

भारत सरकार/Government of India
स्वास्थ्य एवं परिवार कल्याण मंत्रालय /MINISTRY OF HEALTH & FAMILY WELFARE
स्वास्थ्य सेवा महानिदेशालय/ Directorate General of Health Services
अखिल भारतीय भौतिक चिकित्सा एवं पुनर्वास संस्थान
ALL INDIA INSTITUTE OF PHYSICAL MEDICINE & REHABILITATION
हाजि आली, के. खाडये मार्ग, महालक्ष्मी, मुंबई – 400 034
HAJI ALI, K. KHADYE MARG MUMBAI – 400 034

संदर्भ सं.:
Ref.No.: P&O/ EOI/3D Printing setup/1200

दिनांक.: 2025
Dated : 4th August 2025

Expression of Interest (EOI) for Installation of Additive Manufacturing (3D Printing) setup at AIIPMR, Mumbai

Subject: Invitation for Expression of Interest (EOI) for the Supply and Procurement of 3D Printer, Scanner and Modelling software for fabrication of Prostheses and Orthoses with the use of Additive manufacturing (3D Printing) in the Prosthetics and Orthotics Department of All India Institute of Physical Medicine and Rehabilitation

1. Introduction:

All India Institute of Physical Medicine and Rehabilitation (AIIPMR), Directorate General of Health Services (DGHS), Ministry of Health and Family Welfare, Government of India, invites **Expression of Interest (EOI)** from reputed manufacturers, authorised suppliers, and agencies for the supply and installation of Additive manufacturing (3D Printing) Setup at AIIPMR, Mumbai to fabricate prostheses and orthoses for the patients (Divyangjans) in the Prosthetics and Orthotics Department. The goal of installing 3D printing setup in the Department of Prosthetics and Orthotics at the AIIPMR is to enhance the design, fabrication and customization of Prosthetic and Orthotic (P&O) devices through advanced manufacturing technologies. This initiative aims to Improve Patient-Specific customization, increase efficiency and Productivity, enhance quality and innovation, promote research and training and reduce material wastage and cost. By achieving these objectives, the 3D printing setup will significantly augment Institute's capacity to deliver high-quality, patient centred rehabilitation care and maintain its leadership in the field of Physical Medicine and Rehabilitation in India. This initiative is aligned with the National goals of Atmanirbhar Bharat, Digital India (Digital Health) and Accessible India Campaign (Sugamya Bharat Abhiyan) by incorporating modern healthcare technologies into the rehabilitation services of a Government of India Institution.

2. Purpose of this EOI:

This EOI aims to gauge the market interest and gather information from capable firms regarding the supply, installation, and maintenance of 3D printing setup that meet specific requirements. Response will help AIIPMR to understand the available technologies, solutions and potentials partners for a possible future procurement process.

3. Scope of Requirement:

We are interested to establishing in-house 3D printing infrastructure to enable customized, rapid and cost-effective fabrication of prosthetic and orthotic devices, aligned with modern rehabilitation practices and patient-specific solutions. The integrated 3D printing ecosystem to support the in-house digital design and additive manufacturing of P&O devices, should encompass the end-to-end workflow from anatomical data acquisition to final device fabrication and post-processing. The setup must produce lightweight, sturdy, durable, and patient specific P&O devices and related assistive components with clinical-grade precision and biomechanical compatibility. The system should consists of 3D Body/Surface Scanner for patient anatomy capture, Modelling software suite to digitally design Prosthetic and Orthotic devices, 3D printer for printing all types of P&O devices compatible with all materials which are suitable for making P&O devices especially resin, Post processing station for finishing and strengthening of prints, High performance workstation for modelling and simulation, UPS for critical operation safety. All hardware and software must function cohesively within a unified workflow. File formats, design interoperability, and material compatibility should conform to the industry standards for prosthetic and orthotic use. Designed to meet an operational throughput of not less than 20-25 devices per working day, accounting for both prosthetic and orthotic applications. Setup must be scalable for future integration of automation features or additional technologies (e.g., metal sintering 3D printing or multi-material systems).

4. Key Specifications:

Interested firms should offer 3D printing setup for Prosthetic and Orthotic use that meets the following specifications:

(a) Essential Requirements:

- 3D Printer for Prosthetic and Orthotic use: Must have the capability to print an object of 1000 mm in diameter and 600 mm in length.
- 3D scanners for Prosthetic and Orthotic use: Handheld 3D scanner must be able to scan body parts accurately with, colour, texture and geometry.
- UPS for 3D printer: As per Indian Standards for critical operation safety.
- Post processing station: For finishing and strengthening of prints.
- Socket strength tester: for testing socket strength of at least 1000N.
- High-performance workstation : For modelling and simulation
- Modelling software: Modelling software must be capable of designing prosthetic sockets, orthotic devices and assistive devices according to the design and must be compatible with 3D scanner and 3D printer.

- All hardware and software must function cohesively within a unified workflow. File formats, design interoperability, and material compatibility should conform to the industry standards for prosthetic and orthotic use.

(b) Desirable Requirements:

- Preference may be given to solutions that also offer:
- CAMC Inclusion: Option for a Comprehensive Annual Maintenance Contract.
- Designed to meet an operational throughput of not less than 20-25 devices per working day, accounting for both prosthetic and orthotic applications.
- Scalable for future integration of automation features or additional technologies (e.g., metal sintering 3D printing or multi-material systems).

5. Information requested from Interested Firms:

Firms wishing to express their interest should provide the following information:

- A brief company profile, including relevant experience in supplying similar equipment.
- Detailed product brochures and technical specifications sheets for the proposed 3D Printer, Scanner with compatible software model (s).
- Information regarding the availability and details of the desirable requirements listed in the section 4 a.
- Information regarding the availability and details of the desirable requirements mentioned in the Section 4b.
- Description of the materials that are suitable for the fabrication of prostheses, orthoses and assistive device.
- Information on warranty, installation support, user training, and after-sales service offered.
- Indicative pricing or pricing structure.
- Details of any relevant certifications or past projects/client references.

6. Submission Deadline:

Expression of interest must be received by 18th August 2025 at 1600 hrs.

7. Submission Instructions:

Please submit your EOI response electronically to director@aiipmr.gov.in (email) with the subject line “EOI Response - 3D Printing Setup- P&O department, AIIPMR, Mumbai OR via post/courier to the address mentioned below, clearly marked “EOI-3D Printing Setup for Prosthetic and Orthotic Use”.

The Director,
All India Institute of Physical Medicine and Rehabilitation,
Haji Ali Park, K.K. Marg, Mahalaxmi,
Mumbai – 400034

8. Contact Information:

For any clarifications regarding this EOI, please contact:

Email: director@aiipmr.gov.in ,

Tel: (+91) 23528834

(Clarifications may be sought until 08.08.2025)

9. Disclaimer:

This expression of Interest is issued solely for information and planning purposes. It does not constitute a Request for Proposal (RFP), Request for Quotation (RFQ), or a promise to issue RFP/RFQ in the future. Submission of an EOI does not guarantee selection or participation in any future procurement process. All India Institute of Physical Medicine and Rehabilitation, reserves the right to modify the requirements, cancel this EOI process, or proceed with a formal procurement process at its sole discretion, without assigning any reason. Responding to this EOI is entirely voluntary, and All India Institute of Physical Medicine and Rehabilitation will not pay any information or administrative costs incurred in response to this EOI.

Sd/-

निदेशक / Director