File No.M-11011/1/2017-DSDD

No. M-11011/1/2017-DSDD
Government of India
Ministry of Statistics & Programme Implementation
Data Storage & Dissemination Division

East Block-10, R K Puram,
New Delhi- 110066
Dated: 11/07/2019

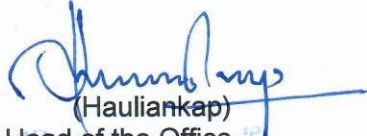### NOTICE INVITING TENDER (NIT)

On behalf of the President of India, Data Storage & Dissemination Division (DSDD), Ministry of Statistics & Programme Implementation, invites e-Tender for the appointment of System Integrator for MOSPI Integrated Information Platform (MIIP) at DSDD (MoSPI) from reputed professional IT System Integrators as per the scope of work mentioned in the tender document.

The mode of tendering is online vai URL https://eprocure.gov.in/eprocure/ app in a two bid system of a technical bid and a financial bid. The tender document is available on https://eprocure.gov.in/eprocure/app and www.mospi.gov.in from 11/07/2019   In case of discrepancies found between the English text version and the Hindi translation, the English version shall prevail.

The tender has to be submitted online on URL https://eprocure.gov.in/eprocure/app latest by **19/08/2019 by 15:00 hrs. Manual bids shall not be accepted.** Tenderers are advised to follow the instructions provided in the tender documents for the e-submission of the online bids. The important information of the bids is as under:

EMD (Bid Security)	Rs. 5,00,00,000/- (Rupees Five Crore)
Date & Time of Publishing Of Tender	11/07/2019; 10:00 HRS
Date & Time of Pre-Bid Meeting	22/07/2019; 11:00 Hrs
Last Date & Time For Submission Of Bid	19/08 /2019; 15:00 Hrs
Date & Time For Opening Of Technical Bid	20/08/2019; 16:00Hrs
Technical Presentation of Bidders	23/08/2019; 11:00 Hrs
Date & time for opening of financial bid in respect of technically qualified bidders only	To be intimated later
Validity of bid	180 Days from the last date of closing

(Hauliankap)
Under Secretary & Head of the Office
T.No.26105074

Request for Proposal (RFP)

'Appointment of

System Integrator for MOSPI Integrated Information Platform'

VOLUME - 1

Contents

1 Introduction

Ministry of Statistics and Programme Implementation (MOSPI) is an Indian government ministry for planning integrated development of the statistical system in the country. MOSPI has been continuously in coordination of statistical work with a view to identifying gaps in data availability or duplication of statistical work in respect of Departments of the Government of India and the States Statistical Wings and to suggest necessary remedial measures.

1.1 Introduction to MOSPI

The Ministry of Statistics and Programme Implementation attaches considerable importance to coverage and quality aspects of statistics released in the country. The statistics released are based on administrative sources, surveys and censuses conducted by the centre and State Governments and non-official sources and studies. The surveys conducted by the Ministry are based on scientific sampling methods. Field data are collected through dedicated field staff. In line with the emphasis on the quality of statistics released by the Ministry, the methodological issues concerning the compilation of national accounts are overseen Committees like Advisory Committee on National Accounts, Standing Committee on Industrial Statistics, Technical Advisory Committee on Price Indices. The Ministry compiles data sets based on current data, after applying standard statistical techniques and extensive scrutiny and supervision.

The Ministry has two wings, one relating to Statistics and the other Programme Implementation.

The Statistics Wing

The Statistics Wing called the National Statistical Office (NSO) consists of the Central Statistical Office (CSO), the Computer centre and the National Sample Survey Office (NSSO).

The Programme Implementation Wing

The Programme Implementation Wing has three Divisions, namely,

(i) Twenty Point Programme
(ii) Infrastructure Monitoring and Project Monitoring and
(iii) Member of Parliament Local Area Development Scheme.

Besides these two wings, there is National Statistical Commission created through a Resolution of Government of India (MOSPI) and one autonomous Institute, viz., Indian Statistical Institute declared as an institute of National importance by an Act of Parliament.

1.2 MOSPI Integrated Information Platform (MIIP)

The aim of MIIP Project is to create a conceptual framework on Data Management, optimum use of Information Technology in integrating and harmonizing the available data sets in various key sectors through single window system. The challenges are likely to be faced in generating, compiling, analysing, maintaining and dissemination quality data both micro and macro (aggregate) level for the user community.

With is background, MIIP Project has been conceptualized with a need to take an overall view, highlighting the importance of linkage between various data sources, integrating the data sources using Information Technology (IT) tools and offering a generally consistent approach to bring out timely, reliable, credible and user-friendly data sets through a single window system and should be able to transform and disseminate all its data sets to a portable data format in a standard, unified and harmonized manner.

MOSPI Integrated Information Platform (MIIP) Implementation: In India, the MOSPI, Various Ministries and Departments of the Union Government and State governments are engaged in the collection, compilation and dissemination of official Statistics. The system generates data on a wide range of subjects. However, neither they are in readily usable form nor up-to-date in public domain.

As MIIP has emerged as a barometer for up-to-date, reliable and credible data being made available through single window access. To make MIIP more meaningful for the ecosystem partners, special emphasis is being laid on below key features:

- ➢ Application Software development, act as single unified platform
- ➢ Content Management System for sharing the content from single unified platform
- ➢ Capturing and Integrating data from various sources
- ➢ System should be capable of integrating data from other database.
- ➢ Electronic Data Processing including Data preparation and Management
- ➢ Data Documentation, Achieving & Dissemination and uploading on web portal
- ➢ Data Sharing mechanism for further analytics purpose
- ➢ GIGW Compliance Secure Portal and web enable application to outreach all possible users
- ➢ Development of various analytical dashboards, GIS based web enabled using any relevant analytical tool
- ➢ Development of National Fact Sheet on various key indicators
- ➢ Workshop cum training for relevant personnel on documentation Data Management, Data Analytics and Data Reporting & Visualization.
- ➢ Provision for separate Database for Dissemination and Data Warehousing
- ➢ Integrated Learning System & Capacity Building Activity
- ➢ Human Resource Management System (including performance monitoring)

1.3   RFP Format
The intent of this RFP is to invite proposal form the bidders for implementation of an integrated solution for the MOSPI (MIIP).The Request for Proposal (RFP) consists of the three volumes –

- **RFP Volume 1 : Bid Process Specification**
  Volume 1 contains the instruction with respect to the bid process management, technical evaluation framework, and the technical and financial forms.

- **RFP Volume 2 : Functional, Technical & Delivery Scope of Work**
  Volume 2 of the RFP provides information regarding the Project functional & technical requirement, Project Delivery Plan, corresponding work and documentations.

- **RFP Volume 3 : Legal Specification**
  Volume 3 details the contractual, legal terms and conditions applicable for the proposed engagement.

1.4 Bid Important Information (Fact Sheet)

RFP No.	M-11011/1/2017-DSDD
RFP Date of Publishing	11 July 2019
RFP Document Availability	Download from www.mospi.gov.in Can be downloaded from https://www.eprocure.gov.in free of cost.
Name & Address for Communication	Director & Joint Director DSDD Computer Centre, East Block-10, RK Puram, New Delhi-110066
Proposal Language	Proposal should be submitted in English only
RFP Document Fee (Non- Refundable and Not Exempted)	NIL
Bid Security/ Earnest Money Deposit (EMD)	Bid Security/ Earnest Money Deposit (EMD) INR 5,00,00,000 (INR 5 Crore only) by DD or by Bank Guarantee (as per format attached in Section 5.8.2) in favour of Pay and Account officer, MOSPI, payable at New Delhi. The same should reach 'The Head of Office', DSDD, MoSPI, East Block-10, R.K.Puram, New Delhi -110066 on or before the last date for submission of bids failing which the offer will be rejected. Bidders, however, have to upload the scanned copies of EMD while submitting the bids online. Any bid submitted without EMD will stand rejected. EMD will not be accepted in the form of cash / cheque. No interest is payable on EMD. **The EMD exemption shall be provided in line with rule 157 of GFR 2005.**
Performance Security	10 % of the Cost discovered through tender process
Currency	INR Only
Method of Selection	The method of selection is Combined Quality Cum Cost Based System (CQCCBS). The weights given as below: • Technical = 70% • Commercial = 30%
Last date for submission of Pre-Bid Queries (to be submitted through email)	hansraj.iss@gov.in chopra.anil@nic.in
Pre-bid Conference Date, Time & Location	22nd July 2019, 11:00 Hrs (IST) Conference hall DSDD Computer Centre East Block 10 RK Puram New Delhi.
Posting of responses to queries by MOSPI (On the Website **www.mospi.gov.in**)	25th July 2019

Bid Submissions	E-procurement submission at https://eprocure.gov.in/eprocure/app
Technical Bid	E-form for Technical bid through the portal https://eprocure.gov.in/eprocure/app
Financial Bid	E-form for Financial bid through the portal https://eprocure.gov.in/eprocure/app
Last date and time for Bid Submission (on and before)	19th August 2019 15:00 Hrs(IST)
Bid Opening of Pre-Qualification Bids Date, Time	20th August 2019, 16:00 Hrs(IST)
Technical Presentation of Bidders	11:00 Hrs (IST) on 23rd August , 2019 or any other date as intimated by MOSPI
Opening of Price/Financial Bid	To be intimated later.
Bid Validity	Proposal must remain valid up to 180 (One Hundred & Eighty) days from the actual date of submission of the Bid.

1.5   List of Abbreviation & Definitions

Sr. No.	Word	Definitions
1	MOSPI	Ministry of Statistics and Programme Implementation
2	MIIP	MOSPI Integrated Information Platform
3	NSO	National Statistics Office
4	CSO	Central Statistics Office
5	NSSO	National Sample Survey Office
6	GIS	Geographic Information System

2   Instruction to Bidders

2.1   General

- While every effort has been made to provide comprehensive and accurate background information and requirements and specifications, Bidders must form their own conclusions about the solution needed to meet the requirements. Bidders and recipients of this RFP may wish to consult their own legal advisers in relation to this RFP.

- All information supplied by Bidders may be treated as contractually binding on the Bidders, on successful award of the assignment by the Purchaser on the basis of this RFP.

- No commitment of any kind, contractual or otherwise shall exist unless and until a formal written contract has been executed by or on behalf of the Purchaser. Any notification of preferred Bidder status by the Purchaser shall not give rise to any enforceable rights by the Bidder. The Purchaser may cancel this public procurement at any time prior to a formal written contract being executed by or on behalf of the Purchaser.

- This RFP supersedes and replaces any previous public documentation & communications, and Bidders should place no reliance on such communications.

2.1.1   Code of integrity

2.1.1.1 No official of a procuring entity or a bidder shall act in contravention of the codes which includes

a. Prohibition of
   i. making offer, solicitation or acceptance of bribe, reward or gift or any material benefit, either directly or indirectly, in exchange for an unfair advantage in the procurement process or to otherwise influence the procurement process
   ii. Any omission, or misrepresentation that may mislead or attempt to mislead so that financial or other benefit may be obtained or an obligation avoided.
   iii. any collusion, bid rigging or anticompetitive behaviour that may impair the transparency, fairness and the progress of the procurement process
   iv. improper use of information provided by the procuring entity to the bidder with an intent to gain unfair advantage in the procurement process or for personal gain
   v. any financial or business transactions between the bidder and any official of the procuring entity related to tender or execution process of contract; which can affect the decision of the procuring entity directly or indirectly
   vi. any coercion or any threat to impair or harm, directly or indirectly, any party or its property to influence the procurement process
   vii. obstruction of any investigation or auditing of a procurement process
   viii. making false declaration or providing false information for participation in a tender process or to secure a contract

b. Disclosure of conflict of interest.
c. Disclosure by the bidder of any previous transgressions made in respect of the provisions of sub-clause (a) with any entity in any country during the last three years or of being debarred by any other procuring entity.

2.1.1.2. In case of any reported violations, the procuring entity, after giving a reasonable opportunity of being heard, comes to the conclusion that a bidder or prospective bidder, as the case may be, has contravened the code of integrity, may take appropriate measures.

2.2 Sole Bidder Criteria

The sole bidder must be an organization which has the capabilities to deliver the entire scope as mentioned in the RFP. Bidders are not allowed sub-contract any part of the scope of work.

2.3 Proposal Compliance Criteria

2.3.1 Bidders are advised to study all instructions, forms, terms, requirements and other information in the RFP documents carefully. Submission of the bid shall be deemed to have been done after careful study and examination of the RFP document with full understanding of its implications.

2.3.2 Failure to comply with the requirements of this paragraph may render the Proposal non- compliant and the Proposal may be rejected. Bidders must:
   i. Include all documentation specified in this RFP;

      ii.   Follow the format of this RFP and respond to each element in the order as set out in this RFP

      iii.   Comply with all requirements as set out within this RFP.

2.4 Bid Preparation Cost

The bidder shall be responsible for all costs incurred in connection with participation in the RFP process, including, but not limited to, costs incurred in conduct of informative and other diligent activities, participation in meeting/discussion/presentation, preparation of proposal, in providing any additional information required by MOSPI to facilitate the evaluation process, and in negotiating a definitive contract or all such activities related to the bid process.

MOSPI will not be responsible or liable for any cost, regardless of the conduct or outcome of the bidding process.

2.5 RFP Document Fee

RFP can be downloaded from the website URL mentioned in the Fact Sheet free of cost.

2.6 Earnest Money Deposit (EMD)

Bidders shall submit, along with their Bids, Bid Security (EMD) as per the details mentioned in the Bid Important Information section. Bid security in any other form will not be entertained.

The bid security of all unsuccessful bidders would be refunded without interest by MOSPI on submission of Performance Bank Guarantee by the successful bidder. The bid security, for the amount mentioned above, of successful bidder would be returned without interest upon submission of Performance Bank Guarantee by the successful bidder.

In case bid is submitted without the bid security then MOSPI reserves the right to reject the bid without providing opportunity for any further correspondence to the bidder concerned.

The EMD may be forfeited:

a. If a bidder withdraws its bid during the period of bid validity.
b. Bidder does not respond to requests for clarification of its Proposal.
c. Bidder fails to provide required information during the evaluation process or is found to be nonresponsive.
d. In case of a successful bidder, if the bidder fails to sign the contract in accordance with this RFP.

2.7 Pre-Bid Meeting & Clarification

2.7.1 Bidders Queries

Any clarification regarding the RFP document and any other item related to this project such as bidding condition, bidding process, rejection of bid, etc. can be submitted to MOSPI as per the submission mode and timelines mentioned in the Fact Sheet. It is necessary that the pre-bid queries should be limited to maximum of 50 distinct queries, and must be submitted in excel sheet format, along with name and details of the organisation submitting the queries. The queries should necessarily be submitted in the following format:

S.No.	RFP Page No.	Section (name & No.)	Statement as per tender document	Query by bidder	Reason for Query
1					
2					
3					
4					
5					

The Bidders will have to ensure that their queries for Pre-Bid meeting should reach to Director DSDD, Computer Centre, East Block-10, RK Puram, New Delhi-110066, on email id hansraj.iss@gov.in on or before 24th July 2019 at 12:00 Hrs(IST).

MOSPI shall not be responsible for ensuring that the bidder's queries have been received by them. Any requests for clarifications post the indicated date and time shall not be entertained by MOSPI. Further MOSPI will reserve the right to issue clarifications.

2.7.2 Pre-Bid Query Response

MOSPI will organize a pre-bid conference and will respond to any request for clarification or modification of the bidding documents. MOSPI will formally respond to the pre-bid queries after the pre-bid conference. No clarification will be entertained after the pre-bid conference.

MOSPI will endeavour to provide timely response to all queries. However, MOSPI makes no representation or warranty as to the completeness or accuracy of any response made in good faith, nor does MOSPI undertake to answer all the queries that have been posed by the bidders.

Any modifications of the Bidding Documents, which may become necessary as a result of the Pre-Bid Conference, shall be made by MOSPI exclusively through a corrigendum. Any such corrigendum shall be deemed to be incorporated into this RFP. However, in case of any such amendment, the bid submission date may be extended at the discretion of MOSPI.

2.7.3 Corrigendum Issue

Any corrigendum / notification issued by MOSPI, subsequent to issue of RFP, shall only be available / hosted on the website URL mentioned in the fact sheet. Any such corrigendum shall be deemed to be incorporated into this RFP.

2.8 Bid Submission

Bidders should submit their responses as per the procedure specified in the e-Procurement portal www.eprocure.gov.in being used for this purpose. Generally, the items to be uploaded on the portal would include all the related documents mentioned in this Model RFP, such as:

> a. EMD
> b. Pre-qualification response
> c. Technical Proposal
> d. Financial proposal
> e. Additional certifications/documents E.g. Power of Attorney, CA certificates on turnover, Signed RFP & Signed Corrigendum etc.

However, each of the above documents must be uploaded in the format specified for this purpose and as per the specified folder structure in the e-Procurement portal.

The bidder must ensure that the bid is digitally signed by the Authorized Signatory of the bidding firm and has been duly submitted (freeze) within the submission timelines. NSSO will in no case be responsible if the bid is not submitted online with in the specified timelines.

f. All the pages of the Proposal document must be sequentially numbered and must contain the list of contents with page numbers. Any deficiency in the documentation may result in the rejection of the Bidder's Proposal.

Please Note that Prices should not be indicated in the Pre-Qualification Bid or Technical Bid but should only be indicated in the Commercial Bid.

In case of e-Procurement, the response to RFPs must be submitted on the eProcurement portal www.eprocure.gov.inby the date and time specified for the RFP. Any proposal submitted on the portal after the above deadline will not be accepted and hence shall be automatically rejected. MOSPI shall not be responsible for any delay in the submission of the documents.

Failure to submit bid on time could cause a proposal to be rejected.

MOSPI will not accept delivery of bid by fax or e-mail.

**Note- Physical copies of Prequalification & Technical Bid also required to be submitted on or before 29th August 11:00 Hrs (IST) to the Nodal Officer Joint Director DSDD, Computer Centre, East Block-10, RK Puram, New Delhi-110066.

Bidder must ensure that the information furnished by them on procurement website is identical to that submitted by him in the original paper bid document. In case of any discrepancy observed by MOSPI in the contents of the e-copy and paper bid documents, the information furnished on submitted e-copy will prevail over paper bid document.

2.9   Bid Pro-forma

Bidder shall submit their bids in the format mentioned in the following sub-sections. Bids not in the prescribed formats will be liable for rejection.

2.9.1   Pro-Forma for Pre-bid Qualification

Section	Section Title	Description
Section 1	Pre-Qualification Bid Covering Letter	As per the format provided in Annexure 5.2.2 of Volume 1
Section 2	Pre-Qualification Criteria	Pre-Qualification criteria table as mentioned in Section3.5, with response and reference

			against each citation in Annexure 5.2.3 of Volume 1
Section 3	Legal Entity	Copy of Certificate of Incorporation Copy of Registration Certificates
Section 4	Turn Over	Details of turnover with Documentary Evidence
Section 5	Profitability	Details of profitability with Documentary Evidence
Section 6	CMM/CMMi Level 5 Certificate	Valid CMM/CMMi Certificate
Section 7	Self-Certificate for non-blacklisting clause	Documentary Evidence
Section 8	No Deviation Certificate	As per format provided in Annexure 6 section 5.6 of Volume 1.
Section 9	Total Responsibility Certificate	As per format provided in Annexure 6 section 5.7 of Volume 1

2.9.2 Pro-Forma of Technical Bid

Section	Section Title	Description
Section 1	Technical Bid Covering Letter	As per the format in Annexure 3 section 5.3.1.
Section 2	Check list	As per the format in Annexure 3 section 5.3.2.
Section 3	About Bidder	o Details about Bidder o Bidder's General Information as per the format in Section 5.1.1
Section 4	MOSPI Project Understanding and Scope of Work	Overall Requirement Understanding of the Project and Scope of Work
Section 5	Approach & Methodology	Methodology adopted o Project Implementation Approach o Approach for ensuring SLA compliance o Project Plan as per format provided in Section 5.5.1 (Bidder can include more sub-sections as seems relevant)
Section 6	Bidder's Experience	Citations as per format provided in Section 5.1.2
Section 7	Project Governance	o Governance Structure o Resource Deployment Plan as per format provided in Section 5.5.2 o CV as per the format provided in Section 5.5.3
Section 8	Masked Commercial Bid	Masked Commercial Bid as per formats provided in Annexure 4 section 5.4

2.9.3 Pro-Forma of Commercial Bid

Section	Section Title	Description
Section 1	Commercial Bid Covering Letter	As per format provided in Annexure 4 section 5.4.1.
Section 2	Total Cost of Ownership	Total Cost of Ownership (TCO) form as per Annexure 4 section 5.4.2.

Important Note:

Commercial Bids that are less than 30% of the average bid price (excluding all applicable taxes) will be disqualified (the average bid price is computed by adding all Financial Bid values of ALL the qualified bidders and dividing the same by the number of bidders).

2.10 Bid Authenticity

A Proposal should be accompanied by a power-of-attorney in the name of the signatory of the Proposal. A copy of the same should be uploaded under the relevant section/folder on the e-Procurement portal. Furthermore, the bid must also be submitted online after being digitally signed by an authorized representative of the bidding entity.

2.11 RFP Amendment

At any time prior to the deadline for submission of proposals, MOSPI, for any reason, may modify the RFP by amendment notified in writing or by fax or email to all bidders who have received this RFP and such amendment shall be binding on them. MOSPI, at its discretion, may extend the deadline for the submission of proposals.

MOSPI may change the scope after the submission of technical bids by the Bidders. In this case, MOSPI will release a corrigendum/ clarification and ask the Bidders to resubmit their commercial bids.

2.12 Bid Price

Commercial Bid shall be as per the format provided in Section 8. Bidders shall give the required details of all applicable taxes, duties, other levies and charges etc. in respect of direct transaction between MOSPI and the Bidder.

Bidders shall quote for the entire scope of contract on a "overall responsibility" basis such that the total bid price covers all the Bidder's obligations mentioned in or to be reasonably inferred from the bidding documents in respect of providing the product / services.

2.13 Deviation and Exclusion

Bids shall be submitted strictly in accordance with the requirements and terms & conditions of the RFP. The Bidder shall submit a No Deviation Certificate as per the format mentioned in Section6.3. The bids with deviation(s) are liable for rejection.

2.14 Total Responsibility

Bidder should issue a statement undertaking total responsibility for the defect free operation of the proposed solution as per the format mentioned in Annexure Section.

2.15 Late Bids

Bids submitted after the due date will not be accepted by the eProcurement system www.eprocure.com and hence will automatically be rejected. The Purchaser shall not be responsible for any delay in the online submission of the proposal.

The bids submitted by telex/telegram/ fax/e-mail etc. shall not be considered. No correspondence will be entertained on this matter.

MOSPI reserves the right to modify and amend any of the above-stipulated condition/criterion depending upon project priorities vis-à-vis urgent commitments.

2.16 Right to Terminate

MOSPI may terminate the RFP process at any time and without assigning any reason. MOSPI makes no commitments, express or implied, that this process will result in a business transaction with anyone.

This RFP does not constitute an offer by MOSPI. The bidder's participation in this process may result MOSPI selecting the bidder to engage towards execution of the contract.

2.17 Non-Conforming Proposals

A proposal may be construed as a non-conforming proposal and ineligible for consideration

a. If it does not comply with the requirements of this RFP.
b. If a proposal appears to be "canned" presentations of promotional materials that do not follow the format requested in this RFP or do not appear to address the particular requirements of the solution, any such bidders may also be disqualified.

2.18 Bid Acceptance/Rejection

MOSPI reserves the right to reject in full or part, any or all bids without assigning any reason thereof.

MOSPI reserves the right to assess the Bidder's capabilities and capacity. The decision of MOSPI shall be final and binding.

Bid should be free of over writing. All erasures, correction or addition must be clearly written both in words and figures and attested.

Offers not submitted in prescribed manner or submitted after due date and time are liable to rejection.

Bids submitted after the due date will not be accepted by the eProcurement system www.eprocure.comand hence will automatically be rejected.

In the event of any assumptions, presumptions, key points of discussion, recommendation or any points of similar nature submitted along with the Bid, MOSPI reserves the right to reject the Bid and forfeit the EMD.

If there is any discrepancy in the commercial bid, it will be dealt as per the following:

a. If, in the price structure quoted for the required goods/ services/ works, there is discrepancy between the unit price and total price (which is obtained by multiplying the unit price by the quantity), the unit price shall prevail and the total price corrected accordingly.

b. If there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected.

c. If there is a discrepancy between words and figures, the amount in words shall prevail.

d. If there is such discrepancy in an offer, the same shall be conveyed to the bidder with target date up to which the bidder has to send his acceptance on the above lines and if the bidder does not agree to the decision of MOSPI, the bid is liable to be ignored.

If the Bidder does not meet even one of the Pre-Qualification criteria separately mentioned in Pre-Qualification Section, the Bidder shall be disqualified & the entire Bid shall be rejected.

2.19 Confidentiality

All the material / information sent to the Bidder shall be treated as confidential and should not be disclosed in any manner to any unauthorized person under any circumstances. The employees of the successful Bidder who were deployed on the project have to furnish a Non-Disclosure Agreement (NDA) as per Section 2 RFP Vol 3.

2.20 Disqualification

The proposal is liable to be disqualified in the following cases or in case bidder fails to meet the bidding requirements as indicated in this RFP:

a. Proposal not submitted in accordance with the procedure and formats prescribed in this document or treated as non-conforming proposal.

b. During validity of the proposal, or its extended period, if any, the bidder increases its quoted prices.

c. The bidder's proposal is conditional and has deviations from the terms and conditions of RFP.

d. Proposal is received in incomplete form.

e. Proposal is received after due date and time will automatically rejected through portal.

f. Proposal is not accompanied by all the requisite documents.

g. Information submitted in technical bid is found to be misrepresented, incorrect or false, accidentally, unwittingly or otherwise, at any time during the processing of the contract (no matter at what stage) or during the tenure of the contract including the extension period if any.

h. If commercial disclosed with technical bid.

i. Bidder tries to influence the proposal evaluation process by unlawful/corrupt/fraudulent means at any point of time during the bid process.

j. In case any one party submits multiple proposals or if common interests are found in two or more bidders, the bidders are likely to be disqualified, unless additional proposals/bidders are withdrawn upon notice immediately.

2.21 Fraud &Corrupt Practices

a) The Bidders and their respective officers, employees, agents and advisers shall observe the highest standard of ethics during the Selection Process. Notwithstanding anything to the contrary contained in this RFP, MOSPI shall reject a Proposal without being liable in any manner whatsoever to the Bidder, if it determines that the Bidder has, directly or indirectly or through an agent, engaged in corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice (collectively the "Prohibited Practices") in the Selection Process. In such an event, MOSPI shall, without prejudice to its any other rights or remedies, forfeit and appropriate the EMD or PBG, as the case may be, as mutually agreed genuine pre-estimated compensation and damages payable to MOSPI for, inter alia, time, cost and effort of MOSPI, in regard to the RFP, including consideration and evaluation of such Bidder's Proposal.

b) Without prejudice to the rights of MOSPI under Clause above and the rights and remedies which MOSPI may have under the LOI or the Agreement, if a Bidder is found by MOSPI to have directly or indirectly or through an agent, engaged or indulged in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice during the Selection Process, or after the issue of the LOI or the execution of the Agreement, such Bidder shall not be eligible to participate in any tender or RFP issued by MOSPI during a period of 3 years from the date such Bidder is found by MOSPI to have directly or through an agent, engaged or indulged in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice, as the case may be.

c) For the purposes of this Section, the following terms shall have the meaning hereinafter respectively assigned to them:

   (i) "corrupt practice" means (i) the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence the action of any person connected with the Selection Process (for avoidance of doubt, offering of employment to or employing or engaging in any manner whatsoever, directly or indirectly, any official of MOSPI who is or has been associated in any manner, directly or indirectly with the Selection Process or the LOI or has dealt with matters concerning the Agreement or arising there from, before or after the execution thereof, at any time prior to the expiry of one year from the date such official resigns or retires from or otherwise ceases to be in the service of MOSPI, shall be deemed to constitute influencing the actions of a person connected with the Selection Process); or (ii) save as provided herein, engaging in any manner whatsoever, whether during the Selection Process or after the issue of the LOA or after the execution of the Agreement, as the case may be, any person in respect of any matter relating to the Project or the Award or the Agreement, who at any time has been or is a legal, financial or technical consultant/ adviser of MOSPI in relation to any matter concerning the Project;

   (ii) "fraudulent practice" means a misrepresentation or omission of facts or disclosure of incomplete facts, in order to influence the Selection Process;

   (iii) "coercive practice" means impairing or harming or threatening to impair or harm, directly or indirectly, any persons or property to influence any person's participation or action in the Selection Process;

   (iv) "undesirable practice" means (i) establishing contact with any person connected with or employed or engaged by MOSPI with the objective of canvassing, lobbying or in any manner influencing or attempting to influence the Selection Process; or (ii) having a Conflict of Interest; and

(v) "restrictive practice" means forming a cartel or arriving at any understanding or arrangement among Bidders with the objective of restricting or manipulating a full and fair competition in the Selection Process.

2.22 Scope of Supply

a) Subject to the provisions in the bidding document and contract, the goods and related services to be supplied shall be as specified in the bidding document.

b) Unless otherwise stipulated in the Contract, the scope of supply shall include all such items not specifically mentioned in the Contract but that can be reasonably inferred from the Contract as being required for attaining delivery and completion of the goods and related services as if such items were expressly mentioned in the Contract.

c) The bidder shall not quote and supply and hardware/ software that is likely to be declared as End of Sale in next 6 months and End of Service/ Support for a period of 5 Years from the last date of bid submission. OEMs are required to mention this in the MAF for all the quoted hardware/ software. If any of the hardware/ software is found to be declared as End of Sale/ Service/ Support, then the bidder shall replace all such hardware/ software with the latest ones having equivalent or higher specifications without any financial obligation to the purchaser.

2.23 Conflict of Interest

a) A bidder shall not have a conflict of interest that may affect the Selection Process or the Solution delivery (the "Conflict of Interest"). Any Bidder found to have a Conflict of Interest shall be disqualified. In the event of disqualification, MOSPI shall forfeit and appropriate the EMD, if available, as mutually agreed genuine pre-estimated compensation and damages payable to MOSPI for, inter alia, the time, cost and effort of MOSPI including consideration of such Bidder's Proposal, without prejudice to any other right or remedy that may be available to MOSPI hereunder or otherwise.

b) MOSPI requires that the bidder provides solutions which at all times hold MOSPI"s interests paramount, avoid conflicts with other assignments or its own interests, and act without any consideration for future work. The bidder shall not accept or engage in any assignment that would be in conflict with its prior or current obligations to other clients, or that may place it in a position of not being able to carry out the assignment in the best interests of MOSPI.

c) Without limiting the generality of the above, an Bidder shall be deemed to have a Conflict of Interest affecting the Selection Process, if:

i. the Bidder or Associates (or any constituent thereof) and any other Bidder or Associate (or any constituent thereof) have common controlling shareholders or other ownership interest; provided that this disqualification shall not apply in cases where the direct or indirect shareholding or ownership interest of an Bidder, its Member or Associate (or any shareholder thereof having a shareholding of more than 5 per cent of the paid up and subscribed share capital of such Bidder, Member or Associate, as the case may be) in the other Bidder or Associate is less than 5% (five per cent) of the subscribed and paid up equity share capital thereof. For the purposes of this Clause, indirect shareholding held through one or more intermediate persons shall be computed as follows:

- o where any intermediary controlled by a person through management control or otherwise, the entire shareholding held by such controlled intermediary in any other person (the "Subject Person") shall be taken into account for computing the shareholding of such controlling person in the Subject Person; where a person does not exercise control over an intermediary, which has shareholding in the Subject Person, the computation of indirect shareholding of such person in the Subject Person shall be undertaken on
  - o a proportionate basis; provided, however, that no such shareholding shall be reckoned under this Sub-clause if the shareholding of such person in the intermediary is less than 26% (twenty six per cent) of the subscribed and paid up equity shareholding of such intermediary; or

ii. a constituent of such Bidder is also a constituent of another Bidder; or

iii. such Bidder or its Associate receives or has received any direct or indirect subsidy or grant from any other Bidder or its Associate; or

iv. such Bidder has the same legal representative for purposes of this Application as any other Bidder; or

v. such Bidder has a relationship with another Bidder, directly or through common third parties, that puts them in a position to have access to each other's information about, or to influence the Application of either or each of the other Bidder; or

vi. there is a conflict among this and other Systems Implementation/Turnkey solution assignments of the Bidder (including its personnel and other members, if any) and any subsidiaries or entities controlled by such Bidder or having common controlling shareholders. The duties of the bidder will depend on the circumstances of each case. While providing software implementation and related solutions to MOSPI for this particular assignment, the bidder shall not take up any assignment that by its nature will result in conflict with the present assignment; or

vii. A firm hired to provide System Integration/Turnkey solutions for the implementation of a project, and its Members or Associates, will be disqualified from subsequently providing goods or works or services related to the same project;

d) An Bidder eventually appointed to implement software solutions for this Project, its Associates, affiliates and the Financial Expert, shall be disqualified from subsequently providing goods or works or services related to the construction and operation of the same Project and any breach of this obligation shall be construed as Conflict of Interest; provided that the restriction herein shall not apply after a period of 12 months from the completion of this assignment; provided further that this restriction shall not apply to software solutions delivered to MOSPI in continuation of this systems implementation or to any subsequent systems implementation executed for MOSPI in accordance with the rules of MOSPI.

3 Bidder Selection Process

3.1 Bid Opening

The Proposals submitted up to <Time> on <Date> will be opened at <Time> on <Date Time> by

<Nodal officer> or any other officer authorized by Purchaser, in the presence of such of those Bidders or their representatives who may be present at the time of opening.

The representatives of the Bidders should be advised to carry the identity card or a letter of authority from the tendering firms to identify their bonafide for attending the opening of the proposal.

There will be three bid-opening events

   a) RFP Document fee & Bid Security/ EMD
   b) Pre-Qualification bid
   c) Technical bid
   d) Commercial bid

The venue, date and time for opening the Pre-qualification bid are mentioned in the Bid Important Information. The date and time for opening of Technical & Commercial bid would be communicated to the qualified bidders.

All the bids will be opened before the bidders" representatives who choose to be present at the specified date, time and location.

The Technical Bids of only those bidders will be opened who clear the Pre-qualification stage. The Commercial Bids of only those bidders will be opened who score equal to or more than qualifying marks in Technical Bid.

3.2   Preliminary Examination of Bid

MOSPI will examine the bids to determine whether they are complete, whether the documents have been properly signed and whether the bids are generally in order. Any bids found to be non-responsive for any reason or not meeting any criteria specified in the RFP, will be rejected by MOSPI and shall not be included for further consideration.

Initial Bid scrutiny will be held and bids will be treated as non-responsive, if bids are:

- Not submitted in format as specified in the RFP document
- Received without the Letter of Authorization (Power of Attorney)
- Found with suppression of details
- With incomplete information, subjective, conditional offers and partial offers submitted
- Submitted without the documents requested
- Non-compliant to any of the clauses mentioned in the RFP
- With lesser validity period

3.3   Bid Clarification

During the bid evaluation, MOSPI may, at its discretion, ask the Bidder for a clarification of its bid. The request for clarification and the response shall be in writing, and no change in the price or substance of the bid shall be sought, offered, or permitted.

3.4 Evaluation Process

MOSPI will constitute a Proposal Evaluation Committee to evaluate the responses of the bidders. The Proposal Evaluation Committee constituted by MOSPI shall evaluate the responses to the RFP and all supporting documents / documentary evidence. Inability to submit requisite supporting documents /documentary evidence, may lead to rejection.

The decision of the Proposal Evaluation Committee in the evaluation of proposals shall be final. No correspondence will be entertained outside the process of evaluation with the Committee. The Proposal Evaluation Committee may ask for meetings with the Bidders to seek clarifications or conformations on their proposals.

The Proposal Evaluation Committee reserves the right to reject any or all proposals. Each of the responses shall be evaluated as per the criteria and requirements specified in this RFP.

Bid Evaluation Steps:

3.4.1 Stage 1: Pre-Qualification

1. MOSPI shall open "RFP Document fee & Bid Security/ Earnest Money Deposit (EMD)".
2. If the contents of the "RFP Document fee & Bid Security/ Earnest Money Deposit (EMD)" are as per requirements, MOSPI shall open the "Pre-Qualification Bid". Each of the Pre-Qualification condition are MANDATORY. In case the Bidder does not meet any one of the conditions, the bidder will be disqualified.
3. Bidders would be informed of their qualification/disqualification based on the Pre-Qualification criteria through Email and Phone. The Bid Security amount and the Unopened Technical & Commercial Bids will be returned to the respective disqualified Bidders after the submission of Bank Guarantee by the successful Bidder.

3.4.2 Stage 2: Technical Evaluation

1. "Technical Bid" will be opened only for the bidders who succeed in Stage 1.
2. MOSPI will review the technical bids of the short-listed bidders to determine whether the technical bids are substantially responsive. Bids that are not substantially responsive are liable to be disqualified at MOSPI's discretion.
3. The bidders' technical solutions proposed in the bid document will be evaluated as per the requirements specified in the RFP and technical evaluation framework.
4. Each Technical Bid will be assigned a technical score out of a maximum of 1000 marks. Only the bidders who get a Technical score of 80% or more (prior to normalization) will qualify for commercial evaluation stage. Failing to secure minimum marks shall lead to technical rejection of the Bid and Bidder.
5. The Final Normalized technical score of the Bidder shall be calculated as follows:

$$\textit{Normalized Technical Score of the Bidder} = \left\{ \frac{\textit{Technical Score of the Bidder}}{\textit{Score of the Bidder with Highest Technical Score}} \right\} \times 1000 \textit{(Adjusted to 2 Decimals)}$$

Example:

Bidders	Technical Score	Calculation	Normalized Technical Score
Bidder A	850	(850 ÷ 900)×1000	944.44
Bidder B	870	(870 ÷ 900)×1000	966.67
Bidder C	800	(800 ÷ 900)×1000	888.89
Bidder D	900	(900 ÷ 900)×1000	1000.00

3.4.3   Stage 3: Commercial Evaluation

1. All the technically qualified bidders will be notified to participate in Commercial Bid opening process.
2. The commercial bids for the technically qualified bidders will then be opened on the notified date and time and reviewed to determine whether the commercial bids are substantially responsive. Bids that are not substantially responsive are liable to be disqualified at MOSPI's discretion.
3. Commercial Bids that are not meeting the condition mentioned in Section 2.9.3 shall be liable for rejection.
4. The Normalized commercial score of the technically qualified bidders will be calculated, while considering the Commercial quote given by each of the Bidders in the Commercial Bid as follows:

$$\text{Normalized Commercial Score of the Bidder} = \left\{ \frac{\text{Lowest Quote}}{\text{Bidder's Quote}} \right\} \times 1000 \text{(Adjusted to 2 Decimals)}$$

Example:

Bidders	Commercial Score	Calculation	Normalized Commercial Score
Bidder A	110	(110 ÷110)×1000	1000.00
Bidder B	150	(110 ÷150)×1000	733.33
Bidder C	170	(110 ÷170)×1000	647.05
Bidder D	140	(110 ÷140)×1000	785.71

5. The bid price will include all taxes and levies and shall be in Indian Rupees and mentioned separately.
6. Any conditional bid would be rejected
7. Errors & Rectification: Arithmetical errors will be rectified on the following basis:
   a. "If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected.
   b. If there is a discrepancy between words and figures, the amount in words will prevail."

3.4.4 Final Score Calculation (CQCCBS)

1. The final score will be calculated through Combined Quality Cum Cost Based System (CQCCBS) method based with the following weight-age:
   - Technical: 70%
   - Commercial: 30%

$$Final\ Score = (0.7 \times Noramlized\ Technical\ Score) + (0.3 \times Noramlized\ Commercial\ Score)$$

Example:

Bidders	Normalized Technical Score	Normalized Commercial Score	Final Score (70:30)
Bidder A	944.44	1000.00	961.108
Bidder B	966.67	733.33	896.668
Bidder C	888.89	647.05	816.338
Bidder D	1000.00	785.71	935.713

2. The bidder with the highest Final score shall be treated as the Successful bidder.
   In the above example, Bidder-A will be treated as successful bidder.
3. In the event the Final scores are "tied", the bidder securing the highest technical score will be adjudicated as the Best Value Bidder for award of the Project.

3.5 Pre-Qualification Criteria

The Bidder's pre-qualification bid will be evaluated as per the following criteria:

Parameter	Pre-Qualification Criteria	Evidence Required
Legal Entity	Should be Company registered under Companies Act, 1956 or a partnership firm registered under LLP Act, 2008 Partnership Firms registered under the India Partnership Act,1932 Registered with the Service Tax Authorities, GSTN authorities Should have been operating for the last three years. FY 2016-17, 2017-18, 2018-19	Copy of Certificate of Incorporation Copy of Registration Certificates
Consortium	Consortium is NOT ALLOWED	NA
Sales Turnover	Annual sales turnover generated from services related to System Integration during each of the last three financial years (as per the last published Balance Sheets), should be at least Rs. 1000 Cr. This turnover should be on account of	Audited financial statements for the last three financial years. Or Certificate from the Statutory Auditor

	Information and Communication Technology systems development and implementation (i.e. revenue should be on account of system Integration/turnkey solutions or products and their associated maintenance or implementation services, packaged software etc.) Only.	
Profitability	Bidder should be profit making as per the audited consolidated financial statements In last 3 financial years (FY 2016-17, 2017-18, 2018-19).	Certificate from the Statutory Auditor
Experience	The Bidder should have of development experience of Analytics and Data Management projects in the last three (3) years from the date of submission of bid: One project of value more than INR 200 Crore or Two projects of value more than INR 150 Crore each or Three projects of value more than INR 100 Crore each	Completion Certificates from the client; OR Work Order + Self Certificate of Completion (Certified by the Statutory Auditor); OR Work Order + Phase Completion Certificate from the client
Certification	Bidder should have following certifications ISO 27001, ISO 20000 and CMMI level 5 or above The certifications should be valid on the date of bid submission	Valid copy of the Certificate
Blacklisting	Bidder should not have been blacklisted by Govt. of India/ Central PSU in the last 3years preceding the date of submission of the bid.	Self-certificate letter undertaking to this effect on company's letter head signed by company's authorized signatory. Bidder must disclose any blacklisting. MOSPI reserves the right to select or reject the Bidder
Analytics Pre-Qualification		
Analytics Software	The OEM should be a Leader from the Gartner vs Forrester evaluation of Data Science, Predictive Analytics, and Machine Learning Platforms, 2018 Q1	Self-attested reference of Gartner vs Forrester evaluation of Data Science, Predictive Analytics and Machine Learning platforms, 2018 Q1
Analytical Services Delivery	Bidder should ensure engagement of OEM of Proposed Analytical Solution for supply of Professional Consulting Services	Bidder shall ensure that scope of Professional Services relating to OEM Software for Analytics shall be sourced and

		provided by the OEM. Bidder shall submit a letter from OEM as per the format at section 5.9 of RFP Vol-1. This will be pre-requisite for payment relating to services

3.6 Technical Evaluation Framework

S.No.	Evaluation Criteria	Total Marks Allotted
1	Bidder's Experience	50
2	Project Planning	50
3	Resource Planning	50
4	Approach & Methodology	50
5	Compliance Matrix	600
6	Presentation & Demo	200
Total		**1000**

MOSPI (or a nominated party) reserves the right to check/ validate the authenticity of the information provided in the Pre-qualification and Technical Evaluation criteria and the requisite support must be provided by the Bidder.

The following sections explain how the Bidders will be evaluated on each of the evaluation criteria.

