

Certification of Biosafety Cabinets used for TB Program

PR43877

Terms of Reference (ToR)

Background on Save the Children

Save the Children is the leading global independent organisation for children. Save the Children believes every child deserves a future. Around the world, we work every day to give children a healthy start in life, the opportunity to learn and protection from harm. When crisis strikes, and children are most vulnerable, we are always among the first to respond and the last to leave. We ensure children's unique needs are met and their voices are heard. We deliver lasting results for millions of children, including those hardest to reach.

We do whatever it takes for children – every day and in times of crisis – transforming their lives and the future we share.

Our vision: A world in which every child attains the right to survival, protection, development and participation.

Our mission: To inspire breakthroughs in the way the world treats children, and to achieve immediate and lasting change in their lives.

Our values: Accountability, ambition, collaboration, creativity and integrity.

We are committed to ensuring our resources are used as efficiently as possible, in order to focus them on achieving maximum impact for children.

Background information/context

Biosafety cabinet also called a biological safety cabinet or microbiological safety cabinet- is an enclosed, ventilated laboratory workspace for safely working with infectious material requiring a defined biosafety level. The primary purpose of a BSC is to serve as a means to protect the laboratory worker and the surrounding environment from pathogens. To ensure the correct functioning of BSCs, they need to be maintained beyond the daily care routines of the laboratory. This involves annual maintenance, calibration and certification by a qualified engineer in accordance to the EN 12469 or NSF 49 standards. To certify biosafety cabinet is part of sensible bio risk management program and allows for the safe handling of pathogens. The BSCs should be certified prior to initial use, after it has been repaired and/or re-located and ideally this should be performed annually for implementation of International Health Regulation.

Objective

The objective of this consultant is calibration and certification of below biosafety cabinets located at-

• National Tuberculosis Center, Thimi, Bhaktapur	6
• GENETUP, Kalimati, Kathmandu	2
• BPKIHS, Dharan	2
• Tuberculosis Treatment Center (TTC), Pokhara	1
• Karnali Provincial Hospital, Surkhet	2
• NATA, Biratnagar	1
Total	14

Location and official travel involved

- TA need to travel to the respected sites with all the tools required for performing the certification.
- TA will work full time during the office hour of the government labs from 10.00 am to 5.00 pm on Sunday to Thursday and upto 3.00 pm on Friday. The work will not be conducted on Saturday.

Services the TA will provide

Test involved during this certification, in accordance to the EN 12469 or NSF/ANSI 49 standards, are-

- **Disinfection prior to testing**
- **Inflow velocity measurement-** This test is performed to determine the calculated or directly measured velocity through the work access opening, to verify the nominal set point average inflow velocity and to calculate the exhaust airflow volume rate.
- **Down flow velocity measurement-** This test is performed to measure the velocity of air moving through the cabinet workspace.
- **HEPA filter leak test-** This test is performed to determine the integrity of supply and exhaust HEPA filters, filter housing and filter mounting frames while the cabinet is operated at the nominal set point velocities.
- **Airflow smoke pattern test-** This test is performed to determine if: 1) the airflow along the entire perimeter of the work access opening is inward; 2) if airflow within the work area is downward with no dead spots or refluxing; 3) if ambient air passes onto or over the work surface; and 4) if there is no escape to the outside of the cabinet at the sides and top of the window. The smoke test is an indicator of airflow direction, not velocity.
- **Light intensity test-** This test is performed to measure the light intensity on the work surface of the cabinet as an aid in minimizing cabinet operator fatigue.
- **Noise level test-** This test is performed to measure the noise levels produced by the cabinets, as a guide to satisfactory mechanical performance and an aid in minimizing cabinet operator fatigue
- **Electrical Leakage and Ground Circuit Resistance and Polarity Tests-** These safety tests are performed to determine if a potential shock hazard exists by measuring the electrical leakage, polarity, ground fault interrupter function and ground circuit resistance to the cabinet connection.
- **Particle count**

Experience and skill set required

This consultancy will be carried-out by an experienced and qualified engineer. The consultant will be selected through a competitive and transparent process. Relevant experience criteria will include:

- Prior experience in biosafety cabinet calibration and certification;
- Qualification/training certificates of the staff who will certify the equipment;
- Proof of valid calibration of measuring instruments to be used in certification.
- Consultant who is NSF/ANSI certified for biosafety cabinet certification will be preferred for the certification. Also, the consultant having certification experience in other countries will be prioritized.
- The report submitted after the certification should provide detailed certification procedures and parameters measured for certification.
- Ability to produce quality work within deadline and under pressure
- Experience in a conflict setting considered a strong attribute

Expected Deliverables and Timeline

The consultant(s) will prepare a detailed work plan. This work plan will describe how and when the assignment will be carried out, in line with the objectives. The level of effort is currently assessed to be of 21 days.

