# HLL Biotech Limited (HBL)
# TICEL Biopark Campus (Module # 013-015)
# CSIR Road, Taramani
# Chennai - 600113

**Sub: Invitation of Expression of Interest (EOI) from Contract Research & Manufacturing Organizations having GLP / GMP compliant Small Scale / Pilot facility, process development labs, process equipments, experienced manpower for development and production of Bacterial and Cell culture based Human Vaccines/ Organizations having facility with utilities and infrastructure for the cGMP lab scale production of vaccines**

## I. INTRODUCTION

HLL Biotech Limited a 100% subsidiary of HLL Lifecare Ltd. (a Govt. of India Enterprises) is in the process of setting up of an Integrated Vaccines Complex for manufacturing of the vaccines**.** The facility will manufacture various vaccines required for immunization program of Government of India at affordable cost.

It has been decided to invite Expression of Interest (EOI) from interested parties as per the two options as below:

**Option 1: (Part A & Part B)**

- Contract Research & Manufacturing Organizations having GLP / GMP compliant biopharmaceutical manufacturing facility, validated utilities, Process equipment's, consumables, chemicals and reagents for the production of vaccines for pre-clinical and clinical trial batches.
- Under this option HLL is further categorizing the scope of services under Part A and Part B (elaborated below).

**Option 2**

- Organizations having a facility, with adequate infrastructure and validated utilities which can be converted by the bidder to a GMP lab facility as per the requirement and layout provided by HBL.

The facility is required for development and production of following vaccines:

## II. List of Vaccine Products under consideration

**Live Vaccines**

- Measles (cell culture based Viral Vaccine)

**Inactivated Vaccines**

- Japanese Encephalitis (cell culture based)
- BCG vaccine (Whole cell)
- Rabies Vaccine (Cell culture based Viral vaccine)

**Recombinant Vaccines**

- Recombinant Hepatitis B vaccine (Yeast cell derived)

**Polysaccharide vaccine**

- Haemophilus Influenza type b vaccine conjugate

**Other vaccines**

- Formulated vaccine (Pentavalent Vaccine – DTwP-recHepB-HibTT)

The various phases of development will include

- Initial product development along with Pre-clinical trials (Product development & process standardization),
- Formulation studies and product development for Phase I & II human clinical trials

  These activities will be carried out for the above vaccines in these outsourced facilities, before our internal production facility is commissioned.

## III. SCOPE OF SERVICES

### III A. SCOPE OF SERVICES, FACILITY & INFRASTRUCTURE:

#### 1. Option 1 - Part A

**The process technology and expertise is available with HLL Biotech Limited and the facility and manpower of the contract research and manufacturing organization will be utilized for the test run batches for replication of the process and establishment of the production process parameters as per the technology know how.**

The activities for **Part A (GLP facility)** of the Project are mentioned below:

- Pre cell bank preparation and primary characterization
- Analytical method verification for Bulk Drug Substance (Analytical methods will be transferred by HLL Biotech Ltd)
- Test run batches production – Upstream and downstream process parameters establishment
- In vitro and In-vivo tests

- Preclinical trial batches – production
- Pre-clinical trial studies

  - GLP lab and infrastructure (up-stream & down-stream process labs, and QC testing labs including animal house) for the development of yeast cell based recombinant vaccine, poly saccharide conjugate bacterial vaccines, formulation and filling of vaccines, cell culture based viral vaccines.
  - Lab scale fermenter, Biosafety cabinets, Yeast cell DNA lysis systems, purification systems, chromatography systems etc
  - Chromatography equipment for viral vaccine purification.

* Note: This list is not exhaustive and for any additional equipment required the bidder has to commit to procure/provide the same after mutual discussion.

