**MASTER SERVICE AGREEMENT**

This Master Service Agreement (“Agreement”) is made effective on 1st day of March 2019 (hereinafter referred as “Effective Date”).

**By and Between**

**Patient Health,** a company incorporated under the provisions of South African Laws and having its office at The Innovation Centre, 1 Mark Shuttleworth Street, The Innovation Hub, 0020 (hereinafter referred to as “Provider”) which expression shall, unless repugnant to the context, meaning thereof shall mean to include its affiliate, successors, assignees; of the FIRST PART;

**And**

**Campaigning for Cancer NPC,** a non-profit companyregistered under the provisions of South African laws and having its registered office at 44 Forbes Street, Fellside, 2091 (hereinafter referred, to as the “Client”) which expression shall, unless it be repugnant to the context or meaning thereof, be deemed to mean and include its successors and permitted assigns of the SECOND PART;

 **“Provider”** and **“Client”** shall be collectively referred to as “Parties” and severally as “Party”.

**NOW THEREFORE** in consideration of the foregoing and the mutual covenants and promises contained herein and other good and valuable consideration the receipt and adequacy of which is hereby acknowledged, the Parties intending to be bound legally, agree as follows: -

1. **DEFINITIONS**

Unless the context otherwise requires, when used in this Agreement:

* 1. **“Agreement”** means this Agreement, the annexure hereto, and includes each of them as may be amended from time to time as agreed between the Parties.
	2. **“Affiliates”** means, with respect to any entity, any other present or future entity controlling, controlled by, or under common control with such entity.
	3. **“Provider Personnel”** means Provider’s employees, Affiliates and Subsidiary company’s employee, Sub-Provider employees, Provider’s, vendors, and agents.
	4. **“Control”** means any legal, beneficial, or equitable ownership, directly or indirectly, of at least 50% of the capital stock or other ownership interest of such entity ordinarily having such voting rights, or the power in fact to direct or cause the direction of the management of such entity or to elect the majority of such entity’s board members.
	5. **“Deliverable”** means that Provider shall deliver to the Client resource capacity.
	6. **“Intellectual Property”** means all algorithms, application programming interfaces (APIs), apparatus, concepts, data, databases and data collections, deliverables, designs, diagrams, documentation, drawings, flow charts, formulae, ideas and inventions (whether or not patentable or reduced to practice), know-how, materials, marketing and development plans, marks (including brand names, product names, logos, and slogans), methods, models, procedures, processes, schematics, software code (in any form including source code and executable or object code), specifications, subroutines, techniques, tools, uniform resource identifiers, user interfaces, works of authorship, and other forms of technology.
	7. **“Intellectual Property Rights”** means all past, present, and future rights of the following types, which may exist or be created under this Agreement in laws of any jurisdiction in the world: (a) rights associated with works of authorship, including exclusive exploitation rights, copyrights, moral rights, and mask work rights; (b) registered or unregistered trademark and trade name rights and similar rights; (c) trade secret rights; (d) patent and industrial property rights; (e) other proprietary rights in Intellectual Property of every kind and nature; and (f) rights in or relating to registrations, renewals, extensions, combinations, divisions, and reissues of, and applications for, any of the rights referred to in clauses (a) through (b) of this sentence.
	8. **“Services”** means any services provided by Provider as described in Annexure A of this Agreement and any SOW.
	9. **“Statement of Work”** **or “SOW”** means a description of the Services to be performed, and Deliverables to be provided by Provider.
1. **INTERPRETATION.** Unless context clearly requires otherwise: (a) “including” means “including without limitation;” (b) “and” means “and/or,” and “or” means “and/or;” (c) words using the singular or plural number include the plural or singular number, respectively; and (d) words of any gender include the other gender.

