



Govt. of India
Ministry of Youth Affairs and Sports
Department of Youth Affairs

EOI No. J-17011/832/2023-Admn.
Dated: 19.01.2024 .

Ministry of Youth Affairs and Sports,
Government of India,
Shastri Bhawan, Dr. Rajender Prasad Road, New Delhi-110001,

Notice inviting Expression of Interest for tender for analytics solution (procurement, configuration, customization, implementation & support) using business intelligence tool for Ministry of Youth Affairs and Sports (MYAS).

1.1 The MYAS invites sealed Expression of Interest (EOI) from Firms of repute having expertise for analytics solution (procurement, configuration, customization, implementation & support) using business intelligence tool for MYAS.

1.2 Entities which satisfy the eligibility and pre-qualification criteria are required to communicate their interest in writing to the MYAS at the following address.

The Under Secretary (Admn. /General)
Department of Youth Affairs,
Ministry of Youth Affairs and Sports,
Government of India,
Room No. 43 Garage, Shastri Bhawan, Dr. Rajender Prasad Road,
New Delhi-110001,
Tele No. 011-2338-0625
Email- rajivk.singh@nic.in

1.3 The MYAS reserves the right to reject any or all EOIs or cancel/withdraw the request inviting proposal without assigning any reason whatsoever and in such case no intending bidder shall have any claim arising out of such action.

1.4 This document does not constitute nor should it be interpreted as an offer or invitation for the selection of any agency for MYAS as described herein. This document does not purport to be all inclusive or contain all the information or be the basis of any contract. No representation or warranty, expressed or implied, is or will be made as to the reliability, accuracy or the completeness of any of the information contained herein. Department reserves the right to seek the financial quotes from the qualified bidders of the EOI or may float an open Tender for the Analytics solution including BI Tool.

1.5 For further clarification, please contact:

Sr. Director(IT)
HOD, Ministry of Youth Affairs & Sports
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Department of Youth Affairs

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Expression of Interest (EOI) for tender for analytics solution (procurement, configuration, customization, implementation & support) using business intelligence tool.

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EOI Schedule and Address

S. No.	Event	Date
1.	Issuance of Expression of Interest (EOI) Document	19.01.2024
2.	Date for Pre EOI discussion	24.01.2024
3.	Last Date and Time for completed EOI document submission	10.00 A.M. on 05.02.2024
4.	Opening of EOI	03.00 P.M. on 05.02.2024
5.	Address for EOI submission and all communication on the subject	The Under Secretary (Admn/General), Department of Youth Affairs, Ministry of Youth Affairs and Sports, Government of India, Room No. 43 Garage, Shastri Bhawan, Dr. Rajender Prasad Road, New Delhi-110001

1. Introduction :-

1.1 The Ministry of Youth Affairs and Sports (MYAS) has completed physical survey of youth in different States/ UTs and the data is being digitized. The data thus generated from survey needs to present, analyzed and various reports and dashboards are to be prepared from the same.

1.2 Accordingly, the Ministry of Youth Affairs and Sports (MYAS) invites proposals from eligible bidders to submit their offer for procurement, development, deployment & on-going support for dashboards analytics solution (procurement, configuration, customization, implementation & support) using business intelligence (**BI**) tool including all paraphernalia as defined in Scope of work.

1.3 The objective of this Expression of Interest (EOI) is to identify and shortlist bidders capable of supplying **BI Platform software**, license and installation services to MYAS and provide technical manpower to enable MYAS to use this platform. Respondents to this EOI (also referred to as “bidders”) are expected to follow the detailed instructions provided herein carefully. Failure to follow the format as instructed may result in disqualification of the proposal. Bidders will be further short-listed after an evaluation of responses/ proposals received and will be subjected to final negotiations as necessary.

The Board scope of work under this EOI is as follows:

1. Procurement, configuration and deployment of BI tool
2. Analytics use case identification, development/ customization of dashboard using BI Tool.
3. Data management activities for Dashboard development

4. Development of web application for solution implementation
5. Support for smooth operation of dashboard solution using BI tool
6. Training and documentations for dashboards utilization
7. Double Blind Data Entry Platform.
8. Data integration from multiple sources

1.4 Interested eligible agencies are invited to submit their offer as per the details given in this EOI. Shortlisted Bidders will be requested for participation in the Request for Proposal (RFP).

2. **Scope of Work :-**

2.1 The Broad scope of work would inter-alia involve the following:

A. **Hardware for the project**

MYAS is planning to operate the tool either as Software as service mode on external cloud or by installation of the tool on NIC cloud or external cloud Virtual Machine (**VM**) having 4 virtual core with minimum 10 GB RAM.

The proposed solution could be Software as Service or on premise. In case the proposed solution is on premise, the hardware / VM for database etc. will be provided by Ministry. The tool will be deployed through open for public as well as restricted user access. Ministry expects the web application development for user interface which will also include user management, basic MIS and integration with the BI tool. This web application will be hosted on NIC data centre and the VM for the same will be provided on NIC Centre by Ministry. No Database License will be provided by the Ministry. The minimum data size is 8.5 Lakh records generated from survey forms.

B. **BI Tool Software:**

- a. The bidder will have to provide for the license for BI tool as per specification provided in the tender document to support different aspects of the data like
 - i. Automated Dashboard Design
 - ii. Data Management
 - iii. Access Management
 - iv. Analytics and Reporting

The minimum data size is 8.5 Lakh records generated from survey forms. The scope also includes the application of various ETL process (Extract, Transform and Load) techniques, data deduplication techniques and other techniques needed to do data cleansing.

- b. Setting up of Admin-user and End-User accounts.

- c. Customisation of web portal / interface along with user management for BI dashboard access for public in open or with restricted use.
- d. Development of dashboard using BI tool and provides data sources with in-places of data pipelines for automatic updates.

C. Training on BI Tool:

One-time Tool usage training for 2-4 people for Admin-users (at least for one-week Ministry).

