

Development of a mathematical model based on HIV case reporting

Request for Proposal (RFP)
Reference Number: RFP-2014-26

TABLE OF CONTENTS

1.	INTR	ODUCTION	4
	1.1	Objective of the RFP	4
	1.2	Characteristics of the bidder	4
		1.2.1 Status	4
		1.2.2 Accreditations	4
		1.2.3 Previous experience	
		1.2.4 Logistic capacity	
		1.2.5 Staffing	
	1.3	Work to be performed	
		1.3.1 Key requirements	
		1.3.2 Reporting requirements	
		1.3.3 Finance and accounting requirements	
		1.3.4 Performance monitoring	
		1.3.5 Further Capacities	
2.	INST	RUCTIONS TO BIDDERS	6
	2.1	Language of the Proposal and other Documents	
	2.2	Intention to Bid	
	2.3	Cost of Proposal	
	2.4	Contents of the Proposal	
	2.5	Joint Proposal	
	2.6	Communications during the RFP Period	
	2.7	Proposal structure	
	2.1	2.7.1 Proposal Submission Form	
		2.7.2 Information of Firm/Organization submitting Proposal	
		2.7.3 Technical Proposal	
		2.7.4 Financial Proposal	
	2.8	Format and Signing of Proposals	
	2.9	Period of Validity of Proposals	
	2.10	Closing Date for Submission of Proposals	
	2.10		
		Modification and Withdrawal of Proposals	
	2.12	Receipt of Proposals from Non-invitees	
	2.13	Amendments of the RFP	12
3.		NING AND EVALUATION OF PROPOSALS	
	3.1	Opening of Proposals	
	3.2	Clarification of Proposals	
	3.3	Preliminary Examination of Proposals	
	3.4	Technical Evaluation of Proposals	
	3.5 3.6	Financial Proposal Evaluation	
4.			
→.	4.1	RD OF CONTRACTAward Criteria, Award of Contract	10 4 <i>E</i>
	4.1	•	
		4.1.2 Right to Extend/Revise Scope or Requirements at Time of Award	
	4.0	4.1.3 Right to enter into Contract Price Negotiations	
	4.2	Signing of the Contract	15
5.	GEN	ERAL AND CONTRACTUAL CONDITIONS	16

5.1	Conditions of Contract			
5.2	Responsibility1			
5.3	Source of Instructions			
5.4	Warranties	17		
5.5	Legal Status			
5.6	Relation Between the Parties			
5.7	Waiver of Breach			
5.8	Liability			
5.9	Assignment1			
5.10	Officials not to Benefit1			
5.11	Indemnification			
5.12	Contractor's Responsibility for Employees			
5.13	Subcontracting1			
5.14	Place of Performance			
5.15	Language			
5.16	Confidentiality1			
5.17				
5.18				
5.19				
5.20	Surviving Provisions			
5.21	Use of UNAIDS and WHO name and emblem			
5.22	Successors and Assignees			
5.23	Payment			
5.24	Title to Equipment			
5.25	Insurance and Liabilities to Third Parties			
5.26				
5.27	Observance of the Law			
5.28	Authority to Modify			
5.29	Privileges and Immunities			
5.30	No Terrorism or Corruption			
5.31				
	5.31.1 Approval of Contractor Personnel			
	5.31.2 Project Managers			
	5.31.3 Foreign Nationals			
	5.31.4 Compliance with UNAIDS Policies			
	5.31.5 Ethical Behaviour			
	5.31.6 Engagement of Third Parties and use of In-house Resources	24		

1. INTRODUCTION

1.1 Objective of the RFP

The purpose of this Request for Proposal (RFP) is to enter into a contractual agreement with a successful bidder and select a suitable contractor to produce a mathematical model to estimate historical trends in HIV incidence based on HIV case reporting. The model should be developed to interface with Spectrum software developed by Futures Institute (www.futuresinstitue.org).

UNAIDS is an organization that is dependent on the budgetary and extra-budgetary contributions it receives for the implementation of its activities. Bidders are therefore requested to propose the best and most cost-effective solution to meet UNAIDS requirements, while ensuring a high level of service.

For more information about UNAIDS please consult our website www.unaids.org.

1.2 Characteristics of the bidder

1.2.1 **Status**

The provider shall be a public institution, company, individual or NGO operating in the field of
infectious disease epidemiology with proven expertise in the development and use of models
to interpret disease impact.

1.2.2 Accreditations

No specific requirements

1.2.3 Previous experience

- Previous work with UNAIDS or other institutions working in the field of infectious disease modeling;
- Proven ability to develop mathematical models for infectious disease with particular experience in HIV models desirable.
- Expertise creating models based on case reporting
- Ability to work with national counterparts to explain and use models.
- Ability to write clearly about modelling tool.

1.2.4 Logistic capacity

 Ability to travel to three countries to test model. Telecommunication facilities to teleconference with UNAIDS and UNIADS Reference Group on Estimates Modeling and Projections to review model and with the Futures Institute for integration of the model

1.2.5 Staffing

Staff can be determined by the contractor as needed

1.3 Work to be performed

1.3.1 Key requirements

The terms of reference for this work are included as Attachment 1. Specific requirements for the model are provided in the attachment including the requirements for interfacing with Spectrum.

1.3.2 Reporting requirements

Specific products required from this contract include:

- Prototype model presented to UNAIDS Reference Group on Estimates Modelling and Projections
- 2. Model that can be integrated into Spectrum AIDS Impact Module
- 3. User manual including a description of how to ensure the data entered are of adequate quality to ensure reliable results
- 4. Summary report of the implementation of the model in three countries
- 5. Final code for the model in a publically accessible programming language

The work performed under this contract will be subject to the intellectual property agreement as described under the General and Contractual Conditions in section 5.17 below.

1.3.3 Finance and accounting requirements

A financial report is due at the end of the project.

1.3.4 Performance monitoring

After the development of the prototype of the model the Reference Group will review the model to determine if it is adequate for our needs. If the model does not meet the needs of UNAIDS the contract will be reconsidered.

1.3.5 Further Capacities

No additional capacities required

2. INSTRUCTIONS TO BIDDERS

Bidders should follow the instructions set forth below in the submission of their proposal to UNAIDS.

2.1 Language of the Proposal and other Documents

The proposal prepared by the bidder, and all correspondence and documents relating to the proposal exchanged between the bidder and UNAIDS shall be written in the English language.

