REQUEST FOR INFORMATION FOR PROCUREMENT OF ELECTRONIC FUZES FOR 105MM, 130MM AND 155MM CALIBRE GUNS

1. The Ministry of Defence(Army), Government of India, intends to procure approximate 20,00,000 to 25,00,000 quantities of electronic artillery fuzes for 105mm, 130mm and 155mm calibre guns.

2. The Request for Information (RFI) consist of two parts as indicated below :-
   (a) **Part I.** The operational characteristics and technical parameters.
   (b) **Part II.** Methodology of submitting responses.

3. Submission of incomplete response will render the vendor liable for rejection.

**PART- I**

4. **Basic Details.** The proposal is to procure electronic fuzes for artillery for 105mm, 130mm and 155mm calibre guns alongwith fuze hand setters (fuze setting arrangements). The basic details are as follows :-

   (a) The fuzes to be introduced must be electronic in which the initiation of the fuzes should take place through electronic chain and adaptable for in-service ammunition in Indian Army.

   (b) The under mentioned set of three electronic fuzes when introduced in service would perform the functions stated against each :-

   (i) **Percussion Fuze.** Obtain ground burst with HE shells with the following sub functions :-

      (aa) Instantaneous action.

      (ab) Delay action.

   (ii) **Time Fuze.** Obtain airburst with all types of carrier shells (smoke illuminating and Cargo). Facilitate functioning of the fuze in percussion mode when air burst function fails.

   (iii) **Proximity Fuze (VT).** Obtain air burst with HE shells at the desired height of burst for the equipment. Facilitate functioning of the fuze in percussion mode when air burst function fails.
5. **Specifications Required from Vendors.** Vendors are requested to forward comprehensive details of electronic fuzes for 105mm, 130mm and 155mm calibre guns separately as per the following specifications :-

(a) **General Information**

(i) Principle of operation of each of the above fuzes.

(ii) Weight, dimensions and other specifications.

(iii) Diagram showing the various internal components.

(iv) Compatibility with ammunition for 105mm, 130mm and 155mm guns.

(v) Details including diagram of the fuze explaining its operation.

(vi) Shelf life of each fuze.

(b) **Operating Parameters.**

(i) Operating temperatures

(ii) Maximum altitude till which the fuze can operate.

(iii) Atmospheric pressure.

(iv) Functional reliability (in terms of percentage).

(v) Safety mechanisms (both mechanical and electrical) incorporated.

(c) **Details of Point Detonating (PD) / Direct Action Fuze.**

(i) Minimum angle of impact at which the fuze will function.

(ii) How is the fuze powered? (Arrangement of firing of the shell and safety arrangements incorporated therein).

(iii) Is the fuze para droppable?

(iv) Does it incorporate delay function? If yes, what is the exact mechanism used to achieve the delay function and what is the amount of delay achieved?

(d) **Proximity Fuze.**

(i) Does it have range gates? What is the minimum and maximum range gate that can be applied.
(ii) Does it have dual function of PD? (Arrangement for point detonation in case of failure of proximity function).

(iii) How is the fuze powered? (Arrangement on firing of the shell and safety arrangements incorporated therein).

(iv) ECCM capabilities.

(v) Accuracy of Height of Burst.

(vi) Is the fuze para droppable?

(e) **Time Fuze.**

(i) Minimum and maximum time setting possible.

(ii) Accuracy of time at which the burst is seen with reference to the setting.

(iii) Accuracy of Height of Burst.

(iv) Does the time fuze function on impact (arrangement for PD function)?

(v) How is the fuze powered? (Arrangement on firing the shell and safety arrangements incorporated therein).

(vi) Is the fuze para droppable?

(f) **Storage Conditions.**

(i) Ammunition Depot.

(ii) Field conditions (during operations – under tentage).

(iii) Colour marking for easy recognition during day or night, if any.

(iv) Availability of literature and firing tables.

(g) **Fuze Setters.** Please provide details of fuze setting arrangement / fuze setters including the principle of operation, power arrangements and other environmental and operating parameters as required at para 5(b) above.

(h) **Delivery Schedule.** What would be the delivery schedule based on maximum production capability at an accelerated pace.
6. **Procurement Methodology.** The acquisition process would be carried out under the provision of DPP 2011. The vendor should confirm that following conditions are acceptable:-

(a) The solicitation of offers will be as per ‘Single-Two Bid System’. It would imply that a ‘Request for Proposal’ would be issued soliciting and commercial offers together, but in two separate sealed envelopes. The validity of commercial offers would be at least 18 months from the date of submitting of offers.

(b) The technical offers would be evaluated by a Technical Evaluation Committee (TEC) to check its compliance with RFP.