D. Technical Support

Technical support on the BI tool is to be provided for a period of Three years from the date of Go-Live. The support includes but not limited to hands on, data refresh, designing of new report, modification of existing report and managing any change requests related to these 8.5 lakh survey records. Full time one senior technical resource to develop analytical reports or Dashboards using deployed BI tool for MYAS. The resource must be working with the company and must have minimum of 9 years of working experience in Information Technology domain, out of which at least 6 years should be in proposed Business Analytics domain. Proposed resource should have experience of sourcing data from multiple and complex data sets and ability to link data between tables, to create efficient SQL queries and design scalable data models. Proposed resource should have strong ability to understand the requirements and develop visualization reports using BI tool during the support and development period.

E. Supply of Web Based Digitisation Platform

The digitisation Platform must include end to end flows for data capture from forms to its various sub modules.

F. Development of Mobile APP for access of MIS Reports & Limited Dashboards

The scope involves generation of various MIS and status of data based on profile and subsequently availability of dashboards with limited features.

2.2 Detailed Scope of Work of BI Tool

Ministry of Youth Affairs & Sports (MYAS) has developed a NEET Survey form which has been filled in physical mode through household surveys. An agency will be hired by this Ministry to do manual data entry of the data provided in the forms.

The proposed BI system should help Ministry to display and analyse the collected data into meaningful insight so that Ministry can identify the issues faced by youth with an ultimate goal making necessary amendments for better governance. The strong analytics and dashboards of the BI system should give easy & faster interpretation of the survey data.

The scope of current tender is not only limited to NEET Survey forms but the proposed Solution should be flexible enough to include and analyse additional dataset (data model), apart from the specified survey-form dataset. The department expects such functionality for the department-owned applications like MyBharat & others. It may be noted that MyBharat is mentioned just for representational purpose and any other applications / platforms can be asked to get integrated with the offered Analytical Solution.

The Analytical Solution is expected to support the following functionalities:

- A. The Solution should be powerful enough to build the additional dataset (data model) from a diverse source of SQL and No-SQL environment.
- B. The Solution should support the functionality to build a single data model from multiple data source.
- C. The Solution should support a diverse set of Multidimensional models offered by various vendors.
- D. The Solution should support One-to-One, One-to-Many and Many-to-Many relationship between the individual data tables of the dataset, even if they are coming from heterogeneous platforms.
- E. The Solution should support building up dynamic queries of complex nature, simply by drag & drop and/or using Natural English Language.
- F. The solution must be flexible enough to operate through virtual memory.

Required Features:

The proposed BI System/ Tool should have the following features:

- i) **Analytics and Reporting**
 - a) A GUI based system where all users are able to view/ save/ download/ various enterprise metrics/ dashboards and their summary without any programming efforts.
 - b) Capable to filter all key metrics based on various parameters.
 - c) Capable to pull the report for a specified performance period in a pivot table & different graphical layouts.
 - d) Capable to compare metrics across various parameters in a chart or graphical formats.
- ii) **Automated Dashboard Design:**
 - a. Capable to produce dashboards with the help of IT team for system integration and publish it for the use by department users.
 - b. Capable to auto update data from defined data sources as per defined rules.
 - c. GUI based dashboard design (drag and drop) and development capabilities along with rich analytical functions.
- iii) **Data Management:**
 - a. Compatible with different data storages like Flat file storage and relational databases.
 - b. Supports on-demand processing with its own data ETL process defined within BI tool.

- c. Supports integration with existing or market leading data preparation/management platforms.
- d. Functionality for admin users to create new dimensions, derived metrics etc.

iv) **Access Management:**

- a) Capability for SSO and/or AD/LDAP authentication, OAuth.
- b) Hierarchy of user access viz. View, Design, Modify, Admin access.
- c) Allows selective edit access while view access should be available to all users.

2.3 **Functional Requirements**

- I. The Reporting tool with
 - a. ability to schedule reports.
 - b. robust visualizations such as graphs, charts, and histograms.
 - c. slicing and dicing features
 - d. output data in various formats like PDF, Images, Excel etc.
- II. Web based management console capable to monitor multiple systems in Test, Development and production across multiple instances and across locations.
- III. Data Visualization like heat maps, spark lines, geographical mapping, spider charts etc., preferably with auto charting and dashboard facilities through the key words.
- IV. A browser based, tab/ smart phone based interface to view reports.
- V. Customizable Fields.
- VI. Graphical Data Presentation with Geospatial support features.
- VII. Built-in ETL and/or strong Integration with leading data preparation platforms.
- VIII. Drag & Drop interface for data transformation & preparation.
- IX. Automated data refresh features.
- X. Text Analytics capabilities.
- XI. Drilldown capabilities (ability to drill down to various levels of a hierarchy)
- XII. Able to format (page size, row, columns, fonts, colors, tables etc.), allow data manipulation (slice & dice multidimensional data on the fly, pivoting, sorting, ranking etc.).
- XIII. Capability of raising exception alarms (e.g. email notification)
- XIV. Compatible with Windows environments.
- XV. User friendly GUI to allow easy generation of reports and exporting capabilities (ability to export resulting data to other applications such as PDF, Images, Excel etc.).
- XVI. Able to publish all the reports on the portal and have the ability to archive reports.
- XVII. The BI application needs to have the BI capabilities like Drill down, Slice and Dice, Multi-Dimensional Analysis, Ad-Hoc analysis.

- XXVIII. Capability to extend or integrate with components of advanced analytics.
- XXIX. Capability to integrate visualization in other web-portals.
- XX. Provide native access to leading Relational Database Management System(**RDBMS**) solutions and file formats.
- XXI. Enables a web based ad-hoc analysis where end user can interact with logical view of information creating charts, pivot tables, reports, gauges, dashboards etc.
- XXII. Facility to save the queries and edit the same in future to derive newer queries.
- XXIII. Cross-platform and Cross-device access.
- XXIV. Mobile Integration/ Support for iOS, Android, Windows.
- XXV. Performance Reporting / Monitoring.

