



25/07/2022

לכבוד : גב' אורית אפרתי-לב,

מנהלת אגף רכש נכסים ולוגיסטיקה ארצי, משרד הבריאות

**הנדון: בקשה לאישור רכש מספק יחיד – סנסיו – רובוט מיון יתושים**

1. חלק נרחב, משמעותי והכרחי בתהליכי העבודה במעבדות בריאות הציבור בירושלים הינו מעקב אחר תפוצת זבובי חול, יתושים ופרוקי רגליים המעבירים מחלות בישראל. התוצאות המתקבלות מהוות כלי חשוב בידי מקבלי החלטות על מנת להכריז על התפרצות, כניסת פתוגן חדש, טיפול ומניעת תחלואה עקב חרקים מזיקים.
2. מעקב זה מתבצע על ידי פריסת מלכודות בשטח, קבלת החומר, מיון היתושים וביצוע בדיקות מולקולריות מתקדמות.
3. ללא ביצוע מעקב בשיטות אלו – לא נוכל לבצע את עבודתנו בשמירה על בריאות הציבור.
4. תהליך מיון היתושים במלכודות הינו סזיפי, קשה ומורכב. הוא דורש עבודה של עובד מיומן וישיבה שעות רבות מול מיקרוסקופ וביצוע מיון באופן ידני. שלב זה הינו מגביל מבחינת כח אדם וכמות החומר שניתן למיין.
5. לאור כך, הוחלט לבדוק האם קיימת טכנולוגיה בעולם אשר יכולה לתת מענה לשלב מיון היתושים.
6. לאחר בדיקת האפשרויות השונות הקיימות בעולם, שיח עם מעבדות ייחוס בינלאומיות מקבילות אלינו ובדיקה מצאנו חברה ישראלית אשר המציאה רובוט ממיין יתושים על ידי שימוש במספר רב של מצלמות אשר משתמשות בבינה מלאכותית כדי למיין את החומר. החברה תומכת בהטמעת הרובוט ובהגדרת היתושים שהוא יודע למיין. בנוסף, לרובוט ישנה יכולת לסדר את החומר במבחנות וליצור רשומות ממוחשבות. כל התכונות הללו יאפשרו הקלה על כח האדם, מניעת טעויות הקלדה והעלאת יכולת הקיבולת של המעבדה.
7. בבדיקות שלנו לא מצאנו חברה אחרת שמספקת יכולות ותכונות אלו.
8. אני מבקשת אישור לבצע רכש כספק יחיד.
9. היקף כולל שנתי מוערך – 60000\$ + מע"מ ילקח מהתקציב השנתי השוטף. המחיר הוא לשנה קלנדרית אחת עם התחייבות בחוזה שירות למשך 5 שנים.
10. העלות כוללת את המכשיר, ליווי, הטמעה, פתרון בעיות מחשוב ותחזוקה ואחריות למשך כל התקופה.
11. התקציב יילקח מתקנה תקציבית : 24168990, מרכז קרנות : 24001621.
12. תוקף התקשרות : מועד התחלת התקשרות – 1.3.2023, למשך שנה קלנדרית אחת, עם אופציה להארכה עד לסה"כ 5 שנות שירות.

בברכה,

  
ד"ר מאיה דוידוביץ-כהן  
מנהלת מעבדות בריה"צ ירושלים

## AGREEMENT

This Agreement (“**Agreement**”) is made and entered into as of June \_\_\_, 2022 (the “**Effective Date**”), by and between Senecio Ltd. (the “**Company**”), and \_\_\_\_\_ (the “**Customer**”). [*please include full legal identity of Customer*]

The parties agree as follows:

### 1. Services

The Customer wishes to receive, and the Company wishes to provide during the Term, the following Services:

1.1. Making one piece of Hardware available to the Customer during the Term at Customer’s site located at \_\_\_\_\_ (“**Installation Site**”)

Delivery of the Hardware will be pre-coordinated in writing by the parties.

1.2. The Hardware specification as in Exhibit B hereto

1.3. The list of species for automated identification:

1.3.1. *Cx. pipiens*

1.3.2. *Cx. perexigus*

1.3.3. *Ae. caspius*

1.3.4. Female sand fly

1.3.5. Male sand fly

1.4. Five licenses providing access to the Company’s online cloud-based platform during the Term.

Insect images are automatically deleted one month after creation. Textual results are available during the term and may no longer be accessed following termination.

1.5. One Service user manual (in English).

1.6. Two sessions of 5 hours each, training Customer employees at the Installation Site.

### 2. Support

The Company shall make reasonable efforts to provide support in timely manner upon reasonable request from the Customer. The Company shall not be required to provide support, fix errors or bugs with respect to Services or any portion thereof (including the Hardware) that have been abused, damaged, altered or misused, or not operated according to the Company instructions manual.