3.6.1 Bidder's Experience

S.No.	Criteria	Details	Documentary Evidence	Marks Allotted
1	Experience in Portal Development that include: ✓ Integrated Portal framework ✓ Integrated CMS, LMS, DMS ✓ Data Mgmt. ✓ Integrated SMS/ Email Gateways	• Experience in implementing project of value at least 10 Crore each in India during last 3 years from date of submission • 3 Citations (1 successful completion) = 100% • 2 Citations (1 Successful completion) = 80% • 1 Citation (successful completion) = 60% *Pan India/Central Government implementation Experience	Completion Certificates from the client;	**20**
2	Experience in Data Acquisition & Data Dissemination	• Experience in implementing projects of value at least 10 Crore each in India during last 5 years from date of submission	Completion Certificates from the client;	**30**

	Service include: ✓ GIS Implementation ✓ Dashboards ✓ BI (incl. AI, ML, etc.) ✓ MIS ✓ Reports ✓ Published Reports	• 3 Citations (1 successful completion) = 100% • 2 Citations (1 Successful completion) = 80% • 1 Citation (successful completion) = 60% * Pan India/Central Government implementation Experience		
Total				**50**

3.6.2 Project Planning

S.No.	Criteria	Marks Allotted
1	Integrated Project Master Plan • Phase/Track wise Project Plan • Project Life Cycle Scheduling • Precedence diagram • RACI Matrix	**30**
2	Project Governance Structure • Proposed Governance Structure, • Clearly defined roles and responsibilities, • Escalation matrix, • Risk Mitigation and interface between multiple stakeholders	**20**
Total		**50**

3.6.3 Resource Planning

S.No.	Criteria	Marks Allotted

1	Resource Master Plan
	   o Resource Deployment Plan
	   o Resource Profiles (Managers, Architect, Engineers, SMEs etc.)
	      ▪ Qualifications
	      ▪ Experience (Total + Relevant)
	      ▪ Domain Specific Skill Set
	   o Marks Criteria
	      ▪ Excellent = 100%
	      ▪ Good = 80%
	      ▪ Average = 60%
		50

Total		**50**

Minimum Qualification for the Key Positions

S.No.	Position	Minimum Qualification
1	Project Manager (1 Person)	• Education: Full Time MBA/ PGDM with B.E/B.Tech/MCA • Total Experience: At least 10 years • Should have more than 5 years of experience of handling such large projects as a project manager in the area of Portal Development, BI, and Analytics. • Languages known (Read, Write and Speak): Hindi, English • Excellent writing, communication, time management and multi-tasking skills
2	Solution Architect (2 Persons)	• Education: Graduate (BE/B.Tech/MCA) • Total relevant experience: Min 10-year
3	Subject Matter Experts – Analytics Services (2 Persons)	• Education: Graduate (BE/B.Tech/MCA) • Total relevant experience: Min 5-year
4	Business Intelligence SME (1 Person)	• Education: Graduate (BE/B.Tech/MCA) • Total relevant experience: Min 5-year
5	Data Warehouse Architect (1 Person)	• Education: Graduate (BE/B.Tech/MCA) • Total relevant experience: Min 5-year
6	DBA (1 Person)	• Education: Graduate (BE/B.Tech/MCA) • Total relevant experience: Min 10-year

3.6.4 Approach & Methodology

S.No.	Criteria	Criteria Details	Marks Allotted
1	Understanding of Business & Scope of work and all aspect of the Project	Demonstrated level of understanding of ✓ MoSPI business processes ✓ MoSPI divisions' expectations ✓ Project purpose ✓ Scope of work. • Excellent = 100% • Good = 80% • Average = 60%	**05** **05** **05** **05**
		Total	**20**
2	Approach & Methodology adoption of overall Project Implementation	Approach for Implementation ✓ Requirement Assessment ✓ Solution Design/ Architecture ✓ Automation of new systems ✓ Development of MIIP ✓ Testing & Deployment Planning Approach in Maintenance & Support ✓ Annual Technology Support Management	 **03** **03** **03** **03** **03** **01**

		✓ Off-site/ Onsite IT support/ Helpdesk	**02**
		✓ On-going Additional Requirements	**02**
		• Excellent = 100%	
		• Good = 80%	
		• Average = 60%	
		Total	**20**
3	SLA Compliance	Approach for ensuring SLA compliance and also for improving SLAs on a continuous basis-	**10**
		• Excellent = 100%	
		• Good = 80%	
		• Average = 60%	
Total			**50**

3.6.5 Compliance Matrix**

S.No.	Criteria	Criteria Details	Marks Allotted*
1.	Architecture	• Physical Architecture Topology • Technical Specification Design Diagram • All Application Specific Architecture Diagram • Functional Architecture Diagram • Software Architecture • Integrated Solution Architecture Diagram • Hardware Sizing Specifications	100
2.	Enterprise Portal	• Enterprise Integrated Framework • Functional Layer Specific Framework • SOA Framework	50
3.	Content Management System	• CMS Application Architecture Diagram • Content Workflow & Approval Flow • Document, Content & Record Management	50
4.	Data Acquisition &Dissemination Services	• Structured/unstructured data capturing from humongous sources • Information Management Component of the Logical Architecture • Data Acquisition Service Specification Diagram • Data Dissemination Service Specification Diagram	100
5.	Analytics Services	• Enterprise Analytics Architecture • Analytical Component Deployment Design • Intelligent Analytics Process Framework • Analytics Computation Design Principles • Information Delivery Framework	150
6.	Data Management Services	• Conceptual Framework of Data Management • Data Architecture, Analysis & Design • Database Management Service (Security, Governance, Quality)	100
7.	Learning Management	• LMS Architecture Diagram • LMS User Service Oriented Architecture	10

		• LMS Workflow Framework	
8.	Geographic Information System (GIS)	• GIS Technical Architecture Diagram • GIS Software Deployment Architecture Framework • GIS Web Application Platform Framework	20
9.	Database	• Address structured and un-structured data storage • Should support database encryption and backup • Utility to encrypt/decrypt sensitive data	20
Total			**600**

* Each compliance matrix's specification will carry equal marks in their respective category

** Points mentioned in Criteria column are illustrative, for complete details refer to Application Service Compliance Criteria at Section 8.2, RFP-Vol 2.

3.6.6 Presentation & Demo

S.No.	Criteria	Criteria Details	Marks Allotted
1	Presentation & Demo	• Cover approach and methodology for implementing MIIP at MoSPI (Refer 3.6.4)	100
		• Cover the Project Planning approach for successful implementation (Refer 3.6.2)	50
		• Demonstration of all the components of the project including Portal, data acquisition &dissemination services, CMS, LMS, etc. (Extra Weighted would be given on Demonstration of how these components will be working as a single integrated solution) • Excellent = 100% • Good = 80% • Average = 60%	50
Total			**200**

4 Award of Contract

4.1 Award Notification

MOSPI will notify the successful Bidder in writing by e-mail followed by courier, to be confirmed by the Bidder in writing by email followed by courier.

4.2 Signing of Contract

After the notification of award, MOSPI will issue Purchase Order (PO)/ Letter of Intent (LOI). The Bidder shall sign and return back to MOSPI duplicate copy of the Purchase Order as an acceptance of the PO/ LOI within 15 working days from the date of issuance of PO/ LOI along with a Performance Bank Guarantee.

On receipt of the Performance Bank Guarantee MOSPI shall enter into a contract. Settlement of dispute, if any, emanating from the resultant contract would be interpreted under applicable Indian Laws to be settled in an appropriate court of law based in Delhi. The Master Service Agreement is provided in Section 1 Master Service Agreement in RFP Volume 3.

4.3 Performance Bank Guarantee (PBG)

The successful Bidder shall at his own expense deposit with MOSPI, within fifteen (15) working days from the date of issuance of PO, an unconditional and irrevocable Performance Bank Guarantee (PBG) from a bank acceptable to MOSPI, in the pre-defined format, payable on demand, for the due performance and fulfilment of the contract by the bidder.

This Performance Bank Guarantee will be for an amount equivalent to 10% of total contract value. PBG shall be invoked by MOSPI in the event the Bidder:

 i.   fails to meet the overall penalty condition as mentioned in Section 7 Service Level Agreement, Volume 2 of RFP or any changes agreed between the parties,
 ii. fails to perform the responsibilities and obligations as set out in the RFP to the complete satisfaction of MOSPI,
 iii. Misrepresentations of facts/information submitted to MOSPI.

The performance bank guarantee shall be valid till satisfactory completion of Post Implementation Support.

The performance bank guarantee may be discharged/returned by MOSPI upon being satisfied that there has been due performance of the obligations of the bidder under the contract. However, no interest shall be payable on the performance bank guarantee.

In the event of the Bidder being unable to service the contract for whatever reason, MOSPI would invoke the PBG. Notwithstanding and without prejudice to any rights whatsoever of MOSPI under the contract in the matter, the proceeds of the PBG shall be payable to MOSPI as compensation for any loss resulting from the bidder's failure to perform/comply its obligations under the contract. MOSPI shall notify the bidder in writing of the exercise of its right to receive such compensation within 40 days, indicating the contractual obligation(s) for which the bidder is in default.

MOSPI shall also be entitled to make recoveries from the bidder's bills, performance bank guarantee, or from any other amount due to him, an equivalent value of any payment made to him due to inadvertence, error, collusion, misconstruction or misstatement.

In case the project is delayed beyond the project milestone and schedule as mentioned in Section 6 of Volume 2 RFP, the performance bank guarantee shall be accordingly extended by the Bidder till completion of scope of work as mentioned in Volume 2 of RFP.

This Performance Bank Guarantee shall be valid only up to the completion of the period of "Go-Live" + 60 months for the Solution.

On satisfactory performance and completion of the order in all respects and duly certified to this effect by the Project Coordinator, Contract Completion Certificate will be issued and the PBG will be returned to the Bidder.

4.4 Warranty & Maintenance

Bidder shall also provide complete maintenance support for all the proposed integrated solution as outlined in this RFP for a period of Sixty months from the date of go-live i.e. "Go-Live" + 60 months. "Go-live" is the date on which the proposed solution is completely operational as per the requirements provided in this RFP and all the acceptance tests are successfully concluded to the satisfaction of MOSPI.

During the warranty period, the bidder shall warrant that the goods supplied under the contract are new, unused, of the most recent version/ models and incorporate all recent improvements in design and materials unless provided otherwise in the contract. The bidder further warrants that the goods supplied under this contract shall have no defects arising from design, materials or workmanship.

MOSPI or designated representatives of the bidder shall promptly notify successful bidder in writing of any claims arising under this warranty. Upon receipt of such notice, the bidder shall, within the warranty period and with all reasonable speed, repair or replace the defective systems, without costs to MOSPI and within time specified and acceptable to MOSPI.

If the successful bidder, having been notified, fails to remedy the defect(s) within the period specified in the contract, MOSPI may proceed to take such reasonable remedial action as may be necessary, at the successful bidder's risk and expense and without prejudice to any other rights, which MOSPI may have against the bidder under the contract.

During the comprehensive warranty period, the successful bidder will provide all product(s) and documentation updates, patches/fixes, and version upgrades within 15 days of their availability and should carry out installation and make operational the same at no additional cost to MOSPI.

The successful bidder hereby warrants MOSPI that:

i.   The implemented integrated solution represents a complete, integrated solution meeting all the requirements as outlined in the RFP and further amendments if any, and provides the functionality and performance, as per the terms and conditions specified in the contract.

ii.   The proposed integrated solution will achieve parameters delineated in the technical specification/ requirement.

iii.   The successful bidder will be responsible for warranty services from licensers of products included in the systems.

iv.   The successful bidder undertakes to ensure the maintenance of the acceptance criterion/standards in respect of the systems during the warranty period.

4.5   Failure to agree with RFP Terms & Condition

Failure of the successful bidder to agree with the Terms & Conditions of the RFP shall constitute sufficient grounds for the annulment of the award, in which event MOSPI may award the contract to the next best value bidder or call for new proposals.

In such a case, MOSPI shall invoke the PBG and/or forfeit the EMD.

5   Annexure

5.1   Annexure 1–Bidder's Information

5.1.1   Bidder's General Information

S.No.	Item	Bidder's Response
1	Company Name	
2	Year of Establishment	
3	Incorporated in India (Yes or No)	
5	Contact Name	
6	Position	
7	Address	
8	Mobile	
9	Telephone	
10	Fax Number	
11	Email Address	

5.1.2   Bidder's Experience – Client Citation

S.No.	Item	Bidder's Response
1	Proposed Product / Solution (for which citation has been provided)	
2	Name of Bidder entity	
3	Assignment Name	
4	Name of Client	
5	Country	
6	Contact Details (Name, Address, Telephone Numbers)	
7	Approx. Contract Value	
8	Duration of Assignment (months)	
9	Award Date (month/year)	
10	Completion Date (month/year)	
11	Narrative description of the project	
12	Scope Detail	

13	Document Evidence	

5.2 Annexure 2 –Pre-Qualification Bid Submission Format

5.2.1 Template for Pre-Bid Queries

S.No.	RFP Page No.	Section (name & No.)	Statement as per tender document	Query by bidder	Reason for Query
1					
2					
3					
4					
5					

5.2.2 Pre-Qualification Bid Covering Letter

To,

<Location, Date>

Shr.

Subject: Submission of the Pre-Qualification bid for MIIP Project

Dear Sir,

We, the undersigned, offer to provide Systems Integrator services for Implementing MOSPI Integrated Information Platform (MIIP) with reference to your Request for Proposal dated <insert date> and our Proposal. We are hereby submitting our Pre-qualification bid.

We hereby declare that all the information and statements made in this Pre-qualification bid are true and accept that any misinterpretation contained in it may lead to our disqualification.

We agree to abide by all the terms and conditions of all the volumes of this RFP document. We would hold the terms of our proposal valid for the number of days as stipulated in the RFP document.

Yours sincerely,

(Authorised Signatory)

Signature:
Name:
Designation:
Address:

Seal:
Date:

5.2.3 Pre-Qualification Citations

S.No.	Item	Bidder's Response
1	Proposed Product / Solution (for which citation has been provided)	
2	Name of Bidder entity	
3	Assignment Name	
4	Name of Client	
5	Country	
6	Contact Details (Name, Address, Telephone Numbers)	
7	Approx. Contract Value	
8	Duration of Assignment (months)	
9	Award Date (month/year)	
10	Completion Date (month/year)	
11	Narrative description of the project	
12	Scope Detail	
13	Document Evidence	

5.3 Annexure 3 –Technical Bid Submission Format

5.3.1 Technical Bid Covering Letter

To,
<Location, Date>
Shri

Subject: Submission of the Technical bid for MIIP Project

Dear Sir,

We, the undersigned, offer to provide Systems Integrator services for Implementing MOSPI Integrated Information Platform (MIIP) with reference to your Request for Proposal dated <insert date> and our Proposal. We are hereby submitting our Proposal, which includes Pre-qualification bid, Technical bid and the Commercial Bid sealed in a separate envelope.

We hereby declare that all the information and statements made in this Technical bid are true and accept that any misinterpretation contained in it may lead to our disqualification.

We agree to abide by all the terms and conditions of all the volumes of this RFP document. We would hold the terms of our bid valid for the number of days as stipulated in the RFP document.

We understand you are not bound to accept any Proposal you receive.

Yours sincerely,

(Authorised Signatory)

Signature:

Name:
Designation:
Address:

Seal:
Date:

5.3.2 Checklist

S.No.	Checklist Item	Bidder's Response (Y/N)
1	RFP Document Fees	
2	Earnest Money Deposit (EMD)	
3	Non- blacklisting undertaking	
4	No Deviation Certificate	
5	Total Responsibility Certificate	
6	Power of Attorney	
7	Pre-Qualification Bid	
8	Technical Bid	
9	Commercial Bid	

5.4 Annexure 4 – Commercial Bid Submission Format

5.4.1 Commercial Bid Covering Letter

To,
<Location, Date>
Shr.

Subject: Submission of the Commercial bid for XXXX Project

Dear Sir/Madam,

We, the undersigned, offer to provide Systems Integrator services for Implementing MOSPI Integrated Information Platform in accordance with your Request for Proposal dated <<Date>> and our Proposal. Our attached Commercial Bid is for the amount of <<Amount in words and figures>>. This amount is inclusive of all the taxes.

1. PRICE AND VALIDITY

- All the prices mentioned in our bid are in accordance with the terms as specified in the RFP
- Documents. All the prices and other terms and conditions of this Bid are valid for a period of <days> calendar days from the date of opening of the Bid.
- We hereby confirm that our prices include all taxes. However, all the taxes are quoted separately under relevant sections.
- We understand that the actual payment would be made as per the existing indirect tax rates during the time of payment.

2. UNIT RATES

We have indicated in the relevant forms enclosed the unit rates for the purpose of on account of payment.

3. RFP PRICING

We further confirm that the prices stated in our bid are in accordance with your Instruction to Bidders included in RFP documents.

4. QUALIFYING DATA

We confirm having submitted the information as required by you in your Instruction to Bidders. In case you require any other further information/documentary proof in this regard before evaluation of our bid, we agree to furnish the same in time to your satisfaction.

5. BID PRICE

We declare that our Bid Price is for the entire scope of the work as specified in all the Volumes of this RFP and Annexure thereto. Our bid prices are mentioned in the submitted Commercial Bid.

6. PERFORMANCE BANK GUARANTEE

We hereby declare that in case the contract is awarded to us, we shall submit the Performance Bank Guarantee as specified in the Section 5.8.1 of this RFP document.

Our Commercial Bid shall be binding upon us subject up to expiration of the validity period of the Proposal, i.e., [Date].

We understand you are not bound to accept any Proposal you receive.

We hereby declare that our bid is made in good faith, without collusion or fraud and the information contained in the bid is true and correct to the best of our knowledge and belief.

Thanking you,

(Authorised Signatory)

Signature:
Name:
Designation:
Address:
Seal:
Date:

5.4.2 Format of Commercial Bid

S. No.	Category	Price (in INR)	Price (in words)
A.	MIIP Solution (As per the proposed Bill of Material)		
B.	Implementation of MIIP (Phase-I)		
C.	Support (Phase-II)		

C1.	**Software Support:** Updates/Upgrades: In the event of release of updates & upgrade by the OEMs, the successful bidder shall update and upgrade the system from time to time under the AMC.			
C2.	**Operational Support:**			
C2.1	5 years support.			
C2.2	Onsite IT-Support			
C2.3	Off-site Helpdesk			
C3.	**On-going Additional Requirements**: 150 man-month efforts of the SI over a period of 5 years of on-going support period for implementation of additional requirements of MOSPI.			
D.	**Training Cost**			
Total Cost (A+B+C+D)				
Taxes and Duties				
Total Cost of Ownership(Including Taxes and Duties)				

Apart from the above the bidder also needs to provide:

Man-month Rate for on-going support for implementation of additional requirements of MOSPI.

Table 2

Team Category	Roles	Man-Month Rate(INR)	Taxes	Man-month rate inclusive of taxes(INR)
Application Development	Team Lead			
	Senior Software Developer			
	Software Developer			
	Business Analyst			
Analytics & Data Management	Team Lead for Analytics			
	Data Management Expert			
	Analytics/Statistical Modeler			
	Business Analyst			
OEM Resources (if	Team Lead for Analytics			

needed) (Analytics & Data Management)	Data Management Expert			
	Analytics/Statistical Modeler			
	Business Analyst			

Table 3 Additional Resource Off-site Helpdesk

Roles	Man-Month Rate(INR)	Taxes	Man-month rate inclusive of taxes(INR)
IT-Helpdesk Resource			

Table 4 Additional On-Site IT-Support

Roles	Man-Month Rate(INR)	Taxes	Man-month rate inclusive of taxes(INR)
Developer			
Lead			
Functional/Domain			

Table 5 Additional Cost for Training

Roles	Batch Size	Rate(INR)/Per day	Taxes	Rate inclusive of taxes(INR)
Trainer	20			
** Infrastructure for training will provided by MOSPI				

(Table 2, 3, 4 & 5 will not form the part of financial bid but would be used as pro-rata rates if the man-month effort requirements increase more than the envisaged man-month efforts. For the

purpose of evaluation of effort of skill-set required beyond the envisaged man-month, efforts have been taken as provided in section 4.3.2 of RFP Vol 2)

Table 6: BILL of Material

S.No.	Item /Product/Module	Proposed Solution(Provide the Product Name or fill Custom Built, in case of a new development)	Unit of Measurement	Number of Licenses(UAT)	Number of Licenses (Training)	Number of Licenses (Production)	Number of Licenses (DR)

5.5   Annexure 5 – Resource Details
5.5.1   Project Plan

S. No.	Activity Description	Months								
		1	2	3	4	5	6	7	8	9
1.										
2.										
3.										
4.										
5.										

5.5.2   Resource Deployment Plan
I.   MIIP Phase-I(Go- Live)

S. No.	Role	Name	Month										Total Staff Man-month	Distribution of Total	
			1	2	3	4	5	6	7	8	9		Onsite	Offsite
1.	Project Manager														
2.	Team Lead														
3.	Analytics Lead														

	Add more rows…												

II. Support

S. No.	Role	Name	Month								Total Staff Man-month	Distribution of Total	
			1	2	3					60		Onsite	Offsite
1.	Project Manager												
2.	Team Lead												
3.	Analytics Lead												
	Add more rows…												

5.5.3 Curriculum Vitae (CV)

S. No.	Item	Bidder's Response	
1.	Name		
2.	Specify role to be played in the Project		
3.	Name of Organization		
4.	Number of years with the Current Organization		
5.	Total Experience (in Years)		
6.	Experience in yrs. (Provide details regarding name of organizations worked for, Designation, responsibilities, tenure etc.)		
	Name of Organization	From	To	Designation/ Responsibilities
6.1				
6.2				
7.	Summarized professional experience (Relevant to the Current Project) in reverse chronological order		
	From	To	Company / Project / Position / Relevant Functional, Technical and Managerial experience
7.1			
7.2			
8.	Educational Background, Training / Certification including institutions, % of marks, specialization areas etc.		
	Degree	Year of Award of Degree	University
8.1			
8.2			

5.6 Annexure 6 - No Deviation Certificate

This is to certify that our offer is exactly in line with your tender enquiry/RFP (including amendments) no. _____ dated _____. This is to expressly certify that our offer contains no deviation either Technical or Commercial in either direct or indirect form.

(Authorised Signatory)

Signature:
Name:
Designation:
Address:

Seal:
Date:

5.7 Annexure 7 - Total Responsibility

This is to certify that I undertake the total responsibility for developing and managing the content for "Knowledge Repository" and provide continuous services as per the requirement of the RFP for the duration mentioned in all the volumes of the RFP.

(Authorised Signatory)

Signature:
Name:
Designation:
Address:

Seal:
Date:

5.8 Annexure 8 – Performance Bank Guarantee Template

5.8.1 Performance Bank Guarantee

PERFORMANCE SECURITY:

To,
<Name>
<Designation>
<Address>
<Phone Nos.>
<Fax Nos.>
<Email id>

Whereas, <<name of the supplier and address>> (hereinafter called "the bidder") has undertaken, in pursuance of contract no. <Insert Contract No.> dated. <Date> to provide Implementation services for <<name of the assignment>> to MOSPI (hereinafter called "the beneficiary")

And whereas it has been stipulated by in the said contract that the bidder shall furnish you with a bank guarantee by a recognized bank for the sum specified therein as security for compliance with its obligations in accordance with the contract;

And whereas we, <Name of Bank> a banking company incorporated and having its head /registered office at <Address of Registered Office> and having one of its office at <Address of Local Office> have agreed to give the supplier such a bank guarantee.

Now, therefore, we hereby affirm that we are guarantors and responsible to you, on behalf of the supplier, up to a total of Rs.<Insert Value> (Rupees <Insert Value in Words> only) and we undertake to pay you, upon your first written demand declaring the supplier to be in default under the contract and without cavil or argument, any sum or sums within the limits of Rs. <Insert Value> (Rupees <Insert Value in Words> only) as aforesaid, without your needing to prove or to show grounds or reasons for your demand or the sum specified therein.

We hereby waive the necessity of your demanding the said debt from the bidder before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the contract to be performed there under or of any of the contract documents which may be made between you and the Bidder shall in any way release us from any liability under this guarantee and we hereby waive notice of any such change, addition or modification.

This Guarantee shall be valid until <<Insert Date>>>

Notwithstanding anything contained herein:

i. Our liability under this bank guarantee shall not exceed Rs. <Insert Value> (Rupees <Insert Value in Words> only).
ii. This bank guarantee shall be valid up to <Insert Expiry Date>)
iii. Tt is condition of our liability for payment of the guaranteed amount or any part thereof arising under this bank guarantee that we receive a valid written claim or demand for payment under this bank guarantee on or before <Insert Expiry Date>) failing which our liability under the guarantee will automatically cease.

5.8.2 EMD (Earnest Money Deposit) Bank Guarantee

To,
<Name>
<Designation>
<Address>
<Phone Nos.>
<Fax Nos.>
<Email id>

Whereas <<Name of the bidder>> (hereinafter called 'the Bidder') has submitted the bid for Submission of RFP # <<RFP Number>> dated <<Date>> for <<Name of the assignment>> (hereinafter

called "the Bid") to <<Nodal Agency>> Know all Men by these presents that we <<>> having our office at <<Address>> (hereinafter called "the Bank") are bound unto the <<Nodal Agency>> (hereinafter called "the Purchaser") in the sum of Rs. <<Amount in figures>> (Rupees <<Amount in words>> only) for which payment well and truly to be made to the said Purchaser, the Bank binds itself, its successors and assigns by these presents. Sealed with the Common Seal of the said Bank this <<Date>>

The conditions of this obligation are:

1. If the Bidder having its bid withdrawn during the period of bid validity specified by the Bidder on the Bid Form; or
2. If the Bidder, having been notified of the acceptance of its bid by the Purchaser during the period of validity of bid
   a. Withdraws his participation from the bid during the period of validity of bid document; or
   b. Fails or refuses to participate in the subsequent Tender process after having been short listed;

We undertake to pay to the Purchaser up to the above amount upon receipt of its first written demand, without the Purchaser having to substantiate its demand, provided that in its demand the Purchaser will note that the amount claimed by it is due to it owing to the occurrence of one or both of the two conditions, specifying the occurred condition or conditions.

This guarantee will remain in force up to <<insert date>> and including <<extra time over and above mandated in the RFP>> from the last date of submission and any demand in respect thereof should reach the Bank not later than the above date.

NOTHWITHSTANDING ANYTHING CONTAINED HEREIN:

I. Our liability under this Bank Guarantee shall not exceed Rs. <<Amount in figures>> (Rupees <<Amount in words>> only)
II. This Bank Guarantee shall be valid upto <<insert date>>)
III. It is condition of our liability for payment of the guaranteed amount or any part thereof arising under this Bank Guarantee that we receive a valid written claim or demand for payment under this Bank Guarantee on or before <<insert date>>) failing which our liability under the guarantee will automatically cease.

(Authorized Signatory of the Bank)

Seal:

Date:

5.9   Annexure 9Letter from OEMs Certifying their Services

To:

The _____ (Designation)

_____ (Customer),

_____,

_____,

_____, (Address)

Ref: RFP number -

Sir,

We,_____ ("OEM") having registered office at _____, who are established and reputed developers of _____("Software") do hereby certify that OEM's professional services including implementation/ installation/support for "proposed Analytical solution" as per the RFP are sourced by SI from OEM and are provided not through SI or other third party than OEM itself.

<<OEM Name>> shall be involved throughout project life cycle, to ensure that installations/ configurations/ integrations/ Implementation of the various components is performed according to the best practices/ OEM guidelines and involving the professional support of the OEM's during the implementation of analytics and data management solution is a requirement of this RFP.

<<OEM Name>> shall also bring in their Professional Consulting Support and Technical Support, during the entire project period.

Name of Authorized Representative: _____

Designation of Authorized Representative: _____

Signature of Authorized Representative with company seal: _____

Verified by: _____

Request for Proposal(RFP)

'Appointment of

System Integrator for MOSPI

Integrated Information

Platform'

Volume - 2

Table of Contents

Acronym

Acronym	Definition
MIIP	MoSPI Integrated Information Platform
MoSPI	Ministry of Statistics and Programme Implementation
DSDD	Data Storage and Dissemination Division
IVRS	Interactive Voice Response System
COTS	Commercial off-the-shelf
CAPI	Computer Assisted Personal Interviewing
NSS	National Sample Survey
DQAD	Data Quality Assurance Division
ASUSE	Annual Survey of Unincorporated Sector Enterprises
PLFS	Periodic Labour Force Survey
ASSE	Annual Surveys of Services Sector Enterprises
HQ	Head Quarters
NSSO	National Sample Survey Office
QCBS	Quality Cum Cost Based Selection
RFP	Request for Proposal
EMD	Earnest Money Deposit
LoA	Letter of Authorization
MSA	Master Service Agreement
NDA	Non-Disclosure Agreement
PAPI	Paper Aided Personal Interview
IT	Information Technology
DQAC	Data Quality Assurance Centre
DPC	Data Processing Centre
IA	Implementing Agency

FOD	Field Operations Division
CWS	Current Weekly Status
MPCE	Monthly per Capita Expenditure
NIC	The National Informatics Centre
ICT	Information and Communication Technology
NCO	National Classification of Occupations
EFC	Expenditure Finance Committee
SDRD	Survey Design and Research Division
CPD	Co-ordination & Publication Division
DG&CEO	Director General and Chief Executive Officer
JSO	Junior Statistical Officer
SSC	Staff Selection Commission
SSS	Subordinate Statistical Service
PQ	Pre-Qualification
GIS	Geographical Information Systems
B.Tech	Bachelor of Technology
B.E.	Bachelor of Engineering
MCA	Master of Computer Applications
IPR	Intellectual Property Rights
RDBMS	Relational Database Management System
OTP	One-Time Password
SSO	Senior Statistical Officer
FO	Field Officer
FI	Field Investigator
RO	Regional Officer
USU	Ultimate Stage Unit

VM	Virtual Machine
ZO	Zonal Officer
FSU	First Stage Unit
LAN	Local Area Network
WAN	Wide Area Network
TSG	Technical Support Group
SDD	Software Design Document
EPFO	Employees Provident Fund Organization
SLA	Service Level Agreement
O&M	Operations and Maintenance
DBA	Database Administrator
CV	Curriculum Vitae

1 Ministry of Statistics and Programme Implementation

Ministry of Statistics & Programme Implementation (MoSPI) works as an administrative body for Government of India, which is responsible for collection, compilation and dissemination of statistics on Economic, Social and Demographic sectors.

The Ministry of Statistics and Programme Implementation (MoSPI) is the nodal agency for the planned and organized development of the statistical system in the country and coordination of statistical activities among statistical agencies in the Government of India, State Governments as well as meeting requirements of the International Agencies like UN, World Bank, IMF, OECD, etc. It has two major organizations, namely, Central Statistics Office and National Sample Surveys Office (NSSO) combined known as National Statistical Organisation (NSO). The collection of statistics on different subject areas, like agriculture, labour, employment, trade, industry, etc. vests with the designated administrative Ministries.

The Ministry of Statistics and Programme Implementation (MoSPI) spearheads the coverage and quality aspects of statistics released in the country. The statistics released are based on administrative sources, surveys and censuses conducted by the Centre and State Governments and non-official sources and studies. The surveys conducted by the Ministry are based on scientific sampling methods. Field data are collected through dedicated field staff.

Input Parameters	MOSPI Focus		Information Dissemination
Annual Survey of Industries	National accounts	Planned Development of Statistical System	Indices (IIP, CPI, etc.)
All India Economic Census	Assess the data-gaps in the system	Working Group Reports	Survey Reports
State Goverment	Technical Papers	Quality of statistics	Annual Reports
Enterprise Surveys	Programme Monitoring		Statistical Publications
Sample Surveys	Sampling guidelines		Survey Data
Others	Administration and Training		Statistical Manual
			Miscellaneous reports
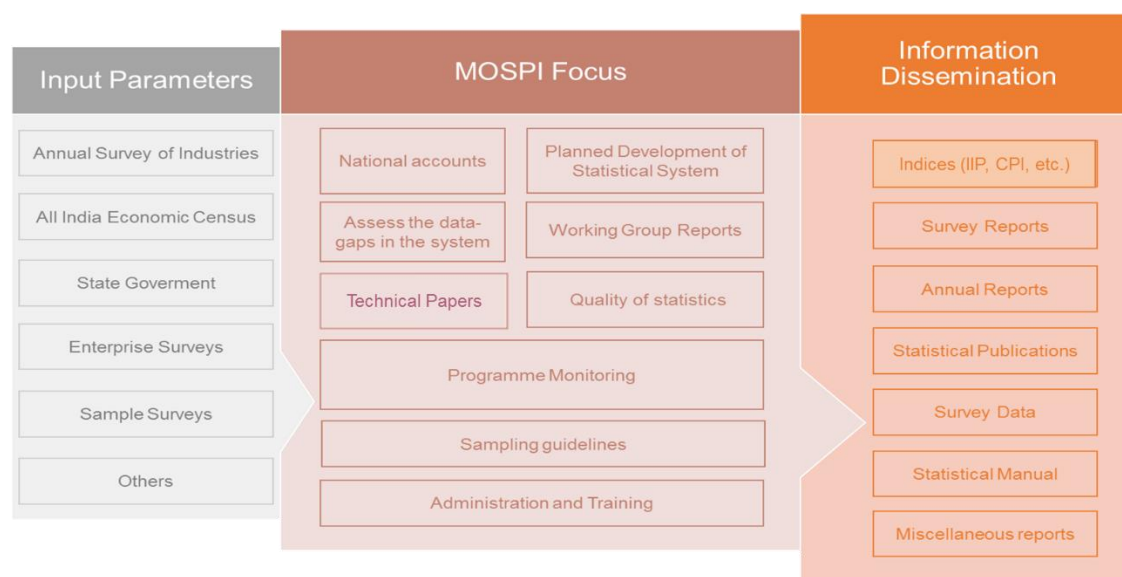
An overview of the indicative activities and focus of MoSPI is shown above:

MoSPI is a point of contact for Administrative Departments, PSU's, State Bodies, Research Institution, Scholars and Individuals (public) for all the data requirement which is available with the government. MoSPI understands the importance of data driven policy making, planning and research, and would like to develop an integrated electronic platform to address the issue related to data collection, management and timely dissemination of statistics without sacrificing the quality of data. In this regard, a Data Management Committee was formed under the leadership of Chairman of National Statistical Commission (NSC). The Chairman of Data Management Committee in his report submitted to NSC, has identified data requirements and associated challenges for effective dissemination of Statistical information across various stakeholders.

To overcome the challenges of collection and distribution of data, MoSPI is implementing an information platform to enable smooth exchange of data from surveys, analysis, statistical reports, etc. MoSPI Integrated Information Platform (MIIP) will be a strategic, central, comprehensive and transformational platform for various stakeholders. MIIP will be managed and administered by MoSPI team for smooth operations and maintenance. It is aimed at creating an ecosystem that provides an integrated exchange platform to stakeholders, including:

1. MoSPI Technical Divisions (Details are covered in Annexure 8.3 & 8.4)
2. State Government (DES)
3. Ministries and State Level Line Departments
4. PSUs / Autonomous Bodies
5. Research organizations
6. Private organizations
7. Individuals (Citizens / Scholars)

2   MoSPI Integrated Information Platform (MIIP)

Based on the recommendations of the Data Management Committee, for seamless collection, storage and dissemination of data, MIIP is conceptualized by MoSPI as an integrated platform enabled by technology. The platform should have an interactive user interface/portal as a face of Ministry for public users and the solution will have an Analytical Engine to cater all kind of reporting and policy making/research requirement.

Broadly, MIIP operations would include:

a. Data collection: The core modular, fully integrated and automated MIIP will have interface for various types of Users (data collection) / stakeholders, like State bodies, Departments, Government institutions, Research organizations, Private organizations, Citizens and Scholars to access data reports, effective monitoring, dashboards and analytical platform. MoSPI executes and collects information from sample surveys conducted across Industries / Enterprises or Citizens.
b. Functional focus: MIIP will enable MoSPI to manage the data; by way of migration, cleaning, validation, compilation, tabulation, analysis, etc. The platform will have functionalities for data management, metadata guidelines, tabulation plans and other technical details for processing the data using analytical tools.
c. Information dissemination: It is envisaged to become a platform of choice for all stakeholders. Various users will access the platform using a portal to access statistical information, indices, reports, request new sets of data and analytics. Features such as e-Book, content management, document management, learning management, geo-spatial information, etc. would be available to aid and assist the stakeholders on various facets of Indian officials system.

The MIIP shall be designed, developed and deployed by a System Integrator (SI). The SI should be able to deliver all the functionalities, technical and operational features listed below, in order to meet the service requirements envisaged from this platform. The solution may include, wherever possible:

    i.   Create new IT-enabled system(s)
   ii.   Integration with existing systems
  iii.   Provide external links to existing systems
  iv.   Others, as required by MoSPI

The MIIP will be a scalable and integrated platform, deployed centrally over the Cloud, having a Web Portal and mobile interface for all stakeholders through Internet. It should be the Single solution on a single architecture provide all the Business Discovery capabilities like Visualization, Analysis, ETL capabilities. The success of the project will be largely dependent upon how the platform creates avenues/opportunities for all ecosystem partners and stakeholders. The overview of the MIIP with indicative activities and functionality is shown below:
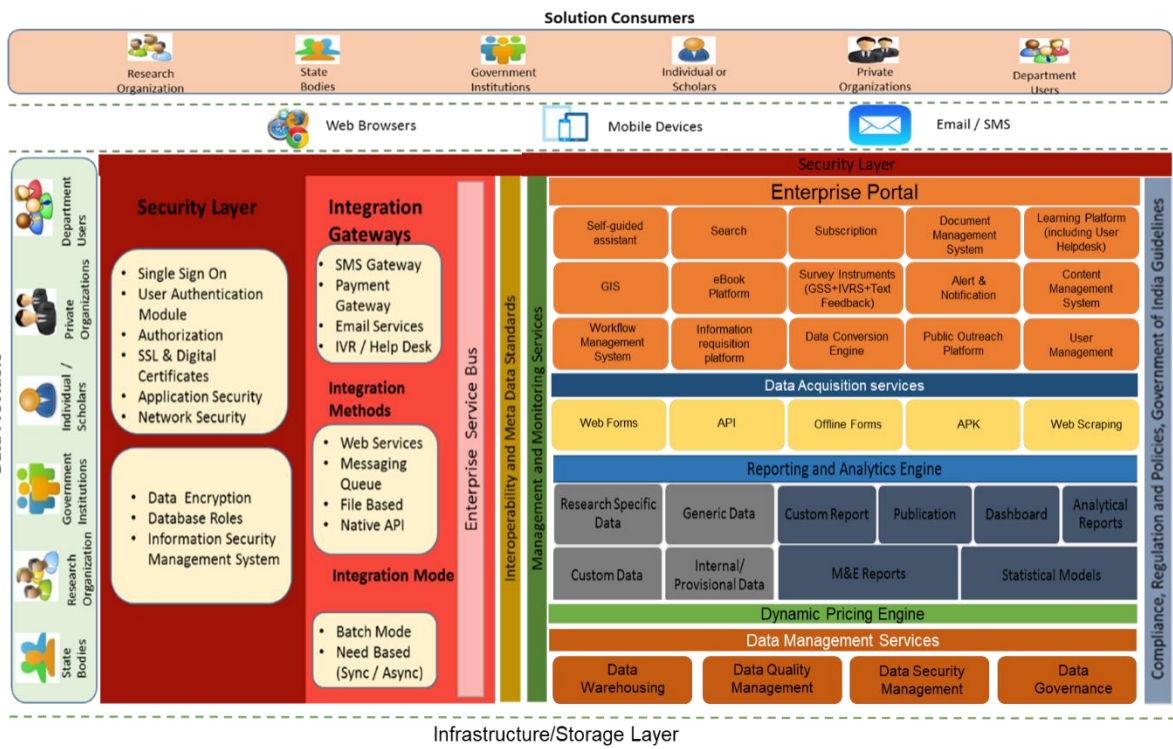
It is proposed that the entire application should have flexible and scalable architecture with defined 'Business Logic layer' and a 'Data Access Layer' to support the efficient data handling between the 'Application Layer' and the 'Database Layer'. It is also envisaged that the portal will be supported by an 'Enterprise Service Bus', which would enable effective data exchange between various applications.

The MIIP should have functional modules, along with automation and user-friendly features. It is a necessary requirement that the application should have complete integration between different modules and an efficient data sharing mechanism so that each module can showcase complete automated workflow functionality for a seamless backend processing. The MIIP is envisaged to cater the information and services needs of variety of stakeholders on demand and supply side as well as other ecosystem partners.

The MIIP platform will have Integration with, SMS Gateway, e-Mail Messaging services, IVR services and other National or State schemes / programmes as well as external systems / applications as required.

Also, the Ministry seeks SI support on necessary customization/revamping of existing electronic functions of the MoSPI for their integration with MIIP (Refer Annexure 8.4). SI is also expected to extend necessary support and undertake the developmental work for strengthening of statistical functions in the line ministries, data supplier and State Government through providing support on core modules/functionality for their use to improve their statistical system and integrate it with MIIP. SI is also encouraged to create a developmental environment (setting up of minimum infrastructure and software's along with leveraging available software's and hardware) for furtherance of adoption of new initiatives in technology in the ministry.

2.1 Partners, Stakeholder and Users

Objective of the MIIP Project clearly reflects that this initiative will help the Government to build a National Data Bank powered by analytical platform which will be exposed to public/ users under the strict governance and monitoring of MoSPI. This objective can't be imagined without the active participation from the partners/agencies involved in the process of data collection, processing, dissemination, etc. at the national and state levels. Various important stakeholders in the MIIP are following:

2.1.1 MoSPI Technical Divisions

MoSPI is the Central agency which is responsible for design, development and implementation of national level surveys. Apart from survey execution MoSPI collects, compiles and publish various socio-economic indicator of National Interest for policy making, planning, research and other public users.

MoSPI owns the MIIP project initiative and will remain the driving force through-out the implementation and support phase of project. Co-ordination with other stakeholders will be closely governed by the MoSPI.

2.1.2 State Government (DES)

State Government significantly contribute in national surveys, carry out the State Level Studies and publish the socio-economic indicator at state level. For the success of MIIP initiative, it is important to define right contribution level and role of state agencies.

The Administrative Statistics data collection, compilation, processing and preparation of results are carried out by the States for most of the sectors. It is the State-wise results, which flow to the Centre, and statistics at the all-India level are obtained, more often, as the aggregates of State-level statistics. The information from MoSPI is also consumed by State Government and utilized for planning their schemes. It is envisaged that the State Governments will also use MIIP for data exchange.

2.1.3 Ministries/State level/ line departments

The ministries/state level line departments at centre/state will own responsibility to share the statistics at National/State level. They are the information provider for Government scheme implemented across the state by them.

Subjects such as money & finance, international trade, transport, infrastructure, balance of payments, incorporated businesses, etc. have meaning only at the all-India level. There are sectors, which straddle across more than one State and for which statistics are collected directly by Central agencies such as finance, railways, telecommunications, etc.

2.1.4 PSUs/Autonomous Bodies

Centre and state level PSUs and Autonomous Bodies are involved in the implementation or execution of many government sponsored schemes (i.e. projects). They also access MoSPI information bank for planning their execution as well as for research studies. It is envisaged that the PSUs and Autonomous bodies will use MIIP for Data exchange and dissemination.

2.1.5 Research organizations

The role of research organizations is very important in the field of social research in a developing economy like India. Centre and state level research organizations conduct research on emerging and cutting-edge areas of social research and policy making. They are pro-actively involved with government bodies in designing and implementation of field studies. The contribution of research

organization is not limited to data collection and report dissemination as they also contribute significantly in the field of development of courses and study materials for development of strong analytical work-force. They also conduct the training programmes and workshops for student, experts and professional coming from various industries/institutions.

