TERMS OF REFERENCE
EXTERNAL CONSULTANT FOR THE DEVELOPMENT OF ADDITIVE MANUFACTURING (3D PRINTING) IN ASSISTIVE TECHNOLOGY COURSE AND TRAINING IN UR/CEBE

Inclusive Nutrition and Early Childhood Development (INECD/ GIKURIRO KURI BOSE) PROJECT

1. CONTEXT

Under USAID funding, Federation Handicap International, in consortium with CRS, the prime and other sub-operating partners, including Umuhuza, Three Stones International and the University of Global Health Equity (UGHE), is implementing a rehabilitation and disability inclusion component in the program entitled “Inclusive Nutrition and Early Childhood Development (INECD/ GIKURIRO KURI BOSE)”.

The INECD programme promotes nurturing and responsive care practices, especially in the areas of health, functioning, nutrition, and early childhood development (ECD) for caregivers and children. Specifically, this project will address child development gaps, significant unmet physical rehabilitation and assistive technology (rehab/AT), and social inclusion needs.

To ensure sustainable implementation of additive manufacturing (3D printing) in assistive technology, accessibility, affordability, and availability of low-cost and durable assistive products to the end-users in Rwanda, the INECD Program, in collaboration with the University of Rwanda – Centre of Excellence in Biomedical Engineering and E-Health (UR-CEBE) wants to hire an external consultant to develop course content and train a pool of trainers on 3D printing in Assistive technology who will transfer skills to the rest of rehabilitation professionals in Rwanda.

This will be an advanced professional course validated and accredited by UR-CEBE and the Rwanda Allied Health Professional Council (RAHPC).

1.1. ABOUT ADDITIVE MANUFACTURING (3D PRINTING) IN ASSISTIVE TECHNOLOGY

Additive Manufacturing (AM) is an appropriate name to describe the technologies that build 3D objects by adding layer-upon-layer of material, whether the material is plastic, metal, concrete, etc.

Assistive technology enables and promotes inclusion and participation, especially of persons with disability, aging populations, and people with non-communicable diseases. The primary purpose of assistive products is to maintain or improve an individual’s functioning and independence, thereby promoting their well-being. They enable people to live healthy, productive, independent and dignified lives, and to participate in education, the labor market, and civic life. Examples of assistive products include hearing aids, wheelchairs, spectacles, prostheses and devices that support memory, among many others.

To strengthen the system’s capacity to promote 3D printing and strengthen the capacity of rehabilitation and AT professionals, the GKB project, in partnership with UR/CEBE, will

hire an external consultant to develop a certified short course and train trainers from the University of Rwanda and specialized rehabilitation centers on 3D printing in Assistive technology to improve accessibility, affordability, acceptability and availability of locally made assistive devices to their end users.

Having in mind that this is a new expertise in Rwanda an international consultant is recommended. Therefore, the call should be advertised internationally to attract international applicants, either individually or a company.

2. DESCRIPTION OF THE EXPECTED SERVICE

2.1. General objectives:

To reinforce the capacities of Rwanda rehab professionals (P&O, Physiotherapist, Occupational Therapist) to utilize 3D printing in Assistive technology.

2.2. Specific objectives:

- To develop a 3D Printing in AT Training Manual, complete with facilitation guidelines, delivery method, training outline, learning outcomes, practical applications, and assessment of participants.
- To deliver a 10-day Training of Trainer's (TOT) program on 3D printing in AT to Rwanda Rehabilitation professionals.
- To facilitate Roll-Out training to other rehabilitation professionals monitored by the selected consultant and HI PO Specialist

2.3. Expected Results and Deliverables

The consultant will handle over the following:

- 1 validated 3D Printing in AT Training Manual
- Training of Trainer (ToT) course guidelines and program

The consultant will technically provide

- Guidance on the selection criteria of TOT participants and Pre/Post Test Results
- Practical advice on how to make 3D printing/production training part of AT training courses to be deployed

2.4. Responsibilities

Both entities, UR-CEBE and HI Rwanda, will collaborate to ensure the implementation of 3D printing in AT training of trainers' course development and delivery is successfully done by the consultant.

2.4.1. UR -CEBE

Will participate in the selection of consultant according to HI selection guidance Develop selection criteria for participants recruitment and selection of ToT participants and development of roll-out training plan. Provide space and 3D printing infrastructures, equipment (3D printers) for the training and implementation

2.4.2. HI RWANDA

Will be responsible, before and during the whole process, for:

- Development of a ToR for the consultancy
- Selection and recruitment of a consultant using HI selection guidance.
- Prepare the TOR for the TOT and Roll-out Training together with the support service team
- Technical support by an international rehabilitation specialist.