Estimated Commencement Date: 1st June 2022

Estimated End Date: 31st July 2022

Deliverable number	Deliverable title	Submit to	Delivery date
1	Certification Status (Per equipment)	NTCC and SCI CO	Daily after the work started.
2	Final certification report	NTCC and SCI CO	Within 15 days of completion of certification process.

Out of Scope

Maintenance of the cabinets or the recommendation for the maintenance should be given in the detail report but maintenance is not required in the site during the certification.

Status updates/reporting

TA shall provide the below status updates for the duration of the services:

- Daily progress update with Microbiologist/NTCC Lab In charge/Biomedical Engineer
- Completion updates with SCI Sr Lab Advisor and NTCC director.

Acceptance

All the tests for the calibration should be carried out and detail of all should be verified by technical expert/ engineer. By reviewing the certification process and report, the work will be accepted accordingly.

Payment information

The Fees are inclusive of all costs, overheads, and expenses, including travel, subsistence and accommodation.

Payment can be made on instalment basis after completion of each deliverable or on mutual agreement with winning bidder.

Save the Children shall pay correctly rendered invoices (a) upon completed delivery of the goods or performance of the services in accordance with the contract or (b) within 45 days from the date of invoice (**whichever is later**).

Proposal Evaluation and Scoring Criteria

Parameter	Description
Essential Criteria	<p>For Consultants in Nepal.</p> <ul style="list-style-type: none"> • Registered with relevant Government Authority. • Have a VAT registration certificate; Tax clearance certificate (for FY 2077/078). • Evidence / reports related to biosafety cabinet certifications performed previously. • The certifier should provide the details about the training taken for certification. Or, for NSF 49 standard, the certifier should be NSF certified for certification. • Field certifier should have all the instruments and tools required for the certification and all the tools and instruments should be calibrated and certified for calibration. The calibration report of tools should also be provided. • Relevant professional license / registration (if applicable). <p>For International consultants:</p> <ul style="list-style-type: none"> • For Company/Institution/Organization: The proposing consultant should have valid registration as per the prevailing act of the country. • For Individuals: Above is not applicable for international individual consultant. • For both Organization and Individual: Evidence / reports related to biosafety cabinet certifications performed previously.

	<ul style="list-style-type: none"> • The certifier should provide the details about the training taken for certification. Or, for NSF 49 standard, the certifier should be NSF certified for certification. • Field certifier should have all the instruments and tools required for the certification and all the tools and instruments should be calibrated and certified for calibration. The calibration report of tools should also be provided. • For both (Organization and Individual): Relevant professional license / registration in their own country or international registration (if applicable).
--	---

S.No.	Criteria	Major Topic	Score Weightage
1	Capability	Qualification and Experience proposed consultant Qualification: 5% Bachelor or above degree in relevant field Yes = 5%, No = 0 Experience in biosafety cabinet calibration and certification: 10% Number of certifications done Less than 5 certifications = 0 5 to 25 certifications = 7% Above 25 certifications = 10%	15%
2		Proposed approach and methodology According to NSF 49: 15%, according to EN 12469: 10%, not specified: 0	15%
3		Interview / Presentation (For shortlisted bidder/s only)	10%
4	Sustainability	The bidder demonstrates experience and understanding of local context and community. Experience working in Low- and Middle-income countries Yes = 10% No = 0%	10%
5	Commercial	Budget (total cost for the assignment) Score in inverse proportionate basis (which means lowest total cost will get highest score).	50%

How to apply for the services:

Proposal Submission Guideline/Required Documents

- Proposal Submission Deadline- **6th May 2022**
- Required Documents-
 - Filled out Consultancy Proposal Form (enclosed with this ToR)

- CV(s) of the proposed consultant(s) with full date of birth in dd/mm/yyyy format.
- **For firms (Nepali):** Copies of- Firm registration certificate, VAT registration certificate, Tax clearance certificate FY 2076/077, Evidence / Certificates related to Bio Safety cabinet certifications, calibration report of tools used for certification, relevant professional license / registration (if applicable).
- **For firms (International):** Copies of registration documents as per the prevailing act of the country and Evidence / Certificates related to biosafety cabinet certifications, calibration report of tools used for certification.
- **For Individuals (Foreign Nationals):** Copy of passport.
- **For both (International Firms and Individual Foreign Nationals):** Copy of relevant professional license / registration in their own country or international registration (if applicable).

If an individual is a full-time staff member of another organization, a no objection/consent letter signed by the organization head must be submitted along with the proposal. This is not applicable for proposals sent through a firm.

Proposals should be submitted via email to nepal.formalquotation@savethechildren.org

The proposal submitted in another email address will not be consider in the process. (Please note that, consultant must not cc / bcc / forward proposals to any other email addresses)

OR

Electronic Submission via ProSave.

- Submit your response in accordance with the guidance provided in the below document:



Bidding on a
Sourcing Event.pptx

Abbreviations:

NSF: National Sanitation Foundation
ANSI: American National Standards Institute
EN: European Standard