### 3. Intellectual Property

3.1. Information relating to the type of mosquito traps and geographical location of the traps (to the extent such information is uploaded by Customer), are, and shall remain, Customer exclusive property and Confidential Information of the Customer and vest solely with the Customer. The Customer hereby grants the Company

a free, non-royalty bearing, fully paid-up, irrevocable, perpetual, exclusive license, that is sub-licensable and transferable by Company, to use the Customer proprietary information as detailed in this Section 3.1, to use and utilize said information to update the services offered to Company customers, update or create features, modifications, improvements, and generally in any manner which is part of general services rendered by the Company without any obligation, restriction, or remuneration whatsoever.

- 3.2. Notwithstanding with the above, all of the intellectual property rights associated with the Services (including but not limited to any of the Company's technology, software, code, hardware (including without limitation the Company's automated separation-identification-pooling robot as further described in **Exhibit B** hereto) (the "**Hardware**"), tradenames, trademarks, logos, and Confidential Information), and any and all photos, imaging, tags, labeling of insects generated, made and/or discovered as a consequence of the use thereof, any derivatives, modifications, improvements, alterations, iterations or custom features to the Services that may be developed or added to the Services by Company, even if deriving from any suggestion, Feedback or contribution made by Customer or anyone on its behalf, are, and shall remain, Company exclusive property and Confidential Information of the Company and vest solely with the Company.
- 3.3. Customer has no obligation to provide Company with ideas/suggestions/proposals/recommendations etc. ("**Feedback**"). However, if Customer chooses to provide Feedback to Company, then the Company shall be free to use and utilize the Feedback in any manner (including among others sell, import, reproduce, publicly display, distribute, modify, copy, incorporate in Company's products (including the Hardware) and Services, etc.) without any obligation, restriction, or remuneration.
- 3.4. Customer will not, and will not permit any person, directly or indirectly, to (i) reverse engineer, disassemble, reconstruct, decompile, translate, modify, the Hardware (as in Exhibit B); or (ii) create derivative works of the Hardware (Exhibit B), or any aspect or portion thereof, including without limitation, source code, algorithms, images etc.
- 3.5. Without derogating from section 2.1 above, Customer reserves and retains all right, title and interest in the Customer's intellectual property and Customer's Confidential Information, including the sole and exclusive ownership of all intellectual property rights relating thereto.

#### 4. **Confidentiality**

- 4.1. Each party as the recipient of Confidential Information ("**Recipient**") agrees that it will not disclose to any third party (other than to consultants and agents of a party who have a need to know such information for the purpose of performing this Agreement, and who have agreed in writing to abide by confidentiality terms at least as protective as those undertaken herein with respect to Confidential Information) or use any Confidential Information disclosed to it by the other party other than for the above purpose, and that it will take all reasonable measures to maintain the confidentiality of all other party's Confidential Information in

its possession or control, which will in no event be less than the measures it uses to maintain the confidentiality of its own information of similar importance. Recipient shall be responsible for any act or omission of any such above-mentioned parties on its part with respect to the other party's Confidential Information.

“**Confidential Information**” shall mean any proprietary information of either party, including but not limited to, all computer software (in binary or source code form), programs, pricing, cost, consideration, terms of payment, designs, concepts, scientific, algorithmic and structural information included in, or related to, (in case of the Company) the Service, information of a business and commercial nature (such as financial and marketing information disclosed in any form or medium whatsoever). Confidential Information includes all information designated by either party as confidential or proprietary within a reasonable time of its disclosure or which a reasonable person would expect to be treated as confidential.

- 4.2. Confidentiality undertakings do not apply to Confidential Information that the receiving party of such Confidential Information can prove *(a)* is in or enters the public domain without breach of this Section 3; *(b)* is lawfully obtained by the receiving party from a third party without breach of a nondisclosure obligation; *(c)* is already in the possession of the receiving party as shown by its dated written records; or *(d)* is required by law to be disclosed, provided that, the receiving party gives prompt written notice of such requirement prior to disclosure unless prohibited by law from doing so, and reasonably assists the disclosing party in avoiding or limiting such disclosure, all subject to applicable law.
- 4.3. The receiving party acknowledges that the disclosure of Confidential Information could cause substantial harm to disclosing party that could not be remedied by the payment of damages alone. Accordingly, disclosing party will be entitled to preliminary and permanent injunctive relief and other equitable relief in any relevant jurisdiction for any breach of this Section 3 or misuse of Confidential Information by the receiving party.

## 5. **Representations and Undertakings**

The Customer represents, warrants and undertakes that in connection with the Services:

- 5.1. It complies and will continue to comply with all applicable law and regulation in any applicable jurisdiction, including reporting requirements to authorities as may be imposed, during the Term of this Agreement;
- 5.2. To nominate upon execution hereof, a program/project manager serving as point of contact for all issues pertaining to this Agreement, including notices, billing, services (“**Project Manager**”). Customer will provide the Company with the identity and contact information for the Project Manager. Customer may change the identity of the Project Manager by providing the Company with a 7 day prior written notice;
- 5.3. to provide working location/station for installation of the Hardware at Customer's site, in accordance with the Company's instructions;