1. **SCOPE OF THE AGREEMENT; SERVICES:**
	1. **Scope of Services.** Provider will provide to Client, the Services that are described in Annexure A of this Agreement and various SOWs executed by both Parties in accordance with this Agreement. Such SOWs shall be attached and incorporated by reference into this Agreement when executed by the parties.
	2. **Form of Statement of Work.** Each SOW shall contain the following: (a) detailed description of the Services to which it applies; (b) estimated fees and expenses for such Services and specific billing arrangements, if any; (c) the names of the respective Project Managers for Provider and Client for the Services under such SOW; (d) the period during which the Services will be performed; (e) project assumptions, including Provider specific responsibilities with respect to the Services; and (f) any other information or agreement of the Parties, to the extent it supplements the provisions of this Agreement.
	3. **Change Procedure.** In order for a SOW to be modified, then such proposed changes need to be negotiated in good faith and the terms of any a Project Change Request (“PCR”) must be executed by a duly authorized representative of each Party. Each PCR will describe the proposed change, the rationale for the change, and the expected effects, if any, the change will have on Project cost, schedule, and other subjects.
	4. **Order of Precedence.** If there is any conflict between this Agreement and any SOW, the terms of this Agreement shall prevail. In no event will any terms, conditions, or provisions of any quotation, order acknowledgement, invoice, or other commercial document sent by Provider to Client or its Affiliates have any binding effect on Client or its Affiliates or modify in any way the terms and conditions of this Agreement or any SOW
	5. **Assignment of Provider Personnel**: Provider shall deploy its Personnel on the Client project as per the Scope of Work with prior approval from Client. In case Client determines, within one (1) weeks of commencement of the Services that the assigned Provider Personnel is not appropriate to the position, Client shall notify Provider that replacement of such Provider Personnel is necessary, and Provider shall immediately comply by replacing that person with another person of suitable ability and qualifications.
2. **DELIVERY AND ACCEPTANCE:**
	1. **Delivery**. Provider will provide each Deliverable to the Client Project Manager on or before the due date set forth in the applicable SOW. Each delivery shall be in a format or medium mutually acceptable to parties or as specified in the applicable SOW.
	2. **Acceptance** Provider will notify Client when a Deliverable is ready for Client’s review and acceptance testing. Within 30 days of Client’s receipt of a Deliverable, to Client will notify Provider of whether it accepts or rejects the Deliverable. If Client rejects the Deliverable, Client shall give Provider notice of its rejection stating in reasonable detail any non-conformity and define requirements as it believes are necessary to remedy such non-conformities, After receipt of any such notice, Provider will correct such non-conformities and resubmit a corrected specification for approval in accordance with this Section 4.2. The foregoing procedure will be repeated until Client approves the specification, and at such time the specifications described in this Agreement or SOW.
3. **PRICING AND PAYMENT**
	1. **General**: Charges and a description of charging methodologies will be set forth in Annexure A of this Agreement or each applicable SOW. Unless otherwise expressly provided in a particular SOW or this Agreement, the fees, charges, or unit rates specified therein will be fixed for the duration of Annexure A or SOW. Client will be responsible for the payment of amounts expressly described in a SOW or Annexure A of Agreement respectively. Whereas Annexure A and SOW specifies charges on an hourly or time-and-materials basis, the specified hourly rates (which will be a fee and not wages, regardless of any designation to the contrary) will apply for all Services rendered for eight (8) hours per day or forty (40) hours per week. Provider Personnel who render the Services will keep time records showing the hours worked in relation to the Services performed under this Agreement or activities identified in the applicable SOW

* 1. **Revision in the Pricing:** After completion 12 month from date of execution of this Agreement, Provider and Client shall mutually agree for upward revision rates which will not exceed the Consumer Price Index (CPI) at the time of review.
	2. **Annual Maintenance & Support**
		1. Provider undertakes to provide the updated versions of the standard Software Tools and the corresponding documentation recorded on an electronic support during term of the Agreement. Client shall ensure that the Client’s IT equipment, particularly the system software thereof meets the state of technology required to operate the Software when updates are provided.

**5.3.2** Provider shall provide support and maintenance to Client for a minimum of 2 years from the Effective Date of this Agreement (“Maintenance Period”).

* + 1. Notwithstanding, anything mentioned in clause 5.3.2 above, In the event Provider withdraws maintenance and Support services prior to completion of Maintenance Period as specified herein for any reasons other than (i) Force Majeure and/or (ii) reasons attributed to Client alone, Provider shall refund amount paid by Client for remaining Maintenance period on pro-rata basis.
		2. In the event that a dispute arises between the parties and parties are unable to resolve the dispute amicably with 30 days from date of dispute then in such case, the disputed matter shall be handled as set out in clause 16.2.2 below.
	1. **Projects.** For SOWs that predominantly address specific Deliverables, charges shall be on a time and materials or fixed fee basis as specified in the SOW. Provider shall report hours rendered or other performance metrics as may be specified in the SOW. For Services performed on a time and materials basis, Provider shall specify in each invoice how the associated hourly fees were calculated, and, for each individual who generated any portion of the invoiced hourly fees, the applicable hourly rate, job title, hours worked, and specific work accomplished. If the SOW specifies performance milestones, Deliverables, or other requirements associated with such Services, Client shall make the payment according to agreed milestones, Deliverables, or other requirements have been accepted based on criteria set forth in the SOW or, if none are specified, when Client accepts such milestones, Deliverables, or other requirements, which acceptance will not be unreasonably withheld.
	2. **Payment.**
		1. Invoiced amounts for which no due date is otherwise established will be due and payable within thirty (30) days after receipt of invoice by Client. Invoices will be deemed paid when payment transmitted by EFT. If payment is not received within 30 days, future payments due shall be paid in full and in advance prior to any new work being started by Provider. Provider will not transfer any Intellectual property rights in and to the work performed for which payment is not received by Provider.
		2. Client must notify Provider of any discrepancy or dispute (i.e. detail information needs to be provided about dispute) within thirty (30) days from the date of receipt of invoice otherwise such invoice will be considered as correct and deemed accepted. In the event Client disputes the amount raised in the invoice or any part thereof. The Parties agree that they shall endeavor to negotiate on the disputed due amount in good faith and expeditiously. If the parties are able to resolve the dispute, the Provider shall raise revised invoice and the amount will be paid on the revised invoices by Client with thirty (30) days from date of receipt of invoice. In the event the Parties are unable to resolve the dispute, the matter shall be referred to arbitration in accordance with Clause 16(1) of this Agreement.
	3. **Expenses.** Any non-ordinary out-of-pocket expenses (e.g., travel, lodging, meals) incurred by Provider in connection with providing Services to Client will be reimbursed to Provider by Client, only if prior written approval is obtained for these expenses from Client.
1. **LICENCE; INTELLECTUAL PROPERTY; OWNERSHIP**

Provider assigns to Client its entire right, title and interest in anything created or developed by Provider for Client during the course of this Agreement and SOW ("Work Product") including all patents, copyrights, trade secrets and other proprietary rights. This assignment is conditioned upon full payment of the compensation due to Provider under this Agreement.