2.2 Intention to Bid

No later than **Monday**, **15 September 2014**, the bidder is requested to complete and return by email to UNAIDS:

- 1. The enclosed RFP_Acknowledgement.doc form signed as confirmation of the bidder's intention to submit a *bona fide* proposal and designate its representative to whom communications may be directed, including any addenda; and
- 2. The enclosed RFP_Confidentiality.doc form signed. (If the bidder does not announce its intention to bid, this document is required to be part of the final submission)
- Email for submissions of acknowledgement: Bids@unaids.org
- Email Subject: Intention to bid for RFP-2014-26

Please note that the Intention to Bid is not a requirement to submit a proposal, however UNAIDS will be able to better identify potential bidders announcing their intention to bid, and communicate with them in case of changes to the RFP or clarifications to questions asked.

2.3 Cost of Proposal

The bidder shall bear all costs associated with the preparation and submission of the proposal, including but not limited to the possible cost of discussing the proposal with UNAIDS, making a presentation, negotiating a contract and any related travel.

UNAIDS will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the selection process

2.4 Contents of the Proposal

Proposals must offer services for the total requirement. Proposals offering only part of the requirement may be rejected.

The bidder is expected to examine all corresponding instructions, forms, terms and specifications contained in this RFP. Failure to follow the instructions provided, terms and specifications and/or to submit the forms requested will be at the bidder's risk and may affect the evaluation of the proposal.

2.5 Joint Proposal

Two or more entities may form a consortium and submit a joint proposal offering to jointly undertake the work. Such a proposal must be submitted in the name of one member of the consortium - hereinafter the "lead organization". The lead organization will be responsible for undertaking all negotiations and

discussions with, and be the main point of contact for UNAIDS. The lead organization and each member of the consortium will be jointly and severally responsible for the proper performance of the contract

2.6 Communications during the RFP Period

A prospective bidder requiring any clarification on technical, contractual or commercial matters may notify UNAIDS via email at the following address:

Email for submissions of all queries: Bids@UNAIDS.org

Subject: Bid Ref. RFP-2014-26

UNAIDS will respond in writing by a consolidated document to any request for clarification of the RFP that it receives prior to **Friday**, **19 September 2014**.

The consolidated document of UNAIDS's response to all questions (including an explanation of the query but without identifying the source of enquiry) will be made available to all prospective bidders on the UNAIDS website, Request for Proposals section after the date indicated above. Questions are to be submitted in the format "Paragraph Number - Question."

There shall be no individual presentation by or meeting with bidders until after the closing date. From the date of issue of this RFP to the final selection, contact with UNAIDS officials concerning the RFP process shall not be permitted, other than through the submission of queries at the indicated email address above and/or through a possible presentation or meeting called for by UNAIDS, in accordance with the terms of this RFP.

2.7 Proposal structure

2.7.1 Proposal Submission Form

The bidder's proposal must be accompanied by a Proposal Submission Form, in the form attached hereto as Annex 1, signed by a duly authorized representative of the bidder, stating:

- That the proposal meets the requirements of the RFP,
- That the bidder undertakes, on its own behalf and on behalf of its possible partners and contractors, to provide the goods/services in accordance with the terms of the Request for Proposal (RFP), and its accompanying documents, for the amount set forth in the attached Financial Proposal,
- The number of days the proposal is valid (from the date of closing of the RFP).

2.7.2 Information of Firm/Organization submitting Proposal

In case of individuals, a brief summary of qualifications and expertise is requested to be attached.

In case of companies bidding, the following information must be provided in order to ascertain capabilities to deliver the work proposed.

Information of Firm/Organization submitting Proposal				
1	1 Company Information			
1.1	Corporate information			
1.1.1	Company mission statement (if applicable)			
1.1.2	Quality Assurance / Quality Control mechanisms in place at the company			
1.1.3	Organization structure			
1.1.4	Geographical presence			

Information of Firm/Organization submitting Proposal		
1.2 Staffing information		
1.2.1 Number and Geographical distribution of staff		
1.2.2 Number of consultants employed on similar projects in each of the past three years		
1.3 Audited financial statements for the past three (3) years		
1.4 Legal information		
1.4.1 History of Bankruptcy		
1.4.2 Pending major lawsuits and litigations in excess of USD 100,000 at risk (indicate particularly those by		
licensees or patent infringement)		
1.4.3 Pending Criminal/Civil lawsuits		
1.5 Contractual relationships		
1.5.1 Contractual programmes (with other UN agencies or International Organizations)		
1.5.2 Company Certifications and certification status		
1.6 Proposed sub-contractor arrangements including company information (as above for each sub-		
contractor)		
2 Experiences and Reference Contact Information (list and provide up to five (5) detailed examples of relevant experience gained within the past five years of the issuance of this RFP that demonstrate the		
contractor's ability to deliver a solution that substantially demonstrates the functional and technical		
requirements of this RFP)		
2.1 Project Name (project one)		
2.1.1 Project Description including but not limited to project starting date and duration, project and contract		
value, and total FTE involved form the company		
2.1.2 Status (under development/implemented)		
2.1.3 Reason for Relevance (provide reason why this project can be seen as relevant to this RFP)		
2.1.4 Roles and responsibilities (list and clearly identify the roles and responsibilities for each participating		
Organization)		
2.1.4.1 Client Role and Responsibility		
2.1.4.2 Contractor Role and Responsibility. Previous contractor role in project		
2.1.4.3 Third party contractors Role and Responsibility. Previous specified 3 rd party role in project.		
2.1.5 Team members (indicate relevant members of the team from the project that will be used in the		
performance of services)		

Bidders will be excluded if:

- they are bankrupt or being wound up, are having their affairs administered by the courts, have entered into an arrangement with creditors, have suspended business activities, are the subject of proceedings concerning those matters, or are in any analogous situation arising from a similar procedure provided for in national legislation or regulations;
- they have been convicted of an offence concerning their professional conduct by a judgment which has the force of res judicata; have been subject of a judgment which has the force of res judicata for fraud, corruption, involvement in a criminal organization or any other illegal activity;
- it becomes apparent to UNAIDS that they are guilty of misrepresentation in supplying, or if they fail to supply, the information required under this RFP and/or as part of the bid evaluation process; or
- they give rise to a conflict of interest.

2.7.3 Technical Proposal

The bidder should include in this section all relevant information for UNAIDS to evaluate the proposal, including information relating to coverage of UNAIDS needs and requirements, as specified in section 1, proposed timeline, resources dedicated partially or fully to the project. {Any specific format or breakdown of services required by UNAIDS beyond the categories listed below should also be specified in this section}

IMPORTANT: The Technical Proposal shall contain no price or cost information.