- 5.4. To operate the Hardware in accordance with the "Hardware Specification Document", as well in accordance with Company's manuals to be provided upon delivery of the Hardware.
- 5.5. The use of the "Hardware" is also subject to the Company's standard end user license agreement, to be provided to Customer as shall amended by the Company from time to time.
- 5.6. Customer shall, at its own cost and expense, obtain and thereafter maintain in full force and affect the following insurance during the Term:
  - 5.6.1. Extended fire insurance. Property Insurance for the Hardware delivered at the Installation Site, with full replacement value, against the customary risks in 'extended fire' insurance. The insurance shall include an express term that the insurer waives the right of subrogation against the Company and/or anyone acting on its behalf, provided that the waiver shall not apply in favor of a person who caused damage maliciously. In the event of loss or damage to Hardware, Insurance benefits shall be paid directly to Company.
  - 5.6.2. Third-party insurance. Third-party liability insurance that insures the Customer's liability under Israeli law for any injury and/or loss and/or damage that will be caused to the body and/or property of any person and/or any entity, including the Company and/or anyone acting on its behalf in connection with and/or within the framework of providing the Services, with liability limit of at least \_\_\_\_\_ per occurrence and in the aggregate for an annual insurance period. The aforesaid insurance is not subject to any restriction regarding liability arising from fire, panic, explosion, poisoning, anything noxious in food or drink, defective sanitary installations, strikes and work stoppages, liability for and to contractors, subcontractors and their employees. The aforesaid insurance shall be extended to include the Company and/or anyone acting on its behalf for their liability for the acts and/or omissions of Company and/or anyone acting on its behalf, all of which subject to a cross-liability clause according to which the insurance will be deemed to have been made separately for each of the individuals insured.
  - 5.6.3. Customer is obligated to fulfil and comply with insurer's requirements, demands and conditions as set forth in the policies, including safety measures and means of protection pertaining to the Hardware.
  - 5.6.4. It is hereby clarified that the taking out of the insurance policies by the Customer shall not limit and/or derogate in any way from Customer's obligations under this Agreement or his liability by any applicable law or under this Agreement to compensate or indemnify the Company and/or any person whatsoever for any damage.
  - 5.6.5. Customer shall not make any changes to coverage limits that bring Company's required coverage below reasonable requirements considering the scope and provisions of this Agreement. Customer shall provide evidence of such insurance upon Company's request.

5.6.6. All Customer' insurances shall be primary to any Company's policy and shall include a clause that the insurers waive any contention and/or demand and/or claim regarding a contribution, indemnification or reimbursement from Company's insurance policies

6. **Disclaimer of Warranties**

- 6.1. THE CUSTOMER UNDERSTANDS AND AGREES THAT THE SERVICES (INCLUDING THE HARDWARE AND THE ONLINE PLATFORM MADE AVAILABLE TO THE CUSTOMER) ARE PROVIDED ON AN "AS IS" AND "AS AVAILABLE" BASIS. TO THE FULLEST EXTENT PERMISSIBLE PURSUANT TO APPLICABLE LAW, COMPANY AND ITS RELATED PARTIES DISCLAIM ALL WARRANTIES OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, IMPLIED WARRANTIES OF TITLE, NON-INFRINGEMENT, ACCURACY, MERCHANTABILITY, AND FITNESS FOR A PARTICULAR PURPOSE.
- 6.2. COMPANY AND ITS RELATED PARTIES DO NOT WARRANT: **(A)** THAT THE SERVICE WILL MEET CUSTOMER REQUIREMENTS OR EXPECTATIONS; **(B)** THAT THE CUSTOMER'S USE OF THE SERVICE WILL BE ERROR-FREE, INVULNERABLE AGAINST CYBER-ATTACKS, OR UNINTERRUPTED; OR **(C)** THAT DEFECTS, IF ANY, WILL BE CORRECTED OTHER THAN AS SPECIFICALLY SET FORTH IN THIS AGREEMENT.

7. **Limitation of Liability**

- 7.1. EITHER PARTY AND ITS RELATED PARTIES SHALL NOT BE LIABLE FOR ANY INDIRECT, INCIDENTAL, CONSEQUENTIAL, SPECIAL, EXEMPLARY, OR PUNITIVE DAMAGES, DAMAGES FOR LOSS OF BUSINESS, LOSS OF GOODWILL, LOSS OF DATA, LOST PROFITS OR OTHER INTANGIBLE LOSSES), UNDER ANY THEORY OF LAW INCLUDING UNDER CONTRACT, NEGLIGENCE, STRICT LIABILITY, BREACH OF ANY STATUTORY DUTY, OR OTHERWISE ARISING OUT OF OR RELATING IN ANY WAY TO THE SERVICE (EVEN IF SUCH PARTY OR ITS RELATED PARTIES HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES AND EVEN IF A REMEDY FAILS OF ITS ESSENTIAL PURPOSE).
- 7.2. NOTWITHSTANDING ANYTHING TO THE CONTRARY CONTAINED HEREIN, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, COMPANY AND ITS RELATED PARTIES' TOTAL AGGREGATE LIABILITY TO CUSTOMER OR ANY OTHER PARTY FOR ANY CAUSE WHATSOEVER AND REGARDLESS OF THE FORM OF THE ACTION, WILL AT ALL TIMES BE LIMITED TO THE AMOUNT PAID BY CUSTOMER TO COMPANY DURING THE 6 MONTHS PERIOD IMMEDIATELY PRECEDING THE CAUSE OF CLAIM.
- 7.3. The Customer agrees that regardless of any statute or law to the contrary, any claim or cause of action it may have arising out of or related to use of the Service or otherwise under this Agreement must be filed within one (1) year after such claim or cause of action arose or the Customer hereby agrees to be forever

barred from bringing such claims.

