data repositories.</li> <li>• Provide details regarding intended data usage.</li> <li>• manage my subscriptions, collaborators on projects involving the use of the datasets,</li> </ul>
<p><b>Your organization's Data Catalog:</b></p> <ul style="list-style-type: none"> <li>• Create a Data Catalog with your own datasets.</li> <li>• Specify tags &amp; metadata to your Data Catalog datasets</li> <li>• View, search and filter Data Catalog datasets of interest using tags &amp; metadata (ie. high-level demographic information).Preview specific datasets attributes, and seamlessly integrate datasets into the User Workspace for use across the Lifebit platform.</li> <li>• Users can use this data in their Workspaces in a secure federated manner without copying or moving data</li> </ul>	<p>As an <u>admin</u>, I can:</p> <ul style="list-style-type: none"> <li>• Create a Data Catalog of my organization's varied datasets in the Lifebit Platform and allow users on the platform to use it for their research.</li> </ul> <p>As a <u>user</u>, I can:</p> <ul style="list-style-type: none"> <li>• Browse and preview details about datasets in my organization's Data Catalog</li> <li>• For each dataset find key metadata information related to the contents including ownership of the dataset.</li> <li>• Search and find datasets of interest using tags</li> <li>• Run jobs, interactive analysis sessions using datasets brought to the workspace via the Data Catalog</li> <li>• Download (if permitted) datasets from the Data Catalog off platform for additional analysis or publications</li> </ul>

The Lifebit Airlock Module	
Features	User journeys

<b>Raise Data Export Requests to download locally</b> <ul style="list-style-type: none"> <li>Identify data to be downloaded via Analysis Results, File Explorer or Cohorts</li> <li>Raise an Export via Airlock Request to your data manager</li> <li>Fill out the reason for request and the describe file contents</li> <li>Allow partners, when permitted, to download data via the platform interface or command line.</li> </ul>	As a <u>user</u> , I can: <ul style="list-style-type: none"> <li>Initiate Data Export Requests: Identify and select data for download via Analysis Results, File Explorer, or Cohorts.</li> <li>Submit Export via Airlock Requests: Send requests to the data manager, including the reason and file content description.</li> <li>Enable Partner Downloads: Allow permitted partners to download data through the platform interface or command line.</li> </ul>
<b>Review, Approve and Reject Requests</b> <ul style="list-style-type: none"> <li>Login to Airlock</li> <li>Review all new requests</li> <li>Preview files</li> <li>Approve raised requests</li> <li>Or reject raised requests and add a reason for rejection for the researcher's information</li> </ul>	As an <u>admin</u> , I can: <ul style="list-style-type: none"> <li>Ensure usage of the platform and data stored is only accessible for organizations and users that have been approved</li> <li>Restrict data download or transfer</li> <li>Selectively identify and review dataset transfer requests</li> </ul> As a <u>user</u> , I can: <ul style="list-style-type: none"> <li>Review all export requests through a centralised view</li> </ul>
<b>Email Notification once a Request is updated</b> <ul style="list-style-type: none"> <li>For an Approved request, an email with an authorised download link will be shared</li> <li>For a rejected request, information regarding the reason will be provided</li> </ul>	As a <u>user</u> , I can: <ul style="list-style-type: none"> <li>Receive an email notification from the Platform with the status of your request</li> </ul> As an <u>admin</u> , I can: <ul style="list-style-type: none"> <li>Receive a notification upon specified events occurring</li> </ul>

The Lifebit Data Science Module	
Functionality	User journeys
<b>Integrative Genome Viewer (IGV) Browser</b> <ul style="list-style-type: none"> <li>Provides access to the IGV genome browser to visualize BAM, CRAM, &amp; VCF files.</li> <li>Users can load annotations, reference genomes, and external data like Clinvar. Additionally, they can</li> </ul>	As a <u>user</u> , I can: <ul style="list-style-type: none"> <li>Visualise BAM, CRAM &amp; VCF files</li> <li>Load annotations</li> <li>Load reference genome</li> <li>Load external data (eg. clinvar)</li> <li>Download an SVG of my current genome browser view</li> </ul>