The Technical Proposal must include the following sections:

a) Understanding of the Requirements for Services, including Assumptions

Include any assumptions as well as comments on the services as indicated in the Technical Specifications, or as the bidder may otherwise believe to be necessary.

b) Proposed Approach, Methodology, Timing and Outputs

Any comments or suggestions on the technical specifications, as well as the bidder's detailed description of the manner in which it would respond to the technical specifications.

c) Proposed Project Team Members

The curriculum vitae of the senior professional members of the team including their specific responsibilities on this project, relevant experience and qualifications.

2.7.4 Financial Proposal

The bidder's **separate sealed** price component must contain an overall quotation in a single currency, either in US Dollars or in the currency of the bidder's country of incorporation or registration. If the bidder opts for the latter and for evaluation purposes only, its proposal will be converted into US dollars using the United Nations rate of exchange in effect on the closing date for the submission of proposals.

The Financial Proposal shall be accompanied by a cover letter signed by a duly authorized representative of the bidder, confirming the following:

- (a) the price; and
- (b) the period of validity of the bid.

In addition, the Financial Proposal must cover all the goods or services to be provided and must itemize the following costs:

- a) Design concepts, development, typesetting, amends and artwork costs
- b) Printing costs
- c) Delivery costs
- d) Travel and Per Diem costs
- Other costs, if any (indicating nature and breakdown).

The Financial Proposal must contain a summary of total cost for the services proposed as well as a proposed schedule of payments, all of which must be expressed and will be made in the currency of the proposal.

In preparing Financial Proposals, bidders should carefully note the following provisions regarding UNAIDS policies on limitations on advance payments, retention, performance bonds, etc.

UNAIDS' general policy is to pay for the performance of contractual services rendered or to effect payment upon the achievement of specific milestones described in the contract.

Please note that UNAIDS' policy is to make an advance payment up to a maximum of 25 per cent upon signature of a contract, whether a private firm, NGO or a government or other entity. UNAIDS, at its discretion, may however determine that such payment is not warranted or determine the conditions under which such payment would be made. In any case where an advance payment for \$50,000 or more is requested and subsequently approved, UNAIDS will normally require a bank guarantee or other suitable security arrangement. Further information may be requested by UNAIDS at the time of finalizing contract negotiations with the selected bidder.

Any request for an advance payment is to be justified and documented and must be submitted with the financial proposal. This justification shall explain the need for the advance payment, itemize the amount requested and provide a time-schedule for utilization of said amount. In addition, the bidder must submit documentation regarding its financial status, e.g. audited

financial statements at 31 December of the previous year, and include this documentation with its financial proposal. Further information may be requested by UNAIDS at the time of finalizing contract negotiations with the selected bidder.

UNAIDS Travel Policy is to cover and reimburse air tickets only in Economy Class using the most direct route available. UNAIDS does not cover Per Diem cost exceeding that defined by the United Nations at the time of the travel for the specific destination of the travel.

2.8 Format and Signing of Proposals

The bidder shall submit the proposal in **one external envelope** marked clearly **Bid Ref RFP-2014-26 containing inside two sealed envelopes** by the closing date set forth in section 2.10 to the address specified below.

UNAIDS
Bid Opening Committee
Reference: RFP-2014-26
20, Avenue Appia
CH-1211 Geneva 27
Switzerland

NOTE: If the envelopes are not sealed and marked as per the instructions in this clause, UNAIDS will not assume responsibility for the proposal's misplacement or premature opening and may – at its discretion – reject the proposal.

This first internal sealed envelope must contain **2** hard copies (1 original and one copy) of the complete technical proposal. Each complete technical proposal should include the following:

- Hard copy of proposal (as specified in section 2.7.3) and supporting documents (marked clearly Bid Ref RFP-2014-26)
- Signed Proposal Submission Form (see Annex 1 to this RFP)
- One CD-ROM containing electronic copy of the technical proposal only and supporting documents

The second internal sealed envelope must contain the financial proposal and its cover letter as specified in section 2.7.44. **Two** copies (1 original and 1 copy) of the complete financial proposal must be included and a separate CD-ROM containing only the financial proposal must be included.

Please also note the following instructions for preparation of the Proposal:

- 1) The two (2) copies shall be labeled "Master copy" and "Copy 1". The bidder must ensure that the content of all copies is identical. If at any time a difference is discovered between any copies of the proposal then the "Master copy" will prevail as the official copy.
- 2) The two (2) hard copies shall be unbound, provided in binders from which pages may be removed easily. Dividers may be used to separate sections of the document, if needed.
- 3) All pages of the proposal shall be numbered in the format 'Page X of Y'.
- 4) All copies of the proposal shall be typed or written in indelible ink and shall be signed by the bidder or a person or persons duly authorized to bind the bidder to the contract. A proposal shall contain no interlineations, erasures, or overwriting except, as necessary to correct errors made by the bidder, in which case such corrections shall be initialed by the person or persons signing the proposal.
- 5) The electronic copy of the proposal and supporting documents on a CD-ROM should be in PDF, or MS Office compatible format (Word, Excel, Power Point or MS Project). The responses to the

functional requirements should be submitted in the structure provided in this RFP. The financial proposal should be submitted in the file format supplied by UNAIDS and, if provided, using the template distributed with the RFP and only within the sealed financial proposal in a <u>separate</u> CD from the technical proposal. The proposed timeline project plan should be either in MS Project MPP, XLS or PDF format.

OPTION FOR ELECTRONIC SUBMISSION: If preferred, the proposal may instead be forwarded to two secure email accounts. The master copy of the "Technical Proposal" shall be forwarded to TechnicalBids@unaids.org and the master copy of the "Financial Proposal" forwarded separately to FinancialBids@unaids.org. There will be no automatic confirmation of receipt as the proposals are only opened after the closing date. The email subject must include the bid reference number available on the first page of this RFP and on the UNAIDS website. Due to email size limitation, multiple emails can be send as the bidder submission.

2.9 Period of Validity of Proposals

The offer outlined in the proposal must be valid for a minimum period of 120 calendar days after the closing date. A proposal valid for a shorter period may be rejected by UNAIDS. In exceptional circumstances, UNAIDS may solicit the bidder's consent to an extension of the period of validity. The request and the responses thereto shall be made in writing. Any bidder granting the request will not be required nor permitted to modify its proposal.

2.10 Closing Date for Submission of Proposals

Proposals must be received at UNAIDS at the address specified in section 2.8 <u>26 September 2014, 17:00 Geneva time</u>.

UNAIDS may, at its own discretion, extend this closing date for the submission of proposals by notifying all bidders thereof in writing.

Any proposal received by UNAIDS after the closing date for submission of proposals may be rejected.

2.11 Modification and Withdrawal of Proposals

The bidder may withdraw its proposal any time after the proposal's submission and <u>before</u> the opening date, provided that written signed notice of the withdrawal (by a duly authorized representative of the bidder) via email is received by UNAIDS prior to the closing date.