7.4. This Agreement shall not confer any rights or remedies upon any person or entity on behalf of the Customer other than the Customer.

7.5. Sections 5 and 6 shall apply notwithstanding anything herein (or in the exhibits hereto) to the contrary, whether expressed or implied.

#### 8. **Consideration**

Customer shall pay Company the following consideration during the Term, pursuant to the following payment terms:

8.1. The consideration to be paid and terms of payment are as set forth in **Exhibit A**.

8.2. **Form of Payment**. Wire transfer to the Company's bank account the details of which are set forth in **Exhibit A**, or any other bank account to be thereafter instructed.

#### 9. **Privacy**

9.1. Personal data shall be defined herein as any data that identifies or makes a natural person identifiable that is provided to the Company in the course of the provision of the Services ("**Personal Data**"). Customer warrants that it will comply with all applicable data protection and privacy laws with respect to the Personal Data provided to Company. Customer further represents that it has all the necessary rights to provide such Personal Data to Company for the Services to be performed by Company and that all necessary privacy notices are provided to and all necessary legal consents have been obtained from, individuals whose Personal Data is processed in the course of the provision of the Services.

9.2. Company undertakes that it shall not use the Personal Data provided to it in the course of the provision of the Services, other than for performing the Services and improving it. Company shall implement reasonable security measures for the security of the Personal Data provided to it in the course of the provision of the Services, and undertakes that if it shall become aware of compromising the security of the Personal Data, it shall notify Customer without delay.

9.3. Company shall have the right to collect and analyze data and other information relating to the use and performance of various aspects of the Services, and may (i) use such information and data (during and after the term hereof) to provide and improve the Services and Company's offerings for its customers, and (ii) share such data in an aggregated statistical form which is anonymized and de-identified for the sole purpose of marketing and promotional uses, and for any legitimate business purposes.

#### 10. **Term and Termination**

10.1. The term of this Agreement shall commence on the Effective Date and will continue for 12 consecutive months as of the delivery and installation of the Hardware at the Customer's site which shall be automatically renewed for additional period(s) of 12 months each (the "**Term**") until terminated in accordance with the terms set forth in this Agreement. Notwithstanding and without derogating from the

payment obligations set forth in Section 8 above and Exhibit A, each party shall be entitled to terminate this Agreement for convenience by providing the other party with 3 months prior written notice.

- 10.2. Upon expiration or termination of this Agreement for any reason, the following shall apply: **(a)** Customer shall immediately complete any payment due to the Company according to the provisions of this Agreement, and **(b)** return to Company the Hardware, and **(c)** Customer shall immediately return or destroy, at Customer's option, all of the Company's Confidential Information made available to Customer in connection with this Agreement, and shall make no further use of same, and Customer will provide written certification representing that all Confidential Information and any other intellectual property of Company made available to Customer in connection with this Agreement was returned or destroyed, as applicable; and **(d)** Company shall immediately return to Customer or destroy, at Customer's option, all of the Customer's Confidential Information made available to Company in connection with this Agreement, and shall make no further use of same, and Company will provide written certification representing that all Confidential Information made available to Company in connection with this Agreement was returned or destroyed, as applicable.
- 10.3. The expiration or termination of this Agreement shall not relieve each party of its obligations intended to survive under this Agreement, including but not limited to, Sections 2, 3, 4, 5, 6, 7, 9 and 10.
- 10.4. In case of (i) termination or expiration of this Agreement for any reason whatsoever, or (ii) Customer's breach or alleged breach of this Agreement, the Company may suspend Customer's access to or use of the Services, and the Company shall not be prohibited in any way from continued and interfered ownership, use, development, commercialization of the Services (including the Hardware, the Company's Confidential Information and intellectual property).

#### 11. **Miscellaneous**

- 11.1. No waiver by either party of any default shall be deemed a waiver of any prior or subsequent default of the same or other provisions of this Agreement, nor shall any delay or omission on the part of either party to exercise or avail itself of any right or remedy that it has or may have hereunder operate as a waiver of any right or remedy. Waiver is only valid if made in writing by the party so waiving its right.
- 11.2. If any provision hereof is held invalid or unenforceable by a court of competent jurisdiction, such invalidity shall not affect the validity or operation of any other provision and such invalid provision shall be deemed to be severed from this Agreement.
- 11.3. This Agreement is not assignable or transferable by either party without the prior written consent of the other party, except by the Company to a successor entity in case of an M&A.
- 11.4. This Agreement supersedes in full all prior discussions and agreements between the parties relating to the Services and constitutes the entire agreement between the parties relating to the subject matter hereof, and may be modified or supplemented only by a written document signed by both parties hereto.