BI Tool Specs

Specifications requirements for the BI System/ Tool are as below:

Tool Installation	
Installation	Support in-premise or on-cloud (MeitY Approved) installation
Data Connections	
Multiple Data source support	Support a variety of data sources including file-based data sources (Excel, CSV, specific character seperator), statistical files (R), JSON Files, direct SQL ad-hoc querying, Multidimensional Expressions (MDX) ad-hoc querying (OLAP cubes), as well as other commonly used data sources. Must support leveraging data from Web Services
Flexible data connection profiles to Data Source	Support both live connection to the data source and extraction into an in-memory, columnar database.
Full and Incremental Data Extraction	Support scheduled full data extraction and incremental data extraction with minimal scripting efforts
In-memory Columnar Data Store option	Have an optional in-memory engine to support caching of data for performance and fast analysis
Memory Optimization	Support dynamic loading of relevant segments of data into memory, not requiring the entire dataset to be loaded "up front"
Multiple Data Source Connections & Cross Database Joins	Must support connecting to multiple data sources at the same time to support both data blending and cross database joins
Combine with Personal Data Sources	Users shall be able to combine data from multiples sources, including their own personal data sources

Metadata Management	Dimensions and measures are automatically generated based on the data type without manual categorization with provision to create additional dimensions and measures in the metadata
User-centric Data Preparation	When connecting to data, end users able to reformat (pivot) flat files into a columnar format better suited for analysis
Geospatial Data	Support geospatial data by automatically generating longitude and latitude of countries, states/provinces and cities without scripting
Exposing OLAP objects	When connecting to an OLAP data source, it should expose OLAP-specific objects such as hierarchies, calculated measures and members, sets.
End-user Functionality	
Single Integrated Tool	Must provide one tool and a single user interface for end-to-end analytics functions - from data connection, metadata definition, data discovery, ad-hoc analysis, visualization, reporting, dashboarding to publishing
Web Authoring	Must be designed for business-user-authored data discovery and dashboards
Intuitive Interface	Shall be easy to use and intuitive
Best Practices Data Visualization	Shall automatically select the best visual graphs based on the fields selected by the user.
Interaction Paradigm	Shall support direct interaction with graphs by dragging and dropping what users want to see
Multidimensional Rendering	Project multidimensional data attributes onto a two-dimensional image using the size, shape and color of the object
Sorting on visual Graphs	Able to sort the data automatically or manually on the visual graphs
Visual Groups	Shall be able to perform dynamic grouping of data visually in graphs
Data Selection	End users are able to exclude irrelevant data or keep only the items of interest from the visual graphs

Threshold	Shall be able to define thresholds and any value over the threshold shall be highlighted (i.e. red bold font, colors, shapes in chart)
Hovering Information	Information shall be displayed when user is "hovering" over a specific area on a map, a chart, a table or a report.
Data Driven Alerts	Sends email alerts on defined thresholds
Tooltip Selection	Select categories in your tooltips to easily identify related marks in the view
Usability - Graphs, Maps	
Brushing	Ability to filter and pass parameters directly from a graph to another by clicking on drawn objects
Conditional Formatting	Able to provide a color-coded summary of the state of a particular metric compared to a goal or threshold target without scripting
Conversion	Instantly converts one visual representation (chart type) into another
Data Layering	Enable demographic data layers to be added into the background of any map
Statistics	
Trend Line	Support automated generation of trend lines to show if there is any correlation between 2 variables
"What if" Analysis	Able to show how the data would change in "what if" scenario. For instance, via a sliding bar, users shall be able to change a parameter and see the repercussions on a chart, map or table
Distribution and Sharing	
Automated Scheduling and Distribution	Provide analytic content to end users on an on-demand and scheduled basis. End user may subscribe to dashboards and receive an email with the dashboard attached in their email box on a scheduled delivery
API	Support for API based integration with external applications
Export to PDF	All dashboard, maps, graphs, tables and reports can be exported to PDF
Export to Excel and CSV	All dashboard, maps, graphs, tables and reports can be exported to Excel & CSV

General Mandatory Points:

- Adherence to Gov policies on Open Standards and Open-Source Software: As per the Government of India policy on Open Standards for e-Governance and Policy on adoption of OpenSource Software (OSS), (available at <http://egovstandards.gov.in/frameworkinstitutional-mechanism-and-policies>), will be given due consideration while evaluation of proposed BI Tools. As per Policy on adoption of OSS, proposed tool with OSS will be considered as preferred option in comparison to Closed Source Software (CSS). In case of Tool with CSS, bidders shall provide justification in their response for exclusion of OSS.
- Any security related observations noted by MYAS team will have to be remediated by the bidder. Bidder has to provide information related to support and remediation process.
- Patches and upgrades: Bidder has to provide all patches and upgrades. Also, details on how these patches and upgrades will be made available and plan of installation of such patches and upgrades will be provided.

2.4 Scope of Work :- Digitisation Platform

Please note that the Data entry is not in the scope of work. The scope of work involves Supply of Digitisation Platform only.

The Digitisation Platform must have following modules and sub modules:

Phase I – Digitisation project- Pre-Commencement

(-User Registration, Project Definition, Batch Generation Module)

1. User Registration and Allocation Module
2. Project Definition Module
3. Batch Generation Module

Phase II – Pre-Digitisation Modules

(-Document Handover, Collection & Document Preparation (DP))

4. Handover Module for Department
5. Receiving Module for Service Provider

Phase III– Digitisation Modules

(- Double blind Data Entry, Quality Check)

6. Multi Page Template Designer
7. **Double Blind Meta Data Entry / Indexing Modules**
 - a. Indexing/ Meta Data Entry Maker Module
 - b. Data verification Module– comparison Double Data Entry
 - c. Data verification – View and Edit Sub module.
 - d. Data Quality Check – Department & Rejection Flow
 - e. Final Quality check Module - Department

Phase IV– Post Digitisation Modules

(-Post Digitisation Document Preparation, Data & Export Module)

8. Handover Module for Service Provider
9. Receiving Module for Department
10. Data Export Module to BI Engine

Modules of the Digitization Platform

The scope and module(s) to be provided by Successful bidders are as stated below. However, this requirement is illustrative and not exhaustive.

