

Request for Offers

Development of Guide to Ageing of Explosive Ordnance

Introduction

The Geneva International Centre for Humanitarian Demining (GICHD) is pleased to invite consultants to submit a quotation for the provision of the description of the goods or the services described below as per requirements set out in this request for quotations.

Gender and diversity - The GICHD seeks to promote gender balance and diversity among staff and consultants and encourages people from Explosive Ordnance (EO)/mine affected countries to apply.

Data privacy considerations: By expressing their interest and submitting a complete file, consultants explicitly consent that the necessary information contained in the submission documents will be used to process the application. Consultants acknowledge that the information provided will be checked against a series of criteria, including (and only if applicable) legal constraints as per funding agreements. The information collected by the GICHD is directly related to the GICHD's need to process the information the consultants submitted adequately. Examples of the data we request include name, title, organization, address, work experience, etc. For more information about data protection or the applicants' rights, see the GICHD data protection notice (<https://www.gichd.org/en/general-contents/data-protection-notice/>).

The timeframe and content of the project that the consultancy will support may be subject to change. Successful applicants will be contacted to discuss specific contractual matters following the deadline for submissions.

Reference number: RFO/2021/EVR/01

Project number: 91051

Posting date: 18 October 2021

Deadline for submission of the Request for Quotation form: 29 October 2021, 00:00 GVA time

Currency: The quotation shall be presented in Swiss Francs (CHF)

Language: The quotation shall be submitted in English

Submit to: r.evans@gichd.org Cc to: n.singh@gichd.org

Area of work: Explosive Ordnance Disposal

Scope of work (ToR)

The GICHD publishes guides for specific mine action thematic areas. At present there is no guide that details how various categories of explosive ordnance age, and how the blast and fragmentation risk such ordnance presents changes over time, or how different environmental factors affect the ageing process.

The guide should provide accessible detail concerning the following thematic areas:

- Ageing characteristics of different categories of explosive ordnance. (e.g. AP Mine, AV Mines, Aircraft Bombs, Projectiles etc).
- Ageing of different energetic components of an explosive train (including HME), including chemical changes in those components over time.
- Ageing of mechanical components including mechanical fuze mechanisms.
- Ageing of electrical components including batteries.
- Effect of different environmental factors on the ageing of explosive ordnance.
- The differences in ageing due to casing material, including generic differences between ERW and certain mines.
- Ageing of items of EO in storage.
- Exploitation of Explosive Ordnance in order to access components to ascertain ageing characteristics.
- Ageing of ERW in tropical conditions such as the Pacific region.

The guide should be able to detail a range of relevant case studies based on previous research.

The guide is estimated to be 10000-15000 words in length.

The guide is to be written in English but may be translated in other languages at a later date.

The consultant must provide, and enable use of, up to 100 copyright images of items/components that illustrate various aspects of ageing.

For more information, see Annex A.

Delivery dates of the services

The service shall be delivered in full by no later than 15 June 2022.

Please note, the schedule may change, subject to constraints due to Covid-19.

Estimated workdays to deliver the services

It is estimated that this consultancy will include up to 80 working days of specialist time. Consultants may choose to offer an alternative estimation with justification. The estimated level of effort will include desktop documentation review, standard drafting, and consultation with the GICHD project manager. No travel is foreseen for the completion of the assignment. Other costs, such as use of copyright images, shall be included in any quotation.

Annex A – Terms of Reference

Development of a GICHD Guide to Ageing of Explosive Ordnance

Requirements and methods

- **Format:** The guide will broadly follow the basic format of previous GICHD guides.
- **Structure/Content:** The exact structure of the guide will be developed with and subject to final agreement of the GICHD project manager. An indicative structure is:
 - Introduction.
 - Effects of ageing on Explosive Ordnance casings.
 - Chemical effects of ageing on the energetic components found within a given explosive train, including molecular military energetics and HME.
 - Effects of ageing on mechanical and electrical components.
 - Effects of different environments on ageing.
 - Ageing of items in storage.
 - Multiple case study chapters detailing documented ageing effects on a range of EO including items of ERW found in the Pacific region.
 - Safe exploitation of explosive ordnance to assess ageing and functionality.
 - Conclusion.
- **Method:**
 - The GICHD and the consultant shall agree on chapter structure of the guides.
 - The GICHD and the consultant shall agree on the level of technical detail of each chapter.
 - The GICHD and the consultant shall agree on illustrations used to illustrate each chapter. Each chapter shall be extensively illustrated.
 - Each draft shall be subject to quality control by the GICHD project manager and the standard GICHD internal and external peer review process.

Annex B - Timeline

The proposed timeline is tentative and is subject to change.

N°	Phases/Milestone	Deadline	Responsibility
1	Submission of tender proposal	22/10/21	Consultants
	Selection of consultant	29/10/21	GICHD
2	Agreement on the timeline, content, and process	05/11/21	Consultant / GICHD
	Estimated start date	22/11/21	Consultant / GICHD
	Drafting and revisions (to be further detailed)	30/05/22	Consultant
	Finalization	15/06/22	Consultant / GICHD
	Consultations with GICHD Project Manager	Throughout	Consultant / GICHD

To be filled in by the Consultant

The consultant shall provide a coherent, organized, and clear proposal in response to the request.

Project resources

Name of the company: ADD NAME

Name of individual: ADD NAME OF INDIVIDUAL

Address: ADD ADDRESS

Proposals

Consultant: Add detail of relevant work conducted to date, including exploitation work, and technical research, conducted on this subject. Add any relevant qualifications (e.g., Explosive Ordnance Engineering) or practical experience. Demonstrate an ability to draft technical documentation in English to a publication standard. Demonstrate an ability to provide relevant copyright imagery that illustrates the ageing process of Explosive Ordnance. Demonstrate familiarity with university research on the ageing of energetics, including primary explosives. Demonstrate a history of working successfully to deadlines to a high standard.

The consultant should provide a short narrative on how they propose undertake the work.

All consultants are asked to attach their updated CV's and any previous work, including reports, and studies (published or otherwise), relevant to this research.

Availability

Consultant: ADD TEXT TO CONFIRM CAPACITY TO DELIVER THE SPECIFIC GOODS AND SERVICES WITHIN THE REQUIRED TIMELINE

Pricing

Use of copyright imagery, not only for the publication, but also for ongoing instruction, should be included in any cost.

Services	Days/Units	Rate in CHF	Total
Fees			
Daily fees			
Professional costs (estimates)			
Imagery			
Total			