(c) The equipment of all TEC cleared vendors would be put through a trial evaluation in India on a ‘No Cost No Commitment’ basis. A staff evaluation would be carried out by SHQ to analyse the result of field evaluation and shortlist the equipment for introduction into service.

(d) Amongst the vendor cleared by GS evaluation, a Contract Negotiations Committee would decide the lowest cost bidder (L1) and conclude the appropriate contract.

(e) Vendor would be bound to provide product support for time period specified in the RFP, which includes spares and maintenance tools/jigs/fixtures for field and component level repairs.

(f) The vendor would be required to accept the general conditions of contract given in the Standard Contract Document at Chapter V of DPP 2011 placed on www.mod.nic.in.

(g) **Offset.** The vendor has to undertake offset contracts amounting to 30% of the value of commercial proposals.

(h) **Integrity Pact.** An integrity pact along with appropriate EMD is a mandatory requirements in the instant case.

(j) **ToT.** Government of India is desirous of license production of the electronic fuzes after acquiring ToT in the case.

7. **Rough Indicative Cost.** Vendors to indicate rough indicative cost of each type of fuze and fuze hand setter for a total quantity of 20,00,000 - 25,00,000 fuzes (of all types) and approximate quantity of 4000-5000 of fuze hand setters?.
8. **Procedure for Response.**

(a) Vendors must fill the form of response as given in Appendix E of Chapter I of DPP 2011 (format enclosed). A-part from filling details about company, details about the exact product meeting our generic technical specifications should also be carefully filled. Additional literature on the product can also be attached with the form.

(b) The filled form should be dispatched at under mentioned address:-

Integrated Headquarters of Ministry of Defence (Army)  
General Staff Branch  
Director General of Artillery (Artillery-4)

Fax No : 011-23333607  
Email ID : artydte-mod@nic.in

(c) Last date of acceptance of filled form alongwith responses is **25 Apr 13**. The vendors short listed for issue of RFP would be intimated.

9. The Government of India invites responses to this request only from Original Equipment Manufacturers (OEM) / Authorised Vendors/Government Sponsored Export Agencies (applicable in the case of countries where domestic laws do not permit direct export by OEMs). The end user of the equipment is the Indian Armed Forces.

10. This information is being issued with no financial commitment and the Ministry of Defence reserve the right to change or vary any part thereof at any stage. The Government of India also reserves the right to withdraw it should it be so necessary at any stage.
INFORMATION PERFORMA
(FOREIGN VENDORS)

1. **Name of the Vendor/Company/Firm.**

   ____________________________________________________________

   (Company profile, in brief, to be attached)

2. **Type (Tick the relevant category).**

   Original Equipment Manufacturer (OEM) Yes/No
   Government sponsored Export Agency Yes/No (Details of registration to be provided)
   Authorised Vendor of OEM Yes/No (attach details)
   Others (give specific details) ____________________________________

3. **Contact Details.**

   Postal Address: ______________________________________________
   ____________________________________________________________
   City : ______________________ Province : _______________________
   Country: ______________________ Pin/Zip Code : ___________________
   Tele : ______________________ Fax : _____________________________
   URL/Web Site : ______________________

4. **Local Branch/Liaison Office/Authorised Representatives, in India (if any).**

   Name & Address: ______________________________________________
   ____________________________________________________________
   City : ______________________ Province : _______________________
   Pin code : ________________ Tel : ________________ Fax : ____________
5. **Financial Details.**

   (a) Annual turn over: _______________________ USD

   (b) Number of Employees in firm ________________________________

   (c) Details of manufacturing infrastructure available ____________________

   (d) Earlier contracts with Indian Ministry of Defence/Government agencies:

<table>
<thead>
<tr>
<th>Agency</th>
<th>Contract Number</th>
<th>Equipment</th>
<th>Quantity</th>
<th>Cost</th>
</tr>
</thead>
</table>

6. **Certification by Quality Assurance Organisation (If Applicable).**

<table>
<thead>
<tr>
<th>Name of Agency</th>
<th>Certification</th>
<th>Applicable from (date &amp; year)</th>
<th>Valid till (date &amp; year)</th>
</tr>
</thead>
</table>

7. **Equipment/Product Profile (to be submitted for each product separately)**

   (a) Name of Product: **Electronic Fuzes for Artillery.**

   (b) Description (attach technical literature): ________________________________

   (c) Whether OEM or Integrator: ________________________________

   (d) Status (in service /Design development stage): ________________________________

   (e) Production capacity per annum: ________________________________

   (f) Countries where equipment is in service: ________________________________

   (g) Whether export clearance is required from respective Government: ______

   (h) Any collaboration/joint venture/co production/ authorised dealer with Indian Industry (give details):

      Name & Address: ______________________________________________________

      Tel: _______________________ Fax: ________________________

8. **Any other relevant information.** ____________________________________________