The bidder's withdrawal notice shall be prepared and dispatched to be received before the closing date in accordance with section 2.10.

Email for withdrawal of proposal: <u>Bids@UNAIDS.org</u>

However, if you submitted your technical and financial proposals using the option for Electronic Submission in section 2.8, then your withdrawal notice must also be submitted to these email addresses with the reference number and the word WITHDRAWAL clearly indicated in the subject line.

No proposal may be modified after the closing date for submission of proposals, unless UNAIDS has issued an amendment to the RFP allowing such modifications (see section 2.13).

No proposal may be withdrawn in the interval between the opening date and the expiration of the period of proposal validity specified by the bidder in the proposal.

2.12 Receipt of Proposals from Non-invitees

UNAIDS may, at its own discretion, extend the RFP to bidders that were not included in the individual invitation list if this is necessary and in the interest of UNAIDS. RFPs published by UNAIDS on the UNAIDS website are open for all qualified bidders.

2.13 Amendments of the RFP

At any time prior to the closing date for submission of proposals, UNAIDS may, for any reason, whether on its own initiative or in response to a clarification requested by a bidder, modify the RFP by amendment. Amendments could include modification of project scope or requirements, project timeline expectations or extension of the closing date for submission.

All prospective bidders that have received the RFP will be notified in writing of all amendments to the RFP. In addition, all amendments will be posted on the UNAIDS website in the Request for Proposals section and in any other website used by UNAIDS directly for publishing the Request for Proposals.

3. OPENING AND EVALUATION OF PROPOSALS

3.1 Opening of Proposals

UNAIDS will open the technical proposals in the presence of a Committee formed by UNAIDS at the Headquarters office in Geneva, Switzerland on a date fixed after the closing of the tendering period. Each technical proposal will be opened during the session with each bidder announced. Financial proposals will be opened only after the technical evaluation of the proposals.

There will not be a public opening of bids.

3.2 Clarification of Proposals

UNAIDS may, at its discretion, ask any bidder for clarification of any part of its proposal to assist in the examination, evaluation and comparison of proposals. The request for clarification and the response shall be in writing. No change in price or substance of the proposal shall be sought, offered or permitted during this exchange.

3.3 Preliminary Examination of Proposals

UNAIDS will examine the proposals to determine whether: (i) they are complete, (ii) any computational errors have been made, (iii) the documents have been properly signed, and (iv) the proposals are generally in order.

Please note that UNAIDS is not bound to select any of the firms/institutions submitting proposals. Furthermore, since a contract would be awarded in respect of the proposal which is considered most responsive to the needs of the project concerned, due consideration being given to UNAIDS' general principles, including economy and efficiency, UNAIDS does not bind itself in any way to select the firm/institution offering the lowest price.

3.4 Technical Evaluation of Proposals

A two-stage procedure will be utilized in evaluating the proposals, with technical evaluation of the proposal being completed prior to any evaluation of the Financial Proposal.

The technical evaluation of proposals will be accomplished by a selection panel. The selection panel will evaluate all proposals which have passed the preliminary examination of proposals according to:

- the quality of the overall proposal (5 Points);
- the appropriateness of the proposed approach (20 Points);
- the management strategy/plan detailed in the document (5 Points);
- the qualifications and competence of the personnel proposed for the assignment (20 Points);
- the proposed timeframe for the project (10 Points);

The obtainable number of points specified for each evaluation criterion indicates the relative significance or weight of the item in the overall evaluation process. The points allocated to the technical proposal correspond to 60% of the total obtainable points.

3.5 Financial Proposal Evaluation

The financial proposal will only be evaluated if the technical proposal achieves a minimum of 60% of the total allocable points for the technical evaluation. Proposals failing to obtain this minimum threshold will not be eligible for further consideration.

The maximum number of points for the price component is 40% of the total obtainable points.

This maximum number of points will be allocated to the lowest price proposal. All other price proposals will receive points in inverse proportion according to the following formula:

Points for the price component of a proposal being evaluated = ([Maximum number of points for the price component] x [Lowest price]) / [Price of proposal being evaluated]

3.6 Bidders' Presentations

At the discretion of UNAIDS, selected bidders may be invited to supply additional information on the contents of their proposal during the evaluation period. Such bidders could be asked to give a presentation of their proposal (possibly with an emphasis on a topic of UNAIDS's choice) followed by a question and answer session. If UNAIDS determines that there is such a need, the presentation will be held at UNAIDS Headquarters in Geneva, or by videoconference/Internet. Bidders will be given reasonable time to prepare for the presentation.

NOTE: Presentations or other individual contact is expressly prohibited before the closing date for proposal submission.

4. AWARD OF CONTRACT

4.1 Award Criteria, Award of Contract

UNAIDS reserves the right to:

- Award the contract to a bidder of its choice, even if its bid is not the lowest;
- b) Award separate contracts for parts of the work, components or items, to one or more bidders of its choice, even if their bids are not the lowest;
- c) Accept or reject any proposal, and to annul the solicitation process and reject all proposals at any time prior to award of contract, without thereby incurring any liability to the affected bidder or bidders and without any obligation to inform the affected bidder or bidders of the grounds for UNAIDS' action:
- d) Award the contract on the basis of UNAIDS' particular objectives to a bidder whose proposal is considered to be the most responsive to the needs of the Organization and the activity concerned;
- e) Not award any contract at all.

UNAIDS has the right to eliminate bids on technical or other reasons throughout the evaluation/selection process. UNAIDS shall not in any way be obligated to reveal, or discuss with any bidder, how a proposal was assessed, or to provide any other information relative to the evaluation/selection process or to state the reasons for elimination to any bidder

NOTE: UNAIDS is acting in good faith by issuing this RFP. However, this document does not obligate UNAIDS to contract for the supply of any products or services.

4.1.1 Right to modify Scope or Requirements during the Proposal Process

UNAIDS reserves the right to, at any time during the proposal process, modify the scope of services and goods specified in the RFP. At any time in the selection process, UNAIDS reserves the right to issue an amendment to the RFP detailing the change which should be notified only to bidders who have not been officially eliminated due to technical reasons at that point in time.

4.1.2 Right to Extend/Revise Scope or Requirements at Time of Award

UNAIDS reserves the right, at the time of award of contract, to extend/revise the scope of services and goods specified in the RFP without any change in the base price of services and goods or other terms and conditions offered by the selected bidder.

4.1.3 Right to enter into Contract Price Negotiations

UNAIDS reserves the right to enter into negotiations, with one or more bidders that have not been eliminated during the evaluation process, including but not limited to negotiations of the terms of the proposal(s), the price quoted in such proposal(s) and/or the deletion of certain parts of the work, components or items called for under this RFP..