Provider own all right, title and interest in anything created or developed prior to the execution of this Agreement. This Agreement does not include pre-existing tools and utilities pre-developed by Provider and used for the client. These will be disclosed and detailed by Provider prior to the usage thereof.

1. **CONFIDENTIALITY**
	1. During the term of the Agreement, Provider will use best efforts to prevent the unauthorized use or dissemination of Client's confidential information. Best efforts mean at least the same degree of care Provider uses to protect its own confidential information from unauthorized disclosure.
	2. Confidential information is limited to information clearly marked as confidential, or disclosed orally and summarized and identified as confidential in a writing delivered to Provider within 15 days of disclosure. Confidential information does not include information that was in either Party’s possession prior to it being furnished to the other Party under the terms of this Agreement, provided the source of that information was not known the other Party to be bound by a confidentiality agreement with, or other continual, legal or fiduciary obligation of confidentiality; (ii) is now, or hereinafter becomes, through no act or failure to act on the part of either party, generally known to the public; (iii) is rightfully obtained by the receiving Party from a third party, without breach of any obligation to the other Party; (iv) is independently developed by the receiving Party or its representative without use of or reference to the Confidential Information of the disclosing Party or (v) is the communication in response to a valid order by a court, government body or any other statutory authority, was otherwise required by law, or was necessary to establish the rights of either party under this agreement, however If Provider becomes so compelled or obligated to disclose any of the Confidential Information pursuant to order of court or under any law, Provider will provide the Client within 24 to 48 working hours written notice so that the Client may seek a protective order or other appropriate remedy. If such protective order or other remedy is not obtained, Provider will furnish only that portion of the Confidential Information which, in the opinion of Provider 's legal counsel, is legally required, and Provider will reasonably cooperate, at the Client's expense and request, with the Client's counsel to enable the Client to obtain a protective order or other reliable assurance that confidential treatment will be accorded the Confidential Information.
2. **INSURANCE**
	1. **Insurance Coverage.** Provider shall, and shall cause its approved subcontractors to, at their own expense, obtain and maintain in full force and effect during the term of this Agreement, adequate insurance coverage for the Services. Provider represents that as of the date of this Agreement Provider carries comprehensive or commercial general liability insurance which includes the coverage for contractual liability for client. Provider shall maintain automobile liability insurance, worker’s compensation and employer’s liability insurance, and errors and omission insurance in adequate amounts.
3. **MUTUAL REPRESENTATIONS & WARRANTIES**
	1. Each Party represents and warrants: (a) it is duly organized and validly existing under the laws of the state of its incorporation (as applicable) and it has full right, power, and authority to enter into and perform its obligations under this Agreement; (b) the execution, delivery, and performance of this Agreement and the consummation of the transactions contemplated by this Agreement are not inconsistent with, and will not breach any contract by which it or any of its material assets are bound, or an event that would, with notice or lapse time or both, constitute such a breach; (c) it has obtained all necessary licenses, permits, and other actions required by applicable laws or government regulations in connection with its ability to perform its obligations under this Agreement; and (d) it is not and will not be bound by any agreement, nor will it assume any obligation, which would in any way be inconsistent with or breached by its performance of its obligations under this Agreement.
	2. Each Party represents and warrants that there is no proceeding pending or, to the knowledge of Other Party, threatened which challenges or may have a material adverse effect on this Agreement or the transactions contemplated by this Agreement, and the Services will comply with any additional warranties set forth in any applicable SOW.
4. **INDEMNIFICATION.**
	1. Provider , at its expense, will indemnify, defend and hold harmless Client and its Affiliates and any of their officers, directors, employees, clients, agents, and other representatives (collectively, the “Indemnified Parties”) from all liabilities, costs, losses, damages and expenses (including reasonable attorneys’ and experts’ fees and expenses as well as interparty damages caused by Provider or third parties) and will reimburse such fees and expenses as they incur, including in connection with any claim or action threatened or brought against the Indemnified Parties, by a third party arising out of or relating to: (i) any claim that the provision or utilization of any Services or any portion thereof constitutes an infringement, violation, trespass, contravention, or misappropriation of any Intellectual Property right of any third party; (ii) breach by Provider of its representations, warranties or obligations under the Agreement; (iii) gross negligence or willful misconduct by Provider. Client will promptly notify Provider of any such claim or action and will reasonably cooperate with Provider in the defense of such claim or action, at Provider’s expense.
	2. Client at its expense, will indemnify, defend and hold harmless Provider and its Affiliates and any of their Indemnified Parties from all liabilities, costs, losses, damages and expenses (including reasonable attorneys’ and experts’ fees and expenses as well as interparty damages caused by Client or third parties) and will reimburse such fees and expenses as they incur, including in connection with any claim or action threatened or brought against the Indemnified Parties by a third party, arising out of or relating to: (i) any claim that the utilization of any Client trademarks, service marks, trade names or any materials provided by Client that are included in the Work Product results in the violation, trespass, contravention, or misappropriation of any Intellectual Property right of any third party; (ii) breach by Client of its representations, warranties or obligations under the Agreement; (iii) gross negligence or willful misconduct by Client . Provider will promptly notify Client of any such claim or action and will reasonably cooperate with Client in the defense of such claim or action, at Client’s expense. Said indemnification is at all times limited to the total value of invoices paid by Client to Provider.
5. **LIMITATION OF LIABILITY**