<b>Federated Cohort Browser</b> <ul style="list-style-type: none"> <li>• Perform on-demand browsing, querying &amp; cohort building on distributed authenticated combined, real-world and real-world evidence data.</li> <li>• Support for OMOP data and custom/ source SQL data.</li> <li>• Perform point-and-click and SQL queries.</li> <li>• Only a subset of OMOP data is available for point-and-click filtering. All OMOP data is available for filtering in the UI via the SQL editor.</li> <li>• Ability to save/load/share cohort queries with all team-members in the same workspace.</li> <li>• Mount cohort data to a new Jupyter or RStudio session</li> </ul>	As a <u>user</u> , I can: <ul style="list-style-type: none"> <li>• Utilize point-and-click interface or SQL for participant filtering using intricate inclusion/ exclusion criteria.</li> <li>• Share cohorts securely and effortlessly with workspace peers.</li> <li>• Browse and visualize: <ul style="list-style-type: none"> <li>• Participant count with available data.</li> <li>• Data distribution related to clinical phenotypes.</li> </ul> </li> <li>• Efficiently export cohort data for: <ul style="list-style-type: none"> <li>• Analytical pipelines, e.g., GWAS.</li> </ul> </li> <li>• Interactive sessions like Jupyter Notebook or RStudio.</li> </ul>
<b>Interactive Analysis</b> <ul style="list-style-type: none"> <li>• Utilize Jupyter Notebooks, RStudio and Jupyter Spark for dynamic data analysis and visualization. Execute R, and Python scripts, and access the bash terminal. With Jupyter Notebooks, the Snapshot* feature lets users save and reload session settings and dependencies. Control project expenses by setting time and cost parameters.</li> <li>• For Admins: Implement rules to terminate inactive Jupyter sessions.</li> <li>• SAS to be enabled in Q4 of 2024</li> </ul>	As a <u>user</u> , I can: <ul style="list-style-type: none"> <li>• Write and run code in R/Python/Bash in Jupyter notebook, RStudio, (and SAS, by Q4 of 2024)</li> <li>• Use the bash terminal in Jupyter Notebook/ RStudio to run Nextflow scripts</li> <li>• Download tools via conda in Jupyter notebooks/ RStudio</li> <li>• Create a snapshot of my Jupyter notebook with all the tools, conda environments, files so that any user in the same workspace can create a new Jupyter notebook session based on my snapshot</li> <li>• Download packages via CRAN in Jupyter notebooks, including ML/AI packages</li> </ul>

## The Lifebit Advanced Analytics Module

Functionality

User journeys

<p><b>Pipeline Management:</b></p> <ul style="list-style-type: none"> <li>• Access and run pre-built analyses (including NF-core pipelines) and custom pipelines from collaborators.</li> <li>• Import, manage, and catalog user-created Nextflow pipelines.</li> <li>• Link pipeline documentation from Github.</li> </ul> <p><b>Pipeline Configuration:</b></p> <ul style="list-style-type: none"> <li>• Configure pipelines visually using a GUI.</li> <li>• Configure and run pipelines from the command line using Lifebit's Nextflow-CLI and track them through the web interface.</li> <li>• Choose between displaying all parameters or a focused view for specific overrides.</li> </ul> <p><b>Environment &amp; Resource Management:</b></p> <ul style="list-style-type: none"> <li>• Configure public or private environment variables for pipelines, including masked values for secrets.</li> <li>• Preview the final Nextflow command before running the pipeline.</li> <li>• Manage pipeline versions (e.g., selecting versions from Github branches, tags, or commits).</li> <li>• Specify and toggle Nextflow profiles for pipeline runs.</li> <li>• Allocate computing resources (disk space, memory, CPUs) and track resource usage.</li> <li>• Allocate jobs to batch queues for selecting computing resources.</li> <li>• Choose between on-premise and AWS resources for running pipelines.</li> <li>• Set cost limits for analyses to enforce auto-stop rules.</li> </ul> <p><b>Pipeline Monitoring &amp; Analysis:</b></p> <ul style="list-style-type: none"> <li>• Monitor pipeline status in detail (individually or in a team/workspace dashboard).</li> <li>• Search all analyses using tags, text search, and various analysis properties such as project, owner, pipeline version, date and more.</li> <li>• Access comprehensive monitoring and logging information (including memory, CPU usage, process logs, metadata, parameters, etc.).</li> </ul>	<p>As a <u>user</u> I can:</p> <ul style="list-style-type: none"> <li>• Access &amp; run a catalog of Lifebit's out of the box analyses, including all pipelines in the NF-core suite, or pipelines made available by my collaborators.</li> <li>• Bring over, manage &amp; catalog my own Nextflow pipelines in the Lifebit platform.</li> <li>• Link documentation for a given pipeline from Github.</li> <li>• Configure pipelines to run using a GUI.</li> <li>• Configure and run pipelines from the command line using Lifebit's Nextflow-cli, and track them through the web interface.</li> <li>• Flexibly choose between displaying all the available parameters and having a full overview of the configuration of the pipeline, or opt for a more focused view and add only the parameters required to overwrite defaults.</li> <li>• Configure environmental variables to supply when configuring pipelines. Variables can be public or private, with masked values for secrets.</li> <li>• Access a preview of the final Nextflow command prior to triggering the pipeline run.</li> <li>• Specify &amp; manage pipeline versions (eg. select a pipeline version from a given Github branch, tag or commit).</li> <li>• Flexibly specify &amp; toggle Nextflow profiles for any given pipeline run.</li> <li>• Easily select &amp; specify computing resources (eg. disc space, memory, CPUs) for my analysis &amp; track the resources used by a given analysis.</li> <li>• Allocate a job to batch queues, allowing self-service when selecting the required computing resources.</li> <li>• Select between on-premise and AWS resources for running the pipeline, using the UI.</li> <li>• Set a cost limit to cap the cost of computing resources for my analysis, enforcing an auto-stop rule once this limit is reached.</li> <li>• Monitor the status of a pipeline in detail individually, or in a dashboard overview for all pipelines run in an entire team or workspace.</li> <li>• Search all analyses ever run using a variety of tags, analysis metadata and text search.</li> <li>• Access a comprehensive table view of the analyses jobs executed with additional information (ie. costs), advanced filtering capabilities and ability to manage table columns.</li> <li>• Access comprehensive monitoring &amp; logging information for my analysis including memory &amp; CPU usage, fine grain process logs, metadata ,</li> </ul>
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\* Support for running WDL pipelines can be provided at a cost