It is envisaged that the Research Organizations will use MIIP for Data exchange, research notes and training content.

2.1.6 Private organizations

The contribution of private organizations can't be ignored in the field consumer based surveys. The organization use the demographic and geographical statistics from MoSPI and identify critical patterns that lead to understanding the consumer behaviour and regional/geographical biases. This information can be leveraged to plan various economic and behavioural studies. Their proactive involvement and engagement with MIIP platform can extend the accessibility and utilization of information.

2.1.7 Individuals (Citizens / Scholars)

A citizen form part of various surveys by contributing information and scholars provide assistance in collating the information assets to derive meaningful results. Timely, reliable, relevant and quality information is a necessity and hence, an effective combination of analysed and visualized data enables appropriate decision making when one needs to know more about national or regional statistics. It is envisaged that MIIP will lead into a knowledge bank with ready responses to frequent data requests and individuals will use MIIP for information, data exchange and sharing insights.

2.2 Access Layer:

It is envisaged that the MIIP will be hosted centrally, at the cloud location, and will be accessed by all the stakeholders, authorized users as well as citizens through various means and mechanisms to request services through various access channels. Some of the key access channels envisaged for the MIIP are described below:

Web Browsers

Mobile Devices

Email / SMS

2.2.1 Web Browser

Access over Internet / through Web Browsers will be one the key access mechanisms for the MIIP. All the ecosystem partners will connect to the Portal via Internet. The MoSPI officials / PMU will have access via internet and a special Gateway provided by the cloud service provider, in consultation with MoSPI. The access rights for the contents and modules of the MIIP will be managed through the 'role based access control' (RBAC) mapped to individual / group login credentials. The MIIP should have both static and dynamic information / content that should be available and accessible through a web browser via Internet. The kind of information / content to be displayed on the web portal will be managed and controlled through the 'Application Admin' module and 'Content Management' module of the Portal with an intention of making most of the information available for Stakeholders consumption through the web portal. The SI is required to develop a comprehensive browser based information control and display feature through these modules.

2.2.2 Mobile Devices

It is envisaged that the MIIP will also be accessible through various Mobile devices and smart phones, through defined mobile application or normal browsing through a mobile device. All the features and

functionalities as defined for the access mechanism through Web Browser / Internet will also be applicable in case of accessing the Portal through any mobile device. The SI will need to optimize the MIIP web content, with user friendly features so that the Users can easily browse and operate the service features through these devices. Some of the key requirements related to Mobile Apps, but not limited to, are mentioned below:

a. The Mobile Apps should provide an intuitive and user-friendly GUI that enables users to navigate and apply actions with ease. The GUI should be responsive with very little or no delays or time lag at launch or whilst navigating through screens.
b. The Mobile Apps should enable ease of configuration and changes to existing GUIs, and support the introduction of new screens.
c. The Mobile Apps should provide on screen tips and online help to aid users while interacting with it.
d. Should make use of data available in the existing Database and reduce duplicate data entry
e. Provide way for users to provide feedback on the mobile apps, a quick way to report bugs, and provide suggestions.
f. Incorporate analytics into mobile app, to track and identify users experience and actions.
g. Apps should be easily customizable and easy to Administer data in the MIIP Database
h. Network level security, traffic should be encrypted using secured connectivity
i. Should support real time information via GPS availability
j. Should provide mobile Apps download based on phone OS and services
k. Apps should structure overall content with proper tagging to make them screen reader friendly.
l. Apps should ensure Compatibility with all platforms like windows, Android, Blackberry & Mac iOS etc.
m. Apps solution should develop Resolution independent design structure i.e. Mobile Apps should adjust itself automatically as per the screen resolution of the Mobile i.e. 1024*768, 1200*800 etc.
n. Mobile Apps should work flawlessly across different platforms
o. There should be minimum use flash contents so that home page should be loaded quickly.
p. It should not occupy excess client's Mobile RAM.

2.2.3   Email/SMS

The MIIP is envisaged to send alerts / intimations / automated messages to register email and mobile number of individual users/ user group. An authenticated SMTP mail service (also known as a SMTP relay or smart host) is envisaged to be integrated under the NIC/MeitY framework for sending mails from MIIP, and delivered to intended inbox or mobile device. The MIIP is envisaged to send text messages and notifications to user, SI will make the necessary arrangement to integrate with SMS Gateway.

2.3   Enterprise Portal Application Services

In order to meet its objective, the MIIP has been envisaged as an Enterprise Portal Application. The MIIP should have the following features but not limited to:

a. Proposed portal will be single integrated user interface for all stakeholders. Backend COTS/ bespoke applications will be exposed through Portal console using single-sign on.
b. Portal should enable personalization and configuration at user level as well as MoSPI level. The portal should be capable of directing relevant content and information to individual users/ roles, and provide end user customization.
c. Portal should enable content publishing within portal framework. It should support or should be capable of integrating with an advanced content management solution. Intention is that the Portal should enable content publishing within portal framework.
d. The portal should support workflows.
e. The portal should not allow concurrent sessions for same user. The system should automatically log out a customer in case of session breakdowns (e.g., communication failure, high inactivity period - these should be parameterized).
f. The portal should implement security features, such as password complexity, automatic blocking (temporary/permanent) of user logins after given number of unsuccessful login attempts (should be parameterized), controlled access to content stored on the portal and

logging of security incidents. It should by its own or through an integrated Identity Management solution be capable of managing security rights and privileges by individual, group and role, and should support Single Sign On.

g.   Portal should support HTTPS protocol on Secure Socket Layer (SSL).
h.   The portal should support the leading browsers such as Internet Explorer, Firefox, Chrome, etc.
i.   The portal should be able to expose / publish functional applications seamlessly.
j.   The portal should provide search engine with advanced full-text search capabilities. The search engine should be able to search for requests within the portal.
k.   Should provide support for comprehensive audit trail features such as:
     i.   Daily activities log should be merged into the history log files
     ii.   Date, time and user-stamped transaction checklist should be on-line generated for different transactions
     iii. All transaction screens should display system information
     iv.   Daily activity reports should be provided to highlight all the transactions being processed during the day
     v.   Unsuccessful attempts to log-in to the system should be recorded
l.   Portal should be compatible to mobile devices
m.   Portal should be interoperable with industry standard databases (Oracle, DB2, Microsoft, etc.).
n.   Portal should be capable of Supporting Multilingual content capabilities.
o.   In addition, the portal should provide the following capabilities.
     I.   Should have multilingual capabilities with regional, localization and Unicode support.
     II.   Should support multiple browsers like IE, Firefox, Chrome, etc.
     III.   Should be able to integrate with common office application.
     IV.   Should authenticate users from Active Directory/LDAP, claim based authentication
     V.   Should support web services APIs, BLOB Storage, custom code solutions, REST, WSRP
     VI.   Should support Virtualization
     VII.   Should support customization of Look and feel of the portal
     VIII. Should support a broad range of standards, preferably open standards. Some examples are DOM 1.0, HTML 5, HTTP, HTTPS, MathML, ODBC, ODF (IS26300) , Open XML (IS29500),OpenSearch, OpenType, PDF 1.7, PDF/A, RTF, RSS, ATOM, SOAP, SVG, REST, UDDI, Unicode, URI/URN, W3C XML Schema, WCAG, 2.0, WebDAV, WSDL, WSRP, XHTML, XML, XML Web Services XMLDsig, XPATH, XPS,XSLT
     IX.   Should be able to connect to mobile devices.
     X.   Should integrate with email servers
     XI.   Should integrate with instant messaging services
     XII.   Should integrate with any other portal products through open standards such as HTML, XML, RSS, web services, and WSRP.
     XIII. Role Based Access
     XIV.   Should support encryption and compression features
     XV.   Should support multiple roles with associated access controls.
     XVI.   Should support upload, store, organize and share documents
     XVII. Should support Podcast Publishing, Rich media streaming and transcoding, Rich media search and organization
     XVIII. Should preferably be XHTML 1.0/WCAG 2.0 AA compliant
     XIX.   Should have content authoring capabilities
     XX.   Should have workflow capabilities about the content approval/publishing process
     XXI.   Should support Publishing content in web viewable formats

XXII.	Should provide multi-channel output capabilities
XXIII.	Should support editions (versions/rollback) of the web site managed
XXIV.	Users should be able to upload documents in multiple formats
XXV.	Users should be able to upload multiple files at the same time
XXVI.	Should support 'Drag-and drop' file upload
XXVII.	Should be able to 'send' documents to a projector group area by email
XXVIII.	Should be able to have embedded viewers for accessing documents in multiple formats without requiring other applications
XXIX.	Should support creating and editing rich documents inside the browser
XXX.	Should have multi-user editing the same document.
XXXI.	Should support version control, change tracking and comments in these documents
XXXII.	Should support approval workflow
XXXIII.	Should support check-in/check-out capabilities
XXXIV.	Should support version Control Capabilities (the number of major versions supported, minor versions, and branching)
XXXV.	Should support document linking capabilities (static, dynamic, and/or other)
XXXVI.	Should supports the import of content into the repository
XXXVII.	Should support document and text indexing capabilities
XXXVIII.	Should have offline capability for uploading content
XXXIX.	Should support image indexing capabilities
XL.	Should be able to support to store and manage documents in the same repository
XLI.	Should Support Managed Metadata
XLII.	Should support Records Management
XLIII.	Should support Document Sets
XLIV.	Should support content archiving capabilities
XLV.	Should Support Digital Asset Management
XLVI.	Should be able to add Site Feeds within a portal
XLVII.	Should support federated search
XLVIII.	Should be able to customize search
XLIX.	Should be able to perform read/write/update data to other RDBMS
L.	Should provide offline support for forms
LI.	Should provide support (out-of-box) drag and drop of documents directly from File Manager/ Windows Explorer to Browser for upload of documents in a document library.
LII.	Availability of document metadata when offline
LIII.	Should support creation of ad hoc query by users
LIV.	Application forms should be created as templates and data could be stored separately.
LV.	Data entry for E-forms could use a common office interface
LVI.	Data could be collected in an offline manner; no connectivity to capture data should be required.
LVII.	Bulk update of data should be available to any data source
LVIII.	While the bulk data is getting uploaded it should also tell for errors if it encounters any.
LIX.	It should be single solution which provides the capability to consolidate the data from multiple sources, Search and visualize the data with GIS integration.

Enterprise Portal

Self-guided assistant	Search	Subscription	Document Management System	Learning Platform (including User Helpdesk)
GIS	eBook Platform	Survey Instruments (GSS+IVRS+Text Feedback)	Alert & Notification	Content Management System
Workflow Management System	Information requisition platform	Data Conversion Engine	Public Outreach Platform	User Management

2.3.1 Portal Search Feature

MoSPI has envisaged this portal not only to support its internal data processing and report dissemination requirements but also to cater a larger set of audience from Ministries, State Departments, Research institutes and public who is looking forward for information in the form of data, reports or published contents. The whole information dissemination process can't be imagined without an Optimized Enterprise Search Engine. Accordingly, MIIP

a. Should be able to support both structured and unstructured data, and a combination of them.
b. Should support surmised/contextual search.
c. Should support search and contextualize results based on user profiles and roles.
d. Should be able to search information from all possible data sources present in the ecosystem which includes but not limited to internal and external data sources such as portal, integrated content management system, databases etc. The solution should be capable of making content from multiple enterprise-type sources, such as databases and intranets, searchable to a defined audience.
e. The solution should be capable of searching in external data repositories (of both structured and unstructured data) which will have interface with the solution.
f. The search solution should support automatic spelling checks, query suggestions.
g. The solution should support dynamic result clustering.
h. The solution should index data and documents from a variety of sources such as: filesystems, intranets, document management systems, e-mail, databases and other integrated external systems.
i. Preference will be given to
    i. Enterprise search platforms with futuristic capabilities like context based search, machine learning and natural language processing capabilities, content analytics and searching with subjective questions or phrases etc.
    ii. Enterprise search platforms should have the capacity of searching but not limited to all types of structured, unstructured, semi-structured, social media, web content, enterprise systems etc.
    iii. The search platform must be scalable to search billions of records.
    iv. The search engine should have the ability to securely search internal, external systems or applications preferably without needing to index them at all times.
    v. The search should show results to the user based on the authorization and authentication of the user.
    vi. Security profiles of the underlying systems should be respected so that users can only see the information for which they are authorized.

vii. The search platform should preferably provide a platform that is easy and quick to customize. A web-based intuitive administrative interface is advantageous.

viii. These arch platform should be able to handle industry specific taxonomies and ontologies, as may be required during the course of operations.

ix. Search users should be able identify and extract specific entities relevant to their interest area fairly easily and quickly.

x. These arch platform should support dynamic categorisation of results in order to accelerate searching process.

xi. Thesearchplatformmayautomaticallyidentifyandclusterrelatedinformation to achieve better user satisfaction.

xii. Theproposedsystemmusthaveasearchfeaturewhichshouldbecapableofincludingfullword matches, partially matching words, misspelt words and different tense of words in the result.

xiii. Theproposedsystemshouldhavecapabilityofcrawlingdifferentstructured and un-structured data sources.

xiv. The system should be able to extract and combine data into a single unified analysable view from different source systems like transactional systems (RDBMS), data warehouses, csv files, and .doc files, excel files, PDF files, DBF files, emails, XML files etc.

xv. The proposed system should allow the business users to run tagging and text enrichment from the front end himself

xvi. The proposed system should have an in-built thesaurus which should be referenced by the search feature for finding similar meaning words from the database and including those records in the search results

xvii. The proposed system should have a stemming feature forincludingdifferentformsofsamewordinthesearchresultsi.e.asearchfor"running" should include "Run", "Ran" in the results

xviii. The proposed system should have a feature for specifying stop words that should not be included in the search i.e. "and", "for", "with", "from", etc. should not be considered for deciding the search results

xix. The proposed system should have the capability of crawling documents like word doc, excel files, PDF files, etc. and combine these sources with other unstructured as well as structured data sources

2.3.2 Subscription Model for Stakeholders

MoSPI values the sanity and effort put-in during the process of data gathering and processing to make it usable for the stakeholders. Every piece of Information with MoSPI qualifies for the financial evaluation based on the certain set of parameters defined by the department.

Accordingly, MIIP should have the subscription model for stakeholders which will be defined/verified in co-ordination with the department officials. By opting the subscription model, user will qualify to view and download the specific Datasets, Customized reports, Research Studies and Publication Reports, which are not available in public space for free. It should allow users to create, review and manage the cart as an online store's catalogue and ordering process, for the information they wish to subscribe. The subscriber will also receive the system generated notification and alerts to keep them updated about the upcoming event and activities of department.

The Subscription model will be supported by the authorized payment gateways to provide user online payment facilities.

2.3.3   Survey Instrument
NSSO and programme Implementation divisions carry out several studies or surveys throughout the year. One of the major activity of these wings/divisions is to timely collect the information from the sources/field. The data requirement of department can be classified into two major categories:

   I.   Surveys or Studies: Data points are fixed and the information is collected, compiled and published by department on a defined periodic interval.
   II.   Ad-hoc Surveys or Studies: Timelines are not pre-defined. Such surveys are carried out as when requirement and presented to the Ministry.
   III. IVRS (Interactive Voice Response Surveys (IVRS): The solution features should have support for carrying out IVR surveys from the intended users. This would be based on CATI (Computer Assisted Telephone Interview) method that uses interactive voice response software. Automatic phone interviews can be initiated by delivering telephone survey calls to potential responders. The telephone survey should be programmed to accept phone key responses or can simply have their responses recorded for transcription or analysis. The solution should be capable of multi-layered text feedback based on the responses.

Besides having several automated online tools for data collection, a separate project (General Survey Solution) is being undertaken by MoSPI to automate data collection under different surveys using this survey instruments. MIIP system should have interface to integrate the survey and define the workflow process of proposed GSS system.

2.3.4   E-Book Platform
MoSPI has been disseminating micro data from its surveys and census since long. It has been required to facilitate sharing the outcomes of its survey in terms of reports, analysis, journal & publications. A platform is required to be built which serves as an E-Book for researchers to browse, search, and download the relevant studies and documents.

Following are some of the key requirements for E-book Platform, as a part of overall MIIP solution:

   •   E-Book platform should be able to facilitate various articles, thesis, books, abstracts, publication reports uploaded in the MoSPI websites by various researchers/scholars.
   •   Search all the publication/literature from one convenient place.
   •   Explore related works, citations, authors, and publications
   •   Export the citations
   •   Locate the complete document through your library or on the web
   •   Keep up with recent developments in any area of research
   •   Alert Notifications to authors/scholars on any updates on uploaded content
   •   Check who's citing your publications, create a public author profile
   •   Summary count of various correction, citation, export etc. on each publication

Along with above features, E book platform should be able to rank documents the way researchers/scholars' updates, weighing the full text of each document, where it was published, who it was written by, as well as how often and how recently it has been cited.

The purpose of E-book platform is to build & organize the library in which all research documents, publication reports, and relevant documents can be stored, saved & updated on time-to-time basis and make it accessible and useful for public.

2.3.5   User Management

The MIIP should provide browser-based interface to the Internal (i.e. MoSPI users) and external stakeholders. The user registration process should be an integrated part of system and every registered user will be assigned appropriate role based on their user group i.e. Administrative Department, State Bodies, Research Organisation, Citizen, etc. All the user management features and Access Control matrix should be managed from the web-based interface by departmental user/admin.

The admin user should have the rights to edit/modify/delete the existing user, user group or user roles in the system. The admin user can also create new user roles and user group. To provide aesthetics to the user interface, the screen and form layouts shall be designed with maximum simplicity. The system shall be designed keeping in view that there is uniformity and consistency across the application's buttons, icons, screens, forms and report layouts.

Under various categories, sub-users may also be created & role for sub-users will be administered by the admin of the respective group/ category. For instance, state government may be created as super user which can create sub users for their corresponding state.

2.3.6   Service Request Mechanism

The set of information which is either not readily available on portal or users is not able to locate it, the portal will provide an online service request system to raise their queries. User can request the department for information related to the content on portal by generating a service request. The user can raise the service request in the following case:

  I.   Enquiry about the portal content.
  II.   Difficulty in operating portal features.
  III.   Report the error appear on portal.
  IV.   Difficulty in locating the contents (data/report/notification).
  V.   Query on published content.

The Portal should process the request and assign to the concerned/aligned official or user. Each service should be categorised by the department in defined segments based on the requested information and associated tentative turnaround time will be communicated to the end user.

The Service Request Mechanism should take care of complete threaded communication and workflow happen with respect to the request/enquiry between the department represented and the end user. Service request system can be integrated with the alert and notification in order to keep the official/user updated i.e. the concern official/user will Email/SMS notification on allocated service requests.

2.3.7   Alert & Notification Management

The portal should be empowered by an alert & notification management system like SMS service, Email and IVRS system. The integrated communication services will be used for activities i.e. verification of user, information dissemination, sending alerts for actionable entity, service request management etc.

The whole alert and notification module should be configurable and managed from the front-end application/web -interface. The module will be designed in such a way that customize alert and notification can be sent to users or user groups. The utilization of this module can be extended to both internal and external users of portal.

This module shall have functionality to issue automated alerts/ notifications to various data suppliers/users as per defined periodicity and summary of their responses will be available on admin super user's dashboard for analytical purpose/ action.

2.3.8   Document Management System

The MoSPI has a huge information bank in the form of documents, published reports, scanned copies, research papers etc. To manage and maintain the documents to make them re-usable and searchable for internal and external users of portal, it is proposed to implement a Document Management System (DMS). This system should allow the users to input the files from web -based interface from their files system or Mobile Device both. The DMS will support Share, Move and Forward the documents. All the document and their content should be searchable for the users.

Key functionality required in Document Management System are:

I.   **Powerful Search Functionality**: the search tool extends to words within documents
II.   **File Versioning:** keep a draft version in addition to a new version
III.   **Role-based User Permissions:** create users with different permissions to account for what they can and cannot view within the system
IV.   **Secure File Sharing:** Quick and easy sharing between divisions with high-level security and encryption
V.   **Document Previews:** Preview contents of all common file formats (Word, Excel, Emails, Tiff, PDF, images, Audio, Video) without their native applications
VI.   **Audit:** Verify who viewed and made updates to the documents
VII.   **Bulk upload:** upload everything in one go more efficiently

2.3.9   Content Management System

The content available on MIIP portal will governed by the management of MoSPI. The process will be defined to approve the content which need to be uploaded on portal and the without the workflow approval system will not accept any content to be viewed or deployed on portal for public users. The web interface will be developed for MoSPI users to add/modify/delete the content, and the process itself will take care of versioning of content. All authorized user division will be given facility to add / modify/ delete the contents for their respective division.

Content Management System should have the following features:

I.   Enabling maximum content reuse and eliminating duplicate content
II.   Functionality through a menu on the toolbar of their favourite authoring/editing software
III.   Flexible and configurable system to make customizations without additional costly programming
IV.   Store and organize graphics and multimedia files within the CMS and search for them based on assigned metadata
V.   Remote users access the system through a secure Web interface
VI.   System administers assign user privileges and roles, allowing users to only access the content they are authorized to use
VII.   Ability to change a data model and/or manage multiple models simultaneously without major changes to the system
VIII.   On-site training and ongoing customer support

2.3.10   Learning Management System (including e-learning Platform)
Apart from building a strong data collection and dissemination platform, MoSPI would also like to engage and motivate the workforce of Government bodies, research organization and individual to contribute to the analytical workspace and share their learning actively with other users through the available platform. The platform should provide online Capacity Development (training) for Officers of the Ministry and Officers of State/UT Government. SI will be required to create sensitization and education based interactive videos, preferably in animation, for various surveys' activities conducted by MoSPI, including, Round wise data of NSS, Economic Census, ASI, CPI, IIP, so on and so forth.

In order to support the agencies or individual who would like to contribute to the analytical space, portal will provide them the self-learning course content and online training through developed Audio, Video or reading material. The learning management system will remain integrated part of portal where registered user opts for different training programme and download the training material. These interactive videos must focus on training users to use MIIP portal, such as, extracting data to workbench, using BI tools and statistics, etc.

2.3.11   Human Resource Management System

It is a human resources software that combines a number of systems and processes to ensure easy management of service and performance related information of Indian Statistical Service (ISS) /Subordinate Statistical Service (SSS) officials posted with ministries in various organizations across India. NIC's HRMS system has to be integrated in MIIP solution.

2.3.12   Self-Guided Assistant
User experience is the most important thing for the success of any solution and, to improve it, solution needs to have support team in place, so that no user remains unheard at any point of time. To achieve the objective portal should have an integrated self-driven Intelligent Assistant in place, which can interact with user, listen to queries and intelligently answer them based on past learning. The Self-Guided Assistance should a have intelligent text processing engine which can process the user queries based on the text entered and consider the knowledge repository for best possible answer. The system should be intelligent enough to keep learning from past user communication and provide relevant suggestion based on previously inputs.

2.3.13   Data Conversion Platform
The 'Statistical Data and Metadata exchange' is an international initiative aimed at developing and employing more efficient processes for the exchange and sharing of statistical data and metadata among international organisations and member countries.

MIIP system should integrate the following tools that MoSPI is currently using to convert the National Accounts data (.csv) quarterly aggregated estimates into SDMX format:

1. SDMX Converter: File oriented concepts

2. SDMX-RI: Database concept (Database is SQL Server)

Data Conversion platform should have functionality to convert various data formats and harmonize as per requirements of internal agencies. It shall also facilitate users (department & states) to bring their data in line with MoSPI standards.

2.3.14   Service Delivery Layer

The system must have a service delivery layer. This layer or module would be essential for data dissemination, and handling queries/criticism/specific requests. Summary of these responses will be available on super user's dashboard for analytical purpose/ action.

This would also include registration, media reports from web scrapping etc.

The service delivery layer will define and decide protocols for using various modules being developed under MIIP by the authorized common user. The process should be automated, e.g. in a particular survey sample units have mobile no. then surveying agency may customize SMS/notification gateway with its survey instrument for sending notifications. In similar manner service delivery layer will enable automated use of various modules/platforms by its users.

2.3.15   Geographic information System

To make information representation more meaningful and relevant the GIS will remain an integrated part of MIIP solution. GIS component will be integrated with portal and other solution component. GIS integration will remain an important aspect of data dissemination process. GIS enablement will help the external and internal user to interact with data compiled from different geographies. Solution need to have interface of GIS representation of data up to Central -> State -> District -> Tehsil -> Village levels.

Key functionality required in Geographical Information System:

Data Capture – This is simply the act of inputting data into a GIS. Relevant data can be grabbed from a number of sources. A GIS should be able to convert your data to a raster or vector file that will be compatible with your tool.

Remote Sensing Integration – Remote sensing is making measurements of a specific location on the earth through airplanes or satellites. These sensors have the ability to collect data in the form of images. As part of its data capture functionality, remote sensed imagery should easily integrate with a GIS.

Data Warehouse – GIS software stores the data on geographical features and their characteristics. It uses that data to publish maps. Just as GIS solutions capture data in multiple formats, said data is stored in multiple formats as well. Map city data can be stored as points, road data formatted as lines, boundaries as areas, and so on. Storing this information is what allows a GIS to identify features located in a map.

Buffer Zone Querying – Buffer zone querying is the ability to select a point on a map and display any given data within a certain radius. These buffers are used to show an area of influence around a location. For example, a buffer can be used to section off a radius around a school to plan for the transportation of students who live farther away. Some GIS tools may refer to buffer zone querying by other names, such as feature-based proximity tools.

Editing Data – The features of the landscapes you study change, which means your data will change as well. A GIS will enable you to keep up with these changes by allowing you to edit your data. Specific revision features and processes will vary in each GIS, but they should all offer the ability to edit your data.

Data Visualization – The data visualization component of a GIS is what brings your data to life, in either a 2D or 3D format. A GIS displays the data you input as an easy-to-read map right on your desktop. This function may allow for additional features, such as adding pop-ups, charts, and infographics to maps.

Geocoding – This feature assigns locations to the addresses you need to keep track of so they may be placed as points on a map. It can be thought of as a digital version of putting a pin on a location on a physical map. Some tools may refer to this feature as address-matching.

Spatial Analysis – This may be one of the key features of a GIS, as this ability allows users to dig into their data and make informed decisions, predict patterns, and more. Spatial analysis is at the core of publishing a map.

Overlaying – Overlaying makes it possible to visualize many different forms of data in one image. This function superimposes multiple datasets into one image to identify the relationships between them. Most GIS software provides overlaying capabilities for both vector and raster data.

Publishing Maps – Creating maps is the end goal of GIS software. All of these features, such as overlaying and data editing, contribute to the creation of a map. Once your data is set, you can simply print the map out on a corresponding printer. Some GIS tools may run one final analysis of your data before printing the final map.

MoSPI intends to add GIS layer to all its data sources and existing data will also be bought to GIS platform. Further, this facility (or GIS platform) functionality may also be extended to various state government authorized users to use so that data pertaining to them may also be made available on GIS layer

2.3.16   Workflow Management System

Workflow Management System allow the user to define different workflows for different types of jobs or processes. At each stage in the workflow, one individual or group is responsible for a specific task. Once the task is complete, the system will ensure that the individuals responsible for the next task are notified and receive the data they need to execute their stage of the process. The system should be able to perform the following tasks:

     I.   Enables individuals to streamline repetitive processes
    II.   Allows creating and assigning tasks
   III.   Provides an infrastructure where tasks can be defined and executed
   IV.   Defines the tasks involved in each step of the process
    V.   Automatically follows up on unfinished tasks in the process
   VI.   Synchronizes tasks in every stage of the process chain
  VII.   Sets up, executes and monitor workflows, and adapts to changes along the way
 VIII.   Coordinates the operation of individual components that constitute the workflow
   IX.   Provides overall visibility of the workflow along with performance metrics
    X.   Combines a number of tools into one easy to use platform
   XI.   Helps users keep up and keep tab of sequences in operation
  XII.   Provides individuals the needed information to perform tasks effectively wherever they may be
 XIII.   Allows custom email notifications regarding workflow status to concerned individuals
 XIV.   Allows integration of other systems into the process model to reduce errors from manually copying information

2.3.17   Public Outreach Platform

To make communication and awareness an organic part of the project, the project is expected to demonstrate a unique identity for MIIP, memorable message development and effective communication through multiple media formats to broad and diverse audiences to provide public relations and community outreach services.

These services would include, but not limited to: community outreach, social media management (including web crawling and sentiment analysis), brand/identity creation, public relations, message development and delivery, event communication and prioritizing multi-phased communication campaigns. The platform will facilitate ministry in disseminating various information directly to Public.

2.3.18 Information Requisition Platform

A robust delegation and requisition management platform to automate and streamline internal business processes associated with MoSPI requirement.

The system shall have a powerful requisition platform for automated collection, approval and fulfilment of information requisitions by the Ministry. A user can start entering requisition requests in an interactive user interface. Requests are automatically sent to appropriate approvers for action / approval based on requestors' institutional position.

2.4 Data Acquisition and Dissemination Services

MoSPI deals with both primary and secondary source information. Primary information majorly gets collected through field surveys or studies carried out either by regional offices of MoSPI or the state functional bodies MoSPI named as Directorate of Economic Statistics (DES). This information is further scrutinized, validated, analysed and published in the relevant format.

The data management services of department are not limited to dealing with the only information collected by them, they also compile and publish the information or data collected by the other administrative government department/ministries (apart from MoSPI) and their state level bodies.

2.4.1 Data Acquisition Services

MoSPI would like to extend the benefit of MIIP initiative to the functional wing of State Government, field partners and Individuals (Entity/People) who are actively involved in the activities of data collection. The department would also look forward to developing this platform as a unified and well - managed collection of data, reports, research studies and analytical work.
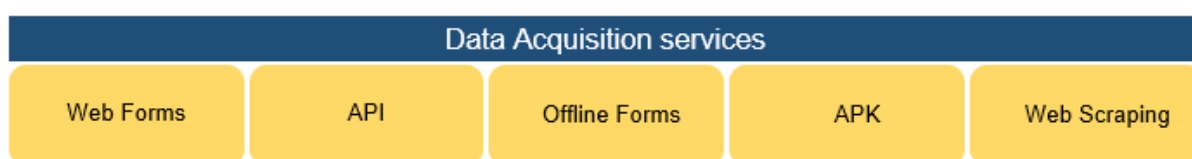
The above objective needs a strong communication channel between the field office of MoSPI as well as the existing agencies/department who would like to contribute or participate in this initiative. To achieve this objective the proposed solution should be open to all type integration and migration activities. Statistical Data and Metadata exchange (SDMX) standards would be utilized for exchange of aggregated data amongst participating organizations. Similar data exchange standards would be used for sharing unit level information between organizations.

The field level data collection and monitoring will remain an integrated part of data acquisition services, which will be administered by MoSPI official. The proposed solution should provide the feature to define the monitoring layers (i.e. Headquarter \ Regional Office\ FOD \ Investigator etc.) with appropriate privileges to accept, reject and submit the information.

2.4.1.1 Web Form
The MIIP will be web based solution, it will be designed in such a way that most of the process i.e. user registration, user management, master data management, survey data collection, workflow management etc. will be done through the web-interface. This will primarily be the most accessed interface of MIIP. The current processes of MoSPI will be studied/discussed in detail to design a unified web-based interface which allow the user to interact with proposed system.

Designing the web-based data entry form of survey execution will help the department to avoid the data losses happen during the transition of data from data collection point to reporting centre. It will also save a significant time and speed up the data validation, verification and compilation process.

2.4.1.2 Application Program Interface (API)
The MIIP platform should be open to accept data from existing application running at the associate sites (i.e. State Department, Research Organisation, and Administrative Department at Centre Level) through the API integration. The proposed platform should allow the partner to consume the API to share the data without any significant effort of coding. For example, API for Public Financial Management System (PFMS) has to be created which is a platform for e-payment of subsidy under Direct Benefit Transfer (DBT) to both Aadhaar based & Non- Aadhaar based bank accounts through NPCI.

2.4.1.3 Offline Form
The proposed solution should allow the users to work offline wherever internet bandwidth is an issue and empower the users to work as per their convenience even if they are not connected to internet. The solution should provision for offline formats for data gathering from data collection agencies and Government departments.

2.4.1.4 Mobile Application (using APK)
The Solution features should have support for handheld (including TAB and Mobile) device, to provide mobility to decision makers (MoSPI official) by integrating the dashboard and reports. This will also enable the field officers to enter the data directly through handheld device. The online survey over mobile must have multi-layer responses.

The mobile application should also support the feature of offline data entry wherever internet bandwidth is an issue.

2.4.1.5 Web Scraping
This module should be used to extract large amounts of data from websites whereby the data is extracted and saved to a local file in or to a database. A web scraping software will automatically load and extract data from multiple pages of websites based on MoSPI requirement. It is either custom built for a specific website or is one which can be configured to work with any website. Web scraping will be done through MOU with the respective public sectors.

2.5   Data Dissemination Services

Handling of complex data leads to a significant amount of work-load on MoSPI for the data dissemination and compilation services. MIIP will be envisaged by keeping the existing and upcoming data dissemination of requirements. Dissemination will include Data services and Reports/Analytical Services. Static as well as dynamic reporting will be required on various parameters. The system should have provision of SMS or email to concern person who is responsible for Data Dissemination after submission of user request.

Reporting and Analytics Engine					
Research Specific Data	Generic Data	Custom Report	Publication	Dashboard	Analytical Reports
Custom Data	Internal/ Provisional Data	M&E Reports		Statistical Models	
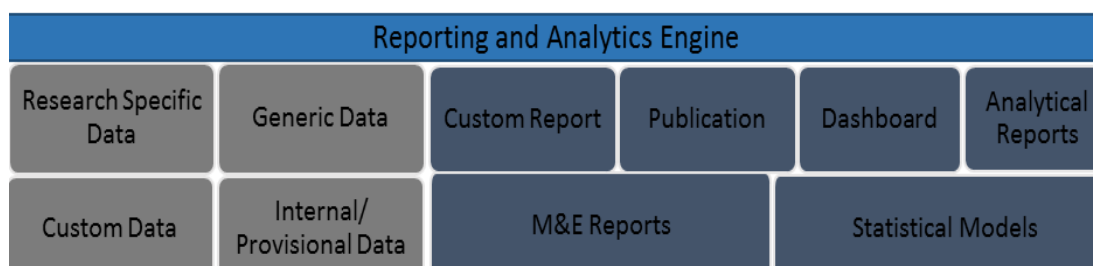
2.5.1 Data Set Service

The information / data collected by MoSPI and other administrative department are managed and published in the form of datasets, tables and reports as per the guide lines of Government of India. These datasets are further made available to the end user i.e. administrative department, Research Organizations, Pvt Institution, scholars etc. through the available platform. Keeping in view the timely delivery with accurate quality of information, MIIP will dynamically generate the dataset, table and reports based on the need of portal user in consultation with MoSPI.

MoSPI values the data need of researcher and Pvt Institution. In order to motivate the user for more data driven research work, department provides the required data for certain period at a nominal cost. The dynamic pricing model will be introduced to derive the cost of requested information, the model will be derived in guidance of MoSPI official and reviewed periodically based on the utilization.

2.5.2 Generic Data

This data is readily available for user in public domain without any user authentication. It includes the census data, research reports and published socio-economic indicators.

2.5.3 Custom Data

Custom data is not readily available with website, but it can be generated on-demand from the DataMart's build using the available data source with department. Custom datasets can be requested in below mentioned ways:

> a. It can be generated by passing the set parameter from web interface, if the relevant set of parameters are available with system.
> b. By submitting the custom data request through the service request mechanism.

2.5.4 Internal/Provisional Data

This data is available only for the internal users of department. It is yet to be finalised or there is a scope of change in statistical figures. The governing bodies will have to approve and publish it before making it accessible to the external users.

It also includes the raw data which only available to the internal user for compilation and calculation of statistical indicators and research studies.

2.5.5 Research Specific Data

MoSPI will also provide the platform to publish work carried by researcher and Government officials. The results/reports in the form of tables and graphs of studies are generally readily available for all the users. But the input data used in the research to carry out the results or inferential indicator are not available with research Studies.

Any user or set of users requires any data related to research studies can contact MoSPI through the available contact channels and get the data after the official approval of MoSPI, subject to the availability.

2.5.6 Reporting Service

As a part of data dissemination process, MoSPI is responsible for publishing many periodic and ad-hoc reports, the reporting requirement of department will be reviewed and analysed in detail as a part of proposed system. Services will include the development of Dashboards/Web services/API for Web and Mobile Apps on various subjects. Based on the existing and upcoming reporting/KPI needs department will segregate the accessed need separate categories that are discussed in detail in this RFP.

2.5.6.1 MIS Reports

Administrative and monitoring reports which needs to be published on a defined periodic interval are categorised as MIS reports. The periodicity and format of these reports are fixed in nature and any change in the layout reports will be approved, processed and published on portal only after the approval of project team of MoSPI officials. It would also generate various reports like monthly, quarterly and yearly revenue generated.

These reports are readily available for the portal users and refreshed only after a fixed time. The periodicity to refresh the reports may vary as per departments' priority or utilisation and they are available for the public users.

2.5.6.2 Dashboard Reports

The department understand role and responsibility of decision makers & officials, and to support their decision-making process with interactive reports and graphs the proposed solution will have provision of dashboards for internal/power users with drill-down reports, graphs and Maps. The dashboard feature is limited to the power user of system, but can extended to public users with limited functionality. The capability should include development of National Factsheet on India Economy (NFIE) indicators using Dashboard.

The requirement of BI-users will be considered separately during the proposed solution designing phase. The solution should have the capability to define user-role based dashboards and reports. The system should provision for web based development feature to design and publish the dashboards. This feature will empower defined internal users to enhance their analytical capabilities and share the across the other decision makers.

2.5.6.3 Custom Reports

Apart from the defined set MIS reports and dashboards, department can receive the custom reporting requirement for data received from other departments and surveys. The system should have a provision to cater the ad-hoc reporting requirements of internal and external users. The tool should support interactive Comparative analysis providing users the capability to dynamically compare the various aspects of same dimensions.

2.5.6.4 Analytical Reports

Although data compilation is one of the major functional activity of MoSPI but over & above it, the department official's routine work also involves a significant amount of estimation and forecasting. MoSPI also closely involved (as a statistical consultant) with the planning and development of Government schemes and programmes for which they closely monitor and forecast the important statistical indicator like CPI, WPI, IIP, Labour Index etc. In order, effectively analyse these the

economic indicator and carry-out the impact analysis using various statically techniques, MoSPI would like to introduce analytical reporting as an undisputed part the proposed solution.

2.5.6.5 Publication Reports

The department owns a set of publication and studies, which must be published by them for public and Government uses. These publication reports require a huge set of table and graphs. The proposed solution should have the provision to automate the generation of these tables and graphs.

2.6 Dynamic Pricing Engine

The data dissemination services will majorly be divided into two categories Paid services and Complementary services. Paid Services are defined by keeping in view the data requirement of Private Organization, Researches Organizations and Individuals users who need the data which is not available in public domain like specific Datasets, Customized reports, Research Studies and Publication Reports and need a significant effort of department to make it accessible.

<div style="background-color:#6aa84f;text-align:center">Dynamic Pricing Engine</div>

To make data service more transparent and linear across the user group, the proposed MIIP will have a Dynamic Pricing Engine in place to define the cost of information. The dynamic pricing engine will calculate the price of each value of information and will consider various parameters related to Domain, time, characteristic, Effort, nature of request and influential parameters, various ranking models, etc., to suggest a price for the requested information.

2.7 Data Management Service

MoSPI is data bank for all important data & indicator of national interest, to handle a huge amount of they need a Data Management tools in place. The tool should be capable enough communicate to data sources, run the data quality check and rectify (or report) the possible errors. The data Management Services will remain the integral part of solution. Every piece of information collected from primary or secondary source will be stored in the best possible way, so that its sanity can be maintained. Processing of data including cleansing & validation using ETL & Schema design. ETL strategy for control and monitoring like Error management, Creation of Error Logs, Defining staging/transformation and loading strategy for Data available from Heterogeneous data sources. The information will have to be maintained in such a way that they qualify for all type of arithmetic functions.

Data Management Services			
Data Warehousing	Data Quality Management	Data Security Management	Data Governance

The Data warehouse shall provide for Data Analytics for all subject areas using BI Analytical tools having capabilities such as; Dashboards, sliced / diced views of data across various Parametric and Dynamic Reports in exportable format such as XLS, TXT and PDF. The prime objectives of this are:

- To develop an integrated repository of current and historical data generated by Ministry of Statistics and Programme implementation, that can provide various sliced / diced views of data across various dimensions of interest.
- This repository over a period will also encompass data generated by various Central Ministries, State Governments and Public Sector Undertakings.
- To build a state-of-the-art decision support infrastructure with online analytical processing (OLAP) capabilities, which includes providing a multi-dimensional and subject oriented view.
- To build user group specific data mart based on the central repository over various phases of implementation.
- To provide extensive integrated metadata support across all layers of data warehouse solution.
- To enable web-based access to the Solution

2.7.1 Data Warehouse

The activity of the functional wings of MoSPI carry out many survey, Studies and processing of socio-economic indicator for Government and Public use. Every study/survey has its own objective, design, questionnaire and database structure. The difference in studies and database structure leads to the requirement of designing a unified Data Warehouse, which can be reference across the MPI to answer the almost all queries related to data. The data management tools should be able with integrate multiple data source at the same time to process the reporting and analytical requirement. The should have capability to integrate, design, transform, configure and Load the information across the available data sources and provide a strong data delivery layer for reporting and analytical solution. Data Warehouse should have the capability to consolidate & link all previous Databases and other data sets available with MoSPI for trend analysis & forecasting. Databases may be brought directly into MoSPI data warehouse. There would be a functionality where relevant data is fetched through APIs. /Web services from respective data sources (Central/State/Other Ministries) and used for analysis & visualization. These may also be used to prepare desired reports. The data warehouse lifecycle should be followed as:

- ➤ Staging DB
  - Purpose of the Staging DB is to provide persistence storage for application. Data is supposed to be read-writable.
  - Staging DB is deployed on the powerful DB cluster to provide satisfied performance.
- ➤ Archival DB
  - Purpose of the Archival DB is to keep inactive data for past cycles. Data is supposed to be read-only for users. At same degree, old reports can be regenerated from archival DB. However, due to evolutional changes in reported data, regeneration of the old reports is not possible.
  - Deployment of archival DB assumes usage of less power options (like one instance DB).
  - Archival DB contains previously published reports in delivered format (PDF)
- ➤ Migration data
  - Transferring it from one computer storage system to another.
  - Required in case, storage equipment replacements, maintenance or upgrades, website consolidation, application migration, disaster recovery, and data centre relocation
  - Migration is supposed.

- System supports job for data migration from Staging to Archival DB
- System supports job for old data removal from Staging DB

The various data source may be from MoSPI, other Ministries/ Agencies/ Department and State Government.

2.7.1.1 MoSPI Data sources -Indicative list of surveys conducted by the Ministry such as:
- Socio Economic Survey (SE)
- Economic Census (EC)
- Annual Survey of Industries (ASI)
- Consumer Price Index (CPI)
- Index of Industrial Production (IIP)
- Other Surveys

2.7.1.2 Other Ministries/ Dept. Data sources: Indicative list is as below:
- ANMOL (Nation Health Mission)
- Goods and Service Tax
- Corporate Data Management (M/o Corporate Affairs)
- Unified District Information System for Education (U-DISE) - (M/o Human Resource Development)
- Unified Shram Suvidha Portal
- National Career Service (M/o Labour & Employment)
- ICEGATE (CBIC, D/o Revenue)
- Government e-Marketplace (GeM) (M/o Commerce & Industry)
- Other sources of different Ministries

2.7.1.3 State Government: Indicative list of data sources that are covered under various acts such as:
- Indian Companies Act
- Factories Act
- Shop and Commercial Establishment Act
- Society Registration Act
- Cooperative Society Act
- Khadi& Village Industries Board
- District Industries Centre (Micro, Small and Medium Enterprises Development Act)
- Other Acts

Additionally, creation of data centre facility for hand holding on use of big-data and other statistical tools practiced by MoSPI is required. This would also include engagement environment for on boarding Start-ups in the area of statistics/data/IT.