User registration and allocation module

- a. Departmental user registration request (self-initiated) supports upload of supporting documents in pdf & image format
- b. Service provider user registration request (self-initiated)
- c. Citizen user registration request (self-initiated)
- d. Citizen user registration request approval flow – auto approval based on aadhar authentication & business rule
- e. Departmental user registration request approval workflow – by authorized user for the requested role
- f. Service provider user registration request approval workflow – by authorized user for the requested role
- g. Two factor authentication like integration with adhar, sms
- h. User log in availability for specific date period.
- i. User log in with restricted working hours

Project definition, communication & sop management module

- a. Project definition along with project activity
- b. Project stakeholder definition along with designation & contact coordinates
 - i. User department's designatory
 - ii. Implementing agency i.e., service provider's designatory
 - iii. Empanelment/ monitoring department's designatory, if applicable
 - iv. Implementing project organizational and/or functional and/or geographical hierarchy definition for example department – sub department – section or district – taluka – village
- c. Project activity master list definition along with associated sop
 - v. Estimated start time
 - vi. Estimated end time
 - vii. Responsible nodal officer (user department, implementing agency, service provider, empanelment/ monitoring agency)
 - viii. Project activity definition for a specific site (multi site project execution capability)-adopted from activity master list and site specific customisation functionality.
- d. Project activity & sop timeline execution tracking (multi site project execution capability)
 - ix. Responsible stakeholder (department, service provider, monitoring /empanelment agency) to mark out the timeline status as 'done'

- x. Activity completion status verification workflow is triggered to remaining stakeholder(s).
- xi. Stakeholder confirmation feature along with date of completion.
- xii. Status marked as 'completed', is communicated to all the stakeholders across multiple channels like mail, sms, notification.
- xiii. Overdue activity (yet to be completed beyond 'estimated start time') is communicated to all the stakeholders over multiple channels.
- xiv. Activity marked as completed beyond 'estimated start time' is communicated to all the three stakeholders over multiple channels.
- xv. Nodal officers – from the responsible stakeholder – is to reply for each overdue and/or delayed completed activity.

Document Batch Generation

- a. Each physical file and/or binder and/or collection of documents and/or single document is required to have a unique code.
- b. The unique code is to be generated logically, representing organizational hierarchy.
- c. The unique code is to serve the purpose of tag (like sku) to manage and track the document inventory.
- d. The defined organizational and/or functional and/or geographical hierarchy definition is to be used to generate required inventory tag for examples:
 - 001-01-01-00001 can represent the file 00001 from department 001, sub department 01, section 01
 - 001-01-01-00002 can represent the file 00002 from department 001, sub department 01, section 01
 - 002-01-01-00001 can represent the file 00001 from department 002, sub department 01, section 01
 - 003-01-01-00002 can represent the file 00002 from department 003, sub department 01, section 01
- e. The inventory tag generation module is expected to generate estimated number of tags.
- f. The inventory tag generation module is expected to generate new set of tags, starting from any user defined / last generated number.
- g. The generated tags are expected to be printed as barcode and/or qr code as sticker label.
- h. Throughout all the modules of digitization platform, this barcode / qr code is to be used as identity of the document in transit.
- i. Files / documents with these system generated barcode / qr code will be considered as valid artifact to be processed in this platform.

Document handover module for user department

- a. The module captures the information about the documents given to the service provider.

- b. The software must have the capability to read / scan the barcode / qr code generated by tag generation module.
- c. The handover information – once captured in the system – triggers the physical file movement workflow.
- d. Feature of acceptance by service provider for the files given by the department must be there.
- e. Tracking feature for the file location & related process stage at which the file is based on the barcode / qr code.

Document receiving module for service provider

- a. The electronic acknowledgement process must be there.
- b. The acknowledgement information can be auto captured by scanning the barcode / qr code on the file or Batch Number./
- c. Tracking feature for the file location & related process stage at which the file is based on the barcode / qr code or Batch Number.

Digitization, Meta Data Entry and Data Quality check Flow:

Ministry envisages that the double-blind data entry having maker and checker features be present in this module.

There must be a module of **Document Template designer** for Multipage forms to enable department to design different templates for their different type of Forms / documents where they can mark the location of field for data entry / auto extraction.

They can also define validation like check against database, Data type, field length and apply script.

Indexing/ Meta Data Entry Maker Module must have the provision of web-based data entry as well as desktop-based data entry.

Indexing/ Meta Data Entry Maker Module – View and Edit

This sub module must provide the feature for the data entry operator to view and edit the data entered by him during the day and enable him to do the corrections before the batch is submitted for Data verification Module.

Data verification Module– comparison Double Data Entry must provide the facility to check the differences between the first and second maker. The discrepancy is shown in this module along with the zoomed and complete image and Data verification operator can correct the data. There must be a provision of **rejection flow** if the data is grossly incorrect the data can be sent back to the maker who is consistently sending incorrect data and the log of such incorrectness will be kept in system. The decision to send the batch to rejection que is for Data Verification operator.

The system keeps a log of original data and edited data characters.

Data verification – View and Edit module must provide for view and editing of all the records of the batch whether appeared in compare module or not. The operator can edit the records which would have been skipped during Data Verification Module-

comparison Double Data Entry. This will ensure 100% accuracy and Data verification operator will touch every record in the selected batch.

If the data is not visible due to the condition of paper the Data Verification operator must get a communication space in module where it can inform the user department along with data submission. The same communication should be available on the maker Module screen.

There must be a provision of justification of incorrectly typed data if maker or Data verification operator intends to give on questions from department.

Final Quality check – User Department: There must be a user department quality check module where the department can see the quality of data along with approved images and accept or reject individual records. There must be a provision of **rejection flow** and the data rejected must be returned to Data verifier and data verifier either does the reentry in to the system or gives a justification to department for the same.

This should have the provision to do 100 % Data QC or random data quality check.