IN NO EVENT WILL PROVIDER OR CLIENT OR ITS AFFILIATES BE LIABLE HEREUNDER FOR ANY INDIRECT, INCIDENTAL, CONSEQUENTIAL, SPECIAL OR PUNITIVE DAMAGES INCLUDING WITHOUT LIMITATION LOST PROFITS, LOSS OF GOODWILL, DAMAGE TO REPUTATION, AND LOSS OF OPPORTUNITIES EVEN IF IT HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES IN CONTRACT, TORT, STRICT LIABILITY, OR OTHERWISE, AND WHETHER OR NOT SUCH DAMAGES WERE FORESEEN OR UNFORESEEN.

SUBJECT TO THE PROVISION OF THIS CLAUSE FOR CLAIMS ARISING OUT OF OR RELATING TO SECTIONS 6 (INTELLECTUAL PROPERTY) OR 7 (CONFIDENTIALITY) IN NO EVENT SHALL THE LIABILITY OF EITHER PARTY EXCEED THE AMOUNT PAID OR PAYABLE BY CLIENT UNDER THE APPLICABLE SOW THAT GAVE RISE TO THE CLAIM. FOR ALL OTHER CLAIMS, IN NO EVENT SHALL THE LIBAILITY OF EITHER PARTY EXCEED THE AMOUNT PAID OR PAYABLE BY THE CLIENT UNDER THE APPLICABLE SOW THAT GAVE RISE TO THE CLAIM.

NOTWITHSTANDING THE FOREGOING, NO LIMITATION OR EXCLUSION OF EITHER PARTY’S LIABILITY WILL APPLY WITH RESPECT TO ANY CLAIMS ARISING OUT OF OR RELATING TO CLAIMS FOR WILLFUL MISCONDUCT OR GROSS NEGLIGENCE, OR ANY CLAIMS FOR DEATH OR PERSONAL INJURY.

1. **TAXES**

Both the parties shall be liable to bear their own taxes including all or any taxes levied by state or central government, statutory authority or any other local authority

1. **TERM, TERMINATION AND RENEWAL**

Term**:** This Agreement will commence on the Effective Date and continue in full force and effect unless and until terminated in accordance with the terms of Section 13.2. The duration of each SOW will be specified in the applicable SOW.