2.7.2 Data Quality Management
While integrating information from multiple data-source Data quality will become important aspect of data management. The proposed analytical solution should have an integrated tool for data quality management and master data management. The tool should be capable to identify and eliminate the anomalies present in data and result in a unified single version of truth across the data-warehouse.

2.7.3 Data Security Management
Data Security will be maintained across the system on application and database layers. Access Control Matrix should be defined for application and reporting users. Data Encryption and masking policies will be integrated in-coordination with MoSPI guidelines.

2.7.4 Data Governance

For Effective implementation, data governance should be integrated tightly with other solution components. All the data acquisition and dissemination processes will be governed closely with the defined workflows, which will be monitored by administrative users. The data governance processes will help the administrative users to provide exact status of data acquisition and dissemination processes.

Every piece of information available with MoSPI is a government property and MoSPI reserve the rights to approve and disapprove the upcoming data requests. The information qualifies for dissemination will followed by an undertaking form accepted by the requestor.

2.8 Management & Monitoring Service

2.8.1 Web Server Load Monitoring

The system administrator needs to closely monitor the responses of the web servers to make the system highly available. The HTTP Server dashboard should help system administrator monitor the load of HTTP servers.

2.8.2 Application Server Administration & Monitoring

Server administration would include a wide range of tasks from creating Server domains, deploying applications, migrating domains from development environments to production environments, monitoring and managing the performance of the run-time system and diagnosing and troubleshooting problems.

2.8.3 Exception, Error Handling & Logging Services

A robust and reliable application error handling mechanism should be part of the basic infrastructure which will handle normal situation as well as unexpected application error.

Error detection, error handling, propagation of error information and error logging capabilities will be considered to make the application robust.

Logger will be used to log the system debug activities, errors and exceptions with different severity level. All errors would be logged with error code, error level and error message along with timestamp. Log 4j can be used for logging mechanism. It is an open source, popular logging package in Java and allows the developer to control which log statements are output with arbitrary granularity.

Following are some of the key requirements for Management & Monitoring Services through solution:

- The solution should provide reports to authorized users for end-to-end performance monitoring and control.
- The solution should provide tools and metrics to support testing, solution performance monitoring, fault isolation, verification and validation of the end-to-end solution
- The solution should have the ability to monitor in real-time all the activities and transactions of all the solution components.
- The solution should have the ability to show the statuses of all components, process.
- The solution should have the ability to show all the services running across the solution and the recent reference bindings with an actual view of the service flows showing service-to-service relationship as well as drill down to service specific information
- Should support monitoring policies (runtime, security policies) and report alerts when necessary
- The solution should have the ability to monitor and show all the statuses of the different infrastructure layers supporting the Portal platform

- The solution should have the ability to monitor the performance of the middleware showing capacity levels and transaction information
- The solution should have the ability to show recent faults and errors and be able to display recent error messages and exceptions handled
- The solution should support meeting specific SLA's by issuing customized and configurable alerts
- Should be able to produce reports showing various performance metrics

2.9 Interoperability and Meta Data Standards

The solution is envisaged to be integrated with other applications as and when required. The following integration and interoperability related guidelines should be followed while designing and developing the entire solution:

- Should be built on Service Oriented Architecture (SOA)
- Should use open or industry standard based message exchange protocols to ensure interoperability between participating systems.
- Should use of portable data and exchange protocols like XML and Web Service etc. as preferred much as possible
- Should ensure guaranteed delivery of messages by capturing the acknowledgment or confirmation of delivery and receipt of messages
- Should ensure integrity of data-in-transit through public network
- Should have proper error handling mechanism and message resend capability
- Should have the ability to view failed messages and reason for their failure
- Should ensure proper auditability and accountability of exchange of data between the proposed solution and other systems
- Should be developed using the published metadata standards by MeitY

The information and forms collected from various sources and the development of the solution web portal shall have to be converted into appropriate electronic open standard format(s) as mentioned in Interoperability Framework for E-Governance in India issued by Ministry of Electronics & Information Technology (MeitY)

2.9.1 Data Encryption, Object Signing &Database Roles
- All the interfaces between various applications and user are encrypted using appropriate protocols (such as HTTPS, IPSec etc.), algorithm and key pairs.
- The solution should support 128-bit encryption for transmission of the data over the Internet.
- Object signing and encryption of attachments (documents) shall be compliant to published MeitY standards.
- Proposed solution must be secured to both internal and external parties (such as through password encryption)
- The Network / Transport level should include Network Link Encryption (IPSEC) and encrypted HTTP session using SSL (HTTPS)
- The solution should use audit controls, electronic signatures, data encryption and other methods to assure the authenticity of transaction and other relevant data

- The solution should treat the following events as security incidents: unsuccessful log-on, intrusion detection, malfunctioning of encryption facility, etc.
- Database server should support most granular column encryption to encrypt sensitive data
- Solution Provider should ensure logs include at least the following:
  - Authentication and Authorization events – logging in, logging out, failed logins. These should include date/time, success/failure, and resources being authorized, the user requesting the authorization and IP address or location of the authentication attempt.
  - Logs of all administrator activity
  - Logs for deletion of any data
  - Logs of modification to data characteristics: permissions, location, field type
- Solution Provider will develop a procedure for archiving the log files and ensure security of the log files
- Solution Provider will maintain separate environment for production, test and development to reduce the risks of unauthorized access or changes
- The solution should have the functionality to record all the administrator, user level activities including the failed attempts
- Solution Provider will deploy NTP and will ensure all the components such as network elements, operating system, applications etc. is in synced with the NTP. All servers and syslog server shall be synchronized with the NTP server
- Should protect logging facilities and log information against tampering and unauthorized access

The solution provider will prepare the information security baseline document for all the infrastructure components such as database, operating system, router, switch etc. based on CERT-In technical guidelines and best practices.

2.9.2   Information Security Management System (ISMS)
It is required that the security management system should be designed, established and implemented based on ISO 27001:2013 standards.

- Should prepare information security policy and supporting procedures for ISO 27001:2013 certifications. The policy and procedure should be submitted prior to Go-Live of business services.
- Should perform Risk Assessment and Risk Treatment Plan for the application and infrastructure based on the approved Risk Assessment Methodology
- Should prepare all the necessary document required for ISO 27001 certification, and ensure that they are implemented at all facilities.
- Should implement all the controls as identified during the Risk assessment and treatment plan as per the agreed timelines
- Must ensure that the policies and procedures should be aligned with MoSPI policies (if any) and comply with CERT – IN guidelines.
- Will ensure that all the observations highlighted during the audit are tracked to closure

Should support / provide information / documents for conducting information security audit on a periodic basis through a third party /nominated agency identified by MoSPI.

2.10 Enterprise Service Bus

The MIIP should be empowered with Enterprise Service Bus, which will not only enable the applications to communicate with each other with-in the environment of MIIP but also support the internal applications to interact with other application which exist outside the MIIP.

All interfacing with external systems like payment and SMS Gateway, IVR solution and internal application or department specific application will take place through this layer. External systems will not have direct access to the MoSPI database, but instead will be calling the relevant business services in the business layer for availing the information. As ESB infrastructure shall be in place along with API gateway that will provide standard interface to integrate with heterogeneous application making use of XML/JSON based standard protocol and mechanism for data exchange.

An enterprise Service Bus (ESB) is expected to be a standardized integration platform that combines messaging, web services, data transformation and intelligent routing, to reliably connect and coordinates the interaction of various heterogeneous applications with transactional integrity.

Below are some of the key features envisaged for ESB oriented architecture:

1. The solution should support various routing services like static/deterministic routing, content-based routing, rules-based routing, and policy-based routing.
2. The solution should be able to provision commonly used functionality as shared services depending on context.
3. The solution should support message queuing, synchronous and asynchronous transport protocol.
4. The solution should be able to provide a highly distributed approach to integration, with unique capabilities that allow individual departments to build out their integration projects in incremental, digestible chunks, maintaining their own local control and autonomy, while still being able to connect together each integration project into larger, more global integration fabric, or grid.
5. The solution should include standard based adapter such as J2C/JCA for supporting integration with legacy system.
6. The solution should offer standard security features in the ESB orchestration layer and provide option to make all communication across systems as secured.
7. The solution should have event processing capabilities, on various system interruptions. System should be able to generate alerts and email notifications to selected groups.
8. ESB should support various integration security standards like: authentication, authorization, Encryption, Secure conversation, Non-repudiation, XML Firewalls, WS-Security 1.1, WS-Trust 1.3, WS-Secure Conversation 1.3 WS- Basic Security Profile,
9. The solution should support standard message exchange patterns, web services, SOAP/HTTP, SOAP/HTTPS standards.

10. The solution should not operate in single point of failure (SPOF) mode. It shall be load balanced to make sure high availability and minimal time lag in message processing and output transmission.
11. The solution can be uniformly apply business rules, enrichment of the message from external sources, splitting and combining of multiple messages, and the error handling.
12. The solution should support SQL access to relational databases such as Oracle, DB2, MS SQL, Sybase and Informix. Should also have integration capabilities with NoSQL databases.
13. The proposed solution should provide advance mechanism for message correlation, hibernation, compensation, business activity monitoring.
14. The solution should be capable for monitoring various SLA (Service Level Agreement) thresholds, message latency and other characteristics described in a Service level Agreement.

2.10.1 Integration Gateways

MIIP will enable the department to initiate the interactive personalised communication with the internal and external users. The integration with communication channels will extended to configuring SMS gateways, E-mail Service and Helpdesk.

2.10.1.1 SMS Gateway

The solution will strengthen the internal users to send personalised SMS to other users. Configuration and integration of SMS gateway service will be done as a part of solution, this will be followed by the interface development for writing personalised contents to users.

SMS Services are envisaged to be part of the solution design. SMS Service can be used for OTP authentication and as well as informing various stakeholders of the eco-system about various transactional messages, promotional messages and alerts and notifications services. The service provider should be able to integrate the solution with MSDG, or deploy its own SMS Gateway service with no extra charge to MoSPI.

Following are some of the key requirements for SMS Services through solution:

- The gateway must be as per prevailing TRAI/DoT Norms
- Event-based and Time-based triggers should be generated automatically and send out reminders
- Provide the provision for international SMS
- Resend the SMS in case of failure of the message
- The message shall be sent through command line interface/API, Web Interface etc.
- Store the history of all messages along with logs & provide the success/failure reports

2.10.1.2 Payment Gateway

The solution is envisaged to have integration with payment gateways, to enable authorized users to make financial transactions, as per rights and privileges provided. The service provider is required to make the provision for integration with third party gateways and provide payment services, as per the requirement of MoSPI.

Following are some of the key requirements for Payment Gateway integration through solution:

- Should support compliance with emerging trends and multiple payment options such debit card, credit card, cash cards and other payment gateways
- Should support integration with Payment Service Providers using web services and over HTTP/S protocol
- Should support processing of one-time or recurring transactions using tokenization
- Should support real time integration with SMS and emails
- Should support secure integration with Payment Service Providers
- Should support a unified interface to integrate with all Payment Service Providers
- Should manage messages exchange between UI and payment service providers
- Should support beneficiary's payment transactions tracking against various services
- Should support bank accounts reconciliation
- Should provide logs for all transactions performed through the Payment Gateway for future financial dispute resolution that might arise between entities and either beneficiaries or Payment Service Providers
- Should maintain and keep transactions logs for time period required and specified by the financial regulations followed in country
- Should support redundant Payment Discovery
- Should submit Periodic Reconciliation Report to government entities
- Should support transaction reports to monitor and track payments
- Should support real-time online credit card authorization for merchants
- Should provide fraud screening features
- Should support browser based remote administration
- Provision to provide the Price using current Dollar rate as per request received.
- Provision to Generate Proforma Invoice / Acknowledgement.
- Integrating with Bharatkosh NTRP portal of Ministry of Finance for online payment.

Guidelines of MeiTY on payment gateway shall be followed diligently by the selected SI.

2.10.1.3 Email Services

The solution will strengthen the internal users to send personalised E-mails to other users. Configuration and integration of E-mail service will be done as a part of solution, this will be followed by the interface development for writing personalised contents to users.

Email Services are envisaged to be made available as part of the solution design to send alerts/intimations/automated messages to register email ids, based on preference set up by various stakeholders of the eco-system. An authenticated SMTP mail service (also known as a SMTP relay or smart host) is envisaged to be integrated with the solution for sending mail from the solution, and delivered intended inbox.

Following are some of the key requirements for Email Services through solution:

- Authentication verification through Email Service and sending acknowledgment/confirmation via email.
- System should have email integration capabilities and shall accommodate event or criteria driven email notification to selected user group.
- System should support configurable email notifications in case events like data/document deletion, data/document access removal, document submission for approval.
- The solution should have the capability of email notification mechanism with regards to learning management program of the project.

2.10.1.4 IVR / Helpdesk Gateway

The proposed system is envisaged to be integrated with IVR systems as a part of the solution.

2.10.2 Integration Methods

The solution should be designed to cater its integration needs of sharing the data and business processes among any connected application or data source. It is envisaged that various systems need to be linked together may reside on different operating system, use different database solution or may be legacy systems. These integration is expected to be done through Web Services, Message Queuing, File Based or Native API based on Batch Mode or Need basis (synchronous or asynchronous).

2.10.2.1 Web Services

It is envisaged that various web services will be developed to exchange the data across applications. Various standards like XML, SOAP, WSDL, and UDDI will be implemented to communicate between electronic devices over a network.

2.10.2.2 Messaging Queue

The solution is envisaged aiming to eliminate the traditional overhead associated with in-house messaging infrastructure.

Message queues should provide an asynchronous communications protocol, meaning that the sender and receiver of the message do not need to interact with the message queue at the same time.

Messages placed onto the queue are stored until the recipient retrieves them.

Message queues should have implicit or explicit limits on the size of data that may be transmitted in a single message and the number of messages that may remain outstanding on the queue.

2.10.2.3 File Based

It is expected that each application should produce files that contain the information associated with the application. These files, then should be transformed into different formats and made available for consumption for relevant stakeholders of the eco-system. These files should be produced with every change in the data value and or in the application. User roles and access based mechanism also needs to be included as a part of file based data sharing.

2.10.2.4 Native API Based

Proposed solution should be capable of seamless integration with leading Office tools both for import and export of data and reports in multiple formats. The solution should allow data to be accessed from any industry standard data source using native connectors. It should also allow data load jobs to be scheduled to automate the process of loading data into the system for Analysis.

2.10.3 Integration Modes

The proposed solution should be able to share data to and from the State systems, through batch mode Synchronization, or on needs basis.

There are multiple ways of integration of the solution with other systems is envisaged. These may be through Web Services, Message Queuing, File based or API based. The integration and data sharing mechanism may be either in Batch Mode or Needs basis (synchronous or asynchronous). Some of the key requirements of the interface /integration are mentioned below:

   a. Should have provision for exceptional scenarios
   b. Should have syntax details such as data type, length, mandatory/option, default values, range values etc.
   c. Error code should be defined for every validation or business rule

d. Inputs and outputs should be defined
e. Should be backward compatible to earlier datasets
f. Data exchange should provide transactional assurance
g. Response time and performance characteristics should be defined for data exchange
h. The failover scenarios should be identified
i. Data exchange should be auditable
j. Data exchange should abide by all laws on privacy and data protection

2.11 Security Services

The security service will cover the user profile management, authentication and authorization aspects of the security control. This service run across all the layers since service components from different layers will interact with the security components. All public contents should be made available to all users without authentication. The service will authenticate users and allows access to other features of the envisaged application for which the user is entitled to.

Following are some of the key requirements for Security Services through solution:

- Data security policies and standards to be developed and adopted across the departments and systems
- In order to adequately provide access to secured information, security needs must be identified and developed at the data level. Database design must consider and incorporate data integrity requirements.
- Role based access for all the stake holders envisaged to access and use the system
- Appropriate authentication mechanism adhering to industry good practice of Password Policies etc.
- Authorization validity to be ensured for the users providing the Data to the system. Data should be accepted only from the entity authorized
- Data should be visible only to the authorized entity
- Audit trails and Audit logging mechanism to be built in the system to ensure that user action can be established and can investigated if any can be aided. (E.g. Logging of IP Address etc.)
- Data alterations etc. through unauthorized channel should be prevented.

Industry good practice for coding of application so as to ensure sustenance to the Application Vulnerability Assessment

2.11.1 Single Sign-on, Authentication & Authorization

It is recommended to adopt an enterprise level centralized authentication model that is secured and ensures that user has a single credential to access the all the services. In this model, there will a centralized authentication services with provision for centralized user registration and user credential store. A centralized user repository (directory services) for the storage of user credentials will also store the authorization information for the user which will be used in different application.

This service will provide the central authentication service for the users/groups created by verification of the user credentials against the central LDAP user repository. When a user tries to login to any centralized application e.g. single window portal, departmental sub-, the user credentials will be validated through the central authentication service.

2.11.1.1 Single Sign-on

Users must be provided 'single sign on' functionality for the entire MIIP module deployed. Users must be provided 'single sign on' functionality for the entire MIIP module deployed.

Single Sign-On service will centrally maintain user session thus preventing user from multiple login when trying to access multiple applications.

Once the users enter their login credentials, the user credentials from the user authentication server database must be verified and then only the access should be granted inside the MPI modules. The personal 'Dashboard' facility should be available for all the users after successful login as a first interface within the application. The type of information and content, to be displayed on the personal 'Dashboard' of Users should be dynamically controlled through the Access control module / Admin Module. However, it should be noted that for each user there should be only one session at a time should be maintained i.e. when one User logs-in to the application using his / her own credentials, then the same credentials must not be allowed to be used for logging into the application through same or different computer.

The solution should implement security features, such as password complexity, automatic blocking (temporary/permanent) of user logins after given number of unsuccessful login attempts (should be parameterized), controlled access to content stored on the portal and logging of security incidents. It should by its own or through an integrated Identity Management solution be capable of managing security rights and privileges by individual, group and role, and should support Single Sign On.

2.11.1.2 Authentication

The solution should support multiple authentication methods such as Username password, two factor authentication, digital certificate and Biometric, Aadhaar based authentication. The SI along with MoSPI, shall roll-out strong authentication for users in phased manner.

Authentication should be done for all valid Users. A valid User for this application should be the one who has been set-up in the application such that he/she can access the application and perform tasks as per assigned roles and responsibilities as well we access rights within the system. Authorized Users should have to access the login screen for authentication. The proposed solution should support authentication – SMTP AUTH, POP before SMTP, File system, Database, LDAP etc.

The application should have a configured directory of all authorized Users. Through the User authentication server 'Rights Management Services' (RMS), there should be a form of User authentication functionality that should allow various users to access the "MPI" and work as per their defined Roles and Responsibilities. Rights Management Services should be used for restricting access to rights-protected content / sections / modules / screens / Fields, etc. to authorized users only. Rights to all active users should be granted based on their hierarchy and level in the organization, designation, assigned roles and responsibilities, location etc. among other parameters. It is also proposed that the new rights can be created through the Rights Management UI interface as well as existing rights be managed through the same. The access to the functionalities of the application should be strictly based on "Role Based Access Control" (RBAC) and only Administrator(s) will have the rights define ACCESS Policy. The details of any change in the module should be captured in the Audit Trail of the application. Also there should be facility to assign/modify/deactivate/delete rights globally for the desired Groups within the system.

2.11.1.3 Authorization

Solution should allow a user to access various functions, forms, screens, sub modules, information, etc. as per the authorization and user role permitted by the portal administrator as per available guidelines and policies.

Public user can browse the portal with rights to view public content available on the website, remaining all types of users shall enter the solution using appropriate secured authorizations.

Authorization of system users should be enforced by access controls. It is recommended to develop access control lists. Consider the following approach for developing access control list

- Establish groups of users based on similar functions and similar access privilege.
- Identify the owner of each group
- Establish the degree of access to be provided to each group

2.11.1.4 Network Security

Network security consists of the policies and practices adopted to prevent and monitor unauthorized access, misuse, modification, or denial of a computer network and network-accessible resources

2.11.1.5 SSL & Digital Certification

There should be a provision of logging into the system through web and/or intranet. The solution should comply with all requirements of security, reliability and non-repudiation as per the government of India guidelines. The solution provider will need to ensure provision for authentication using digital certificates as per the government of India guidelines.

Solution should enable SSL for all sensitive pages, set the secure flag on all sensitive cookies and secure backend connections.

The Network / Transport level should include Network Link Encryption (IPSEC) and encrypted HTTP session using SSL (HTTPS).

2.11.1.6 Application Security

- The solution must comply with the Application Security Plan and security guidelines of Government of India / MoSPI as applicable.
- Secure coding guidelines should be followed. Secure coding guidelines should include controls against SQL injection, command injection, input validation, cross site scripting, directory traversal, buffer overflows, resource exhaustion attacks etc. OWASP Top 10 standard should be mapped in the secure coding guidelines to cover all major vulnerabilities.
- Validation checks should be incorporated into the application to detect any corruption of information through processing errors or deliberate acts.
- Data output from an application should be validated to ensure that the processing of stored information is correct and appropriate to the circumstances
- Should implement secure error handling practices in the application system should have Role based access, encryption of user credentials. Application level security should be provided through leading practices and standards including the following :
    o Prevent SQL Injection Vulnerabilities for attack on database
    o Prevent XSS Vulnerabilities to extract user name password (Escape All Untrusted Data in HTML Contexts and Use Positive Input Validation)
    o Secure Authentication and Session Management control functionality shall be provided through a Centralize Authentication and Session Management Controls and Protect Session IDs from XSS

- Prevent Security Misconfiguration Vulnerabilities (Automated scanners shall be used for detecting missing patches, misconfigurations, use of default accounts, unnecessary services, etc. maintain Audits for updates
- Prevent Insecure Cryptographic Storage Vulnerabilities (by encrypt off-site backups, ensure proper key storage and management to protect keys and passwords, using a strong algorithm)
- Prevent Failure to Restrict URL Access Vulnerabilities (By providing authentication and authorization for each sensitive page, use role-based authentication and authorization and make authentication and authorization policies configurable
- Prevent Insufficient Transport Layer Protection Vulnerabilities (enable SSL for all sensitive pages, set the secure flag on all sensitive cookies and secure backend connections
- Prevent Id Redirects and Forwards Vulnerabilities

2.12 Compliance, Regulation and Policies, Government of India Guidelines

The solution must comply with MEITY's security guidelines, compliances, regulations and other guidelines as well as policies.

The technical solution must be in conformance with e-Governance Standards of MEITY.

The entire solution must be capable of incorporating any changes as a result of changes in the regulations and policies of the government from time to time.

3 MIIP-Other Requirements

Apart from the above, the other key features and functionalities of MIIP, as well as other key requirements are mentioned below:

3.1 Audit Trail

Audit trail should be a detailed record showing who has accessed the MIIP and what transactions/ operations have been performed by the concerned user during a given period of time. Audit trail must display the following details, but not limited to, with filter / sorting criteria options:

a. Timestamp
b. User Name
c. Module – Sub Module – Screen – Section – Field Name
d. Previous Value
e. Current Value
f. Remarks (if any)

It is must that the Audit Trail module does not have a 'Delete' or 'Edit' right granted to any user irrespective of any type or hierarchy as created in the system. The 'view' rights should also be controlled through RBAC in Admin Module.

3.2 Personalized Dashboard

a. The dashboard functionality should enable each of the key MIIP User to view their virtual personal space and manage their tasks, organize their work etc. based on their roles and responsibilities in the MIIP functions and assigned privileges. This should be strictly privilege restricted section based on Role Based Access Control (RBAC) mechanism defined through the 'Admin' module.

b. The following features are proposed for the personal Dashboard facility controlled through the 'Admin' module for all the key MIIP users, but not limited to:

   i.   Quick Links – Links within the application as well as external links to access any application module or website other than MIIP

   ii. Pending Activities/Tasks – A list of tasks assigned / to be performed by the concerned User, arranged sequentially, along with number and type of tasks. Audit trail should capture any such change in the system. An additional facility to view other Users tasks, if sufficient rights are provided (especially to senior officials) should also be provided, but strictly controlled through 'Admin' module of application. Senior officials in some cases might want to view the

   iii. Work load and performance efficiency of any junior staff in handling particular set of tasks. They may also want to reassign a certain task to themselves or to other staff members, due to any administrative reason, and get the task completed. All such functionalities and

   iv. Features must be developed by the SI, while designing the automated processes within the MIIP application.

   v.   History of Completed Activities / Tasks – All the completed activities should be displayed to the concerned User, in case they want to refer it in future. User friendly features like pagination or drill down to see further details of the completed tasks may be provided, as required.

vi.   MIS reports (Fixed and Ad-hoc / Customized reports) –which may be bookmarked from the Reporting module of the system; and Red Flags – notifications, alerts etc. as per pre-defined logic or escalation matrix.

3.3   Version Control and Bug Fixing

The SI must make any modifications necessary for the duration of the contract to ensure that the system is compatible with current and supported versions and releases of the relevant operating system and other system software with all relevant documentation. It is a mandatory requirement that all relevant documentation to be created, updated and maintained throughout the contract duration. The SI will also ensure proper tracking of all bugs fixes as per various tests conducted using the application. It is mandatory that the SI maintains a bug tracking tool for the purpose.

3.4   Future Changes / Application Upgrades:

From time to time, changes in work process, legislations, policies, etc. may necessitate changes in the MIIP. The SI must make any and all such changes for the duration of the contract. Also, as defined in the Change Request Procedure, when provided the specifications of the change required, SI must submit an estimate of work effort and cost for the change, as defined in the Change Request Procedure to MoSPI officials for approval.

3.5   Testing Criteria:

A thorough testing is proposed for the MIIP and its modules, as per standard STLC. MoSPI requires thorough and well-managed test methodology to be conducted. The SI must build up an overall plan for testing and acceptance of system, in which specific methods and steps should be clearly indicated and approved by MoSPI. The SI is required to incorporate all suggestions / feedback provided after the elaborate testing of the MIIP, within a pre-defined, mutually agreed timeline. The SI must undertake the following:
   a. Outline the methodology that will be used for testing the system
   b. Define the various levels or types of testing that will be performed for system
   c. Provide necessary checklist/documentation that will be required for testing the system
   d. Describe any technique that will be used for testing the system
   e. Describe how the testing methodology will conform to the requirements of each of the functionalities.
   f. Indicate / demonstrate to MoSPI that all applications installed in the system have been tested

3.6   Data Cleansing & Migration Approach

There would be an issue faced by MoSPI regarding migration and usage of data available, as this data also needs to be available to MIIP, and would be required to be cleansed and migrated to the new MIIP database to enable smooth transitioning and hence gradually create a reliable central data store. Both Functional and Technical data cleaning has to be completed before migrating the data. The data migration should be carried out as per the data migration policy as defined by the government of India and MeitY. All care must be taken to log in each error during migration. Also, adequate measures must be taken to rectify the data error and move all cleansed digital record to new database, as per defined schema and table structure.

4 Scope of Work

4.1 Detailed Scope of work

The scope of work for SI includes Requirements Study, Solution Design, Solution Development, Testing, Implementation and Maintenance of the solution for 5 (five) years post Go-live of the Solution developed as per the requirements mentioned in Section 2 of this Volume of RFP.

The SI shall be entirely responsible for proposing the Solution which satisfies all features, functions and performance as described in this document. The SI shall be responsible for design, development, and implementation of the proposed solution, as well as providing comprehensive support to MoSPI in a phased manner as given below:

Phase-IA (MIIP Go-live): The Phase-IA of project will focus on implementation of MIIP (all components), to provide a full integrated solution with all working feature and components. Several useful statistical information such as Annual Survey of Industries (using data up to last 10 years), NSSO surveys like PLFS, Economic Census, National Accounts (13-major economic sector), etc. shall be ported to perform analytics and reporting for dissemination.

The scope includes development of a web application for effective monitoring of data collection related activities being done by NSSO (Field Operations Division-FOD) officials. Reports, Visualization and dashboard shall be developed on the basis of data captured through this application. The web application shall be integrated with MoSPI eoffice application for performance monitoring of NSSO (FOD) officials. A human resource management system (with focus on capacity development and carrier progression of officials in Indian Statistical System) shall also be developed for appropriate resource planning by the MoSPI.

The scope also includes development of applications/utilities for automated calculation of Index of Industrial Production (IIP), Consumer Price Index (CPI), Dashboard for monitoring of indicators under National Factsheet on Indian Economy, Sustainable Development Goals (SDG) shall also be developed during the Phase-I. The emphasis will be on mainstreaming and integrating the existing system onto the MIIP, with improved processes and functionalities. It includes Process Automation of divisions (*Refer Annexure 8.4 for indicative descriptions*), along with development of API's for the integration with data sources of other departmental databases (Refer Annexure 8.3 for indicative description)

Alongside MIIP, the Phase-IB of project will focus on implementation and automation of identified systems by various internal divisions within MoSPI. These systems need to be developed, tested, deployed and linked appropriately with MIIP before MIIP go-live. For new systems to be developed, the bidder may refer to Annexure 8.4 for indicative description

More systems may be developed by MoSPI as a part of this project as per requirements and priorities set by the Ministry. For this, the bidder may provide the cost of technical developers that could be engaged on need-based requirement.

Phase-II (On-going Support): Implementation and roll-out any additional specified requirement by MoSPI during the Phase-II of the project i.e. during the on-going support phase.

Over and above the scope of work precisely defined in Phase-I, MoSPI will define the requirement in coordination with the Technical Advisory Committee based on functional requirements. The delivery process of Phase-II will remain iterative considering the preferences & priorities of MoSPI and other stakeholders.

4.2 Activities under Phase-I (MIIP Go-Live)

To accomplish the deliverables mentioned above, the Solution Integrator (SI) will plan to deploy its resources along with functional / domain consultants at MoSPI so as to deliver the quality work. Activities in Phase-I shall include the following

4.2.1 Workshop with Stakeholders

At the start of the project the SI shall conduct the workshops with Stakeholders of the project in coordination with MoSPI to understand the brief roll and participation level.

4.2.2 Requirement Study

The SI shall perform the detailed assessment of the Solution requirements as mentioned in Section2 of this Volume. Based on the understanding and its own individual assessment, SI shall develop & finalize the Functional Requirements Specifications (FRS) and the System Requirement Specifications (SRS) in consultation with MoSPI and all the stakeholders as prescribed by MoSPI. SI resources would need to visit Kolkata (West Bengal) as per the requirement of the department for assessing the requirements of MoSPI offices located there. Similarly, SI resources would need to visit State headquarters of Tamil Nadu, Gujarat, Rajasthan, Maharashtra, Himachal Pradesh and Chhattisgarh to interact and assess the requirements of State DES. While doing the detailed assessment of solution required, SI at least is expected to do following:

    a. SI shall bring in domain experts during the study.
    b. SI shall translate all the requirements mentioned in the document into System Requirements.
    c. SI shall follow standardized template for requirements capturing.
    d. SI must maintain traceability matrix from SRS stage for the entire implementation.

Note: AS requirement are to be gathered from various divisions located in Delhi and Kolkata and State as well as Ministries therefore multiple teams/ sufficient resources needs to be deployed.

4.2.3 Design

The SI shall design the solution architecture and specifications for meeting the requirements mentioned as part of this RFP. The SI shall be entirely responsible for the design and architecture of the system implemented to satisfy all requirements as described in this document including sizing of the required hardware. Solution architecture description provided in this document is for reference only and the SI is expected to provide the best solution which can address the requirements mentioned in this RFP.

The system architecture for the Integrated Solution shall be designed, developed & delivered as per following:

    a. General Guidelines
      i. The system architecture should be based on open industry standards and protocols
      ii. The system will be centrally deployed and globally accessed.
      iii. The system shall be designed to be scalable and easily extensible.
      iv. The system should be flexible to cater to changing business, industry and compliance requirements (including reporting requirements in proper formats)
      v. India centric version as required by any of the modules shall be implemented.
    b. Applications
      i. The Solution design should be multi-tier services based architecture for all environments

ii. The Solution design should focus on developing workflow and business transaction, rules management, configuration management

iii. All applications must consider appropriate security, performance, efficiency and maintainability issues

iv. The ownership of the product licenses would be with MoSPI.

v. The products which would be part of the Solution must be of the latest commercially available Indian version

vi. Products must be supported in terms of upgrades, bug fixes, functionality enhancements and patches to cater to changes to statutory requirements by their respective developer organization for a period of not less than five (5) years from the date of Go-live of Phase-1.

vii. Upgrade to new releases should not become mandatory for the next five years from the date of installation.

c. Integration

i. The integrated solution design should include Integration Framework for integration of both internal and external applications and services

ii. The Integration framework should use SOA enablement for the underlying applications

d. Data

i. Data will be owned, shared, controlled and protected as a corporate asset of MoSPI.

ii. Data should only be accessed through application / interfaces for create, update and delete. There should not be any direct access to the data layer for users

iii. SI shall provide the details of data synchronization strategy both in batch mode and in real time

e. Data Security

i. SI shall provide strategy to maintain data security at the application level

ii. SI shall provide strategy to maintain data security at the database level

iii. SI shall provide strategy to maintain data security at the messaging and middleware level

iv. SI shall provide security strategies when the applications are accessed from outside the network or accessing resources outside the network.

v. SI shall provide strategies of encryption and security for external transaction with partner network and systems

4.2.4 Environment Readiness

SI shall be responsible for installing the proposed software components of MIIP. However, hardware required would be provided/arranged by MoSPI.

The SI shall prepare the technical specification & sizing estimates prepared & submitted as part of Technical proposal. The SI shall carry out the installation, maintenance & support of all the supplied software(s) on the proposed hardware for development, training and production environment.

4.2.5 Develop

The SI shall carefully consider the scope of work and provide a solution that best meets MoSPI's requirements.

a. Products (Configuration & Customization)

i. The successful SI will be responsible for supplying the application, licenses, database and related software, integration tools, along with the source code and installing the same to meet MoSPI's requirements mentioned in various sections of this RFP.

ii. SI shall provision for procurement of licenses as per the indicative transaction volumes. However, the transaction parameters are computed based on certain assumptions and these assumptions might undergo a change which might impact the overall transaction volumes. SI is expected to suggest the approach which can address this business eventuality when actual transaction volume is mark different from that of indicative transaction volume.

iii. The SI shall perform periodic audits to measure license compliance against the number of valid software licenses consistent with the terms and conditions of license agreements, volume purchase agreements, and other mutually agreed upon licensed software terms and conditions. The SI shall report any exceptions to license terms and conditions at the right

time to MoSPI. However, the responsibility of license compliance solely lies with the successful SI. Any financial penalty imposed on MoSPI during the contract period due to license non-compliance shall be borne by SI.

    iv. SI shall also supply any other tools & accessories required to make the Solution complete as per requirements. The SI shall supply:
- o Software & licenses
- o Supply tools, accessories, documentation and provide a list of the same. Tools and accessories shall be part of the solution.
- o Supply latest supported version of Database Software to support the Integrated Solution and any other software, tools and bolt-on/add-on application.
- o Product Documentation: Two sets of Product Documentation in hard copy and one soft copy to be supplied along with licenses and the document shall include the following:
    - ✓ Technical manuals
    - ✓ Installation guides
    - ✓ User manuals
    - ✓ System administrator manuals

b. Bespoke (Custom Developments)
    i. The successful SI shall identify, design and develop functionalities for any component that are not covered under MIIP.
    ii. The SI shall supply the following documents along with the developed components:
- • Business process guides;
- • Data model descriptions;
- • Sample reports;
- • Frequently asked question (FAQ) guides;
- • Any other documentation required for usage of implemented solution

    iii. IPR for any bespoke applications and any customization done in off the shelf product shall lie with MoSPI.

c. Analytics: SI should also perform analytics and develop datasets/reports on migrated data up to last 10-year. Typical activities involved are mentioned below:
    i. Data Migration
    ii. Data Cleansing (including functional data cleaning)
    iii. Analytics
    iv. Reporting
    v. Dissemination

Over and above the SI shall deliver the additional data migration requirement during the on-going support phase. The cost of same will be arrived as per the Man-month Rate mentioned in Section 4.3.2 **"On-going Additional Requirement "section of** this RFP.

d. System Maintenance: SI shall implement a system for monitoring the SLAs. The SI shall ensure that the system addresses all the SLA measurement requirements and calculation of applicable penalties as indicated in the RFP.SI should perform DBA activities periodically.

4.2.6 Integration & Data Migration

The SI shall develop integration mechanism as specified in Section 2.9(Enterprise Bus Service) of this Volume with stakeholders such as State, Research Organizations, Ministries, and Citizen Etc. The SI shall provide an interface of the Portal to the Content Service Provider so that he can upload the content on the Portal. The SI shall provide the functionality to approve/reject/ modify the content uploaded on the portal to the concerned users of MoSPI.

The SI shall migrate CPI, ASI, NSS, Economic Census and National Accounts (13-major economic sector) data of up to last 10-year for each of the mentioned functional areas. SI shall consider that data field may very across the years.

4.2.7   Testing

The SI shall provide the Testing strategy including traceability matrix, Test Cases and conduct testing of various components of the software developed/customized (e.g. Including conference room pilots, unit tests, System integration tests, Stress tests, Security Testing and final user acceptance test.). Details of the testing strategy and approach should be provided in the response. The SI is responsible to identify and inform the MoSPI regarding testing requirements and impacts. The successful SI shall work in a manner to satisfy all the testing requirements and adhere to the testing strategy outlined. The successful SI must ensure deployment of necessary resources and tools during the testing phases. The SI shall perform the testing of the solution based on the approved test plan, document the results and shall fix the bugs found during the testing.

SI shall provide complete support to MoSPI team or their representatives at the time of user acceptance testing. It would be SI's responsibility to ensure that all issues raised during UAT are closed and signed-off from respective authority.

The SI is required to submit a certificate from the OEM to certify the entire product cost for the contract duration has been factored and included in the commercial bid. There must not be any additional charges / cost raised to MoSPI with regards to OEM support, for the entire duration of the project.

4.2.8   Third Party Audit (Security and Performance Audit)

MoSPI shall appoint a third-party auditor who shall be responsible for performing the Performance and Security Audit of the Portal. The SI needs to ensure that the Portal is in compliance with the Security Policy and Guidelines released by MeitY.

The third-party agency shall conduct audit on minimum below mentioned parameters. The audit shall be carried out by Cert-in empaneled auditor. The vendor is required to disclose the name of the finalize Auditor before on-boarding. The final decision will be taken by MoSPI for appointment of auditor. The cost of audit shall be borne by the SI; also, the cost of rectification of non-compliances by the SI shall be borne by the SI. The audit shall be performed at least on the below mentioned aspects.
           a) Functional Testing
           b) Accessibility Testing
           c) Performance Testing
           d) Application Security Audit
           e) Penetration Testing
           f) Vulnerability Testing
           g) Database Server Controls

The illustrative deliverables for this activity are mentioned below.
           1. First Round Audit Report (by Auditor)
           2. Rectified solution and submission of next round of audit (by SI)
           3. Next Round Audit Report (by Auditor)
           4. If required, Rectified solution and submission of next round of audit (by SI)
           5. Compliance Confirmation by the Auditor (by the Auditor)

The audit will be performed periodically i.e. at least once in a year.

4.2.9   Hand-holding support

SI shall also provide hand-holding support to MoSPI's personnel for a period of three months from the date of Go-Live of respective application. These personnel must be clearly identified exclusively for this role.
SI shall provide 2 people for hand-holding support at MoSPI.

4.2.10   Training

The SI is required to provide minimum 20 days training for a batch size of maximum20 people each.

The SI is required to provide financial quotation for 10 days training(including travel cost for SI resources to 6 state (Tamil Nadu, Gujarat, Rajasthan, Maharashtra, Himachal Pradesh and Chhattisgarh) headquarters and twice to Kolkata) as a part of commercial bid as per Table 5 Additional Cost for Training of section 5.4.2 of Volume 1.

If however, apart from the above training requirement, is not adequate and MoSPI feels the need to conduct more number of trainings, then the same training cost on pro-rata basis would be considered for additional payment against the training. The decision to exceed the number of trainings apart from the one stated above will solely remain with MoSPI.

The Scope of Work that needs to be undertaken by the SI for imparting training is given below. The proposed training module is expected to help the MoSPI officers and other stakeholders to undertake their revised roles and responsibilities with ease and without any apprehensions.

The SI must assume the following responsibilities:
1. The SI shall provide training to all the stakeholders in one batch per day (one day training). However, the training days can be revised by MoSPI, based on requirement.
2. It is proposed that the Users and Administrators would be divided in the following groups:

Band	Users
Group 1	MoSPI officials, senior center and state government officials
Group 2	Operators, System Administrators, Other IT support staff, application and database management teams, etc.

3. The SI needs to conduct a 'Training Needs Assessment' (TNA) and impart Training to the Users as per Groups defined above, according to their individual needs and requirements. The SI shall propose the indicative Training plan as below:

S. No	Training Module	Indicative number of Days	Group		Frequency
			1	2	

4. The infrastructure to impart the training will be provided by MoSPI.
5. The schedule / training calendar and the training material for imparting training shall be developed by the SI in consultation with MoSPI. The SI shall submit a softcopy (CD) of the training material to MoSPI Team before every training session
6. In case of modifications either in the Training Plans or substitutions of the regular trainers, proper correspondence with MoSPI Team shall be made.
7. Training program shall be continuously monitored by MoSPI so as to ensure quality standards of the Training. It is the responsibility of the SI to prepare a feedback mechanism (i.e., printed feedback forms) and get it filled by the participating batch and submits the same on a regular basis to MoSPI Team, along with assessment of the trainers themselves.
8. It is the responsibility of the SI to prepare documents including User manuals, technical manuals, and administration manuals, and provide the same to the MoSPI Management team. The team will provide the necessary inputs for preparing the training material.

A detailed training schedule, including the dates, topics to be covered, time and the training literature (to be supplied by SI) at various stages of the project cycle and feedback for effectiveness will be agreed to by all parties during the performance evaluation of the SI as per the Contract.

Apart from classroom trainings, SI is also required to create a generalized e-training solution (having Master Trainers and data collector modules). This module would use animation and graphical visualization to make learning easy and interactive.

Training shall be provided as per the training schedule provided by the SI in consultation with MoSPI. The key training modules provided are indicative for reference of the SI and detailed training plan must be proposed by the SI.

Online Help / Reference with Search option

It is also proposed that the training contents / User Manuals be made available to Users in downloadable (PDF) format so that the Users may refer / download it for their own personal reference as and when needed. It is required that the Downloadable training content should have proper indexing and internal references, mapped with key words, in order to allow any User to search and reach the desired content with the help of those key words. It envisaged that any User will be able to search and read the directions / information for only the part required by him/her rather than looking through the entire PDF document and manually searching for the right content.

On entering the key words for search criteria, the system should pull out and display the links to the content as mapped. This feature should be dynamic with real time search availability, i.e. as soon as the key words are changed; a new set of content links with page / chapter references within the document should appear for selection. Once the selection is made by the User, the system should display the PDF content.