- 11.5. All disputes arising out of this Agreement will be subject to the governing law of the state of Israel, without regard to that body of law controlling conflicts of law. Both parties agree to submit to the exclusive jurisdiction of the courts in Tel-Aviv, Israel.
- 11.6. Notices and all other communications provided for in this Agreement shall be in writing and shall be deemed to have been duly given when personally delivered or on the first business day of the recipient if sent by email (Hanan@senecio-robotics.com) if to Company, and [ ] if to Customer), provided that sender did not receive a delivery failure notice.
- 11.7. This Agreement may be executed in counterparts and in electronic formats (including scanned PDF), each of which shall be an original and all of which together shall constitute one and the same instrument.
- 11.8. Force Majeure. Except for payment obligations, neither party shall have any liability for any failure or delay resulting from any condition beyond the reasonable control of such party, including but not limited to, governmental action or acts of terrorism, pandemics, earthquakes or other acts of God, labor conditions and power failures.
- 11.9. Amendments. No amendment, addition, omission, modification or change to this Agreement shall be valid unless drawn up in writing and signed by the parties hereto.
- 11.10. Independent Parties. Company and Customer are each an independent party. This Agreement does not create a joint venture, partnership, principal-agent or any alike relationship between Company and the Customer.
- 11.11. No Third Party Beneficiary. Nothing contained in this Agreement shall confer any right to claim or enforce any right or obligation as third party beneficiary upon any such third party.
- 11.12. Customer will cooperate with the Company in connection with the performance of this Agreement by making available such personnel and information as may be reasonably required. Customer understands that an effective Service is dependent in part on Customer's and accordingly Customer will timely provide Company with the necessary assistance.

\*\*\*

**[Remainder of Page Intentionally Left Blank]**

**IN WITNESS WHEREOF**, the parties have caused this Agreement to be executed by their duly authorized representatives as of the Effective Date.

**SENECIO LTD:**

\_\_\_\_\_:

**Signature:** \_\_\_\_\_

**Signature:** \_\_\_\_\_

**Printed Name:** Hanan Lepek

**Printed Name:**

**Title:** CEO and member of the BOD

**Title:**

**Date:**

**Date:**

**Exhibit A – Fees and Terms of Payment**

1. **Fees**

- 1.1. In consideration for the Services for the first 12 months of the Term, Customer shall pay Company a total of US \$60,000 (the “Fees”) plus VAT.
- 1.2. For each of the 4 additional period(s) of 12 months of the Term, Customer shall pay Company a total of US \$60,000 + VAT.
- 1.3. Prices for the Services may change for any period(s) of the Term beyond this first 60 months of the Term, as the Company shall update Customer.

2. **Payment**

- 2.1. Company will invoice the Customer with an electronic invoice via the email. With respect to the Fees due for the first 12 months during the Term, the Company will invoice Customer immediately upon delivery of the Hardware at the Installation Site.
- 2.2. For each of the additional period(s) of 12 months during the Term, the Company will invoice Customer upon commencement of each such 12 months period
- 2.3. Payment is due within 30 days of approval of the invoice and must be paid electronically via wire transfer to the Company’s bank account the details detailed below.
- 2.4. Invoices shall be approved within a reasonable time.
- 2.5. Unless otherwise explicitly detailed in this Agreement, all amounts owed to Company are non-cancellable, and are non-refundable.
- 2.6. All payments shall be made in Israeli New Shekels. All such payments shall be made net of any taxes, levies, charges or fees, and no deduction of any kind shall be made from the amounts invoiced by the Company for any reason whatsoever.

**Company’s Bank Account**

Bank: \_\_\_\_\_

Branch: \_\_\_\_\_

Account number: \_\_\_\_\_

Routing number: \_\_\_\_\_

Swift Code: \_\_\_\_\_

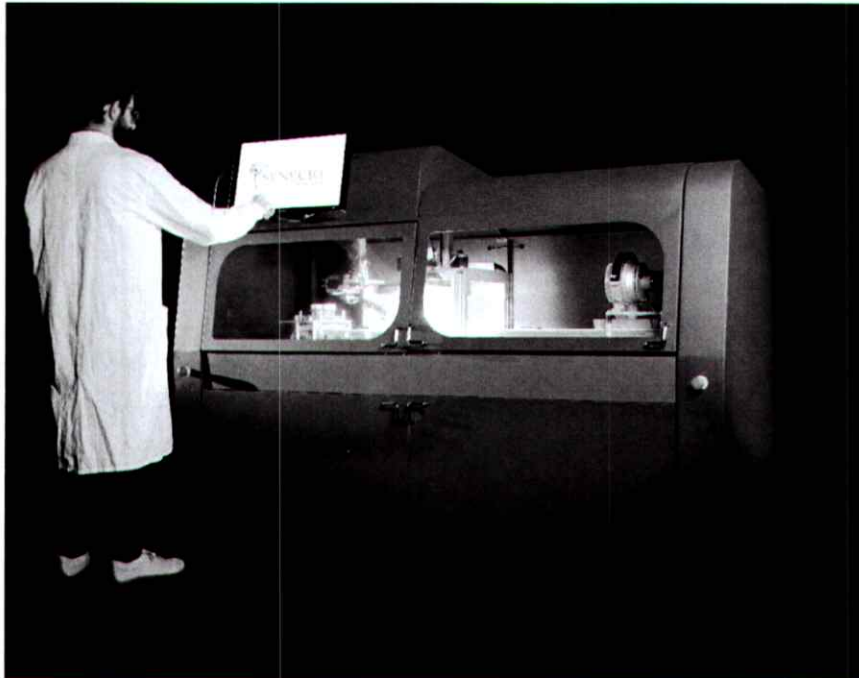
**Exhibit B - Hardware**

Attached "Hardware Specification Document"