2.4.3. CONSULTANT

- To develop a 3D printing training module and content
- Deliver training of trainers.
- To supervise the role of trainings to successful entrants
- To provide a technical report and recommendations for the consultancy work
- Evaluation and assessment of the trainees for the competencies achieved from the course.
- To develop the training cascading action plan with the trained trainers and roll out the first training.

3. CONSULTANT'S PROFILE

The consultant shall meet the following requirements:

- PhD or Master's degree in health sciences or other related biomedical sciences and Professional and training experience of at least three years in Assistive technology and specifically in 3D printing
- Must be knowledgeable in 3D printing for Assistive technology
- Must have experience in course development and delivery
- Excellent training and communication skills.
- Demonstrate excellent interpersonal skills in interacting with stakeholders and partners in health care, specifically in the rehabilitation sector.
- Ability to work in a multi-professional synergy
- Ability and willingness to work online with the international rehabilitation specialist consultant

- Ready to present the developed course content (Topics, Method of delivery) through a participative workshop with stakeholders.
- Should master English as primary teaching language (French as an asset)
- Understanding the Rwandan healthcare context (as an added value)

4. DURATION AND PLACE OF PERFORMANCE OF THE SERVICE

- Course development and validation (5 working days)
- Course delivery (15 working days in two shots): 10 working days at the beginning of the course and 5 working days after two months of reasonable period of trainees.
- The mission to start in October to December, 2023 lasting for 2 months Maximum.

5. WORK PLAN

- Based on the proposed schedule included in these Terms of Reference, the consultant should establish a work plan for the completion of the service
- The work plan should give a clear description of how the consultant intends to approach the activities necessary to the service's completion
- The plan should indicate the rate of progress and/or level of completion of the service, including criteria and indicators for checking that it is proceeding as planned.

6. REPORT

- The narrative report should be 15 pages A4, in English, New times/ Arial font styles,12.
- The report should be submitted 7 days after the consultancy.

7. CONTACT PERSON

During the performance of the service, the consultant will be required to work in liaison with Handicap International's teams, and notably with Mr. Abder BANOUNE (a.banoune@hi.org) the Rehabilitation specialist at HI headquarters and Mbabazi Sylvia (s.mbabazi@hi.org), the Rehabilitation focal person for HI Rwanda, will be his/her contact persons.

8. ADMINISTRATIVE AND TECHNICAL ANNEXES

Proposals from interested consultants(s) should include:

1. Letter of expression of interests, including how the skills and competencies described in the Terms of Reference are met (compulsory);

2. Curriculum vitae (compulsory) detailing the consultant's qualifications and training experience in Assistive technology and specifically in 3D printing, reference of previous assignments done or sample of work accomplished (if it is a team of consultants, all CVs should be included);
3. Respect of HI institutional Policies (Anti-fraud, bribery, and corruption policy, Humanity and Inclusion policy on inclusion, gender and Age, Code of conduct HI, and Child protection policy) remember to sign each policy and send them together with your offer.
4. Technical proposal (compulsory) including training plan and methodology.
5. Financial proposal in Euro (compulsory). All costs related to the consultancy without exception (including VAT, if applicable) should be figured in the financial plan of the consultant, the cost per day for each consultant differentiating: (i) Course development, (ii)Training, (iii) Report development, the overall cost of the intervention including accommodation, and transportation, the ancillary costs (services and additional documents). The interested candidate or team) must include a budget in the offer that details:
   If another payment modality is requested, this must be justified in the offer.
   Note: No per diem will be paid to the consultant (s). The consultant will be responsible for his/her own security in the country, HI will not cover any insurance fee during the consultancy period.
6. Three references of which 2 should be from a previous similar experience.
   Evaluation of the applications will be made through a selection committee in 2 phases:
   - Administrative selection: checking for completeness of application for all compulsory items listed above). Incomplete applications will not be taken into consideration for technical selection.
   - Technical selection: criteria to select the best application will be based on the quality of the technical proposal, competitive financial proposal, human resources skills and previous experiences, and demonstrated expertise of the applicant.

The interested consultant's proposal should also include:

- Copy of Applicant ID or company representative ID
- Copy of Company legalization certificate or Consultancy business registration of the activity or any documents certifying the regularity of the activity
- Tax Certificate
- Insurance certificate

The deadline for submission of applications is 30th June 2023 at midnight.
Proposals should be submitted to the following email: dao@rwanda.hi.org;
including the email subject"3D Training consultancy".

Only candidates who pass the administrative selection will be taken into consideration for the technical assessment and they will be afterward notified of the decision. Selected applicants may be invited for a (phone/skype) interview.
HI reserves the right to contact the applicants for further information before the final selection of the selection committee.

9. APPENDICES

1. Anti-Fraud, bribery, and corruption policy
2. Humanity &inclusion's policy on Disability, Gender and Age
3. Code of conduct: Integrity, Preventing of abuse and Safeguarding
4. Child protection policy

Melanie GEISER
Country Manager