4.2.11   Go-Live Preparedness and Go-Live
   a. SI shall prepare and agree with MoSPI, the detailed plan for Go-Live.
   b. The SI shall define and agree with MoSPI, the criteria for Go-Live and the timelines for the same.
   c. The SI shall ensure that MIIP implementation along with all data migration is done and the system is ready for the operations.
   d. SI shall submit signed-off UAT report (issue closure report) ensuring all issues raised during UAT are being resolved prior to go-live.
   e. SI shall ensure that Go – Live criteria as mentioned in Go – Live plan is met and take approval from MoSPI team on the same.
   f. Go-live of the application shall be done as per the finalized and agreed upon Go-Live plan

4.2.12   Resource Planning
   Statistics being a specialized area and a critical component which will act as a backbone of the MIIP, it is important that OEM of the proposed Analytics and Data management solution should be involved in the project delivery to make the project success. SI is to ensure the OEM's involvement, throughout project life cycle, to ensure that installations/ configurations/ integrations/ Implementation of the various components is performed according to the best practices/ OEM guidelines and involving the professional support of the OEM's during the implementation of analytics and data management solution is a requirement of this RFP.

   The SI is required to engage with the said OEM to bring in their Professional Consulting Support and Technical Support, during the entire project period.

   SI to ensure that adequate manpower is deployed, as necessary, on project for the successful implementation of MIIP. In addition, following resource profiles from the Analytics and Data management OEM shall be onboarded.

   - Data Management Expert with at-least 5 years of experience in Data Management.
   - BI Analyst with at-least 4 years of experience in reporting and dashboarding.
   - Analytics / Modeller with at-least 4 years of experience in analytics and Statistical Model Building.

- Team Lead with at-least 7 years of experience in development and implantation of Analytics project.
- Solution Architect with at-least 8 years of experience in Solution Architecture.
- System Admin with at-least 4 years of experience in managing solution components.

A representative professional consulting from Analytics and Data management OEM is provided below and SI should provision appropriate number of man-days for implementation phase of the project. Over and above of minimum resource requirement mentioned here, the SI may carry out its own assessment to factor any additional effort of professional consulting services from OEMs for effective implementation. While the SI is required to provide commercials based on man hour details, MoSPI, on recommendation of Project Steering Committee, shall reserve the right to employ OEM professional support for any number of man days it deems necessary. MoSPI will make payments to SI on basis of actual man days of OEM professional consulting support consumed by MoSPI.

Analytics and Data management OEM Resource Requirement

S.No.	Roles	Min Nos
1	Data Management Expert	2
2	BI Analyst	2
3	Analytics / Modeller	1
4	Team Lead	1
5	Solution Architect	1
6	System Admin	1

4.3 Phase-II (Support)

4.3.1 Operational Support

The SI shall be appointed for a period of five (5) years from the date of successful go-live of MIIP (i.e. completion of Phase-I).

Application support includes, but not limited to, production monitoring, troubleshooting and addressing the functionality, availability and performance issues, implementing the system change requests etc. The bidder shall keep the application software in good working order; perform changes and upgrades to applications as requested by the MoSPI team. Key activities to be performed by bidder in the application support phase are as follows:

a. Compliance to SLA

   The bidder shall ensure compliance to SLAs as indicated in this RFP and any upgrades/major changes to the software shall be accordingly planned by bidder ensuring the SLA requirements are met at no additional cost to the MoSPI.

b. Annual Technology Support

   The bidder shall be responsible for arranging for annual technology support for the products to MoSPI provided by respective OEMs. MoSPI would require ATS for a period of 5 years from the date of go-live of all the applications.

c. Application Software Maintenance

   I. Bidder shall provide unlimited support through telephone/Fax/E-mail/Video Conferencing/ installation visit as required as per the service window defined in the RFP

   II. The bidder shall address all the errors/bugs/gaps in the functionality in the solution implemented by the bidder (vis-à-vis the FRS and SRS signed off) at no additional cost during the support phase.

   III. All patches and upgrades from OEMs shall be implemented by the bidder ensuring customization done in the solution as per the MoSPI's requirements are applied. Technical upgrade of the installation to the new version, as and when required, shall be done by the bidder.

   IV. Any changes/upgrades to the software performed during the support phase shall subject to the comprehensive and integrated testing by the bidder to ensure that the changes

implemented in the system meets the specified requirements and doesn't impact any other function of the system.

    V. Tuning of products/ applications, databases, third party software's and any other components provided as part of the solution software including reconfiguration of the system in the event of any hardware/ network failures/ if any hardware/ network components have to be replaced, shall be the responsibility of the bidder.

    VI. Issue log for the errors and bugs identified in the solution and any change done in the solution shall be maintained by the bidder and periodically submitted to the MoSPI team.

d. Problem identification and Resolution

    I. Errors and bugs that persist for a long time, impact a wider range of users and is difficult to resolve becomes a problem. Bidder shall identify and resolve all the application problems in the identified solution (e.g. system malfunctions, performance problems and data corruption etc.).

    II. Monthly report on problem identified and resolved would be submitted to MoSPI team along with the recommended resolution.

e. Change and Version Control

All planned changes to application systems and hardware shall be coordinated within established Change control processes to ensure that:

    I. Appropriate communication on change required has taken place

    II. Proper approvals have been received

    III. Schedules have been adjusted to minimize impact on the production environment

    IV. The bidder shall define the Software Change Management and Version control process. For any changes to the solution, bidder has to prepare detailed documentation including proposed changes, impact to the system in terms of functional outcomes/additional features added to the system etc.

f. Maintain configuration information

Bidder shall maintain version control and configuration information for application software and any system documentation.

g. Off-Site Helpdesk/ On-site IT-support

Off-site Helpdesk

The bidder needs to plan and set up an off-site IT helpdesk including the toll-free number as per the usual business hours. This helpdesk will be responsible for resolving technical queries. The bidder needs to plan minimum 5 seater helpdesk which may be increased to handle the growing load of technical queries.

The cost of 5- seater helpdesk for 5 years shall become the part of financial bid. Over and above bidder shall also provide per seat cost in Table 3 Additional Resource Off-site Helpdesk section 5.4.2 of Volume 1 of RFP.

On-site IT Support

In addition to helpdesk, bidder shall also set up an on-site IT -support team for assisting different divisions of MoSPI for their automation and integration with MIIP. The team will be comprising of technical, functional/ domain skills.

On-site IT-Support

S. No.	Role	Experience	Minimum No.	Duration
1.	Software Developer	3+ years	3	5 years
2.	Team Lead	6-10 years	1	5 year
3.	Functional/Domain	5-10 years	2	5 year

The cost of above mentioned team will become the part of financial bid (Table 4 Additional On-Site IT-Support) section 5.4.2 of Volume 1 of RFP. For the addition requirement of resources, bidder shall provide the resource cost for each mentioned role.

For successful operation support SI to ensure that adequate manpower is deployed during support phase and ATS for software has been factored in the financial. In addition, following resource profiles from Analytics and Data management OEM shall be onboarded during Phase-II (Support).

- Data Management Expert with at-least 5 years of experience in Data Management.
- BI Analyst with at-least 4 years of experience in reporting and dashboarding.
- Analytics / Modeller with at-least 4 years of experience in analytics and Statistical Model Building.
- System Admin with at-least 4 years of experience in managing solution components.

A representative professional consulting from Analytics and Data management OEM is provided below and SI should provision appropriate number of man-days for support phase of the project. Over and above of minimum resource requirement mentioned here, the SI may carry out its own assessment to factor any additional effort of professional consulting services from OEMs for effective support. While the SI is required to provide commercials based on man hour details, MoSPI, on recommendation of Project Steering Committee, shall reserve the right to employ OEM professional support for any number of man days it deems necessary. MoSPI will make payments to SI on basis of actual man days of OEM professional consulting support consumed by MoSPI.

First Year Operational Support:

S.No	Roles	Min Nos	Engagement (%)
1	Data Management	1	100%
2	BI Analyst	1	100%
3	Analytics / Modeller	1	100%
4	System Admin	1	100%

Second Year Operational Support:

S.No	Roles	Min Nos	Engagement (%)
1	Data Management	1	75%
2	BI Analyst	1	75%
3	Analytics / Modeller	1	75%
4	System Admin	1	100%

Third Year Onward Operational Support:

S.No	Roles	Min Nos	Engagement (%)
1	Data Management	1	50%
2	BI Analyst	1	50%
3	Analytics / Modeller	1	50%
4	System Admin	1	100%

h. Maintain System documentation

Bidder shall maintain and update documentation of the software system ensuring that:

I. Source code is documented
II. Functional specifications are documented
III. Application documentation is updated to reflect on-going maintenance and enhancements including FRS and SRS, in accordance with the defined standards
IV. User manuals and training manuals are updated to reflect on-going changes/enhancements

> V.   Standard practices are adopted and followed in respect of version control and management.

4.3.2   On-going Additional Requirement

Post go-live of Phase-I, it is envisaged that other stakeholders will be on-board on MIIP during the project period, in order to address the requirements of on-boarded stakeholder or any other functionality not covered in phase-I of MIIP, SI shall implement and roll-out the additional requirement in phase-II of the project.

For this component the SI needs to carry out all the activities such as requirement analysis, FRS preparation, SRS Preparation, Design, Development, UAT, Training etc. as per the requirement of MoSPI.

As and when needs arise Technical Advisory Committee in discussion with SI shall freeze the scope of work, timelines, service level and finalize the skill-set (Team Composition) and man-month effort required for the completion of the envisaged tasks. Considering the role of MoSPI, it is assumed that SI would factor minimum of 150 man-month effort spread over 5-years of on-going support phase for the implementation of additional requirement of MoSPI.

The break-up of the man-month is provided below table:

Resource Engaged	Profile	Duration (Man-month)	Min Relevant Experience	Educational Qualification
Application Development	Team Lead	15	7-year	
	Senior Software Developer	15	5-year	
	Software Developer	15	3-year	
	Business Analyst	15	3-year	
Analytics & Data Management	Team Lead for Analytics	15	7-year	
	Data Management Expert	15	5-year	
	Analytics/Statistical Modeler	30	3-year	
	Business Analyst	30	3-year	

ds to provide the rates for man-month effort for different skill sets as per the format provided in "Table 2 Man-month Rate for on-going support for implementation of additional requirements of MoSPI" of section 5.4.2, Volume 1 of RPF. On utilization of the estimated 150 man-month efforts, further additional requirements shall be implemented based on the pro-rata rate provided by the SI in in "Table 2of section 5.4.2, Volume 1 of RFP.

The SI shall implement and rollout out any additional requirements specified by MoSPI during the Support Phase of the project. To deliver the additional requirement SI shall factor 25% percent of OEM's effort for analytics and data management work.

While the SI is required to provide commercials based on man hour details, MoSPI, on recommendation of Project Steering Committee, shall reserve the right to employ OEM professional services for any number of man days it deems necessary. MoSPI will make payments to SI on basis of actual man days of OEM professional consulting support services consumed by MoSPI.

The SI shall carry out its own assessment of the requirement and deploy the skilled and qualified manpower required for the implementation of MIIP.

5   Project Management & Governance

The project would require a close supervision and appropriate project control for successfully meeting the objectives and its timely completion. The proposed institutional mechanism for the Project Review and Monitoring is shown below for reference:

5.1   Roles & Responsibilities

5.1.1   Roles & Responsibilities of Bidder

a. With respect to the MIIP, the SI will need to put in place all the systems and processes, to ensure that the data (supply and demand side) gets mapped to the nearest Job Code.
b. Procure, install, commission, operate and maintain:
    i.   Requisite Portal solution as per the requirements mentioned in this RFP
    ii. Meet the defined SLAs for the performance of the system.
c. Provide necessary support for the resolution of bugs, patches & upgrades of the software solution.
d. Provide necessary manpower for managing the Change Requests.
e. Design various manuals like User manual, Trouble Shooting manual etc. for the system.
f. Deploy the required manpower to manage the operations.
g. Ensuring the SLAs for downtime of system, software development /customization, as defined in this RFP are met.
h. Management and quality control of all services and infrastructure.
i. Any other services which is required for the successful execution of the project.
j. Generation of MIS reports as per the requirements of MoSPI.
k. Generation of the report for the monitoring of SLA's.

5.1.2   Role & Responsibility of MoSPI

a. Coordination between all the stakeholders for providing necessary information for the study and development / customization of solution.
b. Provision of infrastructure for hosting the solution.
c. Coordinate with Bidder for conducting workshops for the Stakeholders.
d. Monitoring of overall timelines, SLAs and calculation of penalties accordingly.
e. Conducting UAT for the application solution deployed.
f. Issuing the Acceptance Certificate on successful deployment of the software application, and for other components of the Scope of Work (wherever required).
g. Any other requirements that could arise during operations for effective governance and to meet any administrative requirement.
h. Ensuring the staff members and other stakeholders attend the training programs as per the schedule defined by the bidder and agreed upon by MoSPI.
i. Provide sign off on the deliverables of the project.

5.2   Acceptance Criteria

SI shall demonstrate the following mentioned acceptance criteria prior to acceptance of the solution in respect of scalability and performance. SI shall properly define all the envisaged requirement parameters for acceptance. In case required, parameters might be revised by MoSPI in agreement with bidder and the revised parameters shall be considered for acceptance criteria.

5.2.1   User Acceptance Test
   a.   The solution must pass User Acceptance Test and all the issues raised during UAT are closed with proper sign-off.
   b.   The solution should meet the entire functional requirement as finalized between the SI &MoSPI.
   c.   The solution should meet integration requirement with all the external stakeholders as envisaged in Section 2 of this Volume.

5.2.2   Security Acceptance Test
   a.   The solution shall demonstrate single sign on for all the applications provided in the solution.
   b.   The solution shall demonstrate SSL based transaction in the application software.
   c.   The solution shall demonstrate two-factor authentication.
   d.   The solution shall demonstrate role based access.
   e.   The solution shall pass penetration testing for rollout of each phase.
        MoSPI may engage an independent third-party agency at its discretion for carrying out the penetration testing.

5.3   Change Request Procedure

The MIIP will operate in multiple complex technology environments. The environments include development, test, production and other specialized instances. In order to provide better and efficient services to the stakeholders and other Users, MIIP has planned to implement an ambitious project to achieve full automation and integration with its various operations and systems. MIIP recognizes that frequent change is an inevitable part of development and implementation of MIIP applications and its rollout, as well as during the course of the contract period. MoSPI also recognizes that these changes may require modification in the systems and re-organizing processes and therefore may have a financial impact. SI is required to work with MoSPI and PMU to ensure that all changes are discussed, managed, and implemented in a constructive manner.

One of the key requirements is that the SI will be responsible for providing system availability according to defined service levels. This responsibility includes responsibility to implement upgrades, enhancements, extensions and other changes to the software application in order to maintain and extend reliable information systems, services and service delivery mechanism. It is important that changes to the computing environment are executed in a standardized and controlled manner in order to mitigate the risk of interruptions to the services during prime access hours, and to maintain a repository of knowledge about the current as well changed configurations as well as status of the computing environment at all times.

This section describes the procedure to be followed in the event of any proposed change to the Agreement, scope of work and SLAs. Such change shall include, but may not be limited to, changes in the scope of services as mentioned under various sections of the RFP, from time to time.

Purpose and Objective
The purpose of the Change Request procedure is to control changes to the computing environment throughout the MIIP solution. The Change request procedure has the following objectives:
   •   To protect the computing environment from uncontrolled changes.
   •   To minimize the occurrence of unintended affects during the implementation of necessary changes.

- To avoid implementation of any changes which is not reviewed, approved or analyzed.
- To control the impact of changes and minimize the effect on effective as well as efficient service delivery.

Change Advisory Board (CAB)

CAB will be responsible for ensuring that the Change Management guidelines is implemented and maintained.

1. The MoSPI will create a committee in consultation with all the module leaders which will act as a CAB, may also involve PMU as advisors, to oversee the administration of the Change Request Policy.
2. The CAB will be authorized to review, approve and schedule all changes to the computing environment. All decisions of the CAB will be final and binding on all parties involved.

Note: Once MIIP is established its enhancement by covering other Ministries/State Departments is repetitive in nature and no such work which fall in this category will fall under Change Request category.

5.4 Transition Management

a. At the end of the contract period or during the contract period, if any other agency is identified or selected for providing services related to bidder's scope of work, the bidder shall be responsible to deliver services defined in scope and maintain SLA requirements.

b. All risk during transition stage shall be properly documented by bidder and mitigation measures are planned in advance so as to ensure smooth transition without any service disruption.

c. Bidder shall provide necessary handholding and transition support, which shall include but not limited to, conducting detailed walk-through of the solution, handing over the entire software (including source code, program files, configuration files, setup files, project documentation etc.), addressing the queries/clarifications of the new agency, conducting training sessions etc.

d. The transition plan along with period shall be mutually agreed between bidder and MoSPI when the situation occurs. Bidder shall be released from the project once successful transition is done meeting the parameters defined for successful transition.

6   Project Deliverables and Payment Schedule

6.1   Activity Milestones Phase -1

Milestone	Activity	Description/**Deliverable**	Timelines
M0	Issue of Work Order	Contract Award	
M1	Initiation &Planning	1.Project Kick-Off 2.Stakeholder Meeting 3.Mobilization of Resources, 4.Project Schedule & Implementation Plan	T0 T0 + 2 Days T0 + 5 Days T0 + 10 Days
M2	Software Procurement, Installation and commissioning	Procurement, Installation and Verification of Software (BOM, PO's & Successful Configuration Report)	
M3	Requirement Assessment & Design of solution	System Design Report, Technical Design Document, Data Migration Approach, Software Requirement Specifications Report	
M4	Setting up of Data Warehouse including ETL	Data Migration from following - -NSSO -Economic Census -National accounts CPI -ASI -Data from all other divisions of MoSPI	
M5	Development	Development of Phase-1 and Documentation	
M6	Testing Phase	Integration Test Report Security Audit.	
M7	Deployment (Go-live)	UAT and Sign-Off -UAT Completion Report -Requirement Traceability Matrix -Training and Enablement -Sign-off Report	
M8	Enablement	Training and Enablement	

6.2 Payment Schedule for Project Implementation

All the payments shall be made after submission of performance security in the form of bank guarantee. However, milestone based payment will be as per schedule given in the table below:

Milestone	Activity	Timelines (in week's)	Payment
M0	Issue of Work Order	**T0**	
M1	Initiation &Planning	T1=T0+2 Week	80% of the total cost of procured software (excluding support cost for) or 10% of the total ordered value, whichever is lower
M2	Software Procurement, Installation and commissioning	T2=T0+6 Week	
M3	Requirement Assessment & Design of solution	T3=T0+12 Weeks (but it will start from very next day to Stake holder meeting and Resource deployment date)	0.5% of the total ordered value (excluding Support Phase Cost) will be issued at the start of the project, after submission of a Bank Guarantee of an equal amount.
M4	Setting up of Data Warehouse including ETL	T4=T0+24 Weeks	2% of the total ordered value (excluding Support Phase Cost) will be issued at the start of the project, after submission of a Bank Guarantee of an equal amount.
M5	Development	T5=T0+28 Weeks	60% of the total ordered value (excluding Support Phase Cost) will be issued at the start of the project, after submission of a Bank Guarantee of an equal amount.
M6	Testing Phase	T6=T0+30 Weeks	
M7	Deployment (Go-live)	T5=T0+33 Weeks	
M8	Enablement	T5=T0+39 Weeks	7.5% of the total ordered value (excluding Support Phase Cost) will be issued at the start of the project, after submission of a Bank Guarantee of an equal amount.

*Remaining Phase 1 cost will be given on half yearly basis after successful Go-live of the project

6.3 Payment Schedule for Operations & Maintenance Cost

Payments for Support Phase I.e. Operational Support of the system, would be made on a quarterly basis at the end of each quarter from the date of Go-live MIIP, for a period of 5 years. The payment for additional requirement shall be made along with half-yearly operational support cost, only after completion of approved milestones.

Payments for support of implementation of on-going additional requirements beyond the estimated 150 man-month included in on-going support phase cost as mentioned in the above point, during the period of 5 years from the date of successful Go-live. The payment for the same would be shall be made quarterly with the quarterly payment of on-going support on pro-rata rate.

7 Service Level Agreement (SLA) & Penalties

The Service Levels applicable for various activities under this proposal, that would be incorporated in the contract between MoSPI and the SI (Successful Bidder) as service level agreement that have been provided in the tables below. The SI is responsible to submit the periodic SLA report to MOPSI for effective monitoring of SLA's.

These service levels define the SI's responsibility in terms of ensuring the timeliness and accuracy of services (including deliverables) under this contract and have been broadly categorized as below:

Note: No penalties shall be levied on the successful Bidder in the following cases:
- Non-compliance to the SLA for reasons beyond the control of the Bidder
- Force majeure event affecting the SLA

Timely Delivery

Notwithstanding purchaser's right to cancel the order, liquidated damages for late delivery at 1% (One Percent) of the undelivered portion of order value per week will be charged for every week's delay in the specified delivery schedule subject to a maximum 10% of the value of the order value.

Accuracy of Delivery

Definition	Accuracy of deliverables would be assessed in terms of error/ defects/ bug detected in the deliverables post their delivery to MoSPI.	
Service Level Requirement	All the deliverables defined in the contract have to be submitted First-Time-Right.	
Measurement of Service Level Parameter	The service levels would be measured in terms of number of errors/ defects/ bugs for each of the deliverables as defined in the project contract. The definition of Bug /Error /Defect would be agreed and defined at the time of signing of the contract with the successful Bidder.	
Penalty for non-achievement of SLA Requirement	Occurrence of errors/defects/bugs would attract a penalty per defect as per the following – Occurrence of errors/defects/bugs would attract a penalty per defect as per the following –	
	• MIIP Project	1 X 0.01% of the total value of the project per Bug/Error/Defect Penalty detected

Application Availability

Definition	Application availability refers to the total time when the Application is available to the users for performing all activities and tasks.
Service Level Requirement	The average availability of the application should be at least 99% in a month.
Measurement of Service Level	[(Total Uptime of the Application in a month)/ (Total Time in a Month)]*100

Parameter	Any planned application downtime will not be included in the calculation of application availability. However, the Successful Bidder should take at least 15 days prior approval from MoSPI in writing for the planned outage.		
Penalty for non-achievement of SLA Requirement	If the Successful Bidder is not able to meet the above defined service level requirement, then any deviation from the same would attract penalties as provided below:		
	Application Availability (Monthly average)	>= 97 % to <99%	>= 95% to <97%	<95%
	Penalty	INR 50,000 per month	INR 65,000 per month	INR 75,000 per month

Resolution Time

- Successful Bidder should provide adequate tools/ setup adequate processes for capturing data required for measuring SLAs at no extra cost to MoSPI.
- The maximum penalty, excluding LD which would be imposed for late delivery, at any point of time on a cumulative basis and for any period shall not exceed 10% of project cost as per the Financial Bid submitted by the Successful Bidder. In case the penalty exceeds 10%, MoSPI reserves the right to terminate the project.

  The SLA's shall be revisited by the Technical Coordination Committee during the course of the MIIP Project and may be revised in discussion with the SI. However, the revised SLAs shall not cause any changes in the financial quote of the bidder.

  MIIP is service-oriented and the operational portion of the Agreement between MoSPI and the selected Bidder will be in the form of a Service Level Agreement (SLA). The SLA specifies the expected levels of service to be provided by the Bidder to MoSPI. This expected level is also called the baseline. Any degradation in the performance of the solution and services is subject to levying penalties as specified in the following sections.

  This Section indicates the suggested SLA between MoSPI and the Bidder for the project. A set of parameters has been identified as key to the successful implementation of the Project. If the performance of the bidder in respect of any parameter falls below the prescribed tolerance limit, a penalty is imposed for the breach. All the payments to the Bidder are linked to the compliance with the SLA metrics specified down in this section. During the contract period, it is envisaged that there could be changes to the SLAs, in terms of addition, alteration or deletion of certain parameters, based on mutual consent of both the parties i.e. MoSPI and Bidder.

  This section describes the service levels to be established for the Services offered by the Bidder. The Bidder shall monitor and maintain the stated service levels to provide quality service.

Definitions
1. "Scheduled Maintenance Time" shall mean the time that the System is not in-service due to a scheduled activity as defined in this SLA. The scheduled maintenance time would not be during 16X6 timeframe. Further, scheduled maintenance time is planned downtime with the prior permission of MoSPI.
2. "Scheduled operation time" means the scheduled operating hours of the System for the month. All scheduled maintenance time on the system would be deducted from the total operation time for the month to give the scheduled operation time. The total operation time for the systems and applications within the client site locations will be 24x7x365. The total operation time for the client site systems shall be the business hours of MoSPI.

3. "System or Application downtime" means accumulated time during which the System is totally inoperable within the Scheduled Operation Time but outside the scheduled maintenance time and measured from the time MoSPI and/or its employees log a call with the Bidder of the failure or the failure is known to the Bidder from the availability measurement tools to the time when the System is returned to proper operation.
4. "Availability" means the time for which the services and facilities are available for conducting operations on the MoSPI system including application and associated infrastructure. Availability is defined as: $\{(\text{Scheduled Operation Time} - \text{System Downtime}) / (\text{Scheduled Operation Time})\} * 100\%$
5. "Helpdesk Support" shall mean the support center which shall handle Fault reporting, Trouble Ticketing and related enquiries during this contract. Help desk support is to be provided as per service window defined in this RFP.
6. "Incident" refers to any event / abnormalities in the functioning of the any of IT Equipment / Services that may lead to disruption in normal operations of the Datacentre, System or Application services.

Interpretation & General Instructions
1. The SLA parameters shall be monitored on a monthly basis as per the individual SLA parameter requirements. The Bidder is expected to provide the following service levels. In case these service levels cannot be achieved at service levels defined in the tables below, it shall result in a breach of contract and invoke the penalty clause.
2. A Service Level violation will occur if the Bidder fails to meet Minimum Service Levels on a monthly basis for a particular Service Level.
3. Quarterly SLAs would be analyzed. However, there would be month wise SLAs and all SLA targets have to be met on a monthly basis.
4. Overall Availability and Performance Measurements will be on a quarterly basis for the purpose of Service Level reporting. Month wise "Availability and Performance Report" will be provided by the Bidder every quarter in the MoSPI suggested format and a review shall be conducted based on this report. Availability and Performance Report provided to the MoSPI shall contain the summary of all incidents reported and associated performance measurement for that period.
5. The primary intent of Penalties is to ensure that the system performs in accordance with the defined service levels. Penalties are not meant to be punitive or, conversely, a vehicle for cutting fees.
6. MoSPI shall have the right to encash the Performance Bank Guarantee or terminate the contract or both in any of the following cases:
   a) Overall penalty applicable on bidder for any of the Quarter exceeds 25% of the quarterly payment
   b) Overall penalties applicable on bidder for both the consecutive Quarter is above 15% of the quarterly payment

7.1   Service Level Agreement

Following outlines, the key performance requirements for the Project, which needs to be ensured by the Bidder. These performance requirements shall be strictly imposed and a continuous monitoring would be done to ensure the performance of the Portal against the target performance metrics. The performance requirements have been logically segregated in the following categories:

        a.   Functional Availability
        b.   Operations
        c.   Project Implementation

7.1.1   Functional Availability

S.No.	SLA Parameter	Target Performance	Description	Penalty Ref
Portal availability and performance				
1.	Availability of all Critical functionalities of the MIIP as defined below: • Stakeholder registration • Report Access • Data Dissemination Layer Access • Search Engine Access	>=99.9%	Availability of all functionalities for at least 99.9% of time measured on monthly basis for a 24x7x365 time period.	1
2.	Availability of all remaining functionalities of the MoSPI.	>=99.6%	Availability of all functionalities for at least 99.6% of time measured on monthly basis for a 24x7x365 time period.	2
3.	Average loading time for all pages	95% within the limit of: On LAN: 2 seconds Bandwidth of 512 kbps: 10 seconds	Page loading time measured monthly	3
4.	Response Time for Business Transactions including but not limited to: • Stakeholder Registration • Subscription Model • Search Content • Data Integration	95% of business transactions within the limit of: On LAN: 4 seconds Bandwidth of 512 kbps: 15 seconds	Response time of services measured at an interval of 30 minutes and averaged monthly	3
5.	Business Transaction Response Time involving uploading/ downloading of documents (average size 0.2MB)	95% requests within the limit of: On LAN: 6 seconds Bandwidth of 512 kbps: 18 seconds	Response time of services, measured monthly	3

7.1.2   Operations

S. No.	SLA Parameter	Target Performance	Description	Penalty Ref
Reporting and Analytics Solution				
1.	Average response time for simple query of the central data repository	< 4 sec	Measured as the response time for the output of a	4

			simple reporting query from the central server without taking into account the network latency	
2.	Average response time for a medium complex query of the central data repository	< 7 sec	Measured as the response time for the output of a medium complex reporting query from the central server without taking into account the network latency	5
3.	Average response time for a highly complex query of the central data repository	< 10 sec	Measured as the response time for the output of a highly complex reporting query from the central server without taking into account the network latency	6
4.	Timeliness of availability for the scheduled canned reports	On time	Measured as the availability of scheduled/periodic canned reports in the system as per pre-set date/ time	7
5.	Average generation time for any customer analytics report	< 15 sec	Measured as the elapsed time between submitting a request for a custom or analytics report and the generation and display of the report to the user	8
6.	Rectification time for any reported violation of SLA with respect to Page Response Time	< 48 hours	Measured as the elapsed time between reporting of a SLA violation for any page response and the resolution of the issue in order to meet the SLA	9
Helpdesk				
7.	Problem Response time	>=95% within 15minutes	Average Time taken to acknowledge and respond once an incident is logged through one of the agreed channels. This is calculated for all incidents reported within the reporting quarter (16x7x365)	10
8.	Time to Resolve	For Severity 1, 100% of the	Time taken to resolve the reported problem.	11

S. No.	SLA Parameter	Target Performance	Description	Penalty Ref
		incidents should be resolved within4 hours of problem reporting		
9.	MTTR - Time to resolve	>=95% of ▢ Severity 2 within 8 hours of problem reporting ▢ Severity 3 within 24 hours of problem reporting	Time taken to resolve the reported problem	12
10.	Percentage of reopened incidents	<= 2%	For all incidents which are designated resolved by the Bidder, but are re-opened by the client. This is calculated for all incidents reported within the quarter.	13
11	Submission of Root Cause Analysis (RCA) Reports	Within 5 days	For all Severity 1 & Severity 2 incidents resolved during the quarter, Bidder to submit RCA reports	14

7.1.3   Project Implementation

S. No.	SLA Parameter	Target Performance	Description	Penalty Ref
Portal availability and performance				
1.	Delay in any of the project milestone	< 15 days	Measured as the difference between the agreed planned date for the milestone and the actual date of its completion	15
2.	Delay in overall project duration (Individually for Business critical functionalities & rest of the functionalities)	<1 month	Measured as the difference between the agreed planned date for the milestone and the actual date of its completion	16

7.2   Penalties

A Penalty no. is mentioned in "Penalty" column of above table against each SLA. These numbers refer to S. No. in penalty table which is as follows. Penalty table includes penalty that would be levied on bidder on non-achievement of SLAs. Slabs have been created for each SLA and penalty would be imposed on bidder asper the SLA achievement/ non-achievement for the period under consideration. Penalties are mentioned as a percentage of certain components of cost, for example, support cost or call center cost etc. For levying penalty on non-performance during sustenance

support period, Equated Monthly Installment (EMI) of Operations & maintenance phase would be considered for calculation purpose. Penalty would be deducted from the next payment being made to bidder.

S. No.	Penalty Description
1.	Penalty will be levied as per the following table: <table><tr><td>% Availability</td><td>Penalty as % of the Equated Monthly Instalment (EMI) of Operations & Maintenance cost</td></tr><tr><td><99.9% &>=99%</td><td>0.5%</td></tr><tr><td>< 99% &>= 98%</td><td>1%</td></tr><tr><td>< 98% &>= 97%</td><td>2%</td></tr></table> For each additional drop of 1% in performance below 97%, 2% of EMI of Operations & Maintenance will be levied as additional penalty.
2.	Penalty will be levied as per the following table: <table><tr><td>% Availability</td><td>Penalty as % of the Equated Monthly Installment (EMI) of Operations & Maintenance cost</td></tr><tr><td><99.6% &>=99%</td><td>0.5%</td></tr><tr><td>< 99% &>= 98%</td><td>1%</td></tr><tr><td>< 98% &>= 97%</td><td>2%</td></tr></table> For each additional drop of 1% in performance below 97%, 2% of EMI of Operations & Maintenance will be levied as additional penalty.
3.	Penalty will be levied as per the following table: <table><tr><td>% transactions</td><td>Penalty as % of the Equated Monthly Installment (EMI) of Operations & Maintenance cost</td></tr><tr><td><95% &>=93%</td><td>0.5%</td></tr><tr><td>< 93% &>= 91%</td><td>1%</td></tr><tr><td>< 91% &>= 89%</td><td>2%</td></tr></table> For each additional drop of 1% in performance below 87%, 2% of EMI of Operations & Maintenance will be levied as additional penalty.
4.	Penalty will be levied as per the following table: <table><tr><td>Average response time (In seconds)</td><td>Penalty as % of the Equated Monthly Instalment (EMI) of Operations & Maintenance</td></tr><tr><td><6 &>=4</td><td>0.5%</td></tr><tr><td>< 8 &>= 6</td><td>1%</td></tr><tr><td>< 10 &>= 8</td><td>2%</td></tr></table> For each additional drop of 2 second in performance below 10 seconds, 3% of EMI of Operations & Maintenance cost will be levied as additional

	penalty.
5.	Penalty will be levied as per the following table:
	<table><tr><td>Average elapsed time (In seconds)</td><td>Penalty as % of the Equated Monthly Instalment (EMI) of Operations & Maintenance cost</td></tr><tr><td><9 &>=7</td><td>0.5%</td></tr><tr><td>< 11 &>= 9</td><td>1%</td></tr><tr><td>< 13 &>= 11</td><td>2%</td></tr></table> For each additional drop of 2 second in performance below 13 seconds, 3% of EMI of Operations & Maintenance cost will be levied as additional penalty.
6.	Penalty will be levied as per the following table:
	<table><tr><td>Average elapsed time (In seconds)</td><td>Penalty as % of the Equated Monthly Instalment (EMI) of Operations & Maintenance cost</td></tr><tr><td><12 &>=10</td><td>0.5%</td></tr><tr><td>< 14 &>= 12</td><td>1%</td></tr><tr><td>< 16 &>= 14</td><td>2%</td></tr></table> For each additional drop of 2 second in performance below 16 seconds, 3% of EMI of Operations & Maintenance cost will be levied as additional penalty.
7.	For each occurrence of unavailability, 1% of EMI of Operations & Maintenance cost will be levied as penalty
8.	Penalty will be levied as per the following table:
	<table><tr><td>Average elapsed time (In seconds)</td><td>Penalty as % of the Equated Monthly Instalment (EMI) of Operations & Maintenance cost</td></tr><tr><td><17 &>=15</td><td>0.5%</td></tr><tr><td>< 19 &>= 17</td><td>1%</td></tr><tr><td>< 21 &>= 19</td><td>2%</td></tr></table> For each additional drop of 2 second in performance below 21 seconds, 3% of EMI of Operations & Maintenance cost will be levied as additional penalty.
9.	Penalty will be levied as per the following table:
	<table><tr><td>Average elapsed time (In hours)</td><td>Penalty as % of the Equated Monthly Instalment (EMI) of Operations & Maintenance cost</td></tr><tr><td><60 &>=48</td><td>0.5%</td></tr><tr><td><72 &>= 60</td><td>1%</td></tr><tr><td><84 &>= 72</td><td>2%</td></tr></table> For each additional drop of 1 hour in performance below 84 hours, 3% of

	EMI of Operation & Maintenance cost will be levied as additional penalty.
10.	Penalty will be levied as per the following table: 	% transaction with >15 minutes response time	Penalty as % of the Equated Monthly Instalment (EMI) of Operations & Maintenance cost	 	<95% &>=93%	0.5%	 	<93% &>=91%	1%	 	<91% &>=89%	2%	 For each additional drop of 1% in performance below 89%, 2% of EMI of Operation & Maintenance cost will be levied as additional penalty.
11.	Penalty will be levied as per the following table: 	% transaction with more response time as mentioned in SLA table (severity wise)	Penalty as % of the Equated Monthly Instalment (EMI) of Operations & Maintenance cost	 	<100% &>=98%	0.5%	 	<98% &>=96%	1%	 	<96% &>=94%	2%	 For each additional drop of 1% in performance below 89%, 2% of EMI of Operation & Maintenance cost will be levied as additional penalty.
12.	Penalty will be levied as per the following table: 	% transaction with more response time as mentioned in SLA table (severity wise)	Penalty as % of the Equated Monthly Instalment (EMI) of Operations & Maintenance cost	 	<95% &>=93%	0.5%	 	<93% &>=91%	1%	 	<91% &>=89%	2%	 For each additional drop of 1% in performance below 89%, 2% of EMI of Operation & Maintenance cost will be levied as additional penalty.
13.	Penalty will be levied as per the following table: 	% of reopened Incidents	Penalty as % of the Equated Monthly Instalment (EMI) of Operations & Maintenance cost	 	<=4% &>2%	0.5%	 	<=6% &>4%	1%	 	<=8% &>6%	2%	 For each additional increase of 2% in reopened incidents above 8%, 2% of

	EMI of Operations & Maintenance cost will be levied as additional penalty.
14.	For delay of every 2 days in submitting Root Cause Analysis (RCA) report above 5 days, 1% of Operations & Maintenance cost for that month will be levied as penalty.
15.	If the Bidder fails to achieve the completion of any milestone within defined duration, the payment to him will be liable for deduction @1% of the payment for that milestone for delay of 15 days or part thereof
16.	If the Bidder fails to achieve the completion of project within defined duration (Individually for Business-critical functionalities & rest of the functionalities), the payment to him will be liable for deduction @1% of the Total cost of ownership without taxes for delay of each month or part thereof.

7.3 Resource Deployment

Implementing agency must ensure the timelines for deliverables are met. Implementing agency shall ensure minimal disruption to the project, and where required provide a replacement resource to minimise adverse impact on the project. Leave policy of implementing agency will apply (earned leave / Sick leave etc.)

To address problems faced with attrition of deployed resources of highly specialized resources, the Implementation agency may consider providing for fixed annual increments against the fee payable for resources who continue year on year of the project.

8 Annexure

8.1 Project Manpower/Resources Criteria

S. No.	Area of work/ Designation	Education Qualification	Expertise/ Specialization	Year of Experience	Domain of Experience	SI/OEM
	Application Team					
	Analytics & Data Management Team					

8.2   Application Service Compliance Criteria

8.2.1   Architecture

Sr. No.	Specifications	Compliance (Yes/No)	Comments
a.	The solution should have the ability to use In-Memory Analytics to enable users to conduct Fast, Thorough Explorations and Analysis on your data from different data sources across the Enterprise		
b.	The solution should be able to analyse Big Data and generate visualizations on the fly, without any performance degradation		
c.	The offering should have a single interface with integrated modules for in-memory analytics comprising data preparation, exploration, advanced analytics (including Text Analytics), Visualization and administration		
d.	The solution should provide self-service analytics on data in-memory using smart techniques and out-of-box analytical algorithms without requiring any Statistical background or experience		
e.	The solution should allow data load jobs to be scheduled to automate the process of loading data into memory		
f.	The solution should be compatible with both Windows and Linux operating systems		
g.	The solution should provide Scalability and High Performance leveraging cost-effective architecture		
h.	The solution should have the ability to be configured on commodity hardware which gives the scalability and brings down upfront capital investments for an organization		
i.	Ability to scale on commodity hardware architecture with increasing needs of managing Big Data and also support Hadoop without any dependence on third party application or licensing		
j.	The solution must be available in the Cloud Foundry environment for deploying, managing, orchestrating and updating enterprise cloud applications		
k.	The solution must support a containerized analytics like Docker that allows data scientists and analytical teams a flexible DevOps environment for working with containerized Analytics in the cloud.		