* 1. Termination.
1. Either party may terminate this Agreement for convenience at any time, by giving other party not less than thirty (30) days prior written notice. Termination under this Section is effective on the date and to the extent specified in the notice (or if no date is specified, on the thirtieth day following receipt of the notice). Upon completion of the notice period, Provider shall discontinue performance forthwith. Termination or expiration of this Agreement does not affect the Parties’ rights and obligations under a SOW in effect at the time of expiration or termination. Rather, the SOW and accordingly the terms of this Agreement continue in full force and effect until the Services are performed as required in the SOW or until termination of the SOW.
2. Either Party may terminate this Agreement if the other Party commits any material breach of any of its obligations under this Agreement and the same is not cured within thirty (30) days from the date of receipt of notice from the other Party to rectify the breach.
3. Either Party may terminate this Agreement immediately following written notice to the other Party, if the other Party (i) ceases to do business in the normal course, (ii) becomes or is declared insolvent or bankrupt, (iii) is the subject of any proceeding related to its liquidation or insolvency (whether voluntary or involuntary) which is not dismissed or (iv) makes an assignment for the benefit of creditors.
4. If the Client defaults in making undisputed payments as per the terms of this Agreement or SOW, and if such default is not cured within a period of thirty (30) days after written notice is given to the Client by Provider specifying the default, then Provider) may, by giving written notice to the Client, terminate this Agreement or SOW as of the date specified in the notice of termination. Provider's failure to exercise any of its rights hereunder shall not constitute or be construed by Client as being a waiver any of any past, present, or future right or remedy including but not limited to due payments.
	1. Consequences of Termination
		1. On termination of this Agreement, (i) the Parties shall return to each other all the other Confidential Information and all other such properties and materials belonging to the other Party. Each Party shall immediately cease to use and have access to the other Party’s Materials, which shall be immediately surrendered and returned to other Party in a manner acceptable along with certificate of destruction.
		2. It is agreed that such provisions and obligations which by its very nature, shall survive the termination of this Agreement shall continue to be binding between the Parties.
		3. In case of earlier termination of the Agreement, Provider will be entitled for the payment of all milestones that are delivered up to last day of the notice period. Without prejudice of the foregoing, the termination of this Agreement pursuant to any of the provisions contained herein above shall not limit or otherwise affect any other remedy (including a claim for damages), which either Party may have arising out of the event, which gave rise to the right of termination.
5. **DISCLAIMER OF WARRANTIES:** To the extent permitted by law and unless otherwise specified in this Agreement, Provider makes no warranties, express or implied, including, but not limited to, any warranties or merchantability or fitness for any particular purpose. Further, Client agrees and acknowledges that no employee, agent, representative or affiliate of Provider has authority to bind Provider to any oral representations or warranty concerning Services provided to Client under this Agreement.
6. NON SOLICITATION: Each Party agrees that it shall not, directly or indirectly, solicit, recruit or seek to hire any Personnel of the other Party who are or have been assigned to perform work or receive Services under this Agreement, until two (2) year after the termination of this agreement and any breach by a Party of this clause shall make the other Party eligible to enforce an injunctive relief and also, at its sole discretion, claim monetary damages and such aggrieved party shall have right to terminate this Agreement forthwith due to material breach.
7. **MISCELLANEOUS.**
	1. **Arbitration**- Any disputes arising out of or in relation to this Agreement, during its subsistence or/and after its termination in any manner whatsoever, including the validity of this Agreement or interpretation or implementation of any provision hereof, hall, unless resolved amicably by and between the Parties as set out in Sub-clause 16.2.2 and 16.2.3, thereafter its shall be submitted to the Arbitration Foundation of South Africa and shall be finally settled by one or more arbitrators appointed in accordance with the said Rules. Proceedings of such Arbitration shall be held at Johannesburg, South Africa and shall be conducted in English language and the Courts of South Africa have jurisdiction.
	2. **Governing Law & Jurisdiction**
		1. This Agreement and SOWs shall be governed by the laws of South Africa without regard to its conflict of laws provisions.
		2. In the event of any dispute under Agreement, the Parties shall meet and negotiate in good faith to attempt to resolve the dispute. Each Party shall appoint a designated representative of their senior management team. Pending the outcome of the informal dispute process described in this Clause, Provider shall continue to provide Services and Client will continue to make payments to Provider pursuant to the applicable SOWs.
		3. In the event that the dispute cannot be resolved within thirty (30) days of the date one Party gave written notice of the dispute to the other Party, the Parties shall handle such dispute as set out in clause 16.1 above.
	3. **Hiring Fee.** Notwithstanding the provisions of clause 15 above, Client agrees that if any Personnel of Provider, who are or have been assigned to perform work for Client under this Agreement, are to be hired Client shall provide Provider with written notice of the fact of its hiring / transferring of such Personnel within thirty (30) days of such hiring. In order to compensate Provider for losses of investments of time and money in such Personnel who are hired by Client, and to help Provider defray the expenses that shall be incurred in replacing such Personnel who are hired by Client, within thirty (30) days of the date of such hiring, Client shall pay Provider an amount of 2-month equivalent of the monthly salary from the Client pays such Personnel. Client specifically acknowledges and agrees that the fee contemplated by this Section is reasonable and necessary to protect Provider's investments and to cover defray costs associated with replacing any such personnel who are hired by Client.
	4. **Force Majeure:-** Any delays in or failure of performance of any obligations by any Party under this Agreement shall not constitute default hereunder if and to the extent caused by Force Majeure, which is defined to be occurrences beyond the control of the Party committing default, provided, however, that such Party shall give prompt notice to the other Party and shall use reasonable efforts to avoid or remove such cause of non-performance and shall continue performance hereunder whenever such causes are removed.

Attorneys' Fees. If any action at law or in equity is brought to enforce or interpret the provisions of this Agreement then either Party shall bear their own legal costs and fees, if any, incurred.

* 1. No Agency. The Parties are and shall be independent parties to one another, and nothing herein shall be deemed to cause this Agreement to create and agency, partnership, or joint venture between the Parties. Nothing in this Agreement shall be interpreted or construed as creating or establishing the relationship of employer and employee between Client and either Provider or any employee or agent of Provider.
	2. Severability. In the event that any provision of this Agreement shall be unenforceable or invalid under any applicable law or be so held by applicable court decision, such unenforceability or invalidity shall not render this Agreement unenforceable or invalid as a whole, and, in such event, such provision shall be changed and interpreted so as to best accomplish the objectives of such unenforceable or invalid provision within the limits of applicable law or applicable court decisions.
	3. Headings**.** The section headings appearing in this Agreement are inserted only as a matter of convenience and in no way define, limit, construe, or describe the scope or extent of such section or in any way affect this Agreement.
	4. Counterparts; Method of Amendment. This Agreement and any amendments hereto may be executed in counterparts and will not be effective or enforceable unless and until it is executed with the handwritten signature of an authorized representative of each of the relevant entities**.**
	5. Language. This Agreement is in the English language only, which language shall be controlling in all respects, and all versions of this Agreement in any other language shall be for accommodation only and shall not be binding on the Parties to this Agreement. All communications and notices made or given pursuant to this Agreement, and all documentation and support to be provided, unless otherwise noted, shall be in the English language.
	6. Excused Performance. Neither Party shall be liable to the other Party under this Agreement for any failure or delay in performance that is due to causes beyond its reasonable control, including but not limited to, acts of nature, governmental actions, fires, civil disturbances, interruptions of power, transportation problems, telecommunication fiber cut etc.
	7. Assignment. Neither party shall assign the benefit or delegate the burden of this Agreement and/or otherwise transfer any or all of its rights and obligations (whether wholly or partially) under this Agreement to any third party without prior written consent of the other party, such consent not to be unreasonably withheld or delayed.
	8. Use of Other Party's Name. Neither Client nor Provider shall use the other parties name in publicity or press releases without prior written consent. Client will allow Provider to list Client's name and link Client's application/website from (http://www.Provider.com.za) website, however Provider shall ensure that it shall not use the name of Client for any other purpose.
	9. Survival Provision. The Parties' rights and obligations, which by their nature would extend beyond the termination, cancellation or expiration of this Agreement, shall survive such termination, cancellation or expiration.
	10. Notices. All formal notifications and transmittals to Parties of disputes arising under this Agreement shall be sent by registered mail or emails to the Parties to the address shown in preamble or mentioned on the most recent service order. Either Party may change the notice address or addressee by providing prior intimation about the change in the office Address.
	11. Entire Agreement. This Agreement expresses the full and complete understanding of the parties with respect to the subject matter hereof and supersedes all prior or contemporaneous proposals, agreements, representations and understandings, whether written or oral, with respect to the subject matter. This Agreement shall not limit any rights that either party may have under trade secret, copyright, patent or other laws that may be available. This Agreement may not be modified or amended except by a writing that explicitly refers to the amendment of this Agreement and that is signed by authorized representatives of both parties.