4.2 Signing of the Contract

Within 30 days of receipt of the contract the successful bidder shall sign and date the contract and return it to UNAIDS according to the instructions provided at that time. If the bidder does not accept the contract terms without changes, then UNAIDS has the right not to proceed with the selected bidder and instead contract with another bidder of its choice.

The award of contract will be published in the UNAIDS public website, after all internal clearances and acceptance of the contract by the selected bidder.

5. GENERAL AND CONTRACTUAL CONDITIONS

The contract between UNAIDS and the selected bidder ("the Contract") will, unless otherwise explicitly agreed in writing, include the provisions as set forth in this section, and will otherwise inter alia address the following issues:

- Responsibilities of the selected bidder(s) ("The Contractor(s)") and UNAIDS;
- clear deliverables, timelines and acceptance procedures;
- payment terms tied to the satisfactory completion of the work;
- notices.

The prices payable by UNAIDS for the work to be performed under the Contract shall be fixed for the duration of the Contract and shall be in a UN convertible currency (preferably US Dollars), based on the UN exchange rate of the date of invoice.

The total amount payable by UNAIDS under the Contract may be either a lump sum or a maximum amount. If the option for payment of a lump sum applies, that lump sum is payable in the manner provided, subject to satisfactory performance of the work. If the option for payment of a maximum amount applies:

- the Contract shall include a detailed budget;
- the Contractor shall be held to submit a financial statement together with each invoice;
- any advance payments by UNAIDS shall be used by the Contractor exclusively for the work in accordance with the budget and any unspent balance shall be refunded to UNAIDS;
- payment by UNAIDS shall be subject to satisfactory performance and the acceptance of the Contractor's financial statements; and
- all financial reports shall be subject to audit by or on behalf of UNAIDS, including examination of supporting documentation and relevant accounting entries in the Contractor's books. In order to facilitate financial reporting and audit, the Contractor shall keep systematic and accurate accounts and records in respect of the work.

Unless otherwise specified in the Contract, UNAIDS shall have no obligation to purchase any minimum quantities of goods or services from the Contractor, and UNAIDS shall have no limitation on its right to obtain goods or services of the same kind, quality and quantity as described in the Contract, from any other sources at any time..

5.1 Conditions of Contract

Any and all of the Contractor's (general and/or special) conditions of contract are hereby explicitly excluded from the Contract, i.e., regardless of whether such conditions are included in the Contractor's offer, or printed or referred to on the Contractor's letterhead, invoices and/or other material, documentation or communications.

5.2 Responsibility

The Contractor will be responsible to ensure that the work performed under the Contract meets the agreed specifications and is completed within the time prescribed. The Contractor shall facilitate the operational audit related to the execution of the work and the compliance with the obligations set forth in the Contract, by persons so designated by UNAIDS. In this regard, the Contractor shall make all relevant operational information, without restriction, available to persons so designated by WHO and provide satisfactory explanations to all queries arising in connection therewith.

5.3 Source of Instructions

The Contractor shall neither seek nor accept instructions from any authority external to UNAIDS in connection with the performance of its services under this Contract. The Contractor shall refrain from any action which may adversely affect UNAIDS and shall fulfill its commitments with the fullest regard to the interests of UNAIDS.

5.4 Warranties

The Contractor will warrant and represent to UNAIDS as follows:

- The deliverables shall meet the specifications and shall function in a manner which is fully adequate to meet its intended purpose. The Contractor furthermore warrants that the deliverables shall be error-free, in that the Contractor shall correct any errors in the deliverables, free of charge, within fifteen days after their notification to the Contractor, during a period of at least six months after completion of the work. It is agreed, however, that errors and other defects, which have been caused by modifications to the deliverables made by UNAIDS without agreement of the Contractor are not covered by this paragraph.
- 2) The deliverables shall, to the extent it is not original, only be derived from, or incorporate, material over which the Contractor has the full legal right and authority to use it for the proper implementation of this Contract. The Contractor shall obtain all the necessary licenses for all non-original material incorporated in the deliverables including, but not limited to, licenses for UNAIDS to use any underlying software, application, and operating deliverables included in the deliverables or on which it is based, so as to permit UNAIDS to fully exercise its rights in the deliverables and the software without any obligation on UNAIDS's part to make any additional payments whatsoever to any party.
- 3) The deliverables shall not violate any copyright, patent right, or other proprietary right of any third party and be delivered to UNAIDS free and clear of any and all liens, claims, charges, security interest and any other encumbrances of any nature whatsoever.
- 4) The Contractor, its employees and any other persons and entities used by the Contractor shall not violate any intellectual property rights, confidentiality, right of privacy or other right of any person or entity whomsoever.
- 5) Except as otherwise explicitly provided in this Contract, the Contractor shall at all times provide all the necessary on-site and off-site resources to meet its obligations hereunder. The Contractor shall only use highly qualified staff, acceptable to UNAIDS, to perform its obligations hereunder.
- 6) The Contractor shall take full and sole responsibility for the payment of all wages, benefits and monies due to all persons and entities used by it in connection with the implementation and execution of the Contract, including, but not limited to, the Contractor's employees, permitted subcontractors and suppliers.

The Contractor furthermore warrants and represent that the information provided by it to UNAIDS in response to the RFP and during the bid evaluation process is accurate and complete. The Contractor understands that in the event The Contractor has failed to disclose any relevant information which may have impacted UNAIDS' decision to award the Contract to The Contractor, or has provided false information, UNAIDS will be entitled to rescind the contract with immediate effect, in addition to any other remedies which UNAIDS may have by contract or by law

5.5 Legal Status

The Contractor shall be considered as having the legal status of an independent contractor vis-à-vis UNAIDS, and nothing contained in or relating to the Contract shall be construed as establishing or creating an employer/employee relationship between UNAIDS, on the one hand, and the Contractor or any person used by the Contractor in the performance of the work, on the other hand.

Thus the Contractor shall be solely responsible for the manner in which the work is carried out. UNAIDS shall not be responsible for any loss, accident, damage or injury, suffered by the Contractor or persons or entities claiming under the Contractor, arising during or as a result of the implementation or execution of the Contract, including travel, whether sustained on UNAIDS premises or not.

The Contractor shall obtain adequate insurance to cover such loss, accident, injury and damages, before commencing work on the Contract. The Contractor shall be solely responsible in this regard and shall handle any claims for such loss, accident, damage or injury.

5.6 Relation Between the Parties

The Contract does not constitute a partnership between the Parties or does not constitute either Party as the agent of the other.