# Hardware Specification Document

## For

### Automated Id'ing and Pooling



### 1. **Throughput:**

System image a minimum number of 400 specimen per hour up to 1,000 specimen per hour from start of operation to last image taken by the machine. Variance depends on type of species in the batch, size of the specimen and machine mode of operation.

Images and results are available online upon loading to Senecio cloud platform.

### 2. **Identification:**

Identification technology is based on optics and image processing, including machine learning and neural networks which are subject to statistical variances.

If visual markings required for the identification of the specimen are not visible, or if the specimen is missing important body parts, the system may not accurately identify the specimen species and sex. Such specimen should not be counted when recording the Hardware accuracy.

#### 2.1. **Identified specimen**

Machine attempts to automatically identify such insect species that were defined as part of the Services in the service agreement.

Expected accuracy : 90%, typical.

#### 2.2. **Unknown specimen**

A specimen that the machine was not able to identify is declared as “unkown”.

Default : All unknown specimen and all identified specimen which which are not required to be pooled are stored in two different storage compartments, potentially slowing down the throughput of the system (due to increased use of the robot picking arm).

Optional : User can instruct the machine to store both unknown specimen and the identified specimen (which are not required to be pooled) in the same storage compartment, increasing system throughput (due to reduced usage of the robot picking arm)

### 3. **Pooling**

Pooling is enabled for identified specimen only. User can direct the Hardware through the user interface, which species (of the Identified specimen) to pool, to which vials, and what quantity per each vial.

### 4. **Dimensions**

Machine is 2.4 meter long X 0.82 meter wide.

Machine weights approximately 300 Kg.

### 5. **System Requirements**

- 5.1. Electricity: Stable, 220V, single phase, 10amp
- 5.2. Connection to pressurized air source: 6 bars, 100 liter per minute, 40-micron filtering
- 5.3. Internet: wire connection to permanent high-speed stable internet
- 5.4. Vials: Only use vials of the following type: \_\_\_\_\_

**6. System hardware components:**

- 6.1. Insect separator;
  - 6.2. Imaging station including top view camera and a side view camera comprising a liquid lens for imaging mosquitoes at multiple focus planes;
  - 6.3. Pooling station with matrix of space for 30 Vials;
  - 6.4. Computer including a screen for user interaction (“**Ai-Console**”) with an ethernet port for wired internet;
  - 6.5. Onboard modem enabling remote update of the machine software;
  - 6.6. Enclosure including its own structure and legs;
  - 6.7. Electrical cabinet;
  - 6.8. Safety sensors and emergency stop button;
  - 6.9. Documentation – English user manual.
7. Online console includes the following key features:
- 7.1. View images of the insects that were imaged
  - 7.2. View the results as per the insects that were attempted to be identified by the Hardware, either labeled as “unknown” (or equivalent labeling) or labeled with their presumably identified species.
  - 7.3. Ability to manually change labeling of identified or un-identified insects.
  - 7.4. Ability to download a trap report as an XLS file including the following columns  
Exact order of the columns may be amended. Additional columns pertaining to other data may be included, and remain empty or indicated as empty if the data itself is missing (e.g. GPS location)
    - 7.4.1. Trap identifier number
    - 7.4.2. Species name, genus name, sex, number (of specimens identified)
    - 7.4.3. Vial identifier for each vial that was pooled
    - 7.4.4. Species name, genus, sex, ,number (of specimen identified and pooled into that vial)
    - 7.4.5. Number of un-identified specimen

## **8. Concept of operation**

Senecio's unique approach, suggests using the existing client mosquito field-traps, with regular scheduled visits collecting the traps and bringing the contents to the facility where the system is located. The field traps content is assumed to be dry and fresh and of the type that minimize the damage to the mosquitoes and enables the separation of individual insects when the trap content is emptied or poured. Dirt such as leaves and other non-mosquito or sand fly items should be removed as much as possible to allow best performance.

The system's operation requires a technician or a trained operator to attend and supply new trap content to the system as needed.