IN WITNESS WHEREOF the parties have executed these present on the day and year herein above written and in above mentioned.

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| --- | --- |
| For **Patient Health** | **For, Campaigning for Cancer NPC** |
| \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Authorized Signatory | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Authorized Signatory |
| Mr. Sylvester MsuthwanaCEO | Name: Lauren PretoriusCEO |

**ANNEXURE A**

**STATEMENT OF WORK AND OTHER TERMS AND CONDITIONS**

The below statement of Work has been prepared on the basis of the proposal “Project MS New” shared dated 1st March 2019 and agreed with Client stakeholders. The project has been split into three (3) phases. We have calculated the effort and cost estimate based on the high-level module list shared for each phase. Any change addressed which is not mentioned in the Scope of Work would be discussed with Client Stakeholders as Change Request, approved and then implemented.

**TIMELINE AND COMMERCIALS FOR ENTIRE PROJECT**

|  |  |  |  |
| --- | --- | --- | --- |
| Phase | Cost- ZAR | Duration | Engagement Model |
| Phase 1 | 460,940 | 4 Months | Hybrid (Onsite+Offshore) |
| Phase 2 |  |  |  |
| Phase 3 |  |  |  |
| Total |  |  |  |

\*Exclusive of 15% VAT

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**IMPORTANT NOTES:**

* Milestones for each Phase to be discussed with the CLIENT Stakeholders and Provider Delivery Team
* At the end of each Phase the Client will evaluate the outcome of the Phase and provide the go ahead for the next Phase.
* All onsite resource costs quoted includes the cost of VISAS, flight tickets, hotel accommodation and daily allowances.
* Provider will check in code into the Client’s repository every two (2) weeks.

**PAYMENT TERMS:**

* 25% Upfront of the Total Value of Phase 1 of the contract
* Remaining 75% divided into 3 Milestones and invoiced at the end of each month supported by detailed resource timesheets.
* Same Payment Terms to be followed for the other 2 Phases

**TIMELINE AND COMMERCIALS FOR EACH PHASE**

**Phase 1-** Core Modules Analysis and Design

**Item A:** Timeline & Commercials

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sr. No** | **Activities** | **Hrs.** | **Cost/Hr** | **Total Cost ZAR** | **Offshore/Onsite** | **Timeline** |
| 1 | Solution Architect- to be Placed Onsite | 160 | 520 ZAR/hr | 83200 | Onsite | 4 Months, 160 hrs/month |
| 2 | Solution Architect+BA+Technical Architect | 1340 | 300 ZAR/hr | 402000 | Offshore |
| Total Cost | 485200 |  |
| **5% Discount on the Total Cost** | **460940** | **Item A** |  |

**Note:** Any change in the scope as mentioned in the SOW for Phase 1 that impacts on the effort required will be processed via change management and charged at a flat rate of 300 ZAR/hr

In Phase 1 Provider is expected to provide definition and design of the core modules to be completed in minute detail. The decision to share which resource skills is needed onsite for the other 2 phases would be decided as we progress with the project and project needs.

**Phase 2-** Core Modules Development

**Item B:** Timeline & Commercials

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sr. No** | **Activities** | **Hrs.** | **Cost/Hr** | **Total Cost ZAR** | **Offshore/Onsite** | **Timeline** |
| 1 |  |  |  |  |  |  |
| 2 |  |  |  |  |  |
| Total Cost |  |  |
| **5% Discount on the Total Cost** |  | **Item B** |  |

**Phase 3-** xxxxxx

**Item C:** Timeline & Commercials

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sr. No** | **Activities** | **Hrs.** | **Cost/Hr** | **Total Cost** | **Offshore/Onsite** | **Timeline** |
| 1 |  |  |  |  |  |  |
| 2 |  |  |  |  |  |
| Total Cost |  |  |
| **5% Discount on the Total Cost** |  |  |  |

|  |  |
| --- | --- |
| For **Patient Health** | For, **Campaigning for Cancer NPC** |
| \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| Authorized Signatory | Authorized Signatory |
| Name: Mr. Sylvester Msuthwana | Name: Lauren Pretorius  |
| Designation: CEO | Designation: CEO |