5.7 Waiver of Breach

The waiver by either Party of any provision or breach of the contract shall not prevent subsequent enforcement of such provision or excuse further breaches.

5.8 Liability

The Contractor hereby indemnifies and holds UNAIDS harmless from and against the full amount of any and all claims and liabilities, including legal fees and costs, which are or may be made, filed or assessed against UNAIDS at any time and based on, or arising out of, breach by the Contractor of any of its representations or warranties under the Contract, regardless of whether such representations and warranties are explicitly incorporated here in or are referred to in any attached Appendices.

5.9 Assignment

The Contractor shall not assign, transfer, pledge or make other disposition of this Contract or any part thereof, or any of the Contractor's rights, claims or obligations under this Contract except with the prior written consent of UNAIDS.

5.10 Officials not to Benefit

The Contractor warrants that no official of UNAIDS has received or will be offered by the Contractor any direct or indirect benefit arising from this Contract or the award thereof. The Contractor agrees that breach of this provision is a breach of an essential term of this Contract.

5.11 Indemnification

The Contractor shall indemnify and hold UNAIDS harmless, from and against the full amount of any and all claims and liabilities, including legal fees and costs, which are or may be made, filed or assessed against UNAIDS at any time and based on, or arising out of, the acts or omissions of the Contractor, or the Contractor's employees, officers, agents, partners or sub-contractors, in the performance of the Contract. This provision shall extend, inter alia, to claims and liabilities in the nature of workmen's compensation, product liability and liability arising out of the use of patented inventions or devices, copyrighted material or other intellectual property by the Contractor, its employees, officers, agents, servants, partners or sub-contractors.

5.12 Contractor's Responsibility for Employees

The Contractor shall be responsible for the professional and technical competence of its employees and will select, for work under this Contract, reliable individuals who will perform effectively in the implementation of this Contract, respect the local customs, and conform to a high standard of moral and ethical conduct.

5.13 Subcontracting

Any intention to subcontract aspects of the Contract must be specified in detail in the proposal submitted. Information concerning the subcontractor, including the qualifications of the staff proposed for use must be covered with same degree of thoroughness as for the prime contractor. No subcontracting will be permitted under the Contract unless it is proposed in the initial submission or formally agreed to by UNAIDS at a later time. In any event, the total responsibility for the Contract remains with the Contractor.

The Contractor shall be responsible for ensuring that any and all subcontracts shall be fully consistent with the Contract, and shall not in any way prejudice the implementation of any of its provisions.

5.14 Place of Performance

The place of performance of the work under the Contract shall be performed in the premises of the contractor with travel to three countries to be determined in collaboration with the UNAIDS Reference Group on Estimates, Modeling and Projections.

5.15 Language

The communications relating to the Contract and/or performance of the work there under shall be in English.

5.16 Confidentiality

- 1) Except as explicitly provided in the Contract, the Contractor shall keep confidential all information which comes to its knowledge during, or as a result of, the implementation and execution of the Contract. Accordingly, the Contractor shall not use or disclose such information for any purpose other than the performance of its obligations under the Contract. The Contractor shall ensure that each of its employees and/or other persons and entities having access to such information shall be made aware of, and be bound by, the obligations of the Contractor under this paragraph. However, there shall be no obligation of confidentiality or restriction on use, where: (i) the information is publicly available, or becomes publicly available, otherwise than by any action or omission of the Contractor, or (ii) the information was already known to the Contractor (as evidenced by its written records) prior to becoming known to the Contractor in the implementation and execution of this Contract; or (iii) the information was received by the Contractor from a third party not in breach of an obligation of confidentiality.
- 2) The Contractor, its employees and any other persons and entities used by the Contractor shall furthermore not copy and/or otherwise infringe on copyright of any document (whether machinereadable or not) to which the Contractor, its employees and any other persons and entities used by the Contractor have access in the performance of this Contract.
- 3) The Contractor may not communicate at any time to any other person, Government or authority external to UNAIDS, any information known to it by reason of its association with UNAIDS which has not been made public except with the authorization of UNAIDS; nor shall the Contractor at any time use such information to private advantage.

5.17 Title Rights

- 1) All rights pertaining to any and all deliverables under the Contract and the original work product leading thereto, as well as the rights in any non-original material incorporated therein as referred in section 5.4.2 above, shall be exclusively vested in UNAIDS..
- 2) UNAIDS reserves the right to revise the work, to use the work in a different way from that originally envisaged or to not use the work at all.
- 3) At UNAIDS's request, the Contractor shall take all necessary steps, execute all necessary documents and generally assist UNAIDS in securing such proprietary rights and transferring them to UNAIDS in compliance with the requirements of applicable law.

5.18 Termination and Cancellation

UNAIDS shall have the right to cancel the Contract (in addition to other rights, such as the right to claim damages):

- 1) In the event the Contractor fails to begin work on the date agreed, or to implement the work in accordance with the terms of the Contract; or
- 2) In the event the progress of work is such that it becomes obvious that the obligations undertaken by the Contractor and, in particular, the time of fulfillment, will not be respected.

In addition, UNAIDS shall be entitled to terminate the Contract (or part thereof), in writing:

- 1) At will with the provision of thirty (30) days prior notice in writing
- 2) With immediate effect (in addition to other rights, such as the right to claim damages), if, other than as provided in the paragraph above, the Contractor is:
 - a. In breach of any of his material obligations under the Contract and fails to correct such breach within a period of thirty (30) days after having received a written notification to that effect from UNAIDS; or
 - b. Adjudicated bankrupt or formally seeks relief of his financial obligations.

5.19 Force Majeure

No party to the Contract shall be responsible for a delay caused by force majeure, that is, a delay caused by reasons outside such party's reasonable control, it being agreed, however, that UNAIDS shall be entitled to terminate the Contract (or any part of the Contract) forthwith if the implementation of the work is delayed or prevented by any such reason for an aggregate of thirty (30) days. Such termination shall be subject to payment of an equitable part of the Contract sum and/or other reasonable charges. In the event of such termination, the Contractor shall, in accordance with the ownership rights referred to in section 5.17 Title rights, deliver to UNAIDS all work products and other materials so far produced.

In the event of and as soon as possible after the occurrence of any cause constituting force majeure, the Contractor shall give notice and full particulars in writing to UNAIDS, of such occurrence or change if the Contractor is thereby rendered unable, wholly or in part, to perform its obligations and meet its responsibilities under this Contract. The Contractor shall also notify UNAIDS of any other changes in conditions or the occurrence of any event which interferes or threatens to interfere with its performance of this Contract. The notice shall include steps proposed by the Contractor to be taken including any reasonable alternative means for performance that is not prevented by force majeure. On receipt of the notice required under this Article, UNAIDS shall take such action as, in its sole discretion, it considers to be appropriate or necessary in the circumstances, including the granting to the Contractor of a

reasonable extension of time in which to perform its obligations under this Contract.