## Schedule 4: Technical Delivery Plan

		Platform Up & Running		Data on the Platform		Users onboard-ed	
		Sprint 1		Sprint 2		Sprint 3	
		Week 0	1	2	3	4	5
Owner							6
<b>0. Project Set up &amp; Management</b>							
- Kick-off meeting with Client - Ad-hoc sessions (if required) - Client dependencies confirmed*	Lifebit						
- Ensuring successful Go-Live - Ensuring successful coordination & resolution of unforeseen client dependencies & challenges - Capturing of additional client & user requirements to be met after Go-Live	Lifebit & Client						
<b>1. Standard Platform Set up* (cost inclusive in the license)</b>							
Standard Cloud Account Configuration: - Permissions Setup (IAM User and Role) - Network configuration for Private Networks - Whitelist Client's VPN IP for Platform accessibility	Lifebit						
Standard Platform Configuration - Deployment and set up of databases - Admin workspace creation and configuration - Authentication configuration - Account & Platform testing & documentation	Lifebit						
<b>1. Advanced Platform Set up^</b>							
Airlock setup & configuration	Lifebit						
<b>2. Standard Data Standardization &amp; Ingestion** (cost inclusive in the license)</b>							
- Standard OMOP mapping, standardization and ingestion for Tier 1 data (Participant ID, Gender, Age/Date of Birth, Condition, Ethnicity) & for Tier 2 data (Drug Exposure, Measurements) - Ingestion of source data if it exists in SQL format/database - Testing and documentation  - Human variant annotation and ingestion (VCF)	Client & Lifebit						
<b>3. Set Up Connect ^^</b>							
- Onboard Clients' datasets into Connect	Lifebit						
<b>4. Go-Live End-to-End Testing</b>							
- Platform Testing - Pipelines, Cohort Browser and Data Accessibility	Lifebit						
<b>5. Go-Live User Onboarding and Get-Results Training</b>							
- Get Started meeting - introduction to the platform & how users can access the platform and perform analysis - Surveys distributed to users to register for and book 1-1 training sessions - Users trained in 1-1 sessions based on their use-cases	Lifebit						
* 1) WP1 onwards cannot commence until Client dependencies are confirmed to be in place (as defined in 'Lifebit Dependencies & Assumptions').							
**Timeline is based on assumption client provides data meets baseline standards as defined in 'Lifebit Dependencies & Assumptions' for Tier 1 data (Participant ID, Gender, Age/Date of Birth, Condition, Ethnicity) & for Tier 2 data (Drug Exposure, Measurements)							
^ Timeline is based on assumption client provides data meets baseline standards as defined in 'Lifebit Dependencies & Assumptions' for Tier 3 data (death date, procedures, specimen) & for Tier 4 data (notes, observations, care site, care provider)							
^^ Timeline is subject to Dependencies & Assumptions for Data Catalog							



# Schedule 5: Data Processing Agreement

Client to add its DPA.