- 8.1. The dry field traps are collected on schedule and brought to the facility for same or next day identification.
- 8.2. The operator enters the Trap ID into the Senecio system through the system's GUI, for later association with the specific trap content. Then the same trap content is being poured into the system up to a certain limit of the machine (hundreds per batch). The technician may be required to set the separator to work with fresh or old specimen depending on the trap content.
- 8.3. The operator starts the batch and the Senecio system automatically captures images of individual insects using a top view camera and when decided by the system, also from side view at specific angles decided by the system computer for manual identification.
- 8.4. By default, identified insects which required pooling are pooled into vials corresponding to their species, and the remaining identified insects which are not required to be pooled and the un-known insects are all dropped into two different storage compartments.
- 8.5. The provided licenses will allow access to the system images and will have the option to identify and manually override the identification by the system for cases such as low identification threshold
- 8.6. Images of special interest can be saved for later use by the Client personal.
- 8.7. Summary reports per each trapping event are available for manual downloading as XLS files from the online console
- 8.8. API to communicate with the online console to allow fetching of the data will be provided

הצעת מחיר  
מערכת זיהוי ואיסוף יתושים

עבור :  
משרד הבריאות הישראלי  
המעבדות המרכזיות  
ירושלים, ישראל  
מאי 2022

חברת סנסיו מתכבדת להגיש הצעת מחיר זו למשרד הבריאות, המעבדה לאנטומולוגיה, לידי ד"ר לאור אורשן, עבור שירות באמצעות מערכת רובוטית אוטומטית לסיווג, ספירה ואיסוף של פריטים למבחנות. המערכת, פיתוח ישראלי, יחידה מסוגה בעולם, מבוססת בינה מלאכותית לזיהוי הפריטים, הפרדה אוטומטית של יתושים בקצבים מהירים וכוללת זרוע רובוטית להרמה עדינה של חרקים למבחנות.

#### תמחיר:

- השכרה שנתיית : שישים אלף דולר לשנה בתוספת מע"מ על פי חוק
- תקופת השירות : חמש שנים בתנאי שירות ועלות זהים
- אפשרות להפסקת השירות בכל שנה לשנה שלאחריה, עד 3 חודשים לפני תום שנת שירות

#### תקף

הצעת מחיר זו תקפה עד לתאריך 21 ליוני 2022, וכפופה לחתימת הצדדים על תנאי השימוש, המצורפים להצעה זו.

הנספחים מהווים חלק בלתי נפרד מההצעה

1. מפרט המערכת
2. תנאי השימוש

נשמח להעניק את השירות המוצע למשרד הבריאות הישראלי

בברכה,

חנן לפק  
מנכ"ל  
סנסיו בע"מ

מדינת ישראל  
משרד הבריאות  
ועדת המכרזים המרכזית לשירותים וטובין

נוסח אישור אג"ת לרכישה באמצעות פטור עבור יחידות המיניסטריון

תאריך: 18/07/2022

לכבוד

אגף רכש נכסים ולוגיסטיקה

שלום רב,

הנדון: טופס אישור אגף תקציבים לרכישה בפטור ממכרז עבור יחידות המיניסטריון

פירוט ההתקשרות:

**בקשה לרכישת רובוט למיזן יתושים**

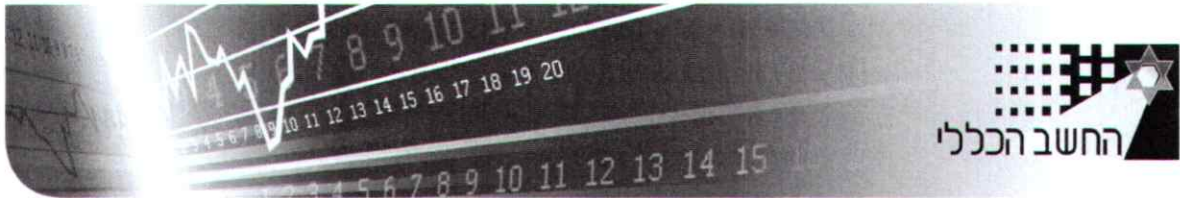
אנו במעבדה לאנטומולוגיה במשרד הבריאות, מבקשים לקדם, להאיץ ולדייק את תהליך מיזן היתושים ועשויים להיות הראשונים שישתמשו במכונה למיזן זבובי חול מעבירי הלישמניה בישראל. חברת סנסיו הגישה לנו הצעת מחיר שמבוססת על השכרת המכונה בעלות שנתית של שישים אלף דולר, התחייבות לספק את השירות בתנאים זהים למשך חמש שנים ואפשרות להפסקת השירות בהתראה של שלושה חודשים. אנחנו משוכנעים שהכנסת המכונה לתפעול תהווה פריצת דרך בתחום המיזן של דגימות השדה של וקטורים מעבירי מחלות ובכך תתרום רבות למערך ההתראה הממשלתי

מדינת ישראל  
 משרד הבריאות  
 ועדת המכרזים המרכזית לשירותים וטובין

בתחום ולבריאות הציבור	
סכום מאושר להתקשרות:	\$60000 כולל מע"מ (243000 ₪ כולל מע"מ)
סעיף תקציבי:	פריט התחייבות 24001621 מרכז קרנות 24168990
שם היחידה:	מעבדות מרכזיות ירושלים
שם גורם מקצועי:	מאיה דוידוביץ

הריני לאשר כי הפעילות לעיל מהווה חלק מתוכנית העבודה של היחידה וקיים תקציב למימושה.  
 אישור זה מהווה הסכמה שאין השלכות כלכליות חריגות או בעיות רוחב למשרד/מערכת הבריאות.