5.20 Surviving Provisions

Those rights and obligations of the Parties as set forth in section 5 that are intended by their nature to survive the expiration or earlier termination of the Contract shall survive indefinitely. This includes, **but is expressly not limited to**, any provisions relating to UNAIDS' right to financial and operational audit, conditions of contract, warranties, legal status and relationship between the parties, breach, liability, indemnification, subcontracting, confidentiality, title rights, use of the UNAIDS and WHO name and emblem, successors and assignees, insurance and liabilities to third parties, settlement of disputes, observance of laws, privileges and immunities, no terrorism or corruption, foreign nationals and compliance with UNAIDS policies

5.21 Use of UNAIDS and WHO name and emblem

Without UNAIDS's prior written approval, the Contractor shall not, in any statement of an advertising or promotional nature, refer to the Contract or its relationship with UNAIDS and/or the World Health Organization (WHO) (which provides the administration of UNAIDS, including its secretariat). In no case shall the Contractor use the name or the emblem of UNAIDS and/or WHO, or any abbreviation thereof, in relation to its business or otherwise.

5.22 Successors and Assignees

The Contract shall be binding upon the successors and assignees of the Contractor and the Contract shall be deemed to include the Contractor's successors and assignees, provided, however, that nothing in the Contract shall permit any assignment without the prior and written approval of UNAIDS.

5.23 Payment

Payment will be made against presentation of an invoice in a UN convertible currency (preferably US Dollars) in accordance with the payment schedule contained in the Contract and subject to UNAIDS's acceptance of satisfactory performance of work. Any payments by UNAIDS to the Contractor shall reflect any tax exemptions to which UNAIDS is entitled by reason of the immunity it enjoys. UNAIDS is exempt from all direct taxes, customs duties and the like and the Contractor shall consult with UNAIDS so as to avoid the imposition of such charges. As regards duties and other indirect taxes, the Contractor shall list such charges on invoices as a separate item and, to the extent required, cooperate with UNAIDS to enable reimbursement thereof.

5.24 Title to Equipment

Title to any equipment and supplies that may be furnished by UNAIDS shall rest with UNAIDS and any such equipment shall be returned to UNAIDS at the conclusion of this Contract or when no longer needed by the Contractor. Such equipment, when returned to UNAIDS, shall be in the same condition as when delivered to the Contractor, subject to normal wear and tear. The Contractor shall be liable to compensate UNAIDS for equipment determined to be damaged or degraded beyond normal wear and tear.

5.25 Insurance and Liabilities to Third Parties

The Contractor shall provide and thereafter maintain:

- (i) insurance against all risks in respect of its property and any equipment used for the execution of this Contract.
- (ii) all appropriate workmen's compensation insurance, or its equivalent, with respect to its employees to cover claims for personal injury or death in connection with this Contract.
- (iii) liability insurance in an adequate amount to cover third party claims for death or bodily injury, or loss of or damage to property, arising from or in connection with the performance of work under the Contract or the operation of any vehicles, boats, airplanes or other equipment owned or leased by the Contractor or its agents, servants, employees partners or sub-contractors performing work in connection with the Contract.

Except for the workmen's compensation insurance, the insurance policies under this section shall:

- a) Name UNAIDS as additional insured;
- b) Include a waiver of subrogation of the Contractor's rights to the insurance carrier against UNAIDS:
- c) Provide that UNAIDS shall receive written notice from the Contractor's insurance carrier not less than thirty (30) days prior to any cancellation or material change of coverage.

The Contractor shall, upon request, provide UNAIDS with satisfactory evidence of the insurance required under this section.

5.26 Settlement of Disputes

Any dispute relating to the interpretation or application of the contract shall, unless amicably resolved, be subject to conciliation. In the event of failure of the latter, the dispute shall be settled by arbitration. The arbitration shall be conducted in accordance with the modalities to be agreed upon by the parties or, in the absence of agreement, with the rules of arbitration of the International Chamber of Commerce. The parties shall accept the arbitral award as final.

5.27 Observance of the Law

The Contractor shall comply with all laws, ordinances, rules, and regulations bearing upon the performance of its obligations under the terms of the Contract.

5.28 Authority to Modify

No modification or change in the Contract, no waiver of any of its provisions or any additional contractual relationship of any kind shall be valid and enforceable unless signed by a duly authorized representative of both parties.

5.29 Privileges and Immunities

Nothing in or relating to this Contract shall:

- be deemed a waiver of any of the privileges and immunities of UNAIDS and/or the World Health Organization in conformity with the Convention on the Privileges and Immunities of the Specialized Agencies approved by the General Assembly of the United Nations on November 21, 1947 or otherwise under any national or international law, convention or agreement.
- Be construed as submitting UNAIDS and/or WHO to any national jurisdiction

5.30 No Terrorism or Corruption

The Contractor warrants that:

- (i) it is not and will not be involved in, or associated with, any person or entity involved in terrorism, that it will not make any payment to any such person or entity and that it will not enter into any employment or subcontracting relationship with any such person or entity; and
- (ii) it shall not engage in any illegal, corrupt, fraudulent, collusive or coercive practices in connection with execution of the Contract.

The Contractor agrees that breach of this provision is a breach of an essential term of the Contract.

Any payments used by the Contractor for the promotion of any terrorist activity or any illegal, corrupt, fraudulent, collusive or coercive practice shall be repaid to UNAIDS without delay

5.31 Personnel

5.31.1 Approval of Contractor Personnel

UNAIDS reserves the right to approve any employee, subcontractor or agent furnished by the Contractor and Contractor's consortium partners for the performance of the work under the Contract (hereinafter jointly referred to as "Contractor Personnel"). All Contractor Personnel must have appropriate qualifications, skills and levels of experience and otherwise be adequately trained to perform the work. UNAIDS reserves the right to undertake an interview process as part of the approval of Contractor Personnel.

The Contractor acknowledges that the qualifications, skills and experience of the Contractor personnel proposed to be assigned to the project are material elements in UNAIDS's engaging the Contractor for the project. Therefore, in order to ensure timely and cohesive completion of the project, both parties intend that Personnel initially assigned to the project continue through to project completion. Once an individual has been approved and assigned to the project, such individual will not, in principle, thereafter be taken off the project by the Contractor to other duties. Circumstances may arise, however, which necessitate that Personnel be substituted in the course of the work e.g. in the event of promotions, termination of employment, sickness, vacation or other similar circumstances, at which time a replacement of comparable qualifications, skills and experience may be assigned to the project, subject to approval of UNAIDS.