**2. Option 1 - Part B**

The activities for **Part B (GMP facility)** of the Project are mentioned below:

- Master/Working cell bank preparation
- Analytical method verification for Final Drug Product (Analytical methods will be transferred by HLL Biotech Ltd) – In vitro & In vivo
- Scale up batches production – Upstream & Downstream
- Formulation of batches

  - GMP compliant facility, classified clean rooms, validated utilities, WFI, Central CIP and SIP stations, Pilot scale GMP compliant bioreactors (50 L and 100 L).
  - Tissue homogenizer, Dyno mill/Homogenizer, Chromatography – HPLC, ELISA systems, other downstream purification systems like microfiltration and ultra-filtration systems.
  - Cell culture facility for viral vaccine production and inactivation.
  - Chromatography equipment for viral vaccine purification.
  - Formulation unit for vaccines.
  - Filling station.
  - In process testing of vaccines- facility.
  - Approved experimental animal house (In-house or outsourced).
  - Qualified and experienced man power : vaccine production, downstream processes, QC testing, animal experiments

* Note: This list is not exhaustive and for any additional equipment required the bidder has to commit to procure/provide the same after mutual discussion.

**III. C. SCOPE OF SERVICES & INFRASTRUCTURE under Option 2:**

**For Organizations providing the facility on a rental basis, the following requirements need to be fulfilled:**

- Facility area adequate for the requested activities as per GMP norms
- The open room (i.e. the facility) must be flexible enough to be modified into a GMP facility as per the relevant vaccine requirements along with the necessary modular and clean room partitions, validated HVAC system, user points for clean and black utilities in individual rooms according to the layouts and room classification provided by HBL
- The facility must have infrastructure and validated utilities or must provide the infrastructure and validated utilities like Purified water (PW), WFI (water for injection) as per USP/ ISP standard, pure steam generation (PSG), SIP and CIP facility.

* Note: This list is not exhaustive and for any additional equipment required the bidder has to commit to procure/provide the same after mutual discussion.

**IV. MINIMUM ELIGIBILITY CRITERIA:**

**OPTION 1 (Part A or Part B)**

1. The firm should have the experience of contract research & manufacturing of biological/vaccines with any or all of the listed vaccines in Section II for the **last two years.**
2. Should have proven and demonstrable experience in development and production of vaccines for Phase I & II trials for any vaccine manufacturing organizations in India or abroad.
3. The firm shall have attained a turnover of not less than **INR 1.0 Crore** in anyone of the past three years.
4. The firm should have the facilities/infrastructure/expertise to carry out and complete the activities for at least one vaccine product either for the Part A and Part B phases.

**OPTION 2:**

1. The firm should have experience in setting up and running the facilities for the development/ production of vaccines/biologicals.
2. The firm shall have attained a turnover of not less than **INR 5.0 Crore** in any one of the past three years.
3. The facility should have adequate area required the desired activities mentioned in the scope of services.
4. The firm should have the utilities and infrastructure to carry out and complete the activities for at least one or more vaccine products as per HBL's requirements.

**Personnel Qualification (Only for Option I Part A or Part B):**

a) At least three senior bioprocess scientists having the experience in production of biological/vaccines by fermentation method, capsular polysaccharide separation and conjugation with proteins, cell culture methods for virus propagation and purification, QC testing methods for vaccines, In vivo testing of vaccines in experimental animals.

b) At least two of the senior bio process engineers of the organization shall have more than 5 years of experience in operation and maintenance of biopharmaceutical process equipment's and facility.

c) Firms should have the capabilities to understand the process and develop the process-focused support.

d) CV's of at least three research scientists/research associates having minimum 5 years' experience in the relevant field shall be attached.

## V. SELECTION PROCESS:

The organization shall be short listed based the evaluation of EOI document and at later stage bids will be invited from only the short listed organizations.

### Technical Evaluation

The Technical Evaluation Committee (TEC) appointed by HBL will screen the EOI document based on the Minimum Eligibility Criteria and the details of availability of infrastructure and services offered by the organizations. The organizations will be invited for a detailed presentation for the evaluation of infrastructure and services offered by them.

## VI. Invitation of bids

Bids will be invited only from short listed organizations after the evaluation of EOI.