8.2.2   Enterprise Portal

Sr. No.	Specifications	Compliance (Yes/No)	Comments
a.	The proposed portal product should be from the Leader's quadrant/ wave of latest Gartner/ Forrester Magic Quadrant/ Wave for Horizontal Portals (in 2017/18)		

Sr. No.	Specifications	Compliance (Yes/No)	Comments
b.	Proposed tool should have the quicker mechanism of creating, deploying, managing, editing, storing, preserving & Delivering the content, videos, photos, audios, links as well as embedded graphics on web page		
c.	Should support Single sign-on		
d.	Should have versioning feature to allow track new versions as well as roll back to previous versions		
e.	Should provide support/interoperable with multiple databases like Oracle/SQL Server/ DB2 / MySQL etc.		
f.	Proposed tool should have facility of one click page creation & quick site creation		
g.	Proposed tool should allow to combine web content alongside web application portlet, widgets		
h.	Proposed tool should have capability to administer user defined contents including reports, videos, audios etc.		
i.	Should be able to address both structured and unstructured data		
j.	Proposed tool should have facility to automatically generate a hierarchical site map for the entire portal		
k.	Proposed tool should have faceted search criteria		
l.	The proposed tool should capability of dynamic keyword tagging to web content		
m.	The proposed tool should make content pages instantaneously searchable by external search engines.		
n.	The proposed tool should be able to leverage in a SOA architecture as well as used for simple integration via REST or RSS Subscription		
o.	The proposed tool should have dynamic virtual hosting capability and vanity URL feature		
p.	The proposed tool should have internal workflow engine		
q.	The proposed tool should have workflow based lifecycle from content creation to review and approval, and finally publishing of the content, as per Access Control to users and groups		
r.	The proposed tool should be capable of search, archiving and versioning of the content		
s.	The proposed tool should have capability of live page editing and scheduling without affecting published content		
t.	The proposed tool should provide all relevant functionalities to provide centralized knowledge base		

8.2.3   Content Management System

Sr. No.	Specifications	Compliance (Yes/No)	Comments
a.	Proposed tool should have the quicker mechanism of deploying, managing, editing, storing, preserving & Delivering the content		
b.	Should support Single sign-on		

Sr. No.	Specifications		
c.	Should have versioning feature to allow track new versions as well as roll back to previous versions		
d.	Should provide support/interoperable with multiple databases like Oracle/SQL Server/ DB2 / MySQL etc.		
e.	Proposed tool should have facility of one click page creation & quick site creation		
f.	Proposed tool should allow to combine web content alongside web application portlet, widgets		
g.	Proposed tool should have capability to administer user defined contents including reports, videos, audios etc.		
h.	Should be able to address both structured and unstructured data		
i.	Proposed tool should have facility to automatically generate a hierarchical site map for the entire portal		
j.	Proposed tool should have faceted search criteria		
k.	The proposed tool should capability of dynamic keyword tagging to web content		
l.	The proposed tool should make content pages instantaneously searchable by external search engines.		
m.	The proposed tool should be able to leverage in a SOA architecture as well as used for simple integration via REST or RSS Subscription		
n.	The proposed tool should have dynamic virtual hosting capability and vanity URL feature		
o.	The proposed tool should have internal workflow engine		
p.	The proposed tool should have workflow based lifecycle from content creation to review and approval, and finally publishing of the content, as per Access Control to users and groups		
q.	The proposed tool should be capable of search, archiving and versioning of the content		
r.	The proposed tool should have capability of live page editing and scheduling without affecting published content		
s.	The proposed tool should provide all relevant functionalities to provide centralized knowledge base		

8.2.4   Data Dissemination and Acquisition

Sr. No.	Specifications	Compliance (Yes/No)	Comments
a.	The proposed analytics product should be from the Leader 's quadrant/ wave of latest Gartner Magic Quadrant for Data Science Platforms or Forrester Wave for Predictive Analytics (in 2017/18/19)		
b.	The solution should provide Auto-charting Based on data selected for analysis, solution should automatically choose best visualization suited to display the type of data selected		
c.	The solution should provide Geographical map views (Choropleths, custom conditional highlighting) to provide a quick understanding of geospatial data		

d.	The solution should allow users to change queries by selecting items to be displayed from a sidebar or dynamically filtering and grouping		
e.	The solution should provide viewable descriptive statistics, such as min, max and mean, enabling users to gain an overall sense of a particular measure		
f.	The solution should provide the capability to link to an external URL from a visual object with relevant context		
g.	The solution should allow 'On-the-fly' hierarchy creation for adding drill-down capabilities to visualizations and reports		
h.	The solution should provide capabilities to Slice and dice multidimensional data by applying filters on any level of a hierarchy		
i.	The solution should provide capabilities to Drill up and down through hierarchies, or expand and collapse entire levels		
j.	The solution should provide a data acquisition wizard for previewing, filtering or sampling data prior to creating visualizations or reports		
k.	The solution should provide selection and brushing modes for discovering relationships while exploring data		
l.	The solution should provide users the capability to save and share their analysis as exploration, report, or PDF		
m.	The solution should provide the capability to export data to Excel, PDF, Text and CSV/TSV document formats		
n.	The solution should be capable of read and write of comments in reports to aid in collaboration		
o.	The solution is capable of emailing a report link with comments to users		
p.	The solution should allow users to Capture screenshots and share comments with users		
q.	The solution should provide progressive filters. This refers to cascading relation between filter controls in the report body with bi-directional filter support		
r.	The solution should provide collaboration support with Annotation on Tablet		
s.	The solution should allow users to Receive Alerts		
t.	The solution should provide a thumbnail view of recent and favorite items to select and open		
u.	The solution should provide precision layout capabilities provide flexibility in report layout and design		
v.	The solution should provide filtering and selection capabilities to reports with easy-to-integrate common action elements such as radio buttons, drop-down/combination boxes, check boxes and sliders		
w.	The solution should provide Percentage of Records as part of Filtering and Result Data set giving a purview of the amount of data being Analyzed		

x.	Capability to calculate new data items on the fly from existing data items using expressions		
y.	All users should have access to all capabilities of the solution platform and should not be restricted by way of licensing		
z.	The solution should be able to create the required management dashboards and reports required by management		
aa.	The solution should allow user controlled rendering of visualizations		
bb.	The solution should allow preview of sub-expression		
cc.	The solution should provide the ability to switch between different percentages for the confidence interval		
dd.	The solutions should have the capability to custom colours across reports and sessions		
ee.	Self-service capability to import data from databases and twitter		
ff.	The solution should be capable of applying filters on aggregated variables		
gg.	The solution should have the functionality of applying global prompts		
hh.	The solution should be capable of Parameterised Calculations / Display Rules / Filters / Ranks		
ii.	For optimal utilization of Real Estate available the solution should have the functionality of assigning prompts/visualizations to containers & the ability to have pop-up visualizations		
jj.	Solution should support extension of Visualization library using third-party visualizations by building D3.js graphs, etc. and embedding into Reports and Dashboards		
kk.	The solution should be capable to schedule & distribute reports/dashboards		
ll.	The solution should have both simple & advance variable aggregation options		
mm.	The solution should provide Self-Service platform without the need to build a semantic metadata layer for End users, thus reducing dependency on IT		
nn.	The solution should provide a user friendly, web based , drag and drop interface for data preparation		
oo.	The solution should visually prepare data for analysis, including joining tables, defining custom calculated columns and creating custom expressions for data tables available in-memory		
pp.	The solution should provide capability to leverage and build star schema data models in Memory		
qq.	The solution should allow data to be accessed from any industry standard data source using native and ODBC connectors		
rr.	The solution should provide the capability to search for data tables available in Memory		
ss.	The solution should provide capability to Import data (including spreadsheets, clipboard) to the report workspace in a drag-and-drop manner		

tt.	The solution should support Preview data prior to importing it, Right-click-driven easy column transformations, New table and column profiling helps users understand the data immediately and Color-coded visual joins		
uu.	The solution should support Native Apps for Windows 10, iOS and Android to quickly view dynamic reports and dashboards on Tablets and Smartphones		
vv.	The solution should allow the analysis / explorations / reports based on in-memory data to be pushed for offline viewing to mobile devices		
ww.	The solution should have the ability for Interactive report viewing for information consumers on iOS, Android and Windows 10 devices		
xx.	Reports and Dashboards access on iOS, Android and Windows 10 devices should be using a native application which helps leverage most popular gestures and capabilities, including zoom, swipe, etc. to optimize ease of use and user engagement		
yy.	The solution should support same dashboard / report created on Web to be accessed from iOS, Android and Windows 10 devices without requiring any redesign		
zz.	The solution should allow users to securely view reports on mobile devices while online or offline		
aaa.	The solution should provide Geographical map views (Choropleths, custom conditional highlighting) to provide a quick understanding of geospatial data		
bbb.	The solution should support lasso data points on geographical maps to select specific data for further analysis		
ccc.	Geographical maps are enabled through suggested GIS software		
ddd.	Access to all base maps and geosearch through suggested GIS software		
eee.	Drive-time and drive-distance analysis is available through a suggested GIS software		
fff.	The solution should support viewing Reports and Dashboards in Office solutions		
ggg.	The solution should support Outlook Integration with full interactive reports, gadget panes		
hhh.	The solution should support SharePoint Integration with full interactive reports		
iii.	The solution should support Excel integration with ability to leverage native Excel charts		
jjj.	The solution should have capability to monitor Resource utilization including CPU, I/O and Memory		
kkk.	The solution should have capability to monitor User sessions		
lll.	The solution should have capability to monitor Mobile device logging history		

mmm.	The solution should provide ability to Refresh reports from the device		
nnn.	The solution should provide server side logging for user actions – reports downloaded		
ooo.	The solution should have 'out of the box' usage report		
ppp.	Start/stop in-memory server		
qqq.	Load/unload tables to/from memory and local data providers		
rrr.	Table and row level security for the data tables loaded in memory		
sss.	Mobile device blacklisting through the web based security and administration interface		
ttt.	Mobile device whitelisting through the web based security and administration interface		
uuu.	Drag-and-drop web browser interface that empowers statisticians, data scientists and business analysts to interactively and iteratively create descriptive and predictive models		
vvv.	Single environment for interactive data exploration and analytical modelling capabilities to quickly identify predictive drivers and build descriptive and predictive models		
www.	Various Modelling Techniques including Linear Regression, Logistic Regression, Generalized Linear Model, Classification Tree, Clustering		
xxx.	Allows Filtering of observations		
yyy.	Interactively exclude outliers and automatically refit the model		
zzz.	Clustering to interactively evaluate cluster membership along with detailed summary statistics		
aaaa.	Classification tree - Based on the C4.5 algorithm (information gain or information gain ratio) with interactive pruning and user-specified number of bins		
bbbb.	Logistic regression modelling providing variable selections along with Influence Statistics, Residual diagnostics, summary tables		
cccc.	Linear regression modelling for continuous data providing variable selections, frequency and weight variables, residual diagnostics, summary tables		
dddd.	Comparison of various Models		
eeee.	Auto-update model toggling for all of the modelling techniques		
ffff.	Build models, compute and process results on the fly for each group or segment without having to sort or index the data each time		
gggg.	Build segment-based models instantly from a decision tree or clustering analysis		
hhhh.	Generate model comparison summaries such as lift charts, ROC charts, concordance statistics and misclassification tables for one or more models.		
iiii.	Interactively slide the prediction cut-off for automatic updating of assessment statistics and misclassification tables		
jjjj.	Interactively evaluate lift at different percentiles		

Sr. No.	Specifications	Compliance (Yes/No)	Comments
kkkk.	Export model code to integrate models with other applications		
llll.	In-memory analytic engine provides a secure, scalable, multiple-user environment.		
mmmm.	Perform Modelling on Entire data. No need to write data to disk or perform data shuffling during different analytical processing steps		
nnnn.	Provides support for single-server mode for smaller organizations or departments, or for distributed environments that take advantage of multi-node, multithreaded processing		
oooo.	Drag-and-drop web browser interface that empowers statisticians, data scientists and business analysts to interactively and iteratively create descriptive and predictive models		
pppp.	Single environment for interactive data exploration and analytical modeling capabilities to quickly identify predictive drivers and build descriptive and predictive models		
qqqq.	Various Modeling Techniques including Linear Regression, Logistic Regression, Generalized Linear Model, Classification Tree, Clustering		
rrrr.	Allows Filtering of observations		
ssss.	Interactively exclude outliers and automatically refit the model		
tttt.	Clustering to interactively evaluate cluster membership along with detailed summary statistics		

8.2.5 Analytics

Sr. No.	Specifications	Compliance (Yes/No)	Comments
a.	The proposed analytics product should be a Leader from the Gartner vs Forrester evaluation of Data Science, Predictive Analytics, and Machine Learning Platforms, 2017 Q1		
b.	The proposed solution should combine data wrangling, data exploration, visualization, feature engineering, and modern statistical, data mining and machine learning techniques all in a single, integrated in-memory processing environment.		
c.	The proposed solution should provide customizable in-memory algorithms in interactive and programming interfaces to analyses large, complicated data		
d.	The proposed solution should provide low maintenance, web-based interfaces for programming and point-and-click workflows		
e.	The proposed solution should provide collaborative environment which enables easy sharing of data, code snippets and best practices.		
f.	The proposed solution should provide highly scalable, in-memory analytical processing for distributed, in-memory processing of complex analytical calculations on large datasets		
g.	The proposed solution should provide concurrent access to the same data in memory by many users improves efficiency		

h.	The proposed solution should provide built-in workload management ensures efficient use of compute resources.		
i.	The proposed solution should have built-in failover management guarantees submitted jobs always finish.		
j.	The proposed solution should be open to coding language selection like python, R, SAS, Java and Lua		
k.	The proposed solution should use the most advanced techniques to detect rare events, outliers and/or influence points to help you determine, capture or remove them from downstream analysis (e.g., models).		
l.	The proposed solution should have modern statistical, data mining and machine-learning techniques like: - Unsupervised and supervised learning algorithms, such as clustering, principal component analysis, linear and nonlinear regression, logistic regression - Automated ensemble of decision trees, - Gradient boosting with automated generation of weighted averages and stopping criteria, - Random forests with automated intelligent tuning of parameter set to identify optimal model - Customizable neural networks architecture and weights with ability to use an arbitrary number of hidden layers to support deep learning, - Support vector machines with automated intelligent tuning of parameter set to identify optimal model - Factorization machines to allow customized recommendation systems - Network analytics and community detection		
m.	The proposed solution should provide integrated text analytics with features like support of multiple languages, automatic identification of term part of speech, entity extraction, detection of noun groups and multi-term lists, uses default start and stop lists, machine-learned topics represent the term-by-document, matrix-generated text processing as a structured numeric representation of the document collection, extract Boolean rules from large-scale transactional data		
n.	The proposed solution should provide easy-to-implement score code that is automatically generated in multiple programming languages for all machine-learning models.		
o.	The proposed solution should be an interactive, user-friendly, web-based visual and programming interfaces		
p.	The proposed solution should combine text data wrangling, text data exploration, visualization, text parsing, topics, concepts, categories and sentiment all in a single framework, integrated in-memory processing environment.		

q.	The proposed solution uses natural language processing (NLP) to analyse and transform text into formal representations for text processing and understanding. This includes automated text parsing, word and sentence tokenization, segmentation, stemming, compound decomposition, synonym detection, part-of-speech tagging, categorization documents, named entity recognition and semantic parsing. It should also directly support the use of regular expressions (REGEX) for matching purposes.		
r.	The proposed solution should have Smart search applications by categorizing documents, associating entity relationships and building a contextual search application for exploration within text, using machine learning and semantic analysis		
s.	The proposed solution combines machine learning with business knowledge to generate new rules for improved accuracy.		
t.	The proposed solution should provide automatic discovery of topics for initial taxonomy development: • Automated machine discovery identifies the core themes in the input document collection with associated relevance scores. • Term relationships within topics can be interrogated and explored with term clouds (with configurable thresholds), interactive term maps and by drilling into topics to evaluate relevancy and refine discovered topics.		
u.	Ability of generation of configurable categorization rules; Automated initial category rule definition based on user-refined generated topics. Easy-to-understand Boolean rule definitions create the categorization model (i.e., taxonomy). System-generated rule robustness is detailed in true positive, false positive and false negative visual diagnostics.		
v.	The proposed solution should employ sophisticated dimension reduction techniques that enable advanced filtering through weighting, integrated spell checking and transformation of qualitative data into compact formats.		
w.	The proposed solution contain crawling capabilities which should be able to retrieve Web pages that go many layers deep originating from a specific URL. It should also be able to retrieve not only Social media content, but also related social media metadata (followers, friends, demographics, comments etc.)		
x.	The proposed solution should combine Statistics and linguistics to provide more accurate sentiment analysis results based on Statistical modelling: Provides predefined default parameters – that can also be configured – to identify the document sentiment from text. Linguistic rules: Lets subject-matter experts define the elements to be examined for sentiment assessment. Hybrid approach: Provides the unique ability to use both statistical rigor and linguistic rules to define sentiment models driving more detailed sentiment evaluations.		

Sr. No.	Specifications	Compliance (Yes/No)	Comments
y.	The proposed solution should support English and Hindi languages and should have the capability to be extended to other Indian languages if required		
z.	The proposed solution should provide named entity recognition concepts. Predefined concepts are available – no rule writing is required. These address common entity definitions for date, location, time, etc. Custom concepts can be written using a suite of predefined operators.		
aa.	The solution should have the capability to explore and seek correlations on data sets using in-memory server sources for any size data analysis		
bb.	The solution should provide interactive analytical capabilities such as Correlations & Regression to assess strength of relationship between variables		
cc.	The solution should provide interactive analytical capabilities such as Decision Tree to assess how target variable is affected by input variables and help perform segmentation		
dd.	The solution should provide interactive advanced statistical analysis capabilities such as Box Plot analysis		
ee.	The solution should provide capabilities to view Entity relationships in Network Plot and allow drill into details to explore relationships and define strength of relationships		
ff.	The solution should have the ability to build Flow Diagrams for Path Analysis		
gg.	The solution should be capable of carrying out sentiment analysis		
hh.	The solution should provide capability to analyze unstructured data and perform Sentiment analysis utilizing pre-defined ontologies and explore results for details		
ii.	The solution should provide capabilities to forecast on the fly with forecasting confidence intervals to further enhance data exploration and analysis		
jj.	The solution should automatically select the most appropriate forecasting algorithm for selected data		
kk.	The solution should provide enhanced forecasting capabilities with Scenario Analysis i.e. It allows users to see how the forecast would be effected by changing independent variable values		
ll.	The solution should be capable of Goal Seeking to see how changes to a forecast affect underlying factors		
mm.	The solution should provide a clear explanation of Analytical results by providing "What does it mean" capabilities		
nn.	The solution should support animations of graphs of bubbles ranging in sequential and automatic way basis the animation variable		

8.2.6   Data Management Service

Sr. No.	Specifications	Compliance (Yes/No)	Comments

a.	The proposed data integration product should be from the Leader's quadrant / wave of latest 'Gartner Magic Quadrant' / 'Forrester Wave' for Data Integration tools in recent 3 years consecutively.		
b.	The ETL tool should provide native access Industry leading RDBMS like ORACLE, DB2, SQL Server, Sybase, MYSQL, appliances like Netezza, Teradata, etc and Big Data Storage Platforms like Hadoop		
c.	The solution should provide a pre-built transformation to use SOAP (Simple Object Access Protocol) and REST (Representational State Transfer) to access a web service as a source for the ETL process		
d.	The solution should provide specialized table loaders to provide optimized bulk loading of databases such as Oracle, Teradata and DB2		
e.	The solution should provide support for Message-Oriented Middleware, including Web Sphere MQ from IBM, MSMQ from Microsoft and Tibco's Rendezvous		
f.	The solution should provide file reader/writer for Hadoop file system (HDFS).		
g.	The solution should provide a graphical development environment for authoring Hadoop-related code including Pig, Hive, MapReduce and HDFS commands		
h.	The solution should provide integrated workflow scheduling, automatic load balancing and grid computing support		
i.	The solution should be able to seamlessly call Data Quality functionalities such as data standardization (standardizing city, state etc.) as part of the ETL process flow		
j.	The solution should be able to seamlessly call Data Quality processes as a web service for de-duplication, as part of the ETL process flow		
k.	The ETL tool should provide for Multiple-user design environment with a governance mechanism to prevent corruption of data integration related objects, and also supports collaboration on large, enterprise wide projects.		
l.	The solution should generate code for ETL process flows created through the GUI which can be viewed / edited by the developers if required		
m.	The ETL tool should be rich in the set of in-built transformations and functions that should include predefined table and column-level transformations including slowly changing dimensions (SCD type1 and type2)		
n.	The solution should provide the ability to create User Written Code transformations, which allows leveraging custom code as part of the ETL process flow		
o.	The solution should provide the capability to create customized transformations which can be reused across ETL process flows		

p.	The solution should provide the capability to import native user-defined functions from databases such as Oracle, DB2, and Teradata and have them available for use in expressions in the ETL process flow			
q.	The solution should have the capability for ELT processing which facilitates execution of the process flow inside a database, providing enhanced execution and performance			
r.	The solution should provide a utility to check if a particular transformation can be executed inside the database			
s.	The solution should have the ability to perform the complete process of extracting and transforming the data and loading it into a DataMart and generate reports as part of the same ETL process			
t.	The solution should provide an out-of-the-box transformation to support conditional processing within jobs, allowing distinct portions of a job to be defined to run conditionally			
u.	The solution should provide in-built analytical transformations for statistical functions such as correlations, distribution analysis, one-way frequencies, summary statistics etc. as part of the ETL process flow			
v.	The solution should provide an in-built analytical transformation to perform forecasting on time-series or transactional data as part of the ETL process flow			
w.	The solution should have the ability for Command-line job deployment options for deploying single and multiple jobs			
x.	The solution should provide the ability to execute external OS level commands such as call shell scripts as part of the ETL process			
y.	The solution should provide a single metadata repository which provides the ability to track data lineage by performing impact and reverse impact analysis visually, through a graphical user interface			
z.	The solution should have the ability to perform complex search (based on object name, type, date range etc.) of the metadata repository and should also be able to save search criteria for reuse.			
aa.	The solution should have the ability to import and export relational metadata in external formats to exchange metadata with third-party applications			
bb.	The solution should provide the ability to export metadata as a package for backup and archival and import the same through a wizard driven interface			
cc.	The solution should have the ability to compare the metadata being imported with the existing metadata to better facilitate change management			
dd.	The solution should provide a wizard driven interface to perform column standardization on table metadata on column lengths, formats, and other attributes that you would like to match between the tables.			
ee.	The solution should provide metadata reports that provide an easy-to-understand view of the metadata for users to view the content.			

ff.	The solution should provide the capability to generate metadata reports which can provide the requisite information related to tables, process flows etc. used as part of the ETL process		
gg.	The solution should have the ability to easily capture and display performance information such as real time, CPU time, memory use, input/output, and record count data as a table / graph		
hh.	The solution should provide enhanced visual de-bugging capabilities: - To run a particular transformation - To run an ETL flow from / up to a particular transformation - To run an ETL flow step-wise		
ii.	The solution should provide the capability to assign checkpoints in the ETL process flow to ensure recovery and de-bugging in case of failure, interruptions or errors		
jj.	The solution should provide enhanced logging capabilities accessible from a log tab which can help determine the point of failure of the ETL process and the corresponding error highlighted in the code		
kk.	The solution should provide the capability to display warnings of a job being changed since previous open, with a brief description of the change, to facilitate use in a collaborative user development environment		
ll.	The solution should provide a graphical user interface to profile the data to understand and analyse the quality of data		
mm.	The solution should provide the following capabilities w.r.t. the profiling of data: Data sufficiency analysis in terms of null count, blank count, unique count etc. Data Statistics such as min, max, mean, median, mode, standard deviation etc. Performing structure discoveries Computing frequency distributions Computing pattern frequency distributions Computing metadata validations and statistics Identifying outliers and percentiles Identifications on range and domain checks Identifying referential integrity (pk/fk relationship) analysis Performing redundant data analysis		
nn.	The solution should provide the capability to create data profiling reports in the form of pie charts, bar graphs etc.		
oo.	The solution should provide the capability to drill through to source level information in the data profiling report		
pp.	The solution should perform the data quality functionalities without creating a copy of the data in a proprietary/external format?		
qq.	The solution should have the ability to correct mistakes in spellings, inconsistencies, casings and abbreviations		

rr.	The solution should have pre-built libraries for standardization of INDIA specific data		
ss.	The solution should enable parsing of data into atomic level information for better matching		
tt.	The solution should provide safe string encode/decode capabilities		
uu.	The solution should provide Java code executions		
vv.	The solution should provide a unified capability and system for both offline and online Dedupe		
ww.	The solution should provide following transformation nodes pre-built: - Clustering - Pattern Analysis - Basic Statistics - Frequency Distribution - Identification Analysis - Gender Analysis		
xx.	The solution should have the capability to identify duplicates and cluster records		
yy.	The solution should have intuitive, flexible rules to identify households		
zz.	The solution should have the capability to provide fuzzy logic to induce tolerance during matching		
aaa.	The solution should have the ability to have options for automatic merging of clustered records		
bbb.	The solution should have the capability to enrich data from internal data sources		
ccc.	The solution should have the capability to enrich data from external/third party data sources		
ddd.	The solution should enable in-database data quality on appliances such as Teradata that helps cleanse large volumes of data, integrate all data sources before loading to the data warehouse and, in the end, empower executives to make more accurate decisions.		
eee.	The solution functions should run within the Appliance which will help meet your data quality requirements – and, in the end, build a strong foundation for business analytics with cleansed and integrated data.		
fff.	The solution should have the capability to enrich data from external/third party data sources		
ggg.	Does the system provide audit trails?		
hhh.	Does the system have the capability to set alerts?		
iii.	Does the system enable enforcing data governance rules?		
jjj.	Can we create customized rules to validate and audit operational processes?		
kkk.	Can we understand and refine mission-critical processes by logging exceptions and violations?		
lll.	Can the system invoke events to correct the data?		

Sr. No.	Specifications	Compliance (Yes/No)	Comments
mmm.	The solution should have INDIA specific vocabulary libraries		
nnn.	The solution should have INDIA specific grammar rule libraries		
ooo.	The solution should INDIA specific phonetics libraries		
ppp.	The solution should have INDIA specific standardization rules and libraries		
qqq.	The solution should have INDIA specific regular expression libraries		
rrr.	The solution should have rules to identify individuals and organization from the customer data		
sss.	The solution should have the ability to identify gender of individuals using the INDIA specific vocabularies		
ttt.	The solution should have the ability to be customizable in terms of the vocabularies, grammars, phonetics, standardization rules, etc.		
uuu.	The solution should have intelligent logic for INDIA names, addresses, phone numbers, national ID, passport number and other identification proof documents and demographic details		
vvv.	The solution should be available for real time (online) mode data quality implementation through a service oriented architecture		
www.	The solution should be capable of handling positive and negative duplicates at real time		
xxx.	The solution should have the capability to integrate the watch-list monitoring capabilities in real time		
yyy.	The solution should have an out-of-the-box Email & FTP node.		

8.2.7   Learning Platform

Sr. No.	Specifications	Compliance (Yes/No)	Comments
a.	LMS should have search functionality allowing learners to find specific courses, materials based on keywords, title, delivery format, and other tagged identifiers		
b.	LMS should support Multilanguage		
c.	LMS Should have feature which allows Individualized learning plan, course catalogue seen on same screen		
d.	LMS Solution should have standard attributes regardless of delivery mechanism including: - Title - Description - Length/duration - Prerequisites (if applicable)		
e.	LMS should have built-in collaborative publishing features foster engagement and encourage content-driven collaboration		
f.	LMS Should have document management System built-in; includes forms, workflow documents/materials, etc.		
g.	LMS should have marking workflow that should assign different markers to assignments, manage grade moderation		

Sr. No.	Specifications	Compliance (Yes/No)	Comments
h.	LMS should have integrated badges to motivate learner and reward participation.		
i.	LMS should have Inline marking for easy review and for feedback		
j.	LMS should have following resources to support learning: - Multi page resources with a book like format - File such as PDF, spread sheet, sound or video file - Folders that contains one or many types of files - Page - single scrollable web page with robust HTML editor - URL for external link		
k.	LMS should recommends content/documents/videos/etc. based on in progress/completed courses or content		
l.	Learner can share any content, including video, audio, etc. with a single learner, multiple learners, shared groups or in an area or section designated for curation		
m.	Learners can leave comments, make suggestions, rank/rate (if available) any content (regardless of format or delivery)		
n.	LMS should have capability when learners register for an event it appears via iCal in Outlook, Gmail and other Internet e-mail platforms		
o.	LMS should have a capability to send the notifications – - Upon registration of courses, event - Automatic and customizable email notification - Ability to send SMS		
p.	LMS should be able to integrate with social media sites like Facebook, Twitter etc.		
q.	LMS should be able to embed videos from sites like You tube, Vimeo etc.		
r.	Learner can be able to upload their own content, course, videos etc.		
s.	LMS should have ability to create forum/discussion board		
t.	LMS should have all required Administrative capabilities – - To create, modify and cancel a course - Can create a learning plan by region, department, group of scholars etc. - Allow administrator to set multiple level of approval - Tracking and Monitoring Dashboard		
u.	LMS should be compatible to Mobile View		
v.	LMS should have capability of creating questions for surveys /Quiz/ Quiz Bank		
w.	LMS should have capability of generating certificates, ability to edit certificate and ability to email certificate		

8.2.8   Geographical Information System (GIS)

Sr. No.	Specifications	Compliance (Yes/No)	Comments
a.	Capability to access and integrate OGC compliant web services.		

b.	Should support a Service Oriented Architecture (SOA)		
c.	The GIS server should be highly scalable		
d.	The GIS solution should integrate seamlessly with proposed analytical solution.		
e.	It should support deployment in cloud environment		
f.	Ability to host OGC compliant services like WMS WFS and WCS		
g.	The application should support LDAP (lightweight directory access protocol) authentication		
h.	Should support standard raster formats such as DTED, DEM, Jpeg2000, JPEG, TIF, BMP, GeoTiff, ERDAS.IMG, Intergraph. COT, GIF, NITF, CADRG, MrSID etc.		
i.	Should support multiple operating systems.		
j.	Should support unlimited number of Editing and viewing clients. It should also allow multiuser editing.		
k.	Should support standard Web server / application server like IIS, Apache, Tomcat, Web Sphere, Web logic etc		
l.	Should have the capability to provide geodata services for data extraction, replication, and synchronization, as well as a framework and tools for managing large spatial datasets in an RDBMS such as IBM DB2, IBM Informix, Oracle, Microsoft Access, Microsoft SQL Server etc.		
m.	Should be capable of maintaining data history, version management and conflict detection / resolution.		
n.	Should support database check in – check out / replication functionalities hence maintaining the parent child relationship of Master Database.		
o.	Should have open access to extensive GIS capabilities so as to enable organizations to publish and share geographic data, maps, analysis tools, models etc		
p.	Should have browser-based access for viewing, editing and analyzing of Geo-Spatial Data		
q.	Should have Web Editing Application Functionalities like simultaneous Feature class editing, isolated editing in separate versions, Undo/Redo operations, conflict detection, snapping by layer, snapping to new geometry, settable snapping, modify, merge, split features, specify an Exact X,Y location, modify and create attribute values, maintain attribute values through defined rules (Domain), any custom component based Tool for editing		
r.	Should support server side geoprocessing tasks		
s.	The server should have the capability to query across multiple map services.		
t.	Should have centrally managed data, models, tools, maps, and applications		
u.	It should provide a web publishing wizard so that registered users can publish websites without the need to programming.		

Sr. No.	Specifications	Compliance (Yes/No)	Comments
v.	Should support Application Developer Tools which Includes Application Development Frameworks (ADFs) for .NET and Java and Application Programming Interfaces (APIs) for JavaScript, Flex, Microsoft Silverlight/WPF etc.		
w.	Server based GIS Software should offer server-based analysis and geoprocessing. This should include vector, raster, scripts, and tools; and synchronous processing.		
x.	Web application developers should be able to build responsive, easy-to-use applications.		
y.	Server Based GIS supports a series of open APIs and standards that should allow virtually any other client (e.g., CAD, GIS, image processing, and SQL-based applications) to interact with and use the mapping, spatial analysis, and data management services of GIS Server. The hosted services integrate with other Web services using standard Web services protocols such as SOAP and XML.		
z.	Should be able to support broad range of clients including browsers, desktops, Mobile Handsets.		
aa.	The server should have inbuilt map caching capability		
bb.	The server should support spatial analysis functions including generalization, interpolation, Overlay, Map algebra, Multivariate, Map Algebra, Euclidean Distance etc.		
cc.	Generation of reports and graphs for various levels: India Level; State Level; District level and Block level as per the availability of data		

8.2.9   IVRS

Sr. No.	Specifications	Compliance (Yes/No)	Comments
a.	Simple to use Graphical System Design Interface		
b.	Multiple telephone line support both on Analog and Digital		
c.	Advanced call screening and call switching options		
d.	Can be integrated with any type of database. Playback data retrieved from database		
e.	Text to Speech		
f.	Call Transfer to other extensions, optionally announcing the Caller ID, allowing the recipient to accept or decline the call		
g.	Full logging of callers' details and all the selections made during the call		
h.	Multi-Language support (English /Hindi)		
i.	DNIS: (Dialed number identification service)		
j.	ANI: (Automatic Number Identification)		

8.2.10   Web Scraping

Sr. No.	Specifications	Compliance (Yes/No)	Comments
a.	Extract many different types of data with our web scraping software, such as text, links, images, files, meta tags, tag attributes		

Sr. No.	Specifications	Compliance (Yes/No)	Comments
	and many more		
b.	Duplicate data detection and removal		
c.	Extract data from the different website and compare them		
d.	Unique selection features to extract website data from web pages with an unstructured "flow" of content		
e.	Extract data from documents such as PDF or Docx documents by using 3rd party document converters		

8.2.11 Database

Sr. No.	Specifications	Compliance (Yes/No)	Comments
a.	The proposed Operational Database Management should be from the Leader's quadrant/wave of latest Gartner/Forrester Magic Quadrant/Wave for Operational Database Management (in 2018/19)		
b.	The database should address all the structured and un-structured data storage requirements of the proposed system		
c.	The RDBMS database should have a high tolerance of failure		
d.	The underlying database should support 24x7 high availability		
e.	The data scalability and manageability should be integral part functionality of the database.		
f.	It should support User-defined Data Types & User-defined Functions.		
g.	It should provide Unicode support.		
h.	The database should support native automated disaster recovery capability with seamless switch over and switch back between primary and disaster recovery sites		
i.	The database should be capable to support plug and play data transfer across platforms or operating systems		
j.	The database should be able to support various types of content like Texts, Images, Multi-media and XML content natively		
k.	The database should ensure data synchronization between database servers on near real-time basis by capturing messages at the source database, stage messages in a queue, propagate messages from one queue at the source to another queue at the target and consuming messages		
l.	The database should support both way data synchronization across database servers		
m.	The database should support database encryption, backup encryption and support for external key management.		
n.	The database should support data synchronization across database servers in heterogeneous platforms		
o.	The database should be capable to deploy fine grained access control, separation and segregation of duties and native encryption capabilities. The database should also prevent access to sensitive application data by highly privileged users.		

Sr. No.	Specifications	Compliance (Yes/No)	Comments
p.	The database should control access to the applications, databases and data with flexible security controls.		
q.	The solution should provide options or utility to encrypt/decrypt sensitive data		
r.	The solution should support data export and import facility to variety of databases and other software packages		
s.	The solution should provide backup (hot & cold) and recovery facility		
t.	The solution should be able to schedule a backup/restore task		
u.	The solution should be compatible with 3rd party system monitoring package.		
v.	The database should support a single unified data model hosted on a single database.		
w.	The database platform should support enhanced		
x.	Configuration and management of audits.		
y.	The database should be highly available with every processing node providing full view of data. This means, in case of failure of one server, each remaining server in the cluster should provide full access to all data at any point in time		
z.	It should support clustering exploiting rapidly emerging disk storage and interconnect technologies		
aa.	It should provide disaster recovery solution to maintain transaction consistency		
bb.	It should provide restrictive data access that enables		
cc.	different types of users to have secure, direct access to mission-critical data sharing		
dd.	It should control data access down to the row-level (row-level security) so that multiple communities of users with varying access privileges can share data within the same database		
ee.	It should provide Public Key Infrastructure (PKI) support		
ff.	It should provide support for comprehensive auditing for 'inserts', 'deletes', 'updates' and 'selects', and quickly spot and respond to security breaches		
gg.	It should store XML content native to database		
hh.	It should have the ability to index, search, and analyse text and documents stored in database		
ii.	It should support different partitioning schemes to split large volumes of data into separate pieces or 'partitions' which can be managed independently.		
jj.	SI should calculate for total number of RDBMS Licenses (Processor license as well as Named user) required for stated scope. The number of licenses required for RDBMS database and its licensing basis i.e. processor or named user should be explicitly mentioned by the SI in consultation with MoSPI.		

Sr. No.	Specifications	Compliance (Yes/No)	Comments
kk.	RDBMS licenses should be unrestricted and full use licenses (read, write and modify).		
ll.	Operational database should support distributed database architecture that can leverage distribution to provide high availability and fault tolerance through replication and scale out ability.		
mm.	Database should have perpetual and enterprise wide licenses. They should have proven scalability credentials to cater to any system load.		
nn.	All the applications implemented should have provision for optimizing the number of static connections to the database using connection pooling. All the applications implemented should also optimize the duration of connection to the database by using techniques like session time out.		
oo.	Operational database should provide transactions as main abstraction to guarantee data consistency that guarantee the so-called ACID properties (Atomicity, Consistency, Isolation, and Durability).		
pp.	The consistency of the data is guaranteed in the case of failures and/or concurrent access to the data.		
qq.	Operational databases can be used to manage mission-critical business data, to monitor activities, to audit suspicious transactions, or to review the history of dealings with a particular transactions.		
rr.	RDBMS should allow storing scanned images, text documents, XML, multimedia inside the tables. It should be part of the basic database distribution without any additional cost to the organization.		
ss.	RDBMS should provide strong encryption capabilities within database for stored information in the tables as well as the information transmitted over network.		
tt.	Database should support multiple languages such as English, Hindi and other Indian languages.		
uu.	Database should be compatible for hosting on various industry standard platforms such as Windows, AIX, UNIX, LINUX etc.		
vv.	Database should support all leading horizontal and/ or vertical portal systems featuring in the Gartner Magic Quadrant Reports.		
ww.	The database platform should support enhanced configuration and management of audits.		
xx.	It should support online indexing operations and parallel indexing operations		
yy.	Database should support Schemas, Roles Based Privileges & Authentication.		
zz.	The data platform should support policy-based system for managing one or more instances across enterprise		

Sr. No.	Specifications	Compliance (Yes/No)	Comments
aaa.	The database OEM should have support centre in India with a 24*7 helpdesk support.		
bbb.	Other than built in database access logic in application, a separate database security layer will be required to control direct access to database server by any unauthorized user.		
ccc.	It should support Module Signing using Certificate		
ddd.	The database platform should support defining resource limits and priorities for different workloads, which enables concurrent workloads to provide consistent performance		
eee.	Database security should provide different layers of database users with overall control of database security administrator, only authorized database administration users with assigned privilege should be allowed to access database.		
fff.	Separate audit trail should be maintained for any direct modification, deletion and addition in RDBMS database in database structure or records. User, even the database administrator should not be allowed to tamper with audit log. Database server should support most granular column encryption to encrypt sensitive data.		
ggg.	The selected RDBMS should have abilities for fault tolerance, linear scalability, mixed workload capability		
hhh.	Database should support option of different partitioning schemes within the database to split large volumes of data into separate pieces or partitions, which can be managed independently. It should support physical columns. The partitioning should enhance the performance, manage huge volumes of data and should provide foundation for Information Life Cycle Management.		
iii.	The RDBMS should preferably provide options for Automated/manual performance analysis with diagnosis of the cause of performance related issues with possible resolutions.		

8.3 Overview of Departments

S No	Divisions	Activities	Reports/ Outputs	Data base
1	NAD	-Responsible for the preparation of national accounts, which includes Gross Domestic Product, Government and Private Final Consumption Expenditure, Fixed Capital Formation and other macro-economic aggregates - Preparation of quarterly estimates of Gross Domestic Product (GDP) at current and constant prices - Estimation of Capital Stock and Consumption of Fixed Capital - Estimation of State-wise Gross Value Added and Gross Fixed Capital Formation of supra-regional sectors of Railways, Communication, Banking & Insurance and Central Government Administration - Input-Output Transaction Tables (IOTT) and (v) preparation of comparable estimates of State Domestic Product (SDP)	- NAS Publication –Annually - Annual Press Releases: 1. First Advance Estimate of National Accounts 2. Second Advance Estimate of National Accounts 3. Provisional Estimate of National Accounts 4. Revised Estimate of National Accounts where the estimate of last three Financial Years are revised - Quarterly Estimates of National Accounts	Local systems
2	FOD	- Responsible for the collection of primary data for the surveys undertaken by NSSO		
3	ESD	- Compiles All India Index of Industrial Production(IIP), Energy Statistics and Infrastructure Statistics - Develops classifications like, National Industrial Classification (NIC) and National Product Classification (NPC) - Gather data from around 29 data source manually and host the final report on MoSPI website	- Annual Survey of Industries(ASI)disseminated through Computer Centre, MoSPI - All India Index of Industrial Production disseminated through ESD, CSO - Economic Census disseminated through Computer Centre, MoSPI	- DSDD Servers - Third party cloud (amazon/ azure) for 7th Economic Census

| 4 | PSD | - Compiles Wholesale Price Index (WPI) for both service and non-service sectors
- Develops Consumer Price Index (CPI) for rural and urban areas | `-All India Sub-group/Group/General/Consumer Food Price Indices for Rural, Urban and Combined sectors
-State-wise Sub-group/Group/General Indices for Rural, Urban and Combined sectors (having population more than 50 lakhs as per Population Census 2011)
- State-wise Group/General Indices for Rural, Urban and Combined sectors (having population less than 50 lakhs as per Population Census 2011)
- Annual Inflation rates based on all India Sub-group/Group/General/Consumer Food Price Indices, State-wise Sub-Group/Group/General Indices for Major States (having population more than 50 lakhs as per Population Census 2011) and State-wise Group/General Indices for Minor States (having population less than 50 lakhs as per Population Census 2011) for Rural, Urban and Combined sectors
- Annual Inflation rates based on all India Item CPI (Combined)
- Sub-group level indices of Minor States (having population less than 50 lakhs as per the Population Census 2011)
- Shop/Outlet level price data | NIC Server |
| 5 | Training Division (NSSTA) | - Responsible for fostering human resource development in official statistics in India as well as at international level, particularly amongst developing and SAARC countries
'-Responsible for the training manpower in theoretical and applied statistics to tackle the emerging challenges of data collection, collation, analysis and dissemination required for evidence based policy making as also for planning, monitoring and evaluation | - Training Calendar | Offline |

6	DSDD	- Electronic Data Processing including Data preparation and Management - Application software development for MoSPI - Design , Development and Maintenance of the Ministry's website - CPI – Processing of pricing data, Compilation of Index and uploading monthly on web portal - Data Documentation, Archiving & Dissemination in International standard using IHSN toolkit - IT Training's for the ISS / ISS probationers/ Non- ISS Cadre Officers sponsored by the Ministry and the officers sponsored by UNDP - Development of GIS based web enabled online query system of 6th Economic Census and other Census & surveys conducted by the Ministry using SAS BI tool - Development of National Fact sheet on India Economy (NFIE) indicators using SAS VA BI Tool - Workshop cum training for States/UTs DES personnel on Documentation of Micro data	- Annual Report of Ministry - Processing of pricing data, Compilation of Index (CPI) and upload - Data Documentation, Archiving & Dissemination in International standard using IHSN toolkit - Develop and maintain MoSPI Website - Annual Survey of Industries(ASI)disseminated through Computer Centre, MoSPI - Economic Census disseminated through Computer Centre, MoSPI	Database: Oracle 11g Client: Oracle 9i Servers: - SQL Server 2008 - SQL Server 2014 (Cloud Version)
7	SDRD	- Responsible for technical planning of surveys, formulation of concepts and definitions, sampling design, designing of inquiry schedules, drawing up of tabulation plan, analysis and presentation of survey results	- Annual Reports	
8	DPD & ASI	- Sample selection, software development, processing, validation and tabulation of the data collected through surveys - IS Wing (ASI) - Sample selection, data processing, validation and tabulation of the Annual Survey of Industries(ASI) data collected through a dedicated web-portal	- Datasets for conducted surveys - Data sets from Sate govt. - Reporting and validation of data collected - ASI Results - ASI Volume 1 and Volume 2 reports	NIC server
9	SSD	- Analyse secondary research data generated by corresponding Departments or ministries - They are divided in three main verticals - SDG, Environment and Others	- Annual Reports - Datasets from different Ministries (around 90) - Dashboard created by SDG Unit	SDG - MongoDB Rest - Local Systems/ Servers

10	IPMD/MPLADS	- MPLADS - Responsible for implementing and monitoring of Members of Parliament Local Area Development Scheme (MPLADS) '- Monthly Progress Report (MPR) is created by the system using data entered by Nodal District and Fund transfer information by MPLADS - Responsible for compilation of Work Management System Report (WMS) where work wise fund structure is defined -IPMD - The Infrastructure & Project Monitoring Division (IPMD) is responsible to perform triple role in monitoring the implementation status of central sector projects costing more than Rs 150 Crores in 16 infrastructure sectors and performance of key 11 infrastructure sectors. - The Twenty Point Programme (TPP) Division monitors the implementation of Twenty Point Programme (1986) which is a package of programmes comprising schemes relating to poverty alleviation, employment generation, education and health, etc ensuring growth with equity and social justice - Compiles 3 types of reports: Flash Report, Project Implementation and Overview Report (PIO) and Infrastructure Performance Report	MPLADS - MPRs (Monthly Progress Reports) from Nodal Districts - Data of MPs and their details - Standard Reporting from data - MPLADS Training Material - Annual Report IPMD - Large Projects data (> INR 150 Cr.) from 16 Infrastructure sectors including Atomic Energy, Civil Aviation, Coal, etc. - Flash Reports (Monthly) - Flash Reports (Quarterly) - Infrastructure Performance Report (Monthly) - PIO Report	MySQL NIC server
11	CPD	- This Division coordinates all the activities of different Divisions of NSSO. It also brings out the bi-annual journal of NSSO, titled "Sarvekshana", and organizes National Seminars on the results of various Socio-economic surveys undertaken by NSSO	- Custodian of knowledge repository (historical study, rules, designs, RACs, etc.)	- Local systems
12	NSC Secretariat	- Responsible for all core statistical activities of the country, evolve, monitor and enforce statistical priorities and standards and to ensure statistical co-ordination among the different agencies involved	- Annual Report	No Database

8.4 High Level Requirements of Departments

Under MIIP, MoSPI intends to automate core functioning of its various divisions to integrate them to MIIP portal. SI will have to automate these core functioning. Indicative division-wise list of functions in being provided in the below sub-sections.

8.4.1 Price Statistics Division (PSD)

Two major activities are conducted periodically at Price Statistics Division: Retail Inflation Index and International Comparison Programme (ICP)

From Retail Inflation, the division extracts Consumer Price Index (CPI) on 12th of every month; while for ICP, prices for required commodities in India is provided to World Bank for calculating PPP worldwide. Annual average price is shared with World Bank every three years. Each of these two surveys have 2 schedules – Rural and Urban.

