

Annexure A1

Clarification on Functional Equivalence, Support Requirements and Compliance Verification

1. Purpose

This Annexure clarifies the intent of certain technical requirements contained in Annexure A and establishes the criteria for acceptance of equivalent solutions, support arrangements, and compliance verification. This Annexure shall be read together with the technical specification and forms part of the RFQ.

2. Functional Equivalence

Where reference is made in this specification to manufacturers, software platforms, hardware platforms, computer models, or technologies, such references are intended solely to define the minimum functional, performance, reliability, maintainability, interoperability, supportability, cybersecurity, and quality requirements of the proposed solution.

Bidders may propose alternative solutions, if they demonstrate, through objective and verifiable evidence, that the proposed solution meets or exceeds all applicable requirements set out in this specification.

The responsibility for demonstrating compliance and equivalence rests solely with the bidder. The CSIR reserves the right to assess the adequacy of the evidence submitted and to determine whether the proposed alternative satisfies the requirements of the specification. Failure to satisfactorily demonstrate equivalence may result in the proposal being deemed technically non-compliant.

3. Clarified Requirements

3.1 Software and Control Hardware Platforms

LabVIEW software and National Instruments hardware are considered acceptable reference platforms. Alternative software and hardware platforms may be proposed provided the bidder demonstrates compliance with all functional, performance, reporting, calibration, cybersecurity, maintainability, supportability, and data management requirements specified in the RFQ.

Objective:

To ensure the system delivers the required functionality, reliability, maintainability, and performance irrespective of the technology platform.

Evidence Required:

- Software and hardware architecture descriptions.

- The bidder shall specify the support and maintenance arrangements for the measurement and control hardware and software during and after the warranty period. The submission shall include support response times, maintenance activities, software support arrangements, spare parts strategy, and typical 2026 costs for remote and on-site support services, including labour, travel, accommodation, and subsistence Functional specifications.
- Cybersecurity documentation.
- The Bidder shall provide references for clients where the same or substantially similar breathing simulator systems have been supplied, installed, commissioned, and supported. References shall include the client's name, country, system description, year of installation, scope of supply, and contact details (subject to client approval) for verification purposes
- Performance and validation data.

Verification:

Compliance will be assessed through review of the submitted technical documentation and demonstration of the proposed system's functionality during the bid evaluation process. Final verification will be conducted during installation, commissioning, and acceptance testing to confirm compliance with the specified requirements.

3.2 Computing Platform

The specified Dell PC configuration represents the minimum computing performance requirements necessary for system operation, control, data acquisition, reporting, storage, retrieval, and export of test data. Alternative computing platforms or integrated computing solutions will be accepted, provided that the bidder demonstrates compliance with all functional, performance, reliability, compatibility, and supportability requirements specified in this RFQ.

Objective:

To ensure adequate computing performance, reliability, storage capacity, and long-term supportability.

Evidence Required:

- Computing platform specifications.
- System architecture.
- Warranty information.
- The bidder shall provide a detailed statement describing how the proposed computing platform will be supported and maintained during and after the warranty period. The submission shall include details of support arrangements, response times, software and operating system support, hardware maintenance, spare parts availability, cybersecurity updates, and lifecycle support. The bidder shall also provide indicative 2026 costs for remote and on-site technical support, including labour rates, travel costs, accommodation, subsistence allowances, and any other applicable support charges.

Verification:

Technical evaluation of specifications and demonstration of required functionality.

3.3 Technical Support Arrangements

Local South African technical support capability is desirable but not mandatory. Suppliers without local support capability shall provide a documented support model including response times, escalation procedures, remote support capability, spare parts availability, and indicative support costs.

The supplier shall demonstrate the ability to respond to reported equipment breakdowns within two working days through local, remote, hybrid, or subcontracted support arrangements.

Objective:

To minimise equipment downtime and ensure sustainable lifecycle support.

Evidence Required:

- Support organisation structure.
- Service level commitments.
- Escalation procedures.
- Technical support contact details.
- Spare parts strategy.

Verification:

Review of support proposal, service commitments, and customer references.

3.4 Foreign OEM Participation

Foreign Original Equipment Manufacturers (OEMs) may participate directly in this RFQ provided all applicable procurement requirements are met, and adequate after-sales support capability is demonstrated.

The absence of a South African authorised agent shall not constitute grounds for disqualification.

Objective:

To promote fair competition while ensuring adequate technical and after-sales support capability.

Evidence Required:

- Company registration details.
- Customer references.
- Support arrangements.
- Lifecycle support plan.

Verification:

Evaluation of submitted documentation and reference checks.

3.5 Historical Data Access and Backup

The system shall provide secure storage, retrieval, reporting, printing, and export of historical test records.

Historical test data shall remain accessible during equipment downtime, maintenance activities, software upgrades, or component failures through either the primary system or an alternative data-access mechanism provided by the supplier.

Objective:

To ensure preservation, accessibility, and traceability of historical test records.

Evidence Required:

- Description of data management architecture.
- Backup procedures.
- Supported export formats.
- Sample reports and data files.

Verification:

Demonstration of successful retrieval, reporting, printing, and export of historical records.

4. Warranty Requirements

The breathing simulator, associated software, instrumentation, control systems, accessories, and ancillary equipment shall be supplied with a comprehensive minimum warranty period of twenty-four (24) months from the date of successful installation, commissioning, and acceptance by the CSIR.

The warranty shall, as a minimum, include:

- Replacement parts;
- Labour;
- Remote technical support;
- Corrective maintenance;
- Repair or replacement of defective components;
- Software defect correction;
- Software updates required for normal operation; and
- On-site support where required to restore the equipment to specified performance.
- The bidder shall additionally provide separate pricing for a comprehensive preventive maintenance service plan and associated Service Level Agreement (SLA) covering all manufacturer-recommended, usage-based preventive

maintenance activities for the proposed system. The service plan shall include all required service parts, consumables, labour, travel, accommodation, and any other costs associated with performing the prescribed maintenance during the applicable service period.

- The preventive maintenance SLA shall clearly define the scope of services, maintenance intervals, response times, reporting requirements, service deliverables, escalation procedures, and performance commitments. The bidder shall also clearly state the recommended maintenance intervals, scope of work, and deliverables for each scheduled maintenance intervention.

Objective:

To minimise technical, operational, and financial risks associated with equipment ownership and lifecycle support.

Evidence Required:

- Warranty statement.
- Warranty terms and conditions.
- Scope of coverage.
- Exclusions list.
- Extended warranty pricing.
- Service plan pricing, which must cover the OEM's recommended time-based or use-based preventive maintenance schedule.

Verification:

Evaluation of warranty documentation and incorporation into the final contract.