All the modules of data entry must record the character wise count for English and Unicode compliant languages.

The desktop module along with the web module must be available.

The details of the modules are given below:

Module: multi page template designer for Double Blind data entry

- a. This module empowers the user to define any number of document types required for metadata entry.
- b. For each of the defined document type, module allows the definition of any number of metadata fields to be captured.
- c. For each of the metadata fields, module allows the definition of field type, field length, field validation rule and field input format.
- d. For input format like dropdown, the module allows the definition of predefined set of values to fill up the dropdown.
- e. Each of the defined metadata fields can be organized across multiple tabs for final form rendering.
- f. The module allows the definition of 'region of interest' (roi) on the related image / document, for each of the metadata field
- g. The module allows the roi definition linked with page number if the document is multi page.
- h. The page number definition can be absolute number or relative page position.
 - xvi. Absolute page number like 1, 2, 3
 - xvii. Relative page number like last page, second last page
- i. This complete definition of roi is expected to be used for image assisted data entry.

Module: image assisted double blind meta data entry / indexing modules

- a. The document type definition – along with roi definition – is instrumental in this module.

- b. The document type definition is expected to be used to dynamically rendering the data entry form.
- c. A specific batch is allocated to two data entry operators – for supporting double blind data entry process.
- d. The data entry operator gets to work on only those batches which are allocated.
- e. The data entry form is rendered – across different tabs if defined – along with validation rules and dropdown values.
- f. The image is rendered along with the data entry in specified position.
- g. As the operator moves from one field to another, the defined roi is to be highlighted on the image for the defined page number.
- h. All the validation business rules as defined for the fields is to be applied before the entered metadata is saved into a persistent storage.
- i. Operator activity log along with timestamp is to be maintained.
- j. View and edit option before finalizing the batch.
- k. **Checker Function:**
 - The checker function is expected to be used by Metadata Quality Controller (Checker)
 - When a batch is marked as completed by both the data entry operator (Maker), the batch falls under checker's bucket.
 - The module allows the checker to review the records of completed batches with multiple perspective like
 - Metadata records entered by both the data entry operators match for all the fields for the record.
 - Metadata records entered by both the data entry operators do not match for at least one of the fields for the record.
 - All metadata records, either matching or not.
 - The module feature empowers the checker to look at the metadata entered by both the operators on one screen, highlighting where the difference is.
 - The module feature allows the checker to navigate through or jump to field(s) and decide the correction if any while looking at the associated image.
 - For higher process efficiency, some shortcut key is must have feature here which allows the checker to consider either maker 1 entry as correct or maker 2 entry as correct.
 - The module is to allow the final records to be saved with corrections where applicable.
 - Checker is expected to mark a specific batch as completed.
 - The marked batch is considered as ready for the department quality check for metadata entry.

2. **Module : metadata quality check for department**

- a. The metadata entered at double blind meta data entry modules are organized under batch & file code based on inventory tag.
- b. The module empowers the department for doing metadata quality check.
- c. User department can select to check n% of the batches claimed to be completed with metadata entry by service provider.
- d. User department can randomly check n% of metadata entered from the selected batch.
- e. User department can search a batch and check n% of images from the that batch.

3. **Module : metadata rejection workflow for department**

- a. Department can reject one or more metadata records from the selected batch.
- b. The rejection by department triggers the rejection flow for the entire batch.
- c. The service provider gets the intimation of the batch rejection and expected to re-work on it.
- d. The service provider nodal officer gets the rejected batch under the relevant bucket.
- e. The checker has multiple options for the rejected batch.
 - i. Justify the metadata entry issue observed by the department and request them to pass through software.
 - ii. Correct the metadata record and forward back the batch to department for data quality check

4. *Document handover module for service provider*

- a. The module captures the information about the documents sent to the department.
- b. The document information can be auto captured by scanning the barcode / QR code on the batch and / or files.
- c. The handover information once captured in the system triggers the physical file movement workflow.
- d. The department is expected to confirm the receipt of the files given by the service provider.
- e. The department & service provider reconciles the overall movement of physical files – based on the barcode / qr code.

Receiving module for department

- a. The physical files acknowledged is done by the department in this module.
- b. The acknowledgement information can be auto captured by scanning the barcode / QR code on the Batch / Form or Batch Number.
- c. The department & service provider reconciles the overall movement of physical files – based on the Barcode / QR code or Batch Number.

Module: data and image export

Functionality of export of meta data entered to

- a. Export to BI Platform
- b. Export to file system
- c. Export to database
- d. Export via api to other application(s)

Module: cross functional report – supporting user definable report creation

- a. The module is expected to provide cross functional reporting covering all the business processes.
- b. The department will provide a set of reports to be developed initially which can be extended over time to time.
- c. The reports designed and implemented in the web application should be customizable.
- d. The customization is expected to be done by the departmental users within the application.
- e. The customization of reports should not have any dependency on the developer.
- f. The reporting dashboard showing available reports is expected to be contextual, based on the logged in user.

General Mandatory Features of Digitisation Platform :

1. Data Security - Secure and Encrypted Data Points - 'Data at Rest' as well as 'Data in Motion'.
2. The architecture of software must have Enterprise Level Scalability, multitier, Service Oriented Architecture having Micro-Service approach.
3. Software must support two factor authentication.
4. The Platform should give real time reporting and analytics.
5. The system must not have any limitation or restriction on the number of concurrent users. The server sizing is to be done accordingly.
6. Multi-OS Hosting Support (Web Application)
7. Web Modules- Responsive Web App across all Form Factors - all modules.
8. Platform / Tools / Language – Recommendation
 - a. Code Generator for Quick CRUD UI – No Code / Low Code Tool
 - b. Backend Database – RDBMS supporting Memory Optimized Columnar Table
 - c. Self Service BI & Collaborative Dashboard – Cloud and/or On Premise
 - d. Suggested App Development Platform: Microsoft .NET MAUI Blazor Hybrid

9. The Backend Database Platform must have following capability–
 1. In-Memory Online Transaction Processing (OLTP) for Realtime Analytics
 2. Inbuilt Capability to transparently distribute records from a single table-across Enterprise Storage & Cloud Storage
 3. Inbuilt Capability for accessing Warm & Cold data transparently - using a single query
 4. Structure Query Language Based Query Support for Relational as well as NoSQL data stores
 5. In-Database Machine Learning Services

Note :- The Agency is required to give justification and basis for each of its submissions / suggestions and recommendations.

