

# INVITATION of EXPRESSION of INTEREST (EoI) for a PROOF-OF-CONCEPT (PoC) on ANALYTICS in GeM

# **ISSUED BY-**

Government e-Marketplace (GeM)
Department of Commerce
Ministry of Commerce & Industries
Government of India



# F.No. POI-56/45/2019-GeM

# Government e-Marketplace (GeM) Department of Commerce Ministry of Commerce & Industries Government of India

"INVITATION OF EXPRESSION OF INTEREST (EoI) for a PROOF-OF-CONCEPT (POC) on ANALYTICS in GeM"

Government e-Marketplace (GeM), Government of India invites Expression of Interest (EOI) for a Proof-of-Concept (PoC) on analytics in GeM.

**Disclaimer:** This EOI is not an offer by GeM or a tender document but it is an invitation to receive responses from eligible interested parties. The purpose of this EOI document is to provide such necessary information to interested analytics service providers that may be useful to them in formulating their proposals in response to this EOI.

#### Introduction:

Being a data centric B2B e-Commerce Platform, GeM gives utmost importance to data driven decision-making. By being a centralized national portal, in the last two years of operations, GeM has accumulated a rich collection of data on public procurement.

Presently this data is being used primarily for 'Descriptive Analytics' i.e. MIS, Dashboards, Price Comparisons, Price Trends and basic level of Fraud Detection etc. GeM is in the process of setting up a Data Warehouse in National Informatics Center (NIC) Cloud to perform advanced predictive and prescriptive analytics. For this purpose, GeM intends to invite commercial entities to perform Proof of Concept (PoC) and demonstrate best practices and technologies in the areas of Data Analytics (DA) & Machine Learning (ML) using the available data.

## **Expression of Interest (EoI)**

The Expression of Interest (EOI) is invited from the eligible entities, as per the eligibility criteria, who are solution providers in the specific area of Data Warehouse, DA and ML, development and implementation. The job includes design, development, implementation of analytics best practices in data cleaning, transforming, modelling, extracting relevant insights and developing atleast one software module which shall be implementable on GeM platform.



The details of data available with GeM shall be shared only with the agencies selected for the PoC. The data shall be related to the closed transactions on GeM. The GeM policy on sharing of Personal Information (PI) and Personally Identifiable information (PII) and statutory requirements shall be complied with while sharing the data with the entities performing PoC. The entities might be asked to perform PoC in separate areas such as- e-Market, Fraud Detection etc. or multiple entities might be asked to compete in the same area with the same data sets. A committee of GeM shall evaluate the outputs of the PoC. Some of the probable problems for PoC are indicated in the Annexure, however, they are just for illustration purpose.

In longer term, GeM might on-board an entity or multiple entities to perform analytics on GeM data on commercial basis. Demonstration of PoC is expected to help decide sizing, specification and other details towards setting up an operational scale data warehouse and analytics platform in GeM. For setting up an operational scale data warehouse and analytics platform and perform analytics on commercial basis, GeM might float Request For Quotations (RFQ)/Request for Proposals (RFP) among entities demonstrating successful PoC. Details requirements and eligibility criteria for the RFQ is not part of this EoI and shall be shared separately. GeM does not guarantee that, all the entities successfully demonstrating the PoC shall be eligible to respond to the RFQ as it may include additional eligibility requirements such as related to financial strength of the entity etc.

#### **Duration of PoC**

Duration of PoC shall be 5 weeks from the date of placement of offer for PoC.

#### **Commercial Terms**

This EoI is non-commercial and no renumeration in any way whatsoever shall be paid to the entities performing the PoC.

#### **Eligibility Criteria**

The minimum eligibility criteria for an entity to participate in the PoC are as follows-

- 1. The entity must be a company or Limited Liability Partnership (LLP) registered in India under relevant applicable Acts and Laws.
- 2. The entity must have executed atleast one data analytics project for a commercial organization or government body/ department globally including the following:
  - a. Setting up a Data Warehouse including Staging and ETL
  - b. Setting up analytics platform and perform analytics, including visualization In case, the activities mentioned in the points (a) & (b) are performed as part of two separate projects, both the projects must be showcased as part of the response to this EoI.



#### **Documents to be Submitted:**

The following documents are required to be submitted as part of the response to this EoI:

- 1. Document supporting Eligibility Criteria at S.No. 1
- 2. Case study (Max. 2 pages) on the work performed under Eligibility Criteria S.No. 2. The Personal Information (PI) and Personally Identifiable Information (PII) can be masked in the case study/ies, if required.
- 3. An introduction of the entity submitting the proposal (Max 1 page)

GeM reserves the right to select or reject any of the proposals received against this EoI. Eligible entities who have competence and experience to carry out such work are requested to submit the EOI along with supporting documents through e-mail to grm1-gem@gem.gov.in with a copy to osdtoceo.gem@gem.gov.in to reach on or before 1800 Hrs on 16<sup>th</sup> August 2019. No hardcopy of the documents is required to be submitted.

### Important timelines:

Event	Timeline
Last date of submission of responses	16 <sup>th</sup> August 2019, 1800 Hrs



#### Annexure:

Illustrative problem statements for PoC:

- 1. There might be instances where some buyers are rejecting offers from sellers with a set of attributes or sellers are not accepting orders from buyers of particular attributes e.g. location, department etc. Such behaviors are to be analyzed and a pattern is to be found to detect any need for correction/intervention.
- 2. The sellers might be doing slight tweaking (in the places of decimal) in some parameters of their products to standout and eliminate/reduce competition in the listing of product with L-1 (lowest) price. Identification of such abnormal seller behavior to be identified.
- 3. For different categories of bids certain parameters such as turnover criteria, EMD amount etc. might be influencing the level of participation. Such parameters and range of values against them to be identified.
- 4. Prescriptive analytics may be applied to suggest better product specifications, better qualification criteria and EMD amounts to ensure higher responses etc.
- 5. Application of Analytics for improving the design of Reverse and Forward Auctions, bidding etc. for better and faster price discovery.

The above examples are for illustration purpose only. The participating entities may propose their own ideas and different ideas may be taken/given for the PoC. The decision of GeM in this regard shall be final.