**SOW For Phase 1**

**Phase 1: Core Modules Identification, Design and Definition**

# **List of Core Modules**

1. [Login Component](#Login)
2. [Authentication & Authorization](#AuthenticationAuthorization)
3. [Email Notification Library](#EmailEngine)
4. [SMS Notification Library](#SMSEngine)
5. [Push Notification Library](#PushNotification)
6. [Print Library (Label, Barcode, QR Code)](#PrintLibrary)
7. [Grid Component (List, Search, Paging, Indexing, Export)](#GridComponent)
8. [Adhoc Report Component](#AdhocReporting)
9. [Audit Log Library](#AuditLog)
10. [Export Library](#Export)
11. Global [Search Component](#SearchComponent)
12. [CSV Parser Library](#CSVParser)
13. [Workflow Component](#WorkflowComponent)
14. [Calendar Component](#Calendarcomponent)
15. [Dynamic Field Component](#DynamicField)
16. [Chat Component](#ChatComponent)
17. [Discussion Board Component](#DiscussionBoardComponent)
18. [Barcode / QR Code Read Library](#BarcodeReadLibrary)
19. [Barcode / QR Code Writer Library](#BarcodeWriterLibrary)
20. [Payment Gateway Library](#PaymentGateway)
21. [Timer Based Job Scheduling Framework](#schedulingframework)
22. [Queue Messaging Library](#QueueMessaging)
23. [SSO Library](#Singlesign)

[Invoice Generation (PDF / Work)](#InvoiceEngine)

The list of core modules will be reevaluated during Phase 1 and may change from the above list.

# **Detailed Description of Core Modules**

High-Level Designs (HLD) and Low-Level Designs (LLD) will be produce for below listed modules and components.

###  2.2.1 Login Component

|  |  |
| --- | --- |
| Objective | Description |
| To facilitate the login of users | * Sign Up
* Login credentials Management
* Forgot Password
* OTP
* Social Media Integration
 |

###  2.2.2 Authentication & Authorization

|  |  |
| --- | --- |
| Objective  | Description |
| To facilitate Authentication and Authorization to users. | * Authentication
* Authorization
* Roles & Privileges management
* Claim Based Authentication
* Active Directory Support
 |

###  2.2.3 Adhoc Reporting (Using 3rd Party Tool/Open Source)

|  |  |
| --- | --- |
| Objective | Description |
| To provide automatic and/or manual report generation  | * Adhoc Report
* Scheduled report generation and notification by email
* Manual report generation by UI
* Export
* Proposed 3rd party tools such as BIRT OR JiReport
 |

###  2.2.4 Email Engine

|  |  |
| --- | --- |
| Objective | Description |
| To notify users via email. | * Subscribe to Messaging middleware for Email Messages.
* Sent & Receive email messages asynchronously from Messaging middleware
* Email gateway integration with Retry mechanism
* Record Email Activity in Log
 |

###  2.2.5 SMS Engine

|  |  |
| --- | --- |
| Objective | Description |
| To notify users via SMS. | * Subscribe to Messaging middleware for SMS Messages.
* Sent SMS messages asynchronously from Messaging middleware
* SMS gateway integration
* Record Sent SMS Activity in Log
 |

###  2.2.6 Push Notification Engine

|  |  |
| --- | --- |
| Objective | Description |
| To notify users via push notification. | * Subscribe to Push Notification middleware for Push Notification Messages.
* Sent Push Notification messages asynchronously from Messaging middleware
* Push notification gateway integration
* Record Notification Activity in Log
 |

###  2.2.7 Print Library – Worked by Jigar

|  |  |
| --- | --- |
| Objective  | Description |
| To provide the printing facility across devices to required users | * Multiple Device Support
* Printing History
* Document type support
 |

###  2.2.8 Grid Component

|  |  |
| --- | --- |
| Objective | Description |
| To provide reusable component with configurable options and consistent styling | * Options configuration
* List, Filter, Sort, Paging, Export
* Styling
 |

###  2.2.9 Audit Log

|  |  |
| --- | --- |
| Objective | Description |
| To provide audit trail of user activities | * Track add, update, delete activities performed by user
* Filter by activity, user
* Export to excel
 |

###  2.2.10 Export Library

|  |  |
| --- | --- |
| Objective  | Description |
| To provide user facility to export any kind of document | * Different Document/Content Type Support
* Custom Fields/Pages Support
* Static/Dynamic Modules
 |

###  2.2.11 Global Search Component

|  |  |
| --- | --- |
| Objective | Description |
| To provide global search with free form text | * Indexing document content
* Indexing keyword metadata
* Hits(matches) and highlighting
* Continuous update of Index based on changes
 |

###  2.2.12 CSV Parser Library

|  |  |
| --- | --- |
| Objective  | Description |
| For easy to integrate and efficient fast data store processing. | * Support Read/Write Operation
* Parsing & Validation
* Generate CSV for List as Export Library
 |

###  2.2.13 Workflow Component

|  |  |
| --- | --- |
| Objective | Description |
| To allow managing approval workflow  | * Author/Edit workflow modelling a business process
* Execute & Track workflow
* Task management
* Email notification
* History management
 |