3. Invitation:

Expression of Interest (EOI) is invited in a sealed envelope superscripted with “Expression of Interest (EOI) for next Gen SOC”

- a. From the applicants/ bidders who meet the eligibility criteria as set out in Para 4 below.
- b. Who have solution strictly in line with the Broad Scope of Work as set out in this EOI.
- c. Agree to abide by the terms and conditions contained in this document.

Please note that the EOI is not a qualification criterion. MYAS may float an open/ closed RFP at its own discretion. By participating in this EOI process, Applicant/ Bidder confirms that they are in complete agreement with MYAS as per all the terms and conditions of this EOI.

4. ELIGIBILITY CRITERIA: The eligibility criterion will be as follows:

1. **Years of Past Experience required:** The bidder must have experience of providing similar type of services to any Central / State Govt Organization / PSU/ Autonomous bodies of Central and State govt. Copies of relevant contracts / orders/ work completion certificate along with acceptance certificates to be uploaded along with bid in support of having provided services during each of the Financial year.
2. **Purchase preference to Micro and Small Enterprises (MSEs):** Purchase preference will be given to MSEs as defined in Public Procurement Policy for Micro and Small Enterprises (MSEs) Order, 2012 dated 23.03.2012 issued by Ministry of Micro, Small and Medium Enterprises and its subsequent Orders/Notifications issued by the concerned Ministry. If the bidder wants to avail

the Purchase preference, the bidder must be the manufacturer of the offered product in case of bid for supply of goods. Traders are excluded from the purview of Public Procurement Policy for Micro and Small Enterprises. In respect of bid for Services, the bidder must be the Service provider of the offered Service. Relevant documentary evidence in this regard shall be uploaded along with the bid in respect of the offered product or service. If L-1 is not an MSE and MSE Seller (s) has/have quoted price within L-1+ 15% of margin of purchase preference /price band defined in relevant policy, such Seller shall be given opportunity to match L-1 price and contract will be awarded for percentage of 100% of total value.

3. **Past Experience of Similar Services:** The Bidder must have successfully executed / completed during last 7 years ending last day of month previous to the one in which applications are invited at least one single order of 3 (three) Crores or 2 orders each of INR 1.5 Crore (one crore fifty lakhs) or 3 orders each of INR 1.2 Crore (One crore twenty lakhs) for similar service(s) in last three years to any Central / State Govt Organization / PSU/ Autonomous bodies of Central and State Govt. copies of contracts / work orders and documentary evidence of successful execution / completion in support of Past Experience of Similar Services along with names, address and contact details of clients shall be uploaded with the bid for verification by the Buyer.
4. The Pre-Qualification Criteria and the list of documentary evidences to be submitted are as per below table:

#	Qualification Criteria	Documentary Evidence
A.	Registration & Certificates Documents	
1.	The bidder should be a company registered under Indian Companies Act, 1956 or a Partnership Firm registered under Indian Partnership Act, 1932.	The certified copy of Partnership Deed/ Certificate of Incorporation/ Registration Certificate.
2.	Bidder (not individual) should have valid documentary proof of GST, PAN registration number and valid Income Tax returns for the last five financial years (2022-23, 2021-22, 2020-21, 2019-20 and 2018-19)	Copy of PAN, GST registration Certificate and ITRs
3.	Bidder should have the following certification: <ul style="list-style-type: none"> • CMMi level 3 or above certification • ISO 9001 : 2015 • ISO 20000-1 : 2018 • ISO 27001 : 2013 	Copy of the valid certificate
4.	Any other certificate (Optional)	Copy of the valid certificate in

	<ul style="list-style-type: none"> - MSME Registration certificate - Startup Registration Certificate 	case the EMD exemption(s) are claimed.
B.	Turnover & Net Worth	
5.	Bidder should have minimum average turnover of Rs. 3 Crores from IT or IT enabled services over the last five financial years (2022-23, 2021-22, 2020-21, 2019-20 and 2018-19).	Copy of the audited Profit and Loss Statement of the company and Certificate from the Chartered Accountant clearly stating the turnover from IT or IT enabled Services.
6.	Bidder's Financial Standing: Bidders should have positive net worth for each of the last 5 financial years (FY 2022-23, 2021-22, 2020-21, 2019-20 and 2018-19). The bidder should not be under liquidation, court receivership or similar proceedings, should not be bankrupt. Bidder to upload undertaking to this effect with bid.	Certificate from the Chartered Accountant clearly stating the net worth. Undertaking for not being under liquidation, court receivership or similar proceedings.
C.	Work Experience	
7.	The bidder should have Experience of having successfully completed similar works during last 7 years ending last day of month previous to the one in which applications are invited should be either of the following: (1) Completed one project with minimum order value of INR 3 Crores OR (2) Completed two projects each with minimum order value of INR 1.5 Crores OR (3) Completed three projects each with minimum order value of INR 1.2 Crores The similar works includework related to software development including Implementation of web portal / software developments, Reports /Dashboard design and development.	Copy of Work Order, Work completion certificate/ extension certificate and Client certificate / UAT Certificate.
8.	The Bidder should have implemented the proposed BI tool in any one of the projects for Central , State Government departments, PSUs in India for total project value over Rs. one crore.	Copy of Work Order and User Acceptance certificate-
9.	The OEM must be one among the "Leaders" in Magic Quadrant for Analytics	Independent analyst (Gartner, IDC, etc.) report about the firm/