UNAIDS may refuse access to or require replacement of any Contractor Personnel if such individual renders, in the sole judgment of UNAIDS, inadequate or unacceptable performance, or if for any other reason UNAIDS finds such individual does not meet its his/her security or responsibility requirements. The Contractor shall replace such an individual within fifteen (15) business days of receipt of written notice from UNAIDS. The replacement will have the required qualifications, skills and experience and will be billed at a rate that is equal to or less than the rate of the individual being replaced.

5.31.2 Project Managers

Each party shall appoint a qualified project manager ("Project Manager") who shall serve as such party's primary liaison throughout the course of the project. The Project Manager shall be authorized by the respective party to answer all questions posed by the other party and convey all decisions made by such party during the course of the project and the other party shall be entitled to rely on such information as conveyed by the Project Manager.

The Project Managers shall meet on regular basis in order to review the status of the project and provide UNAIDS with reports. Such reports shall include detailed time distribution, information in the form

requested by UNAIDS and shall cover problems, meetings, progress and status against the implementation timetable.

5.31.3 Foreign Nationals

The Contractor shall verify that all Contractor Personnel is legally entitled to work in the country or countries where the work is to be carried out. UNAIDS reserves the right to request the Contractor to provide UNAIDS with adequate documentary evidence attesting this for each Contractor Personnel. Each party hereby represents that it does not discriminate against individuals on the basis of race, gender, creed, national origin, citizenship.

5.31.4 Compliance with UNAIDS Policies

The Contractor shall at all times comply with and ensure that the Contractor and each of its subcontractors and their employees and agents comply with any applicable laws and regulations and any UNAIDS policies and reasonable written direction and procedures relating to: (i) occupational health and safety, (ii) security and administrative requirements, including, but not limited to computer network security procedures, (iii) sexual harassment, (iv) privacy, (v) general business conduct and disclosure, (vi) conflicts of interest and (vii) business working hours and official holidays.

In the event that the Contractor becomes aware of any violation or potential violation by the Contractor, its subcontractor or any of their employees or agents, of any laws, regulations, UNAIDS policies or of other UNAIDS reasonable written directions and procedures, the Contractor shall immediately notify UNAIDS of such violation. UNAIDS, in it sole discretion, shall determine the course of action to remedy such violation or prevent such potential violation, in addition to any other remedy available to UNAIDS under the Contract or otherwise.

5.31.5 Ethical Behaviour

UNAIDS, the Contractor and each of the Contractor's partners, subcontractors and their employees and agents shall adhere to the highest ethical standards in the performance of the Contract. In this regard, the Contractor shall also ensure that neither Contractor nor its partners, subcontractors, agents or employees will engage in activities involving child labor, trafficking in arms, promotion of tobacco or other unhealthy behavior, or sexual exploitation or discrimination.

5.31.6 Engagement of Third Parties and use of In-house Resources

The Contractor acknowledges that UNAIDS may elect to engage third parties to participate in or oversee certain aspects of the project and that UNAIDS may elect to use its in-house resources for the performance of certain aspects of the project. The Contractor shall at all times cooperate with and ensure that the Contractor and each of its partners, subcontractors and their employees and agents cooperate, in good faith, with such third parties and with any UNAIDS in-house resources.

ATTACHMENT 1

Terms of Reference Development of a mathematical model based on HIV case reporting and mortality

Background

UNAIDS supports countries to develop estimates of the HIV epidemic and its impact on the population. These country HIV estimates are used for country programme and planning purposes and to calculate regional and global estimates of the HIV epidemic. The current models rely heavily on HIV prevalence surveillance by specific populations and size estimates of those populations. Estimates for countries that do not systematically carry out HIV prevalence surveillance or size estimates are unreliable. In countries where data on HIV case reporting or vital registration on AIDS-related deaths is consistently available and of reasonable quality, a model that uses those data might improve the rigor of the HIV estimates.

UNAIDS would like to offer countries an option of using a mathematical model to estimate HIV incidence from case reported data or mortality data. This model would be incorporated into the existing Spectrum software which provides the necessary variables required by countries and UNAIDS for advocacy and planning.

Activities

- Develop a prototype of the model to present at a UNAIDS Reference Group on Estimates
 Modeling and Projections (<u>www.epidem.org</u>) meeting (either in person or virtual). The date of
 the meeting will be determined by the availability of the model but should be completed by end
 November 2014.
- 2. Refine the model based on feedback from reference group
- 3. Integrate the model with Spectrum (see specific requirements for integration under products) by end December 2014
- 4. Implement the model in 3 countries (in different regions). Specifically the consultant will work with country counterparts to determine which data to incorporate into the software. He/she will also work closely with in-country team to receive feedback on the usability of the interface and the user manual. To be completed by March 2015.
- 5. Produce a user manual to be completed by March 2015.

Products and specific requirements

1. A mathematical model that uses HIV case reporting data to estimate HIV incidence by year and 5-year age group for ages 15-49 years.

Requirements for the model:

a. The model should be capable of using annual HIV diagnosis case reporting, annual vital registration of AIDS-related deaths, testing patterns, CD4 count at diagnosis, and recency of infection -- when available -- among newly diagnosed HIV cases.

- b. Data available from Spectrum as an input to the model include non-AIDS population by five year age group, number of adults (15-49) receiving ART, and non-AIDS mortality by five year age group.
- c. The tool should produce reliable estimates of the HIV incidence rate for adults 15-49 from 1970 and project forward five years after the most recent empirical data.
- d. A measure of uncertainty around the incidence estimates should be available from the model.
- e. The tool should have a user-friendly interface that is well-defined and clear
- f. The code for the model should be written in a publically accessible programming language with accompanying documentation.
- g. Validation capabilities should be built into the model so available data on directly measured prevalence and incidence can be compared to the results from the model
- 2. Collaborate with Futures Institute to identify the specific output and format of the output to feed into the Spectrum software. This can be done over phone or via email correspondence.
- 3. Summary report on results from 3 countries, validated against previous models or alternative data.
- 4. A user-friendly manual, written in simple language, describing how to use the tool. The manual should explain the data review process necessary to ensure high quality estimates.
- 5. Final code for the model in a publically accessible programming language

Duration of the project

Approximately six-months from signature of contract.

Requirements

Ability to develop mathematical models for infectious disease with particular experience in HIV models, Expertise in the development of models based on annual data on HIV diagnosis case reporting, ability to work with national counterparts to explain and use models, ability to write clearly about modelling tool.

Budget

The budget should include at a minimum the following items:

- Staff costs
- Communication costs
- Travel: Travel costs for country implementation will be added to the contract once the countries are determined.