###  2.2.14 Calendar component

|  |  |
| --- | --- |
| Objective  | Description |
| User can manage their daily schedule with automated reminders. | * Create/Schedule & Edit Events/Meetings
* Location & Device Sync Support
* Reminder Notifications (email, mobile push notification)
* Export / Import iCAL or Google Calendar Even
* Post Data to Google Calendar
 |

###  2.2.15 Dynamic Field

|  |  |
| --- | --- |
| Objective | Description |
| To attach user defined fields against system defined entities | * Define Custom fields
* Add / Attach Custom Fields to Module
* Render custom fields
* Store/Search custom field values
 |

###  2.2.16 Chat Component

|  |  |
| --- | --- |
| Objective  | Description |
| To allow user to have real-time chat facility. | * Chat Bot based Solution
* Custom Messaging (One to One chat, Group Chat)
* Attachment
* Cross Platform
* Broadcasting
* Offline Data Save
* Log History
 |

###  2.2.17 Discussion Board Component

|  |  |
| --- | --- |
| Objective  | Description |
| To provide a collaborative environment for user to engage/share their view across different topics.  | * Viewing, Sorting, Editing/Deleting threads.
* Support both Asynchronous & Synchronous discussions.
* Attachment
* Grading/Rating
 |

###  2.2.18 Barcode / QR Code Read Library

|  |  |
| --- | --- |
| Objective | Description |
| To provide Barcode/QR code scanning services | * Decode barcode
* Decode QR code
 |

###  2.2.19 Barcode / QR Code Writer Library

|  |  |
| --- | --- |
| Objective | Description |
| To generate Barcode/QR code  | * Generate Barcode
* Generate QR code
* Integration with print/export to image service
 |

###  2.2.20 Payment Gateway

|  |  |
| --- | --- |
| Objective | Description |
| To provide online payment related services | * Credit card payment
* Refund processing
* Cancellation
 |

###  2.2.21 Timer based job scheduling framework

|  |  |
| --- | --- |
| Objective | Description |
| To schedule jobs for execution | * Job Execution at defined schedule
* Retry mechanism
* Execution log
 |

###  2.2.22 Queue Messaging Library

|  |  |
| --- | --- |
| Objective  | Description |
| To facilitate indirect communication between different modules. | * Support both inter-process communication (IPC) and inter-thread communication
* Message Prioritization
* Security & Data integrity
 |

###  2.4.23 Single sign on / Identity management

|  |  |
| --- | --- |
| Purpose | Responsibility |
| Entry point for identity management and authentication | * Protect resources
* Manage and authenticate clients
* Issue identity and access tokens to clients
* Validate tokens
* Provide single sign on
 |

###  2.4.24 Invoice Engine

|  |  |
| --- | --- |
| Responsibility  | Objective |
| Background service to generate invoice in defined format | * Subscribe to Messaging middleware for Invoice Messages.
* Receive Invoice messages asynchronously from messaging middleware
* Generate PDF/Excel/Word as per message details
* Send invoice via Email
 |

# **Proposed Principles for Core Modules Architecture**

The proposed Architecture platform has been designed

* The proposed approach will adopt microservices principles to ensure the integration, scalability and availability of the system.
* Use of microservices principles facilitates the independent and frequent Deployments and no longer commitments to any stack.
* The proposed approach facilitates information availability, transparency and security.
* Use of BBM model will assist us in addressing the gap between domain functionality and system functionality by using system qualities and technology choices in the identification of objects and aspects
* Using Layered development process based on the BBM model, the architectural design remains stable throughout component/core module development. Please refer below diagram for understanding the Layered process development process.

# **System Architecture Contemplations**

Following design objectives have been taken into the consideration while designing the architecture for the proposed system. This is to articulate and help in further design considerations for technical and operational designs.

|  |  |
| --- | --- |
| Area | Details |
| Architectural Style | **Micro-services**Modular / Components design to be achieved in form of micro services. This will help in addressing following areas:* This will help in achieving high cohesion for the system.
* Pluggable & Loosely coupled design principles to be achieved.
* Speed track development work, as components are distributed over functional business needs.
* Deployments, issue fixes, upgradation becomes easy.
* New feature extension to the modular design reduces risks for the other fragmented components.
 |
| Architecture Pattern | Distributed Architecture  |
| Loose Coupling | * Message Communication
* Component Autonomy
* Component Interoperability
 |
| Component Reuse | * Composition
* Integration
 |
| Cluster Design | Splitting the platform into the multiple clusters by functionality |
| Scalability | * Design for portioning and elasticity
* Stateless component design
 |
| Enforcements | * Restful API as a service offering for application integration with different components and applications.
* Loose coupling of components helps in scalability.
* Asynchronous systems for messaging system.
 |
| Failure Handling | * System failover & exception management for operational components.
* Some part of the application can continue in execution without the other parts functioning.
 |

# **System Architecture Diagram**



|  |  |
| --- | --- |
| For **Provider Pty. Ltd.** | For, **Client Incorporated** |
| \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| Authorized Signatory | Authorized Signatory |
| Name: xxx | Name:  |
| Designation: Director | Designation: Director |