- All the data collected is compiled in MS Access currently, SI is required to suggest improvements in the current process and an eventual integration with MIIP
- Surveys are required to be created for data collection and the collected will be interlinked with MIIP
- Various data collected and disseminated by the division are provided in the table below:

S. No.	Details of Data	Category
1	All India Sub-group/Group/General/Consumer Food Price Indices for Rural, Urban and Combined sectors for the period of January 2013 onwards	Shareable data (Category A: Open Access Data)
2	All India Item Indices for Combined sector only, for the period of January 2014 onwards	Shareable data (Category A: Open Access Data)
3	State-wise Sub-group/Group/General Indices for Rural, Urban and Combined sectors for the period of January 2013 onwards in respect of Major States (having population more than 50 lakhs as per Population Census 2011)	Shareable data (Category A: Open Access Data)
4	State-wise Group/General Indices for Rural, Urban and Combined sectors for the period of January 2013 onwards in respect of Minor States (having population less than 50 lakhs as per Population Census 2011)	Shareable data (Category A: Open Access Data)
5	Annual Inflation rates based on all India Sub-group/Group/General/Consumer Food Price Indices, State-wise Sub-Group/Group/General Indices for Major States (having population more than 50 lakhs as per Population Census 2011) and State-wise Group/General Indices for Minor States (having population less than 50 lakhs as per Population Census 2011) for Rural, Urban and Combined sectors for the period of January 2014 onwards.	Shareable data (Category A: Open Access Data)
6	Annual Inflation rates based on all India Item CPI (Combined) for the period of January 2015 onwards	Shareable data (Category A: Open Access Data)
7	Sub-group level indices of Minor States (having population less than 50 lakhs as per the Population Census 2011)	Shareable data (Category B: Registered and/or Restricted Data)
8	Shop/Outlet level price data	Non-Shareable data

			(Negative list)

- All the above data sets are needed to be integrated with the envisioned MIIP by the department.
- The division also publish "Press Release", which includes Consumer Price Index (CPI) numbers for Rural, Urban and Combined for all States/UTs and also at All India level on 12th day of the following month at 5.30 pm which needs to be integrated with MIIP
- These reports/ releases are expected to be used on MIIP in an interactive manner using advanced BI analytics including, but not restricted to, customized visualization, analytics, accessibility to unit/ part data from the data sets, etc.

### 8.4.2   Training Division (National Statistical Systems Training Academy – NSSTA)

This Division is primarily responsible for the training manpower in theoretical and applied statistics to tackle the emerging challenges of data collection, collation, analysis and dissemination required for evidence based policy making as also for planning, monitoring and evaluation. The Division also looks after the National Statistical Systems Training Academy (NSSTA), which is a premier Institute fostering human resource development in official statistics in India as well as at international level, particularly amongst developing and SAARC countries.

The SI would require to carry out the following tasks:

- **System Development & Maintenance:** There are following identified schemes by the division to be developed and maintained online. These are:
  - o **Grant-in Aid:** Under this scheme, funds are given to eligible institutions/ organizations for conducting research study/ organizing seminars and workshops, etc.
  - o **Internship for PG/ Research Students:** End to end system needs to be developed from announcement till stipend dispersion and keeping the records for future use
  - o **On the Spot Essay Writing Competition:** An online system needs to be developed to cover entire process from competition announcement, student register, generating admit cards and results announce along with keeping records for future use
  - o **P.V. Sukhatme and CR Rao Awards:** The departments has instituted two national awards for which all the activities are carried out in an offline mode. The SI would require to develop an online system for the same.
  - o **Nominations for International Trainings/ Workshops/ Seminars etc.:** Nomination of officers from MoSPI to participate in various International training programmes, workshops, etc. is processed by Training Division. An online system is required to be developed for this purpose
- Other Requirements
  - o Online request for training from different ministries /States and other departments
  - o Approval of training application and further process need to be online
  - o Annual report of training division need to be published and integrated with MIIP
  - o Training calendar and other notification need to be integrated with MIIP

8.4.3   Economic Statistics Division (ESD)

Economic Statistics Division (ESD) conducts Economic Censuses, compiles All India Index of Industrial Production (IIP), Energy Statistics and Infrastructure Statistics, and develops classifications like, National Industrial Classification (NIC) and National Product Classification (NPC). For IIP they gather data from around 15 data sources and for Energy Statistics and Infrastructure Statistics around 14 data sources. This data is in the form of Excels and is shared monthly via emails. After this ESD verify the data, apply some pre-defined logical rules/calculations and create the index for report generation. This whole process of data transformation is done manually using Excel. The final high level report is then created in PDF or Word format is hosted on MoSPI website for users to access. If low level report is required then the user can request the same via email and after the completion approval process, the data is shared or declined.
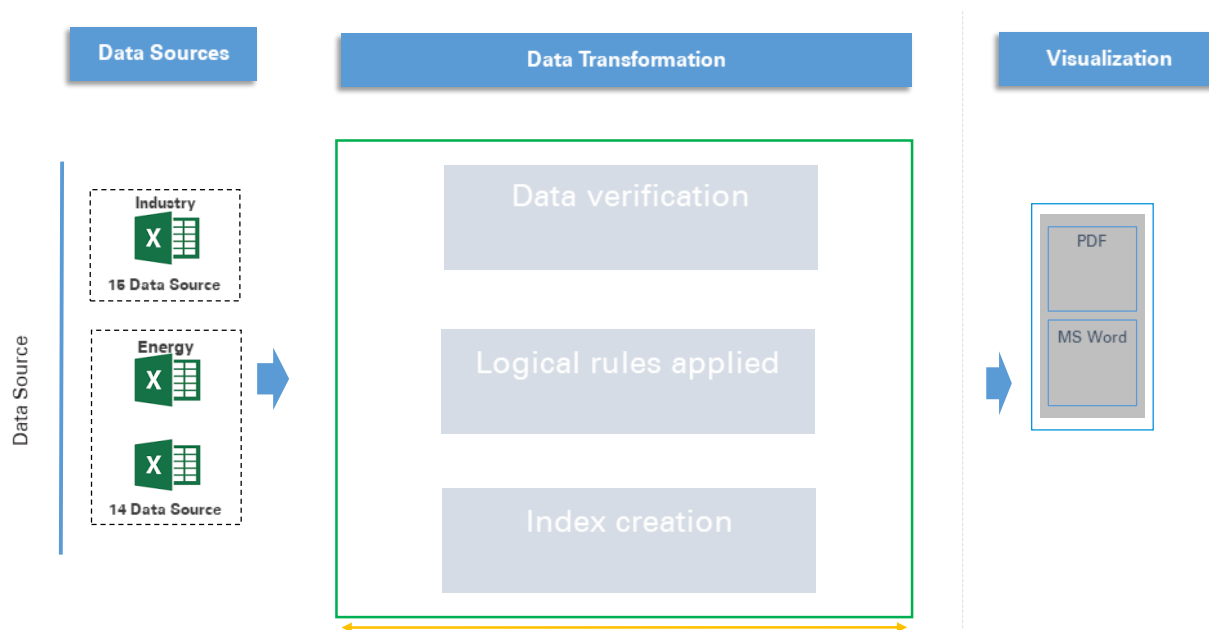
The SI would be required to perform following activities:

- Facility to integrate data from different data sources (around 30) automatically
- Validation checks should be automatically applied
- Index creation and report generation should be done automatically
- The report on MoSPI website should be updated automatically
- Role based authentication
- Web based online training module

ESD is currently conducting 7th Economic Census online and there are following requirements for MIIP once the survey is completed:

- 7th EC Database(s) will be migrated from the existing CSC/Amazon cloud to MoSPI Cloud, may be integrated with other departments' databases and will become one of the source systems/DB to the larger Data warehouse solution.
- 7th EC Application can stay on the Google playstore but its architecture will have to be reworked to make it compatible with the new cloud wrt Operating system, Networking architecture, Virtual machine configuration, Database options and System management tools.
- Change management, Network, Application & infrastructure operations to be managed by MIIP System Integrator, post the cloud-to-cloud migration.
- The SI may be required to support the cloud-to-cloud migration apart from the current vendor, CSC.
- AI and Data analytics/mining will be required on the destination cloud database to create dashboards/MIS, supporting the concerned departments and MoSPI itself and to find Data anomalies, assist in the policy making and strategic planning by different departments.

8.4.4   Survey Design and Research Division (SDRD)

This Division, located at Kolkata, is responsible for technical planning of surveys, formulation of concepts and definitions, sampling design, designing of inquiry schedules, drawing up of tabulation plan, analysis and presentation of survey results.

The division requires the SI to perform following activities in an interactive and user friendly manner:

- Development of Survey Design Module- a module for automating various functions of survey designing and development by:
  - covering designing process for various surveys,
  - referencing/linking /harmonization with international surveys (or their data collection parameter),
  - standardizing concepts & definitions,
  - creating directory of subject wise parameters to be captured (indigenously and internationally),
  - Report Generation Module
- Creation of automated/ semi-automated annual report in standardized templates
- Highlights of the report using BI tool using customized parameters
- A live chat option to help and assist users
- Video tutorials and learning modules to be included for sensitizing the users on how to use data for analytics
- Include an external link to NSSO portal for users to access reports, survey design and concept definition

8.4.5 Data Processing Division (DPD) and Industrial Statistics Wing (IS Wing)

The Division, with its headquarters at Kolkata and 5 other Data Processing Centers at various places, is responsible for sample selection, software development, processing, validation and tabulation of the data collected through surveys.

The division requires the SI to perform following activities for their division:

- The data sets generated as a result of completed surveys must be linked with and available on MIIP. There must be a provision to visualize data using geo referencing on maps
- Data sets generated from state-bound surveys conducted by state governments to be integrated in MIIP
- An external link to DPD web-page be provided

Industrial Statistics Wing (IS Wing), DPD, NSSO, Kolkata is responsible for sample selection, data processing, validation and tabulation of the Annual Survey of Industries(ASI) data collected through a dedicated web-portal.

The database that is being used currently by IS Wing needs to be integrated with MIIP.

8.4.6 Co-ordination & Publication Division (CPD)

This division, located in New Delhi, coordinates all the activities of different Divisions of NSSO. It also brings out the bi-annual journal of NSSO, titled "Sarvekshana", and organizes National Seminars on the results of various Socio-economic surveys undertaken by NSSO.

Major requirements of the division are as follows:

- Integration of real-time dashboard that NSSO is planning to make, once operational
- Creation of an exhaustive Knowledge Repository (with proper indexing)
- Linkages of e-files at CPD with MIIP

8.4.7 Field Operations Division (FOD)

The Division, with its headquarters at Delhi/Faridabad and a network of six Zonal Offices, 49 Regional Offices and 118 Sub-Regional Offices spread throughout the country, is responsible for the collection of primary data for the surveys undertaken by NSSO.

The selected SI is expected to interact with this division on a regular basis to understand any inter-linkages and coordination between other divisions within MoSPI.

8.4.8   National Statistical Commission (NSC)

The NSC was established to serve as a nodal and empowered body for all core statistical activities of the country, evolve, monitor and enforce statistical priorities and standards and to ensure statistical co-ordination among the different agencies involved.

The division needs the SI to link the Annual Reports and ATRs to MIIP. Additionally, they require SI to develop a separate web-site for NSC which is to be linked with MIIP.

8.4.9   Social Statistics Division (SSD)

SSD works with social sectors of Govt. of India and analyse secondary research data generated by corresponding Departments or ministries. They are divided in three main verticals - SDG, Environment and Others.

Major requirements of the division are as follows:

- Facility to do BI applications using interactive visualizations
- Migration of data sets and annual reports from locally stored systems at SSD or from MoSPI websites; Automated/ semi-automated annual report generation in future
- Migration of data from DevInfo system that was used by the division till 2015

8.4.10   Data Storage and Dissemination Division (DSDD)

Computer Center was set up to meet the data processing needs of various Government Ministries/Departments/Organizations and Public Sector Undertakings located in and around Delhi. The Center has now a sophisticated PC-based computer system under Client/Server Architecture using WINDOWS 2008 as the operating system and ORACLE 10g (without ATS) as RDBMS along with software tools Visual Studio 2008, SPSS 17, STATA/MP 12 &SQL Server 2014 (cloud version). Now, the Center is equipped with servers- HCL servers and IBM Xeon X3850 O/s Windows Server 2008.

Major requirements of the division under MIIP project are as follows:

- Facility to support and maintenance of all Web applications that are available on NIC cloud server.
- Availability and accessibility of part-data or unit-level data (state-wise, category-wise, etc.) of all Surveys and Census conducted by Ministry to the users from exhaustive data-sets by developing Data Analytics Solution for all subject areas using BI Analytical tools having capabilities such as; Dashboards, sliced / diced views of data across various dimensions of interest in the form of Data Cubes, Parametric and Dynamic Reports in exportable format such as XLS, TXT and PDF
- Development of Technical Administrative Examination Committee (TAEC) dashboard
- Development of GIS based web enabled online system of 6th Economic Census and other Census & surveys conducted by the Ministry using BI tool
- The GIS system must be expandable to lowest level as per requirement of the division (state/ district/ village level); compiling of various data sets into usable formats
- Support and implementation of converting old data to international standards
- Facility to Support & maintenance of MoSPI website along with all linked applications.
- Facility for Hardware, Software & related infrastructure for MIIP project.
- To develop Helpdesk Solution for hardware and software of Ministry to keep the track of users requests.

8.4.11 National Account Division (NAD)

This Division is responsible for the preparation of national accounts, which includes Gross Domestic Product, Government and Private Final Consumption Expenditure, Fixed Capital Formation and other macro-economic aggregates. The Division brings out an annual publication, titled "National Accounts Statistics", containing these statistics. Other important activities of the Division are:

(i) preparation of quarterly estimates of Gross Domestic Product (GDP) at current and constant prices,
(ii) estimation of Capital Stock and Consumption of Fixed Capital,
(iii) estimation of State-wise Gross Value Added and Gross Fixed Capital Formation of supra-regional sectors of Railways, Communication, Banking & Insurance and Central Government Administration
(iv) Input-Output Transaction Tables (IOTT) and (v) preparation of comparable estimates of State Domestic Product (SDP)

NAD receives data from 74 Major data sources from agencies central level, state level, others (including some major source agencies for e.g. – RBI credit data, saving data etc.)

Major requirements of the division under MIIP project are as follows:

- Support and implementation in automation of data collection in various formats from source dept./ divisions for better efficiency (Mode of receipt of data - Excel Files, Hardcopy, Pdf, Online Portal)
- Build basic in-system validation checks for the output generated
- BI facilities to analyse relevant data sets using complex calculations and eventually enabling visualization of data

8.4.12 Statistical Data and Metadata eXchange (SDMX)

The Statistical Data and Metadata eXchange (SDMX) is an international initiative aimed at developing and employing more efficient processes for the exchange and sharing of statistical data and metadata among national and international organisations. The internet and the world-wide web have made the electronic exchange and sharing of data easier and more frequent. However, exchanges often take place in an ad-hoc manner, using all kinds of formats and non-standard concepts. This creates the need for common global standards, guidelines and tools to enable more efficient processes for exchanging and sharing statistical data and metadata. SDMX may be of interest to any organisation that collects, processes, analyses and disseminates statistical data and metadata. It consists of technical and statistical standards, guidelines, an IT service infrastructure and IT tools. SDMX standards used within national or international agency for data management or for exchanging data with other organisations using SDMX standard. Its use is aiming at reduction of development, maintenance and operation costs

Within a given organisation, there are generally three roles and teams in an SDMX project: initiators, represented by a business unit that has a business case for an SDMX project; facilitators, represented by IT units that are involved with either developing tools or establishing the necessary IT architecture, as well as SDMX specialists who develop the DSDs or MSDs; and implementers, who provide the data (implementing the project to provide SDMX-compliant files).

An SDMX project typically brings together statisticians, economists, methodologists, and experts in dissemination and information technology. This is why it is vital for people to 'speak the same language', i.e. use shared standards and a shared vocabulary.

The aim is, Data from various statistics to be stored and disseminated in SDMX format using the SDMX standards (SDMX Global Registry) like currently we are under the process of transforming the National Accounts Summary in SDMX format. The data flow from all the agencies who are providing the statistical data may be communicated automatically in SDMX format to centralized place for further dissemination the

statistical data in SDMX format to national and international organizations. All the stakeholders may be involved in the development phase of the SDMX project.

Request for Proposal (RFP)

'Appointment of

System Integrator for MOSPI Integrated Information Platform'

Volume-3

145496/2019/Computer Centre

Table of Contents

Section 1 Master Service Agreement

THIS MASTER SERVICE AGREEMENT ("Agreement") is made on this the <***> day of

<***> 20... at <***>, India.

BETWEEN

The President of India, acting through Ministry of Statistics & Programme Implementation having its office at -- -- India (hereinafter referred to as „**MOSPI',** which expression shall, unless the context otherwise requires, include its permitted successors and assigns);

AND

<***>, a Company incorporated under the Companies Act, 2013 or a partnership firm registered under LLP Act, 2008., having its registered office at <***> (hereinafter referred to as „**Bidder'** which expression shall, unless the context otherwise requires, include its permitted successors, executors, administrators and assigns).

Each of the parties mentioned above are collectively referred to as the „**Parties'** and individually as a „**Party'**.

WHEREAS:

1. MOSPI is desirous to implement the MOSPI Integrated Information Portal (MIIP) project.

2. In furtherance of the same, MOSPI undertook the selection of a suitable System Integrator through a competitive bidding process for implementing the Project and in this behalf issued Request for Proposal (RFP) dated <***> .

MOSPI will provide all guidelines/ prerequisites that the Bidder needs to adhere for implementing and maintenance of MIIP.

NOW THEREFORE, in consideration of the mutual covenants, promises, assurances, representations and provisions set forth herein, the Parties hereto agree as follows:

1. DEFINITIONS AND INTERPRETATION

1.1. Definitions

Terms and expressions used in this Agreement (including the Introduction) shall have the meanings set out in the RFP Volume 1.

1.2. Interpretation

In this Agreement, unless otherwise specified:

a.   Singular includes the plural and vice versa;
b.   References to Clauses, Sub-Clauses, Paragraphs, Schedules and Annexures are to clauses, sub-clauses, paragraphs, schedules and annexures to this Agreement;
c.   use of any gender includes the other genders;
d.   References to a „company' shall be construed so as to include any company, corporation or other body corporate, wherever and however incorporated or established;
e.   References to a „person' shall be construed so as to include any individual, firm, company, government, state or agency of a state, local or municipal authority or government body or any joint venture, association or partnership (whether or not having separate legal personality);
f.   A reference to any statute or statutory provision shall be construed as a reference to applicable Indian Laws as it may have been, or may from time to time be, amended, modified or re-enacted;
g.   Any reference to a „day' (including within the phrase „business day') shall mean a period of 24 hours running from midnight to midnight;
h.   References to a „business day' shall be construed as a reference to a day (other than a Sunday) on which banks in the state of Delhi are generally open for business;
i.   references to times are to Indian Standard Time;
j.   A reference to any other document referred to in this Agreement is a reference to that other document as amended, varied, novated or supplemented at any time; and
k.   All headings and titles are inserted for convenience only. They are to be ignored in the interpretation of this Agreement.
l.   Bidder or System Integrator has been used for the same entity i.e. bidder selected for the project.

1.3.   Measurements and Arithmetic Conventions

All measurements and calculations shall be in the metric system and calculations done to 2 (two) decimal places, with the third digit of 5 (five) or above being rounded up and below 5 (five) being rounded down except in money calculations where such amounts shall be rounded off to the nearest INR.

1.4. Ambiguities within Agreement

In case of ambiguities or discrepancies within this Agreement, the following principles shall apply:

a. As between two Clauses of this Agreement, the provisions of a specific Clause relevant to the issue under consideration shall prevail over those in a general Clause;

b. As between the provisions of this Agreement and the Schedules/Annexures, the Agreement shall prevail, save and except as expressly provided otherwise in the Agreement or the Schedules/Annexures; and

c. As between any value written in numerals and that in words, the value in words shall prevail.

1.5. Priority of documents

This Agreement, including its Schedules and Annexures, represents the entire Agreement between the Parties as noted in this Clause. If in the event of a dispute as to the interpretation or meaning of this Agreement it should be necessary for the Parties to refer to documents forming part of the bidding process leading to this Agreement, then such documents shall be relied upon and interpreted in the following descending order of priority:

    a. This Agreement along with the SLA agreement, NDA agreement, Schedules and Annexures;

    b. Request for Proposal and Addendum / Corrigendum to the Request for Proposal (if any). For the avoidance of doubt, it is expressly clarified that in the event of a conflict between this Agreement, Annexures / Schedules or the contents of the RFP, the terms of this Agreement shall prevail over the Annexures / Schedules and Annexures / Schedules shall prevail over the contents and specifications of the RFP.

2. SCOPE OF THE PROJECT

The Bidder shall be required to carry out the Scope of work as mentioned in RFP Vol 2 and Annexures. For the avoidance of doubt, it is expressly clarified that this Agreement shall govern the provision of the contracted professional services rendered by the Bidder under the SLA to MOSPI and its nominated agencies. It is anticipated that new or renewal agreements may be undertaken by creating a separate SLA, with schedules and annexures as required, under this Agreement for each additional engagement.

3. TERM AND DURATION OF THE AGREEMENT

This Agreement shall come into effect on <***> 20--- (hereinafter the „Effective Date') and shall continue till "MIIP Go-live (Phase-I) + 60 months", unless terminated earlier in accordance with clause 15. The completion of Phase I is defined as the approval of MIIP Go-live by the MOSPI. The agreement may be extended by a period of 1 year each, up to a maximum of 2 years, as per the decision by MOSPI and performance of the SI.

4. CONDITIONS PRECEDENT & EFFECTIVE DATE

4.1. Provisions to take effect upon fulfilment of Conditions Precedent

Subject to express terms to the contrary, the rights and obligations under this Agreement shall take effect only upon fulfilment of all the Conditions Precedent set out below. However, MOSPI or its nominated agencies may at any time at its sole discretion waive fully or partially any of the Conditions Precedent for the Bidder.

4.2. Conditions Precedent of the Bidder

The Bidder shall be required to fulfil the Conditions Precedent which is as follows:

    a. To provide a Performance Security/Guarantee to MOSPI or its nominated agencies within fifteen (15) days of award of the contract to the Bidder substantially in the format provided in in section 5.8.1 of RFP volume 1; and

    b. To provide MOSPI or its nominated agencies certified true copies of its constitutional documents and board resolutions authorizing the execution, delivery and performance of this Agreement by the Bidder.

4.3. Extension of time for fulfilment of Conditions Precedent

The Parties may, by mutual agreement extend the time for fulfilling the Conditions Precedent and the Term of this Agreement. For the avoidance of doubt, it is expressly clarified that any such extension of time shall be subject to imposition of penalties on the Bidder linked to the delay in fulfilling the Conditions Precedent.

4.4. Non-fulfilment of the Bidder's Conditions Precedent

In the event that the Agreement fails to come into effect on account of non-fulfilment of the Bidder's Conditions Precedent, MOSPI or its nominated agencies shall not be liable in any manner whatsoever to the Bidder and MOSPI shall forthwith forfeit the bid security or Performance Guarantee as the case may be.

5. OBLIGATIONS UNDER THE SLA

5.1. The SLA shall be a separate contract in respect of this Agreement and shall be entered into concurrently with this Agreement between MOSPI and Bidder;

5.2. In relation to any future SLA entered into between the Parties; each of the Parties shall observe and perform the obligations set out herein.

6. Change of Control

a. In the event of a change of control of the Bidder during the Term, the Bidder shall promptly notify MOSPI and/or its nominated agencies of the same.

b. In the event that the net worth of the surviving entity is less than that of Bidder prior to the change of control, MOSPI or its nominated agencies may within 30 days of becoming aware of such change in control, require a replacement of existing Performance Guarantee furnished by the Bidder from a guarantor acceptable to MOSPI or its nominated agencies (which shall not be Bidder or any of its associated entities).

c. If such a guarantee is not furnished within 30 days of MOSPI or its nominated agencies requiring the replacement, MOSPI may exercise its right to terminate the SLA and/ or this Agreement within a further 30 days by written notice, to become effective as specified in such notice.

d. Pursuant to termination, the effects of termination as set out in clause 15 of this Agreement shall follow.

e. For the avoidance of doubt, it is expressly clarified that the internal reorganization of the Bidder shall not be deemed an event of a change of control for purposes of this clause unless the surviving entity is of less net worth than the predecessor entity.

7. Final testing and certification

The Project shall be governed by the mechanism of final acceptance testing and certification to be put into place by MoSPI and < <Selected bidder>> as under:

I. Final testing and certification criteria will lay down a set of guidelines following internationally accepted norms and standards for testing and certification for all aspects of project development and implementation covering software, hardware and networking including the processes relating to the design of solution architecture, design of systems and sub- systems, coding, testing, business process description, documentation, version control, change management, security, service oriented architecture, performance in relation to compliance with SLA metrics, interoperability, scalability, availability and compliance with all the technical and functional requirements of the RFP and this Agreement;

II. Final testing and certification criteria will be finalized from the development stage to ensure that the guidelines are being followed and to avoid large scale modifications pursuant to testing done after the application is fully developed;

III. Final testing and certification criteria will consider conducting specific tests on the software, hardware, networking, security and all other aspects;

    IV.   Final testing and certification criteria will establish appropriate processes for notifying the <<'Selected bidder'>> of any deviations from the norms, standards or guidelines at the earliest instance after taking cognizance of the same to enable the <<'Selected bidder'>> to take corrective action; etc.

8. REPRESENTATIONS

8.1 Representations of the Bidder

The Bidder covenants and represents to MOSPI or its nominated agencies that:

a. It is duly organized and validly existing under the laws of India, and has full power and authority to execute and perform its obligations under this Agreement and other agreements and to carry out the transactions contemplated hereby;

b. It has taken all necessary corporate and other actions under laws applicable to its business to authorize the execution and delivery of this Agreement and to validly exercise its rights and perform its obligations under this Agreement;

c. From the Effective Date, it will have the financial standing and capacity to undertake the Project in accordance with the terms of this Agreement;

d. In providing the Services, it shall use reasonable endeavours not to cause any unnecessary disruption to MOSPI's normal business operations

e. This Agreement has been duly executed by it and constitutes a legal, valid and binding obligation, enforceable against it in accordance with the terms hereof, and its obligations under this Agreement shall be legally valid, binding and enforceable against it in accordance with the terms hereof;

f. The information furnished in the tender documents and as updated on or before the date of this Agreement is to the best of its knowledge and belief true and accurate in all material respects as at the date of this Agreement;

g. The execution, delivery and performance of this Agreement shall not conflict with, result in the breach of, constitute a default by any of the terms of its Memorandum and Articles of Association or any Applicable Laws or any covenant, contract, agreement, arrangement, understanding, decree or order to which it is a party or by which it or any of its properties or assets is bound or affected;

h. There are no material actions, suits, proceedings, or investigations pending or, to its knowledge, threatened against it at law or in equity before any court or before any other judicial, quasi-judicial or other authority, the outcome of which may result in the breach of this Agreement or which individually or in the aggregate may result in any material impairment of its ability to perform any of its material obligations under this Agreement;

i. It has no knowledge of any violation or default with respect to any order, writ, injunction or decree of any court or any legally binding order of any Government Instrumentality which may result in any Adverse Effect on its ability to perform its obligations under this Agreement and no fact or circumstance exists which may give rise to such proceedings that would adversely affect the performance of its obligations under this Agreement;

j. It has complied with Applicable Laws in all material respects and has not been subject to any fines, penalties, injunctive relief or any other civil or criminal liabilities which in the aggregate have or may have an Adverse Effect on its ability to perform its obligations under this Agreement;

k. It and its personnel, have the necessary experience, skill, knowledge and competence to perform the Services;

l.   It will not, nor will it suffer or permit any third party under its direction or control to negligently introduce into the Client's systems or any deliverables any harmful code.

m. No representation or warranty by it contained herein or in any other document furnished by it to MOSPI or its nominated agencies in relation to the Required Consents contains or shall contain any untrue or misleading statement of material fact or omits or shall omit to state a material fact necessary to make such representation or warranty not misleading; and

n.   No sums, in cash or kind, have been paid or shall be paid, by it or on its behalf, to any person by way of fees, commission or otherwise for entering into this Agreement or for influencing or attempting to influence any officer or employee of MOSPI or its nominated agencies in connection therewith.

9. OBLIGATIONS OF MOSPI OR ITS NOMINATED AGENCIES

Without prejudice to any other undertakings or obligations of MOSPI or its nominated agencies under this Agreement, MOSPI or its nominated agencies shall perform the Roles & Responsibilities as mentioned in Section 5.1   Roles and Responsibilities, Volume 2 of RFP.

10. OBLIGATIONS OF THE BIDDER

The Bidder shall perform the Roles & Responsibilities as mentioned in Section 5.1   Roles and Responsibilities, Volume 2 of RFP.

11. GOVERNANCE

11.1 Governance

The review and management process of this Agreement shall be carried out in accordance with the Governance Schedule set out in section 5 Project Management and Governance, Volume 2 of RFP and shall cover all the management aspects of the Project.

11.2 Changes – Not applicable

11.3 Security and Safety

a. The Bidder shall comply with the technical requirements of the relevant security, safety and other requirements specified in the Information Technology Act or Telegraph Act including the regulations issued by dept. of telecom (wherever applicable), IT Security Manual of MOSPI& the Other Security requirements as specifically stated in the RFP and follow the industry standards related to safety and security (including those as stated in the RFP), insofar as it applies to the provision of the Services.

b. Each Party to the SLA/Agreement shall also comply with MOSPI or the Government of India, and the respective State's security standards and policies in force from time to time at each location of which MOSPI or its nominated agencies make the Bidder aware in writing insofar as the same apply to the provision of the Services.

c. The Parties to the SLA/Agreement shall use reasonable endeavours to report forth within writing to each other all identified attempts (whether successful or not) by unauthorized persons (including unauthorized persons who are employees of any Party) either to gain access to or interfere with MOSPI as the case may be or any of their nominees data, facilities or Confidential Information.

d. The Bidder shall upon request by MOSPI as the case may be or their nominee(s) participate in regular meetings when safety and information technology security matters are reviewed.

e. As per the provisions of the SLA or this Agreement, the Bidder shall promptly report in writing to MOSPI or its nominated agencies, any act or omission which they are aware that could have an adverse effect on the proper conduct of safety and information technology security at the facilities of MOSPI as the case may be.

11.4 Cooperation

Except as otherwise provided elsewhere in this Agreement or the SLA, each Party ("Providing Party") to this Agreement or to the SLA undertakes promptly to provide the other Party ("Receiving Party") with all such information and cooperation which the Receiving Party reasonably requests, provided that such information and co-operation:

a. Does not require material expenditure by the Providing Party to provide the same;

b. Is reasonably required by the Receiving Party in order for it to comply with its obligations under this Agreement or the SLA;

c. Cannot be construed to be Confidential Information; and

d. Is capable of being provided by the Providing Party. Further, each Party agrees to co-operate with the other Party as reasonably requested in order to accomplish the purposes of this Agreement.

12. FINANCIAL MATTERS

12.1. Terms of Payment and Service Credits and Debits

a. In consideration of the Services and subject to the provisions of this Agreement and of the SLA, MOSPI shall pay the Bidder for the Services rendered in pursuance of this

Agreement, in accordance with the Terms of Payment Schedule set out in Section 6 of Volume 2 of RFP.

b. All payments are subject to the application of service credits and debits as may be provided for in the SLA (Section 7, Volume 2). For the avoidance of doubt, it is expressly clarified that MOSPI will pay the service credits as stated in accordance with the Terms of Payment Schedule set out in Section 6 of Volume 2 and MOSPI may also calculate a financial sum and debit the same against the Terms of Payment Schedule as set out in section 6 of Volume 2, of this Agreement as a result of the failure of the Bidder to meet the Service Level.

c. Save and except as otherwise provided for herein or as agreed between the Parties in writing, MOSPI shall not be required to make any payments in respect of the Services (or, without limitation to the foregoing, in respect of the Bidder performance of any obligations under this Agreement) other than those covered in Terms of Payment Schedule set out in RFP Vol 2. For the avoidance of doubt, it is expressly clarified that the payments shall be deemed to include all ancillary and incidental costs and charges arising in the course of delivery of the Services including implementation and management charges and all other related costs including taxes which are addressed in this clause.

13. Invoicing and Settlement

Subject to the specific terms of the SLA, the Bidder shall submit its invoices in accordance with the following principles:

a. MOSPI shall be invoiced by the Bidder for the Services. Generally and unless otherwise agreed in writing between the Parties or expressly set out in the SLA, the Bidder shall raise an invoice as per Terms of Payment Schedule set out in Section 6, Volume 2; and

b. Any invoice presented in accordance with this Article shall be in a form agreed with MOSPI.

c. The Bidder alone shall invoice all payments after receiving due approval from the competent authority. Such invoices shall be accurate and all adjustments to or changes in the terms of payment as stated in Terms of Payment Schedule set out in RFP Vol 2. The Bidder shall waive any charge for a Service that is not invoiced within six months after the end of the month in which the change relating to such Service is

    (i) Authorized or

    (ii) Incurred, whichever is later.

d. Payment of each valid and undisputed invoice shall be due and payable within 30 working days of the receipt of invoice along with supporting documents by MOSPI subject to deduction of penalties. The penalties are imposed on the Bidder as per the SLA criteria specified in the SLA.

e. MOSPI shall be entitled to delay or withhold payment of any invoice or part of invoice delivered by the Bidder under Terms of Payment Schedule where MOSPI disputes/withholds such invoice or part of invoice. The withheld amount shall be limited to that which is in dispute. Any exercise by MOSPI under this clause shall not entitle the Bidder to delay or withhold provision of the Services.

14. Tax

a. MOSPI or its nominated agencies shall be responsible for withholding taxes from the amounts due and payable to the Bidder wherever applicable. The Bidder shall be solely responsible to pay all other taxes in connection with this Agreement, SLA, scope of work and any other engagement required to be undertaken as a part of this Agreement, including, but not limited to, property, sales, use, excise, value-added, goods and services, consumption and other similar taxes or duties.

b. MOSPI or its nominated agencies shall provide Bidder with the copies of the tax receipt of any withholding taxes paid by MOSPI or its nominated agencies on payments under this Agreement. The Bidder agrees to indemnify, defend and hold harmless MOSPI or its nominated agencies from any claims, judgments, actions, suits, proceedings, demands, liabilities, costs, losses, damages and expenses, including, reasonable attorney's fees arising out of or relating to taxes that are its responsibility under this paragraph. For purposes of this Agreement, taxes shall include taxes incurred on transactions between and among MOSPI or its nominated agencies, the Bidder and third party subcontractors.

c. If, after the date of this Agreement, there is any change of rate of levy under the existing applicable laws of India with respect to taxes and duties, which are directly payable by MOSPI for providing the services i.e. service tax or any such other applicable tax from time to time, which increase or decreases the cost incurred by the Bidder in performing the Services, then the remuneration and reimbursable expense otherwise payable to MOSPI under this Agreement shall be increased or decreased accordingly by correspondence between the Parties hereto, and corresponding adjustments shall be made to the ceiling amounts specified in Terms of Payment Schedule set out in section 6, Volume 2. However, in case of any new or fresh tax or levy imposed after submission of the proposal the Bidder shall be entitled to reimbursement on submission of proof of payment of such tax or levy.

15. TERMINATION

15.1. Material Breach

a. In the event a Party materially breaches its obligations under this Agreement, the non-defaulting aggrieved Party may terminate this Agreement upon giving a one month's written notice for curing the Material Breach to the other Party. In case the Material Breach continues, after the notice period, MOSPI or Bidder, as the case may be will have the option to terminate the Agreement. Termination of this Agreement will be without prejudice to any other rights and remedies that a non-defaulting may have under this Agreement or at law or in equity. Any notice served pursuant to this clause shall give reasonable details of the Material Breach, which could include the following events and the termination will become effective:

b. If the Bidder is not able to deliver the Services as per the SLAs defined in RFP and or the work order which translates into Material Breach, then MOSPI may serve a 30days written notice for curing this Material Breach. In case the Material Breach continues, after the expiry of such notice period, MOSPI will have the option to terminate this Agreement, provided that MOSPI may only exercise such right to terminate for SLA failure after the SLA penalty cap is exhausted by MOSPI. Further, MOSPI may at its sole discretion afford a reasonable opportunity to the Bidder to explain the circumstances leading to such a breach.

c. MOSPI may, upon its sole discretion, by giving a one month's written notice, terminate this Agreement if there is a change of control of the Bidder has taken place. For the purposes of this clause, in the case of Bidder, change of control shall mean the events stated in clause 6, and such notice shall become effective at the end of the notice period as set out in clause 6 (c).

d. In the event that Bidder undergoes such a change of control, MOSPI may, as an alternative to termination, require a full Performance Guarantee for the obligations of Bidder by a guarantor acceptable to MOSPI or its nominated agencies. If such a guarantee is not furnished within 30 days of MOSPI's demand, MOSPI may exercise its right to terminate this Agreement in accordance with this clause by giving 15 days further written notice to the Bidder.

e. MOSPI may terminate this Agreement at any time upon 60 days prior written notice to Bidder. In the event of any such termination under this clause, MOSPI will only be liable to make any payments which are due hereunder to Bidder for work performed in accordance with the terms and conditions herein up to the date of such termination.

f. The termination provisions set out in this clause shall apply mutatis mutandis to the SLA.

15.2. Effects of termination

a. In the event that MOSPI terminates this Agreement pursuant to failure on the part of the Bidder to comply with the conditions as contained in this Agreement and depending on the event of default, Performance Guarantee furnished by Bidder may be forfeited.

b. Upon termination of this Agreement, the Parties will comply with the Exit Management Schedule set out as Schedule II of this Agreement.

c. In the event that MOSPI or the Bidder terminates this Agreement, the compensation will be decided in accordance with the Terms of Payment Schedule set out as RFP Vol 2 Section 6.

d. MOSPI agrees to pay Bidder for all fees for Services Bidder provides and any Deliverables Bidder delivers through termination, . Upon any termination or expiration of this Agreement, Bidder will (i) deliver to MOSPI all deliverables or work product, including any in progress at the time of termination or expiration, (ii) repay all monies paid in advance for services not yet provided; (iii) work with MOSPI or its nominated agency to ensure a smooth transition of services.

15.3. Termination of this Agreement due to bankruptcy of Bidder

MOSPI may serve written notice on Bidder at any time to terminate this Agreement with immediate effect upon institution of bankruptcy proceedings against the Bidder or if there is an appointment of receiver over the bidders' assets by a court or in case of a similar proceedings or cessation of business of the bidder.

16. INDEMNIFICATION & LIMITATION OF LIABILITY

16.1. Subject to Clause 16.2, Bidder (the "Indemnifying Party") at its expense and to the maximum extent permitted by law, undertakes to indemnify, defend and hold harmless MOSPI (the "Indemnified Party") and its nominated agency from and against all losses, liabilities, costs, damages and expenses and will reimburse such fees and expenses as they are incurred, including in connection with any claim or action threatened or brought against the Indemnified Party, attributable to the Indemnifying Party's or its representative's negligence or wilful default, including but not limited to, bodily injury, death or damage to tangible personal property arising in favour of any person, corporation or other entity (including the Indemnified Party) in performance or non-performance under this Agreement; provided, however, that Indemnifying Party shall not be obligated to defend, indemnify, or hold the Indemnified Party from and against any such liabilities, costs, loses, damages and expenses to the extent caused solely by any negligent act or omission or intentional wrongdoing of such Indemnified Party .

16.2. The Indemnifying Party at its expense and to the maximum extent permitted by law, will indemnify, defend and hold harmless the Indemnified Party from and against all claims, actions, suits, proceedings, judgments, demands losses, liabilities, costs, damages and expenses and will reimburse such fees and expenses as they are incurred, including in connection with any claim or action threatened or brought against the Indemnified Party, arising out of or relating to any claim that the provision or the utilization of any services or any portion thereof constitutes an infringement, violation, trespass, contravention or breach of any intellectual property rights of any third party , or constitutes the unauthorized use of any trade secret of any third party.

16.3. Indemnified Party will promptly notify the Indemnifying Party of any such claim or action and will reasonably co-operate with Indemnifying Party in the defence of any such claim or action, at Indemnifying Party's expense. Indemnifying Party will not indemnify the Indemnified Party, however, if the claim of infringement is caused by (a) Indemnified Party's misuse or modification of the Service; (b) Indemnified Party's failure to use corrections or enhancements made available by the Indemnifying Party; (c) Indemnified Party's use of the Service in combination with any product or information not owned or developed by Indemnifying Party; (d)Indemnified Party's distribution, marketing or use for the benefit of third parties of the Service; or (e) information, direction, specification or materials provided by Indemnified Party or any third party contracted to it. If any Service is or likely to be held to be infringing, Indemnifying Party shall at its expense and option either (i) procure the right for Indemnified Party to continue using services or such portion thereof, as contemplated hereunder, (ii) replace it with an equally suitable, compatible, non-infringing and functionally equivalent services as reasonably determined by Indemnified Party , (iii) modify the services or such portion thereof, to make it non infringing (provided such modification does not adversely affect the utilization of such services, as reasonably determined by Indemnified Party).

16.4. The indemnities set out in Clause 16.1 shall be subject to the following conditions:

   a. a. The Indemnified Party as promptly as practicable informs the Indemnifying Party in writing of the claim or proceedings;

   b. b. The Indemnified Party shall, at the cost of the Indemnifying Party, give the Indemnifying Party all reasonable assistance in the defence of such claim or proceedings including reasonable access to all relevant information, documentation and personnel provided that the Indemnified Party may, at its sole cost and expense, reasonably participate, through its attorneys or otherwise, in such defence;

    c. c. The Indemnifying Party may participate in such Defence at its sole cost and expense, and the Indemnified Party will have the right to defend the claim in such manner as it may deem appropriate, and the cost and expense of the Indemnified Party will be included in Losses;

    d. d. The Indemnified Party shall not prejudice, pay or accept any proceedings or claim, or compromise or consent to the entry of any judgment in any such commenced or threatened proceedings or claim, without the prior written consent of the Indemnifying Party;

        i. Be entered into only with the prior written consent of the Indemnified Party, and include an unconditional release to the Indemnified Party from the claimant or plaintiff for all liability in respect of such claim or threatened proceedings or claim; and

        ii. Include any appropriate confidentiality agreement prohibiting disclosure of the terms of such settlement;

    e. e. All settlements of claims or proceedings subject to indemnification under this Clause will:

    f. The Indemnified Party shall account to the Indemnifying Party for all awards, settlements, damages and costs (if any) finally awarded in favour of the Indemnified Party which are to be paid to it in connection with any such claim or proceedings or threatened proceedings or claims;

    g. The Indemnified Party shall take steps that the Indemnifying Party may reasonably require to mitigate or reduce its loss as a result of such a claim or proceedings or threatened proceedings or claim;

    f. In the event that the Indemnifying Party is obligated to indemnify an Indemnified Party pursuant to this clause, the Indemnifying Party will, upon payment of such indemnity in full, be subrogated to all rights and defences of the Indemnified Party with respect to the claims or proceedings to which such indemnification relates; and

    g. If a Party makes a claim under the indemnity set out under clause 15.1 above in respect of any particular loss or losses, then that Party shall not be entitled to make any further claim in respect of that Loss or Losses (including any claim for damages).

16.5. The liability of Bidder (whether in contract, tort, negligence, strict liability in tort, by statute or otherwise) for any claim in any manner related to this Agreement, including the work, deliverables or Services covered by this Agreement, shall be the payment of direct damages only which shall in no event in the aggregate exceed the total value of the contract The liability cap given under this clause 16.5 shall not be applicable to the indemnification obligations set out in clause 16.1 and breach of clause 11.3 and 18 of this Agreement, or the Bidder's wilful misconduct or gross negligence, or any claims of personal injury or property or damage.

16.6. In no event shall either party be liable for any consequential, incidental, indirect, special or punitive damage, loss or expenses (including but not limited to business interruption, lost business, lost profits, or lost savings) nor for any third party claims (other than those set-forth in clause 16.1) even if it has been advised of their possible existence.