**Format for submitting eligibility criteria**

**Option I Part A or Part B**

| | | |
|---|---|---|
| 1 | 1.1 Years of Experience<br>**In contract manufacturing** | |
| | 1.2. Should have proven and demonstrable experience in development and production and formulation of Biologicals/Vaccines- Bacterial vaccines and Cell culture based viral vaccines for Pre-clinical Phase I/II trials projects for any biopharmaceuticals/vaccine manufacturing organizations in India or abroad.<br>Project Implemented:<br>(a) Name of the Project(s)<br>(b) Duration | **Details of each project to be attached by the Bidder** |
| 2. | **Turnover**<br>The organization should have a turnover of **at least Rs 1.0 Crore** in anyone of the last three years | **Audited annual Reports for the last three years** |
| 3 | **Qualification and experience of the key personnel**<br>At least 3 CVs spread across in the fields of biopharmaceuticals/Vaccine Projects. | **CV's to be attached by the Bidder** |
| 4 | **Availability of infrastructure and equipments** | **Detail on :**<br>• Availability GLP / GMP facility: adequate space for the specified activities as per norms<br>• List of process and utility equipments available<br>• Commitment to procure the specific equipments for each product<br>• GLP facility- Product development (Upstream, Down stream) : List of equipments and infrastructure<br>• Cell banking and storage facility<br>• Analytical testing facility and equipment details<br>• Biological testing – list of equipments, In vivo testing – Details of experimental animals and facility either in-house or out sourced.<br>• Fill-finish, lyophilization stations in-house or outsourced. |
| 5 | The organizations must specify the vaccines provided under section II for which they will be interested to collaborate with HBL | |

**For Option 2:**

| | | |
|---|---|---|
| 1 | **Years of Experience**<br>In providing a facility on rent for the development and production of biologicals or vaccines | Details of the project to be attached |
| 2 | **Turnover**<br>The organization should have a turnover of at least Rs 5.0 Crore in anyone of the last three years | Audited annual Reports for the last three years |
| 3 | **Availability of infrastructure and equipments** | The firm to list the infrastructure and utilities (both clean and black) along with the list of equipment |
| 4 | **The organizations must specify the vaccines provided under section II for which they will be interested to collaborate with HBL** | |

**Documents to be submitted with EOI:**

- Profile of the Organization.
- Organization Structure
- Memorandum of Association/Articles of Association.
- Authenticated copy of the certificates of incorporation/registration of the organization
- Authenticated copy of annual accounts for the last three years
- Details of the team which is proposed to handle the assignment with their CVs, in brief, mentioning their experience in similar projects done earlier. (only for Option I)
- List of process equipments (GLP and GMP) for all Options and Parts).
- For option II, the list of utilities and equipment available on site must be provided along with the layout of the area
- Analytical Testing facility and equipments (For all Options)
- Commitment to procure the specific equipments (For all or any specific Options)
- Details of experimental animals house (If available / outsourced)

## VII. MODE OF SUBMISSION OF EXPRESSION OF INTEREST/BID

**Documents in electronic form will not be accepted**. The documents to prove the eligibility criteria should be submitted in a separate sealed envelope marked ***'ELIGIBILITY CRITERIA'*** in the format provided with all relevant documents to prove the eligibility.

The EOI envelope should be super-scribed as **"EOI for Qualifying the Contract Research and Manufacturing Organizations having facility and process equipment**

**for development and production of Bacterial and Cell culture based Viral vaccines** should be delivered at the following address before the stipulated closing time.

**Chief Executive Officer**
**HLL Biotech Limited**
**TICEL Biopark Campus (Module # 013-015)**
**CSIR Road, Taramani**
**Chennai – 600113**

## VIII. CLOSING TIME FOR RECEIPT OF EOI

The closing time for submission of EOI is 27-12-2012-upto**: 3-PM.**

**The EOI documents shall be opened on the same day, 27-12-2012 at 3.30 PM.**

**The date of Technical presentation will be informed to the organizations after the preliminary evaluation of EOI.**

## IX. RIGHTS OF HBL

(i) HBL reserves the right to accept / reject the EOI received without assigning any reasons whatsoever, or may call for any additional information / clarification if so required.

(ii) HBL reserves the right to limit or delete any part of the scope of work and extend the last date of submission of the EOI and bid.

## X. COURT JURISDICTION

This shall be subject to the exclusive jurisdiction of courts at Thiruvananthapuram.

## XI. MISCELLANEOUS

In case any further clarification or information is required, the following officer may be contacted:

**E.A. Subramanian**
**Chief Executive Officer**
**HLL Biotech Limited**
**TICEL Biopark Campus (Module # 013-015)**
**CSIR Road, Taramani**
**Chennai – 600113**
**eas@lifecarehll.com**
**Ph no. 044-2254 4949/50/54/56**