	and Business	company (if any) related to products/ services in the domain.
D.	Team Capacity, Skill set and Infrastructure	
10.	<p>Bidder should be an expert team which has already worked on any one of the projects submitted by the bidder as a part of technical bid.</p> <p>The full time resources must have a minimum of 9 years of working experience in Information Technology domain, out of which at least 6 years should be in proposed Business Analytics domain.</p> <p>Bidder must have a minimum technical team size of five people dedicated for this project. The strength of the company should be minimum fifty people.</p>	<p>Declaration signed by the Director / Partner and Personal Appearance of full-time resource having minimum six years of experience in this proposed business analytics domain is mandatory during technical demonstration / POC.</p>
11.	<p>Bidder should not have been blacklisted by Central Government or any State Government Organization / Department/ Autonomous bodies of Central and State govt. in India at the time of submission of the bid.</p>	<p>Declaration letter by Bidder as per format given in the bid document</p>
E.	Presentation	<p>The Technical Capability of the bidder will be ascertained by the Live demonstration of the following features at the time of technical presentation & demonstration. The sample / real data of any of the Govt. project, where the bidder has worked in past, submitted as the part of this technical bid must be shown for following features:</p> <ol style="list-style-type: none"> 1. Best Practices Data Visualization 2. Data Selection (End users are able to exclude irrelevant data or keep only the items of interest from the visual graphs) 3. Multidimensional Rendering 4. Brushing (Ability to filter and pass parameters directly from a graph to another by clicking on drawn objects)

		<p>5. Conditional Formatting</p> <p>6. Conversion (Instantly converts one visual representation (chart type) into another)</p> <p>7. "What if" Analysis (Able to show how the data would change in "what if" scenario. For instance, via a sliding bar, users shall be able to change a parameter and see the repercussions on a chart, map or table).</p> <p>8. Export to PDF, Excel and CSV</p> <p>9. Capability to use AI based visualization in dashboard. For the web Application, the bidders must technically present & demonstration:</p> <p>10. User Registration and Approval including different Roles.</p> <p>The Live demo of Double-Blind data entry</p>
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No consortium/sub-contracting shall be allowed for bidding.

In order to demonstrate the technical competency of the bidder, the bidders are expected to demonstrate the working POC (Proof of Concept) hosted on its cloud / NIC cloud at **No Cost No Commitment** basis. The POC can be developed for the Ministry especially or could have been developed in any of the earlier Government project.

5. SUBMISSION OF PROPOSALS

5.1 The proposal from the interested Bidders would consist of the documents stated in para 6 below and will be submitted under sealed cover containing complete set of **signed hard copy (on all pages) of EOI document.**

The following should be clearly mentioned on the sealed cover : -

- (i) Response to the EOI No. **J-17011/832/2023-Admn.** dated 19.01.2024
- (ii) Name of the Company with address and Stamp.

5.2 The proposals from the interested eligible Bidders shall be accepted at the following address up to 1000 Hrs (Indian Standard Time) on 05.02.2024

The proposal shall be addressed to:

The Under Secretary (Admn. /General)
Department of Youth Affairs,
Ministry of Youth Affairs and Sports,
Government of India,
Room No. 43 Garage,
Shastri Bhawan, Dr. Rajender Prasad Road, New Delhi-110001,
Tele No. 011-2338-0625
Email- rajivk.singh@nic.in

- 5.3 The proposal may be sent by post or delivered in person on the above mentioned address. The responsibility for ensuring that the Proposals are delivered in time would vest with the Bidder. MYAS shall not be responsible if the Proposals are delivered late or elsewhere.
- 5.4 Proposals received either by post or courier service or in person after the specified date and time will not be opened or considered. MYAS, at its discretion, may extend the deadline for the submission of the proposals.
- 5.5 An annexure may⁷ be provided clearly specifying the page number with proper indexing, in support of each supporting document, for smooth evaluation.

6. DOCUMENTS TO BE SUBMITTED IN THE OFFER: The Bidder is required to furnish the following documents :

The following documents submitted by the firms shall be properly indexed:-

- (i) Certificate of Partnership Deed/ Incorporation/ Registration in support of para 3 above. .
- (ii) Copy of Articles and Memorandum of Association or aims and objectives of the Society.
- (iii) Audited annual reports, Profit and Loss Statement and Turn over statement in support of eligibility criteria mentioned in para 4 above along with a certificate from the statutory auditors of the company certifying the turnover in INR as stated in para 4 above with copies of Work Order, Work completion certificate/ extension certificate and Client certificate / UAT Certificate.
- (iv) Certificate from Principal Client(s) establishing satisfactory experience as defined in eligibility criteria mentioned in para 4 above. List name, address & contact details of the said client(s) also to be given.
- (v) Copy of Certificates for Service Tax & EPF Registration and copy of PAN and TAN.

- (vi) Details of the Bidder along with List of Directors on the Board of the Company / Society with their address(es), contact telephone numbers, Email ID , Mobile No., DIN, etc. in the format enclosed. (**Annexure-I**).
- (vii) Certificate about relatives as per format enclosed as **Annexure II** to be given by each of the Full time Directors of Bidding company / Society as per details given in para 8.
- (viii) Board's resolution(s) in favour of authorized signatory of the bidder, if any.
- (ix) Attestation of the signature of the authorized signatory of the, by the respective Company Secretary(ies) / Secretary of the society (in case bidder is a Society).
- (x) Copy of valid certificate as mentioned Para 4.4 A.4.
- (xi) Undertaking for not being under liquidation, court receivership or similar proceedings and non-blacklisting declaration.
- (xii) Independent analyst (Gartner, IDC, etc.) report about the firm/ company (if any) related to products/ services in the domain.
- (xiii) Brief bio data of the key personnel to be associated with the project. Declaration relating to them having minimum six years of experience in this proposed business analytics domain.
- (xiv) Copy of EOI & clarifications issued by MYAS to this EOI, if any, duly signed and stamped on each page by the authorized signatory of the bidder as a mark of acceptance of all conditions of the EOI.
- (xv) The project plan with high level description of project phases and estimated duration.