שם נציג מאשר אגף תקציבים:	נועה סלע
חתימה:	



**שם הטופס: חוות דעת מקצועית במסגרת כוונה להתקשר עם ספק יחיד/ספק חוץ**

מספר הוראה: 7.8.2

פרק ראשי: התקשרויות ורכישות

מספר טופס: ט. 7.8.2.1

פרק משני: פטור ממכרז

משרד:	הבריאות
יחידה מזמינה:	מעבדת בריה"צ ירושלים
תאריך:	17/7/2022

אל: ועדת המכרזים

**הנדון: חוות דעת מקצועית במסגרת כוונה להתקשר עם ספק יחיד/ ספק חוץ**

הבקשה מסתמכת על תקנה  3(29) /  3(31) (סמן את התקנה המתאימה) לתקנות חובת מכרזים ועל הוראות תכ"מ מס' 7.8.1 ו-7.8.2.

<b>תיאור מהות ההתקשרות (רקע ופירוט התכונות של הטובין/השירות/העבודה)</b>
רכש רובוט למיזם יתושים

האם קיים בנושא זה מכרז מרכזי של החשב הכללי או גורם ממשלתי מוסמך אחר?  כן  לא

סוג ההתקשרות: (סמן X במקום המתאים)

טובין  שירותים  ביצוע עבודה

שם הספק:	Senecio Ltd
מספר הספק (ח.פ./ח.צ.ע.מ/מספר עמותה)	514988351 חברה בע"מ
ספק זה הנו:	<input type="checkbox"/> ספק חוץ <input checked="" type="checkbox"/> ספק יחיד
אומדן / שווי ההתקשרות:	\$60,000 + מע"מ לשנה, במשך 5 שנים.
תקופת ההתקשרות:	חמש שנים

## שם הטופס: חוות דעת מקצועית במסגרת כוונה להתקשר עם ספק יחיד/ספק חוץ

מספר הוראה: 7.8.2

פרק ראשי: התקשרויות ורכישות

מספר טופס: ט. 7.8.2.1

פרק משני: פטור ממכרז

### נימוקים כי הספק הוא ספק יחיד או כי הטובין הם טובי חוץ נא להתייחס לסעיפים הבאים:

#### 1. האמצעים שבהם נערכו בדיקות לאיתור ספקים נוספים והכנת חוות דעת

אני עוקבת אחר הדיווחים המקצועיים והחידושים בתחום תהליכי מיון היתושים כנציגת ישראל ברשת הניטור האירופאית VECTORNET ובמסגרת יוזמת ה COST ועוקבת באופן שוטף אחרי פרסומים מארה"ב וארצות נוספות במסגרת כנסים מקצועיים בין לאומיים והספרות המקצועית. הרובוט בו אנחנו מעוניינים הוצג בכנסים ועורר עניין עצום אצל משתמשים פוטנציאלים מרחבי העולם. לא הוצג משהו דומה.

#### 2. ממצאי הבדיקה:


עד כה בכל מעבדות הרפנס המקבילות לנו ספירת היתושים והגדרתם למינים מבוססת על עובדים מיומנים המכירים את הסימנים המורפולוגיים. הרובוט למיון יתושים פותח במסגרת סטרטאפ ישראלי, והוגשה לגביו הצעת פטנט. מדובר ביוזמה חדשנית המשלבת שימוש ברובוטיקה, צילום תלת מימדי איכותי מזוויות שונות, זיהוי המין באמצעות לימוד מכונה ולאחר מכן הרמת היתוש והכנסתו למבחנה לפי תכנות ודרישה.

#### 3. נימוקים והערות נוספות

הכנסת הרובוט לעבודה אצלנו תאפשר להגדיל את התפוקות ולחסוך את העבודה הידנית הסיזיפית ובכך לשחרר את העובדים העוסקים במיון לבצע תהליכים אחרים הדורשים מיומנות מקצועית ייחודית. הרובוט יאפשר לנו לעבוד עם מכסה גבוהה יותר של מלכודות ולספק מערך ניטור מורחב יותר בישראל. כיום היקף הניטור בישראל מוגבל בהתאם ליכולת המעבדה הנגזרות מכמות כח האדם המצומצם. בנוסף הרובוט עובד עם מערכת בינה מלאכותית המאפשרת למידה עתידית בהתאם למינים הקיימים והפולשים. הרובוט יחסוך הקלדות וטעויות אנוש הנובעות כיום מהקלדה ידנית. ישנה חשיבות כי מעבדות בריאות הציבור בישראל יובילו את המהפכה הטכנולוגית הבאה בתחום וישמשו כאת מופת לשאר מעבדות הייחוס בתחום זה בעולם.

חוות דעתי זו ניתנת מתוקף היותי הסמכות המקצועית לנושא זה.

בכבוד רב,

ד"ר לאור אורשן	מנהלת המעבדה לאנטומולוגיה ופרזיטולוגיה	
שם בעל הסמכות המקצועית	תפקיד בעל הסמכות המקצועית	חתימה