Note :-

- (a) All papers which are a photocopy and submitted as part of the proposal shall be duly attested by the Company's CS/ CA or by the Secretary of the Society (in case the bidding company is a Society)**
- (b) Each of the pages of the proposal submitted will be signed and stamped by the Authorized Signatory of the Bidder Firm.**
- (c) Each page of the proposals should be duly numbered and total number of pages in the proposal should be clearly mentioned in the proposal. Index of the documents submitted in this EOI should be given and location of the documents submitted should be clearly mentioned in the Index so that evaluation committee is able to easily locate them.**

(d) In case any value of money is indicated in a currency other than INR, the same will be converted into INR by MYAS as per the exchange rate as on the date of opening of the EOI.

7. CLARIFICATIONS ON EOI DOCUMENT: -

7.1 The prospective bidder requiring any clarification on the this document shall notify MYAS in writing at the MYAS mailing address indicated in Para 4.2 above, latest by 10:00A.M. on 24.01.2024. Clarifications sought , if any, are to be asked in the following format :-

S. No.	Clause No. of the EOI	Query / Clarification sought	Name of the firm asking the query

7.2 Meeting for clarification on EOI document will be held at 11:00 A.M. Hours on 24.01.2024 at the address stated in para 5.2 above. Clarifications issued by MYAS, if any, will be displayed on Department of Youth Affairs section of MYAS website latest by 30.01.2024.

7.3 Any clarifications issued by MYAS shall form an integral part of this document and shall amount to an amendment of relevant clauses of this document.

8. CERTIFICATE ABOUT RELATIVES IN MYAS :

8.1 Each of the Full time Directors of the Bidder Firm, shall give a certificate that none of his/her near relative is working in the MYAS where the bidder is going to apply for the Proposal, in the Format enclosed as **Annexure II**.

8.2 A person shall be deemed to be a relative of another if, and only, if,

- (a) They are members of a Hindu Undivided Family; or
- (b) They are husband and wife; or
- (c) The one is related to the other in the manner indicated below :-
 - (1) Father
 - (2) Mother (including step-mother)
 - (3) Son (including step-son)
 - (4) Son's wife
 - (5) Daughter (including step-daughter)
 - (6) Father's father
 - (7) Father's mother
 - (8) Mother's mother
 - (9) Mother's father
 - (10) Son's son
 - (11) Son's son's wife
 - (12) Son's daughter
 - (13) Son's daughter's husband
 - (14) Daughter's husband
 - (15) Daughter's son
 - (16) Daughter's son's wife

- (17) Daughter's daughter
- (18) Daughter's daughter's husband
- (19) Brother (including step-brother)
- (20) Brother's wife
- (21) Sister (including step-sister)
- (22) Sister's husband

9. OPENING OF PROPOSALS:

9.1 MYAS shall open the PRPOSALS at 03:00 P.M. on 05.02.2024 at Shastri Bhawan, New Delhi in the presence of authorized representatives from participating Bidders, who choose to attend. The date fixed for opening of Proposals, if subsequently declared as holiday by the Government, the proposals will be opened on the next working day, time and venue remaining unaltered.

9.2 The authorized representatives are required to bring authorization letter to attend the opening of proposals.

10. EVALUATION:

10.1 The proposals will be screened based on the eligibility criteria and submission of all the requisite documents as asked for in this EOI.

10.2 Bidders meeting the requirement in para 4 above will be short listed for participation in the Request for Proposal (RFP).

10.3 The evaluation of the proposals received for the RFP (i.e. evaluation at RFP stage) will be done using "Quality Cum Cost Based System (QCBS).

11. General :

11.1 MYAS reserves right to accept or reject any or all proposal (s) or to annul the EOI / RFP process and reject all proposals, at any time prior to award of contract without assigning any reason whatsoever and without thereby incurring any liability to the affected bidder (s) on the ground of MYAS's action.

11.2 Any effort by a Bidder to influence the proposal comparison/evaluation/ work award decision by way of overt/covert canvassing shall result in non consideration / rejection of its proposal.

11.3 MYAS reserves the right to change the schedule of dates / time stated in this EOI. Changes, if any, will be displayed on the website of MYAS. As such the bidders are requested to regularly check the MYAS website.

11.4 In case of any dispute, Jurisdiction of courts in New Delhi will apply.

11.5 The responsibility of giving truthful information without concealing any facts, is that of the Bidder(s). In case at any stage, it is found that any information given by the Bidder (s) is false/ incorrect / concealed, then MYAS shall have the absolute right to take any action as deemed fit including but not limited to all or any of the following

without incurring any liability to the affected bidder (s) on the ground of MYAS's action.:-

Details about the Bidder Firm

S.No.	Particulars	
1.	Full name of the Bidder firm (In capital letters)	
2.	Full address of the Bidder firm	
3.	(A) Telephone No. (B) email id	
4.	Names and details of Directors of the bidding firm (Address, contact telephone Number, Mobile number., Email IDs, DIN No. of each of the Directors)	
5.	PAN; TAN; GST No.	

6. It is hereby certified that M/S(The bidding Firm herein) has never been black-listed by Central/ State governments/ PSUs.

7. It is hereby submitted that all the terms and conditions of this EOI are acceptable to the Bidder firm.

I hereby certify that the above-mentioned particulars are true and correct.

Signature of Authorized Signatory .
Name of Authorized Signatory
Company / Society Stamp

Details of Authorized Signatory

- (i) Designation:
- (ii) Phone No.
- (iii) Mobile No.
- (iv) Fax No.
- (v) Email :
- (vi) Postal address:

**PROFORMA FOR DECLARATION BY EACH OF THE FULL TIME DIRECTORS OF
THE BIDDING COMPANY / SOCIETY/ AGENCY**

I S/o.....
R/o.....hereby certify that none of my
relative(s) as defined in the EOI document is/ are employed in MYAS as per details
given in EOI document. In case at any stage, it is found that the information given by
me is false/ incorrect, MYAS shall have the absolute right to take any action as
deemed fit without prior intimation to me.

Name, Signature & Seal of the Director

Name of the Company / Society