16.7. The allocations of liability in this Section 16 represent the agreed and bargained for understanding of the parties and compensation for the Services reflects such allocations. Each Party has a duty to mitigate the damages and any amounts payable under an indemnity that would otherwise be recoverable from the other Party pursuant to this Agreement by taking appropriate and commercially reasonable actions to reduce or limit the amount of such damages or amounts.

17. FORCE MAJEURE

17.1 Definition of Force Majeure

The Bidder or MOSPI as the case may be, shall be entitled to suspend or excuse performance of its respective obligations under this Agreement to the extent that such performance is impeded by an event of force majeure („Force Majeure').

17.2 Force Majeure events

A Force Majeure event means any event or circumstance or a combination of events and circumstances referred to in this clause, which:

   a. is beyond the reasonable control of the affected Party;
   b. such Party could not have prevented or reasonably overcome with the exercise of reasonable skill and care;
   c. does not result from the negligence of such Party or the failure of such Party to perform its obligations under this Agreement;
   d. is of an incapacitating nature and prevents or causes a delay or impediment in performance; and
   e. may be classified as all or any of the following events: Such events include:

— Non-Political Events
   1. act of God, including earthquake, flood, inundation, landslide exceptionally adverse weather conditions, storm, tempest, hurricane, cyclone, lightening, thunder, volcanic eruption, fire or other extreme atmospheric conditions.
   2. Radioactive contamination or ionization radiation or biological contamination except as may be attributable to the bidder's use of radiation or radioactivity or biologically contaminating material.
   3. Strikes, lockout, boycotts, labour disruptions or any other industrial disturbance as the case may be not arising on account of the acts or omissions of the Bidder and which affect the timely implementation and continued operation of the project.
   4. any event or circumstances of a nature analogous to any of the foregoing

— Political Events
   5. Change in Law, other than any Change in Law for which relief is provided
   6. under this Agreement;
   7. expropriation or compulsory acquisition by MOSPI or any of their nominated agencies of any material assets or rights of the Implementing Partner;
   8. unlawful or unauthorised revocation of, or refusal by MOSPI or any of their nominated agencies, GoI or any of its agencies to renew or grant any clearance or Required Consents required by the Bidder to perform its obligations without valid cause, provided that such delay, modification, denial, refusal or revocation did not result from the Bidder's inability or failure to comply with any condition relating to grant, maintenance or renewal of such Required Consents applied on a non-discriminatory basis;
   9. any judgment or order of any court of competent jurisdiction or statutory authority in India made against the Bidder in any proceedings for reasons other than failure of the Bidder to comply with Applicable Laws or Required Consents or on account of breach thereof, or of any contract, or enforcement of this Agreement or exercise of any of its rights under this Agreement;
   10. expropriation or compulsory acquisition by MOSPI or any of their nominated agencies of any material assets or rights of the Bidder;
   11. unlawful or unauthorized revocation of, or refusal by any authority other than MOSPI or any of their nominated agencies to renew or grant any Required Consents required by the Bidder to perform its obligations without valid cause, provided that such delay, modification, denial, refusal or revocation did not result from the Bidder's inability or failure to comply with any condition relating to grant, maintenance or renewal of such Required Consents applied on a non-discriminatory basis;
   12. any requisition of the Project by any other authority; or
   13. any requisition of the Project by MOSPI or any of their nominated agencies

14. For the avoidance of doubt, suspension of the Project in accordance with the provisions of this Agreement shall not be considered a requisition for the purposes of Force Majeure event.

— Other Events

An act of war (whether declared or undeclared), hostilities, invasion, armed conflict or act of foreign enemy, blockade, embargo, prolonged riot, insurrection, terrorist or military action, civil commotion or politically motivated sabotage, for a continuous period exceeding seven (7) days. For the avoidance of doubt, it is expressly clarified that the failure on the part of the Bidder under this Agreement or the SLA to implement any disaster contingency planning and back-up and other data safeguards in accordance with the terms of this Agreement or the SLA against natural disaster, fire, sabotage or other similar occurrence shall not be deemed to be a Force Majeure event. For the avoidance of doubt, it is further clarified that any negligence in performance of Services which directly causes any breach of security like hacking aren't the forces of nature and hence wouldn't be qualified under the definition of "Force Majeure". In so far as applicable to the performance of Services, Bidder will be solely responsible to complete the risk assessment and ensure implementation of adequate security hygiene, best practices, processes and technology to prevent any breach of security and any resulting liability therefrom(wherever applicable).

17.3 Notification procedure for Force Majeure

a. The affected Party shall notify the other Party of a Force Majeure event within seven (7) Days of occurrence of such event. If the other Party disputes the claim for relief under Force Majeure it shall give the claiming Party written notice of such dispute within thirty (30) days of such notice. Such dispute shall be dealt with in accordance with the dispute resolution mechanism in accordance with clause 25.

b. Upon cessation of the situation which led the Party claiming Force Majeure, the claiming Party shall within seven (7) days hereof notify the other Party in writing of the cessation and the Parties shall as soon as practicable thereafter continue performance of all obligations under this Agreement.

17.4 Allocation of costs arising out of Force Majeure

a. a. Upon the occurrence of any Force Majeure Event prior to the Effective Date, the Parties shall bear their respective costs and no Party shall be required to pay to the other Party any costs thereof.

b. b. Upon occurrence of a Force Majeure Event after the Effective Date, the costs incurred and attributable to such event and directly relating to the Project („Force Majeure Costs') shall be allocated and paid as follows:

  i. upon occurrence of a Non-Political Event, the Parties shall bear their respective Force Majeure Costs and neither Party shall be required to pay to the other Party any costs thereof.

  ii. upon occurrence of another event of Force Majeure, all Force Majeure Costs attributable to such other event, and not exceeding the Insurance Cover for such other event, shall be borne by the Bidder and to the extent Force Majeure costs exceed such Insurance Cover, one half of such excess amount shall be reimbursed by MOSPI to the Bidder (optional clause – to be used, if relevant.)

  iii. upon occurrence of a Political Event, all Force Majeure Costs attributable to such Political Event shall be reimbursed by MOSPI to the Bidder

  iv. For the avoidance of doubt, Force Majeure Costs may include interest payments on debt, operation and maintenance expenses, any increase in the cost of the Services

on account of inflation and all other costs directly attributable to the Force Majeure Event.

v. Save and except as expressly provided in this clause, neither Party shall be liable in any manner whatsoever to the other Party in respect of any loss, damage, costs, expense, claims, demands and proceedings relating to or arising out of occurrence or existence of any Force Majeure Event or exercise of any right pursuant hereof.

17.5 Consultation and duty to mitigate

Except as otherwise provided in this clause, the affected Party shall, at its own cost, take all steps reasonably required to remedy and mitigate the effects of the Force Majeure event and restore its ability to perform its obligations under this Agreement as soon as reasonably practicable. The Parties shall consult with each other to determine the reasonable measures to be implemented to minimize the losses of each Party resulting from the Force Majeure event. The affected Party shall keep the other Parties informed of its efforts to remedy the effect of the Force Majeure event and shall make reasonable efforts to mitigate such event on a continuous basis and shall provide written notice of the resumption of performance hereunder.

18. CONFIDENTIALITY

18.1 MOSPI or its nominated agencies shall allow the Bidder to review and utilize highly confidential public records and the Bidder shall maintain the highest level of secrecy, confidentiality and privacy with regard thereto.

18.2 Additionally, the Bidder shall keep confidential all the details and information with regard to the Project, including systems, facilities, operations, management and maintenance of the systems/facilities

18.3 MOSPI or its nominated agencies shall retain all rights to prevent, stop and if required take the necessary punitive action against the Bidder regarding any forbidden disclosure.

18.4 Bidder may disclose the confidential information to its representatives who have a need to know such confidential information solely in connection with this Agreement.

18.5 The Bidder shall ensure that all its employees, agents, representatives and subcontracted partners execute individual non-disclosure agreements, which have been duly approved by the MOSPI with respect to this Project and will assume full responsibility for any failure to comply with the terms of this Agreement by any such employees, agents, representatives and sub-contracted partners

18.6 For the avoidance of doubt, it is expressly clarified that the aforesaid provisions shall not apply to the following information

    I.   information already available in the public domain

    II.   information which has been developed independently by the Bidder

    III.   information which has been received from a third party who had the right to disclose the aforesaid information

    IV.   information which has been disclosed to the public pursuant to a court order

18.7 Bidder will not transfer or disclose any such confidential information to any third party without MOSPI's prior written consent and without such third party having a contractual obligation to keep such confidential information confidential

18.8 Bidder will not use any confidential information for any other purpose other than to provide Services to MOSPI under this Agreement.

18.9 To the extent the Bidder shares its confidential or proprietary information with MOSPI for effective performance of the Services, the provisions of the Clause 17.1 to 17.3 shall apply mutatis mutandis on MOSPI or its nominated agencies.

19. AUDIT, ACCESS AND REPORTING

The Bidder shall allow access to MOSPI and or its nominated agencies to all information which is in the possession or control of the Bidder and which relates to the provision of the Services as set out in the Audit, Access and Reporting Schedule and which is reasonably required by MOSPI to comply with the terms of the Audit, Access and Reporting Schedule set out as Terms of Payment Schedule set out in RFP Vol 2.

20. INTELLECTUAL PROPERTY RIGHTS

MOSPI shall have exclusive title and ownership rights, including all trademark patents, copyrights, trade secrets, operating practices/ procedures or other intellectual property rights, relating to the content and like prepared, developed, conceived or delivered as part of or in connection with the Services and any derivatives of the foregoing to which MOSPI has sovereign rights. Nothing herein shall or will be construed or deemed to grant to the Bidder any right, title, license, sub-license, proprietary right or other claim against or interest in, to or under (whether by estoppels, by implication or otherwise) to the aforesaid rights.

Except to the extent otherwise expressly provided in this Agreement, the Bidder hereby grants to MOSPI an exclusive, royalty free, all media, irrevocable, unrestricted and unlimited license to use the content in any manner under or pursuant to this Agreement for whatsoever purpose. Further specifically to allow MOSPI, to use the MIIP in the manner given hereinabove, irrespective of the number of users or sessions or applications or any other restrictions without additional cost. The Bidder will ensure that all necessary licenses and/or copyright and all other consents and permissions are obtained from all third parties to enable MOSPI, to make the fullest use of the MIIP for which license is granted. In addition the Bidder undertakes to indemnify the MOSPI against any claims caused by the Bidder's failure to obtain such licenses, consents and approvals from the third parties in respect of the Content.

Without limiting the generality and except to the extent otherwise expressly agreed by the Parties to this Agreement or the SLA in writing, nothing contained in this Agreement shall or will be construed or deemed to grant to the Bidder any right, title, license or other interest in, to or under (whether by estoppels, by implication or otherwise) any logo, trademark, trade name, service mark or similar designations of MOSPI or its nominees or any confusingly similar designations of Project.

If Bidder uses in the course of the provision of the Services any Third Party System (i.e. Systems (or any part thereof) in which the Intellectual Property Rights are owned by a third party and to which Bidder has been granted a license to use and which are used in the provision of Services) it will use all commercially reasonable endeavours to pass through to MOSPI such third party's warranties relating to such Third Party Systems. In the event that such warranties cannot be passed through to or enforced by MOSPI, the Bidder will enforce such warranties on MOSPI's behalf and account to MOSPI for so doing.

In respect of Bidder's usage of third party Intellectual Property Rights, Bidder undertakes to assist MOSPI to secure such consents or licenses from such third parties as are necessary to perform Services hereunder. The obligations of the Bidder under this Article shall be considered part of the services performed by the Bidder under the Exit Management Services.

Deliverables will be provided to MOSPI by the Bidder during the course of its performance under this Agreement. All right, title and interest in and to such Deliverables, shall, as between Bidder and MOSPI, immediately upon creation vest in MOSPI.

21. WARRANTY

21.1. The Bidder further warrants that all Services will be performed to the best of Bidder's ability and in an effective, timely, professional and workmanlike manner in accordance with the highest applicable industry standards and practices and such Services will be performed in accordance with any specifications and documentations set forth in the RFP and will comply, including the utilization thereof as contemplated hereunder, with all applicable laws, rules, regulations, orders of any governmental agencies; and will not violate or contravene the terms of any contract between Bidder and any third party.

21.2. The Bidder further warrants that it has and will have all right, titles, licenses, intellectual property, permissions and approvals necessary in connection with its performance under this Agreement and to grant MOSPI rights granted hereunder; and none of the services nor the utilization of the services will, violate, infringe, trespass or in any manner contravene or breach or constitute the unauthorized use or misappropriation of any intellectual property of any third party.

21.3. The Bidder warrants that the Bidder owns or will prior to delivery of the content to MOSPI have obtained all rights, consents, licenses, clearances and waivers in or in relation to the Content (and all material contained therein) which are necessary to enable MOSPI to include the MIIP, and make the Contents available through the portal;

21.4. The Bidder further warrants that the MIIP (or any part thereof) as delivered by the Bidder to MOSPI or its nominated agency under this Agreement will not be obscene or will not breach any law or regulation or infringe any rights of copyright, performing right or other proprietary right or interest of any third party or constitute a breach of confidence or be defamatory of any person;

21.5. The Bidder further warrants that it will not create Content that defames or threatens others. Bidder will not make statements that are bigoted, hateful or racially offensive.

21.6. The Bidder further warrants that the Bidder will not promote competitive websites or companies.

21.7. The Bidder warrants that the Content is not owned by any third party and the same is believed to be accurate and has not been obtained by any unlawful means. In the event an error in the accuracy of the Content is discovered, Bidder agrees to edit and make corrections;

21.8. The Content provided by the Bidder will be free from any virus or any other disabling or harmful codes;

21.9. If during the warranty period any defect or deficiency is found in the Content developed and created by the Bidder, the Bidder shall promptly, in consultation and agreement with MOSPI, and at the Bidder's sole cost repair, replace, or otherwise make good such default, defect or deficiency in the Content.

21.10. Except as set forth in this Agreement, neither Party makes any other warranties, both express and implied, and all other warranties, including without limitation that of merchantability or fitness for intended purpose is specifically disclaimed.

22. LIQUIDATED DAMAGES

The delivery dates, timetables, milestones and other requirements mentioned in the RFP and the work order are binding on the Bidder. In the event of delay or any gross negligence, for causes attributable to the Bidder, in meeting the milestones and associated deliverables, milestones and time table MOSPI shall be entitled to recover from the Bidder as agreed, liquidated damages as mentioned as part of the SLA in Section 7, RFP Vol 2.

23. INSURANCE COVER

23.1 Bidder will, during the term of the Agreement, at its sole cost and expense, obtain and maintain if full force and effect, adequate standard forms of insurance which are mandatorily to be maintained as per the applicable laws and Bidder further, agrees to provide to MOSPI on request copies of such policy of insurance and evidence that the premiums have been paid. Nothing in this Section will be construed as limiting Bidder' liability to MOSPI or any third party. The mere purchase and existence of insurance does not reduce or release Bidder from liability incurred or assumed during the scope of the Agreement. Bidder's obligation to maintain insurance coverage, shall be in addition to, and not in substitution for, Bidder's other obligation hereunder and Bidder's liability to GE&T shall not be limited to the amount of coverage required hereunder.

23.2   Non-compliance

MOSPI or its nominated agencies may, at its election, terminate this Agreement upon the failure of Bidder, or notification of such failure, to maintain the insurance coverage.

24. MISCELLANEOUS

24.1. Personnel

a. The personnel assigned by Bidder to perform the Services shall be employees of Bidder and under no circumstances shall such personnel be considered employees of MOSPI or its nominated agencies. The Bidder shall have the sole responsibility for the supervision and control of the personnel deployed in the Project and for payment of such personnel's compensation, including salary, withholding of income taxes , worker's compensation, employee and disability benefits and the like and shall be responsible for all obligations of an employer subject to Applicable Law.

b. The Bidder shall use its best efforts to ensure that sufficient Bidder personnel are assigned to perform the Services and that such personnel have appropriate qualifications to perform the Services. Bidder will maintain continuity of personnel consistent with its obligation to perform the Services. After discussion with Bidder, MOSPI or its nominated agencies shall have the right to require the removal or replacement of any Bidder personnel performing work under this Agreement. In the event that MOSPI or its nominated agencies requests that any Bidder personnel be replaced for any reasons, Bidder will provide an equally qualified replacement and the substitution of such personnel shall be accomplished pursuant to a mutually agreed upon schedule. In the event that Bidder provides a replacement of personnel, Bidder will not charge MOSPI for the number of hours required to train the replacement until such personnel is familiar with the particular project, so that the replacement is capable of performing the services under this Agreement.

c. In the event that MOSPI and Bidder identify any personnel of Bidder as "Key Personnel", then the Bidder shall not remove such personnel from the Project without the prior written consent of MOSPI or its nominated agencies unless such removal is the result of an unavoidable circumstance which is beyond the control of the Bidder, including but not limited to resignation, termination, medical leave, etc.

d. Except as stated in this clause, nothing in this Agreement or the SLA will limit the ability of Bidder to freely assign or reassign its employees; provided that Bidder shall be responsible, at its expense, for transferring all appropriate knowledge from personnel being replaced to their replacements. MOSPI or its nominated agencies shall have the right to review and approve Bidder's plan for any such knowledge transfer. Bidder shall maintain the same or higher standards for skills and professionalism among replacement personnel as in personnel being replaced.

e. Bidder shall be responsible for the performance of all its obligations under this Agreement or the SLA as the case may be and shall be liable for the acts and omissions of its employees and agents in connection therewith.

f. Neither Party will solicit for employment or knowingly hire an employee of the other Party with whom such Party has contact pursuant to project engagements under this Agreement. This restriction shall not apply to employees of either Party responding to advertisements in job fairs or news media circulated to the general public.

24.2. Independent Contractor

Bidder is acting as an independent contractor and the Bidder is solely responsible for its actions and inactions , and nothing in this Agreement or the SLA shall be construed as establishing or implying any partnership or joint venture or employment relationship between the Parties to this Agreement or the SLA and, except as expressly stated in this Agreement or the SLA, nothing in this Agreement or the SLA shall be deemed to constitute any Parties as the agent of any other Party or authorizes either Party to:

a. incur any expenses on behalf of the other Party;

b. enter into any engagement or make any representation or warranty on behalf of the other Party;

c. pledge the credit of or otherwise bind or oblige the other Party; or

d. commit the other Party in any way whatsoever without in each case obtaining the other Party's prior written consent.

24.3. Sub-contractors

Bidder is not allowed to subcontract part of the scope of work as per Section 2.2 Sole Bidder Criteria Vol 1 of the RFP.

24.4. Assignment

a. All terms and provisions of this Agreement shall be binding on and shall inure to the benefit of MOSPI and their respective successors and permitted assigns.

b. The Bidder shall not be permitted to assign its rights and obligations under this Agreement to any third party.

c. MOSPI may assign all or any part of this Agreement and Schedules/Annexures, to any third party.

24.5. Notices

a. Any notice or other document which may be given by either Party under this Agreement or under the SLA shall be given in writing in person or by pre-paid recorded delivery post, email or by facsimile transmission.

b. In relation to a notice given under this Agreement, any such notice or other document shall be addressed to the other Party's principal or registered office address as set out below:

<Insert Address> Tel:

Fax:

Email:

Contact:

With a copy to:

Bidder

Tel:

Fax:

Email:

Contact:

c. In relation to a notice given under the MSA / SLA, a Party shall specify the Parties' address for service of notices, any such notice to be copied to the Parties at the addresses set out in this clause.

d. Any such notice or other document shall be deemed to have been given to the other Party (or, if relevant, its relevant associated company) when delivered (if delivered in person) if delivered between the hours of 9.00 am and 5.00 pm at the address of the other Party set forth above or if sent by fax, provided the copy fax is accompanied by a confirmation of transmission, or on the next working day thereafter if delivered outside such hours, and 7 days from the date of posting (if by letter).

e. Either Party to this Agreement or to the SLA may change its address, telephone number, facsimile number and nominated contact for notification purposes by giving the other reasonable prior written notice of the new information and its effective date.

24.5.1. Bidder acknowledges that a breach of the confidential obligations may result into irreparable and continuing damages to MOSPI for which monetary damages may not be sufficient, and agrees that MOSPI will be entitled to seek, in addition to its other rights and remedies under the law, injunctive or any other equitable relief as may be proper from court of competent jurisdiction.

24.6. Variations and Further Assurance

a. No amendment, variation or other change to this Agreement or the SLA shall be valid unless the Parties enter into an amendment to the Agreement or the SLA, as the case may be. Such amendment shall be made in writing and signed by the duly authorized representatives of the Parties to this Agreement or the SLA.

b. Each Party to this Agreement or the SLA agrees to enter into or execute, without limitation, whatever other agreement, document, consent and waiver and to do all other things which shall or may be reasonably required to complete and deliver the obligations set out in this Agreement or the SLA.

24.7. Severability and Waiver

a. If any provision of this Agreement or the SLA, or any part thereof, shall be found by any court or administrative body of competent jurisdiction to be illegal, invalid or unenforceable the illegality, invalidity or unenforceability of such provision or part provision shall not affect the other provisions of this Agreement or the SLA or the remainder of the provisions in question will remain unimpaired and which shall remain in full force and effect. The Parties shall negotiate in good faith in order to agree to substitute for any illegal, invalid or unenforceable provision a valid and enforceable provision which achieves to the greatest extent possible the economic, legal and commercial objectives of the illegal, invalid or unenforceable provision or part provision.

b. No failure to exercise or enforce and no delay in exercising or enforcing on the part of either Party to this Agreement or the SLA of any right, remedy or provision of this Agreement or the SLA shall operate as a waiver of such right, remedy or provision in any future application nor shall any single or partial exercise or enforcement of any right, remedy or provision preclude any other or further exercise or enforcement of such right, remedy or provision or the exercise or enforcement of any other right, remedy or provision.

24.8. Compliance with Applicable Law

Each Party to this Agreement accepts that its individual conduct shall (to the extent applicable to its business like the Bidder as an information technology service provider) at all times comply with all laws, rules and regulations of government and other bodies having jurisdiction over the area in which the Services are undertaken provided that changes in such laws, rules and regulations which result in a change to the Services shall be dealt with in accordance with the Change Control Schedule set out in Schedule II of this Agreement.

24.9. Professional Fees

All expenses incurred by or on behalf of each Party to this Agreement and the SLA, including all fees of agents, legal advisors, accountants and actuaries employed by either of the Parties in connection with the negotiation, preparation and execution of this Agreement or the SLA shall be borne solely by the Party which incurred them.

24.10. Ethics

The Bidder represents, warrants and covenants that it has given no commitments, payments, gifts, kickbacks, lavish or expensive entertainment, or other things of value to any employee or agent of MOSPI or its nominated agencies in connection with this Agreement and acknowledges that the giving of any such payment, gifts, entertainment, or other things of value is strictly in violation of MOSPI standard policies and may result in cancellation of this Agreement, or the SLA.

24.11. Entire Agreement

This Agreement and the SLA with all schedules & annexures appended thereto and the contents and specifications of the RFP constitute the entire agreement between the Parties with respect to their subject matter, and as to all other representations, understandings or agreements which are not fully expressed herein, provided that nothing in this clause shall be interpreted so as to exclude any liability in respect of fraudulent misrepresentation.

24.12. Amendment

Any amendment to this Agreement shall be made in accordance with the Change Control Schedule set out in Schedule I of this Agreement by mutual written consent of all the Parties.

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25. GOVERNING LAW AND DISPUTE RESOLUTION

25.1   This Agreement shall be governed by and construed in accordance with the laws of India, without giving effect to conflict of law rules. The parties expressly agree to exclude the application of the U.N. Convention on Contracts for the International Sale of Goods (1980) to this Agreement and the performance of the parties contemplated under this Agreement, to the extent that such convention might otherwise be applicable.

25.2 In case the escalations do not help in resolution of the problem within 3 weeks of escalation, both the parties should agree on a mediator for communication between the two parties. The process of the mediation would be as follows:

a. Aggrieved party should refer the dispute to the identified mediator in writing, with a copy to the other party. Such a reference should contain a description of the nature of the dispute, the quantum in dispute (if any) and the relief or remedy sought suitable.

b. The mediator shall use his best endeavours to conclude the mediation within a certain number of days of his appointment.

c. If no resolution can be reached through mutual discussion or mediation within 30 days then the matter should be referred to Experts for advising on the issue.

25.3   In case the mediation does not help in resolution and it requires expertise to understand an issue, a neutral panel of 3 experts, agreeable to both parties should be constituted. The process of the expert advisory would be as follows:

a. Aggrieved party should write to the other party on the failure of previous alternate dispute resolution processes within the timeframe and requesting for expert advisory. This is to be sent with a copy to the mediator.

b. Both parties should thereafter agree on the panel of experts who are well conversant with the issue under dispute

c. The expert panel shall use his best endeavours to provide a neutral position on the issue.

d. If no resolution can be reached through the above means within 30 days then the matter should be referred to Arbitration.

25.4 Any dispute or difference whatsoever arising between the parties to this Contract out of or relating to the construction, meaning, scope, operation or effect of this Contract or the validity of the breach thereof shall be referred to a sole Arbitrator to be appointed by mutual consent of both the parties herein. If the parties cannot agree on the appointment of the Arbitrator within a period of one month from the notification by one party to the other of existence of such dispute, then the Arbitrator shall be appointed by the High Court of New Delhi, India. The provisions of the Arbitration and Conciliation Act, 1996 will be applicable and the award made there under shall be final and binding upon the parties hereto, subject to legal remedies available under the law. Such differences shall be deemed to be a submission to arbitration under the Indian Arbitration and Conciliation Act, 1996, or of any modifications, Rules or re-enactments thereof. The Arbitration proceedings will be held at New Delhi, India. Any legal dispute will come under the sole jurisdiction of New Delhi, India.

25.5 Compliance with laws: Each party will comply with all applicable Indian export and import laws and regulations.

IN WITNESS WHEREOF the Parties have by duly authorized

Representatives set their respective hands and seal on the date first above

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Written in the presence of:

WITNESSES:

Signed by:

(Name and designation) **For and on behalf of MOSPI**

(FIRST PARTY)

Signed by:

(Name and designation)

BIDDER

(SECOND PARTY)

(Name and designation) For and on behalf of Bidder

Signed by:

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SCHEDULES

SCHEDULE I – CHANGE CONTROL SCHEDULE

This Schedule describes the procedure to be followed in the event of any proposed change to the Master Service Agreement ("**MSA**"), Project Implementation Phase, SLA and Scope of Work and Functional Requirement Specifications. Such change shall include, but shall not be limited to, changes in the scope of services provided by the Implementation Agency and changes to the terms of payment as stated in the Terms of Payment Schedule.

The Purchaser and IA recognize that frequent change is an inevitable part of delivering services and that a significant element of this change can be accomplished by re-organizing processes and responsibilities without a material effect on the cost. The IA will endeavour, wherever reasonably practicable, to effect change without an increase in the terms of payment as stated in the Terms of Payment Schedule and Purchaser or its nominated agencies will work with the Implementation Agency to ensure that all changes are discussed and managed in a constructive manner. This Change Control Schedule sets out the provisions which will apply to all the changes to this agreement and other documents except for the changes in SLAs for which a separate process has been laid out in Clause 11 of the SLA.

This Change Control Schedule sets out the provisions which will apply to changes to the MSA.

CHANGE MANAGEMENT PROCESS

    a.   **CHANGE CONTROL NOTE ("CCN")**

        i.   Change requests in respect of the MSA, the Project Implementation, the operation, the SLA or Scope of work and Functional Requirement specifications will emanate from the Parties' respective Project Manager who will be responsible for obtaining approval for the change and who will act as its sponsor throughout the Change Control Process and will complete Part A of the CCN attached as Annexure A hereto. CCNs will be presented to the other Party's Project Manager who will acknowledge receipt by signature of the CCN.

        ii.   The IA and the Purchaser or its nominated agencies, during the Project Implementation Phase and the Purchaser or its nominated agencies during the Operations and Management Phase and while preparing the CCN, shall consider the change in the context of the following parameter, namely whether the change is beyond the scope of Services including ancillary and concomitant services required and as detailed in the RFP and is suggested and applicable only after the testing, commissioning and certification of the Pilot Phase and the Project Implementation Phase as set out in this Agreement.

        iii.   It is hereby also clarified here that any change of control suggested beyond 25 % of the value

of this Project will be beyond the scope of the change control process and will be considered as the subject matter for a separate bid process and a separate contract. It is hereby clarified that the 25% of the value of the Project as stated in herein above is

Calculated on the basis of bid value submitted by the Implementation Agency and accepted by the Purchaser or its nominated agencies or as decided and approved by Purchaser or it Nominated Agencies. For arriving at the cost / rate for change up to 25% of the project value, the payment terms and relevant rates as specified in <mark>Annexure D</mark> shall apply.

b. Quotation

    i.   The IA shall assess the CCN and complete Part B of the CCN, in completing the Part B of the CCN the IA shall provide as a minimum:

        1.   a description of the change

        2.   a list of deliverables required for implementing the change;

        3.   a time table for implementation;

        4.   an estimate of any proposed change

        5.   any relevant acceptance criteria

        6.   an assessment of the value of the proposed change;

        7.   Material evidence to prove that the proposed change is not already covered within the Agreement and the scope of work

    ii.   Prior to submission of the completed CCN to the Purchaser, or its nominated agencies, the Service Provider will undertake its own internal review of the proposal and obtain all necessary internal approvals. As a part of this internal review process, the IA shall consider the materiality of the proposed change in the context of the MSA and the Project Implementation affected by the change and the total effect that may arise from implementation of the change.

c. Costs

Each Party shall be responsible for its own costs incurred in the quotation, preparation of CCNs and in the completion of its obligations described in this process provided the IA meets the obligations as set in the CCN. In case of recertification due to proposed changes, required cost will be borne by the party that initiated the change. In the event the IA is unable to meet the obligations as defined in the CCN then the cost of getting it done by third party will be borne by the IA.

d. Obligations

The IA shall be obliged to implement any proposed changes once approval in accordance with above provisions has been given, with effect from the date agreed for implementation and within an agreed timeframe. IA will not be obligated to work on a change until the parties agree in writing upon its scope, price and/or schedule impact. The cost associated with any hardware/goods/License

for COTS product should not exceed the price quoted in the bidder's proposal. Any costs associated with changes to Software specifications which cannot be arrived at on the basis of the IA's proposal shall be mutually agreed to between the IA and the Purchaser.

[Note: Please refer to guidance notes with regard to method of calculation of Change Requests.].

SCHEDULE II - EXIT MANAGEMENT SCHEDULE
1 PURPOSE

1.1 This Schedule sets out the provisions, which will apply on expiry or termination of the MSA, the

Project Implementation, Operation and Maintenance SLA.

1.2 In the case of termination of the Project Implementation, the Parties shall agree at that time whether, and if so during what period, the provisions of this Schedule shall apply.

1.3 The Parties shall ensure that their respective associated entities carry out their respective obligations set out in this Exit Management Schedule.

2 Payment to Outgoing Bidder

2.1 Upon service of a notice under this Article, Payment to the outgoing BIDDER shall be made to the tune of last set of completed services / deliverables, subject to SLA requirements.

3 COOPERATION AND PROVISION OF INFORMATION

3.1 During the exit management period:

(i) The Bidder will allow MOSPI or its nominated agency access to information reasonably required to define the then current mode of operation associated with the provision of the services to enable MOSPI to assess the existing services being delivered;

(ii) promptly on reasonable request by MOSPI, the BIDDER shall provide access to and copies of all information held or controlled by them which they have prepared or maintained in accordance with this Agreement relating to any material aspect of the Services (whether provided by the Bidder or the sub-contracted partner). MOSPI shall be entitled to copy of all such information. Such information shall include details pertaining to the services rendered and other performance data. The Bidder shall permit MOSPI or its nominated agencies to have reasonable access to its employees and facilities as reasonably required by the Chairman, PIU to understand the methods of delivery of the services employed by the Bidder and to assist appropriate knowledge transfer.

4 CONFIDENTIAL INFORMATION, SECURITY AND DATA

4.1 The Bidder will promptly on the commencement of the exit management period supply to MOSPI or its nominated agency the following:

- (i) Information relating to the current services rendered
- (ii) all current and updated data as is reasonably required for purposes of MOSPI or its nominated agencies transitioning the services to its Replacement Bidder in a readily available format nominated by MOSPI, its nominated agency;
- (iii) all other information (including but not limited to documents, records and agreements) relating to the services reasonably necessary to enable MOSPI or its nominated agencies, or its Replacement Bidder to carry out due diligence in order to transition the provision of the Services to MOSPI or its nominated agencies, or its Replacement Bidder (as the case may be).

4.2 Before the expiry of the exit management period, the Bidder shall deliver to MOSPI or its nominated agency all new or up-dated materials from the categories set out in Schedule above and shall not retain any copies thereof.

4.3 Before the expiry of the exit management period, unless otherwise provided under the MSA, either party shall deliver to the other party all forms confidential information, which is in the possession or control of the party.

5 EMPLOYEES

5.1 Promptly on reasonable request at any time during the exit management period, the Bidder shall, subject to applicable laws, restraints and regulations (including in particular those relating to privacy) provide to MOSPI or its nominated agency a list of all employees (with job titles) of the Bidder dedicated to providing the services at the commencement of the exit management period.

5.2 Where any national, regional law or regulation relating to the mandatory or automatic transfer of the contracts of employment from the Bidder to MOSPI or its nominated agency, or a Replacement Bidder ("**Transfer Regulation**") applies to any or all of the employees of the Bidder, then the Parties shall comply with their respective obligations under such Transfer Regulations.

5.3 To the extent that any Transfer Regulation does not apply to any employee of the Bidder, department, or its Replacement Bidder may make an offer of employment or contract for services to such employee of the Bidder and the Bidder shall not enforce or impose any contractual provision that would prevent any such employee from being hired by the Chairperson, PIU or any Replacement Bidder.

6 TRANSFER OF CERTAIN AGREEMENTS

On request by MOSPI or its nominated agency the Bidder shall effect such assignments, transfers, licenses and sub-licenses as the Chairperson, PIU may require in favour of the Chairperson, PIU, or its Replacement Bidder in relation to service provision agreement between Bidder and third party lessors, vendors, and which are related to the services and reasonably necessary for the carrying out of replacement services by MOSPI or its nominated agency or its Replacement Bidder.

7 -Deleted

8 GENERAL OBLIGATIONS OF THE BIDDER

8.1 The Bidder shall provide all such information as may reasonably be necessary to effect as seamless a handover as practicable in the circumstances to MOSPI or its nominated agency or its Replacement Bidder and which the Bidder has in its possession or control at any time during the exit management period.

8.2 -Deleted

8.3 The Bidder shall commit adequate resources to comply with its obligations under this Exit Management Schedule.

9 EXIT MANAGEMENT PLAN

9.1 The Bidder shall provide MOSPI or its nominated agency with a recommended exit management plan ("Exit Management Plan") which shall deal with at least the following aspects of exit management in relation to the MSA as a whole and in relation to the Project Implementation.

   (i)   A detailed program of the transfer process that could be used in conjunction with a Replacement Bidder including details of the means to be used to ensure continuing provision of the services throughout the

transfer process or until the cessation of the services and of the management structure to be used during the transfer;

(ii) Plans for provision of contingent support to MOSPI, and Replacement Bidder for a reasonable period after transfer.

9.2 The Bidder shall re-draft the Exit Management Plan annually thereafter to ensure that it is kept relevant and up to date.

9.3 Each Exit Management Plan shall be presented by the Bidder to and approved by MOSPI or its nominated agencies.

9.4 The terms of payment as stated in the Terms of Payment Schedule include the costs of the Bidder complying with its obligations under this Schedule.

9.5 In the event of termination or expiry of MSA, and Project Implementation, each Party shall l comply with the Exit Management Plan.

9.6 During the exit management period, the Bidder shall use its best efforts to deliver the services.

9.7 Payments during the Exit Management period shall be made in accordance with the Terms of Payment Schedule.

9.8 This Exit Management plan shall be furnished in writing to MOSPI or its nominated agencies within 90 days from the Effective Date of this Agreement.

SCHEDULE III – AUDIT, ACCESS AND REPORTING
1 PURPOSE

This Schedule details the audit, access and reporting rights and obligations of MOSPI or its nominated agency and the Bidder.

2 AUDIT NOTICE AND TIMING

2.1 As soon as reasonably practicable after the Effective Date, the Parties shall use their best endeavours to agree to a timetable for routine audits (Other than those mentioned as part of the mandatory requirements for successful delivery and acceptance of the Services) during the Project Implementation Phase and the Operation and Maintenance Phase. Such timetable during the Implementation Phase, MOSPI or its nominated agency shall conduct routine audits in accordance with such agreed timetable and shall not be required to give the Bidder any further notice of carrying out such audits.

2.2 MOSPI or its nominated agency may conduct non-timetabled audits at his/ her own discretion if it reasonably believes that such non-timetabled audits are necessary as a result of an act of fraud by the Bidder, a security violation, or breach of confidentiality obligations by the Bidder, provided that the requirement for such an audit is notified in writing to the Bidder a reasonable period time prior to the audit (taking into account the circumstances giving rise to the reasonable belief) stating in a reasonable level of detail the reasons for the requirement and the alleged facts on which the requirement is based. If the Bidder considers that the non-timetabled audit was not appropriate, the matter shall be referred to the escalation procedure as set out in the Governance Schedule.

2.3 The frequency of audits shall be a (maximum) half yearly, provided always that the MOSPI or its nominated agency shall endeavour to conduct such audits with the lowest levels of inconvenience and disturbance practicable being caused to the Bidder. Any such audit shall be conducted by with adequate notice of 2 weeks to the Bidder.

2.4 MOSPI will ensure that any 3rd party agencies (except CAG) appointed to conduct the audit will not be the competitor of Bidder and will be bound by confidentiality obligations.

3 ACCESS

The Bidder shall provide to MOSPI or its nominated agency reasonable access to employees, suppliers, agents and third-party facilities as detailed in the RFP, documents, records and systems reasonably required for audit and shall provide all such persons with routine assistance in connection with the audits and inspections. The Chairperson, PIU /Steering Committee shall have the right to copy and retain copies of any relevant records. The Bidder shall make every reasonable effort to co-operate with them.

4 AUDIT RIGHTS

4.1 MOSPI or its nominated agency shall have the right to audit and inspect suppliers, agents and third-party facilities (as detailed in the RFP), documents and records relating to the provision of the Services, but only to the extent that they relate to the provision of the services, as shall be reasonably necessary to verify:

(i) The security, integrity and availability of all data processed, held or conveyed by the Partner on behalf of MOSPI and documentation related thereto;

(ii) That the actual level of performance of the services is the same as specified in the SLA;

(iii) That the Bidder has complied with the relevant technical standards, and has adequate internal controls in place; and

(iv) The compliance of the Bidder with any other obligation under the MSA and SLA.

(v) Security audit and implementation audit of the system shall be done once each year, the cost of which shall be borne by the Bidder.

(vi) For the avoidance of doubt the audit rights under this Schedule shall not include access to the Bidder's profit margins or overheads, any confidential information relating to the Bidder' employees, or (iii) minutes of its internal Board or Board committee meetings including internal audit, or (iv) such other information of commercial-in-confidence nature which are not relevant to the Services associated with any obligation under the MSA.

6 ACTION AND REVIEW

6.1 Any change or amendment to the systems and procedures of the Bidder, where applicable arising from the audit report shall be agreed within thirty (30) calendar days from the submission of the said report.

6.2 Any discrepancies identified by any audit pursuant to this Schedule shall be immediately notified to MOSPI or its nominated agency and the Bidder Project Manager who shall determine what action should be taken in respect of such discrepancies in accordance with the terms of the MSA.

7 TERMS OF PAYMENT

MOSPI shall bear the cost of any audits and inspections. The terms of payment are exclusive of any costs of the Bidder for all reasonable assistance and information provided under the MSA, the Project Implementation and SLA by the Bidder pursuant to this Schedule.

8 RECORDS AND INFORMATION

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For the purposes of audit in accordance with this Schedule, the Bidder shall maintain true and accurate records in connection with the provision of the services and the Bidder shall handover all the relevant records and documents upon the termination or expiry of the MSA.

ANNEXURE

ANNEXURE A –FORMAT OF PERFORMANCE GUARANTEE –Section 5.8 of RFP Volume 1

ANNEXURE B -FORMAT FOR CHANGE COTROL NOTICE-Section 5.8 of RFP Volume1

ANNEXURE C – PROJECT PLAN-Section 5.5.1 of RFP Volume 1

ANNEXURE D – TECHNICAL BID RESPONSE- Section 5.3 of RFP Volume 1

ANNEXURE E – FINANCIAL BID RESPONSE- Section 5.4 of RFP Volume 1

Section 2 Non-Disclosure Agreement

THIS AGREEMENT is made on this the <***> day of <***> 20--- at <***>, India.

BETWEEN

The President of India, acting through Ministry of Statistics & Programme Implementation having its office at ------------------------------- India hereinafter referred to as „**MOSPI',** which expression shall, unless the context otherwise requires, include its permitted successors and assigns);

AND

<***>**,** a Company incorporated under the Companies Act, 2013 or a partnership firm registered under LLP Act, 2008., having its registered office at <***> (hereinafter referred to as „**the Bidder'** which expression shall, unless the context otherwise requires, include its permitted successors, executors, administrators and assigns). Each of the parties mentioned above are collectively referred to as the „**Parties'** and individually as a „**Party'**.

WHEREAS:

1. MOSPI is desirous to implement the MOSPI Integrated Information Portal (MIIP) project

2. MOSPI and Bidder have entered into a Master Services Agreement dated <***> (the "**MSA**") as well as a Service Level Agreement dated <***> (the "**SLA**") in furtherance of the Project.

3. Whereas in pursuing the Project (the "**Business Purpose**"), a Party ("Disclosing Party) recognizes that they will disclose certain Confidential Information (as defined hereinafter) to the other Party ("Receiving Party").

4. Whereas such Confidential Information (as defined hereinafter) belongs to Disclosing Party as the case may be and is being transferred to the Receiving Party to be used only for the Business Purpose and hence there is a need to protect such confidential information from unauthorized use and disclosure.

NOW THEREFORE, in consideration of the mutual covenants, promises, assurances, representations and provisions set forth herein, the Parties hereto agree as follows:

DEFINITIONS AND INTERPRETATION

1.1 Definitions

Terms and expressions used in this Agreement (including the Introduction) shall have the same meanings setout in RFP Vol 1.

1.2 Interpretation

In this Agreement, unless otherwise specified:

(a) references to clauses, Sub-clauses, Paragraphs and Schedules are to clauses, sub-clauses, paragraphs of and schedules to this Agreement;

(b) use of any gender includes the other genders;

(c) references to a „company' shall be construed so as to include any company, corporation or other body corporate, wherever and however incorporated or established;

(d) references to a '**person**' shall be construed so as to include any individual, firm, company, government, state or agency of a state, local or municipal authority or government body or any joint venture, association or partnership (whether or not having separate legal personality);

(e) a reference to any statute or statutory provision shall be construed as a reference to the same as it may have been, or may from time to time be, amended, modified or re-enacted;

(f) any reference to a „**day**' (including within the phrase „business day') shall mean a period of 24 hours running from midnight to midnight;

(g) references to a „**business day'**shall be construed as a reference to a day (other than a Sunday) on which banks in the state of <***> are generally open for business;

(h) references to times are to Indian standard time;

(i) a reference to any other document referred to in this Agreement is a reference to that other document as amended, varied, novated or supplemented at any time; and

(j) all headings and titles are inserted for convenience only. They are to be ignored in the interpretation of this Agreement.

1.8Measurements and Arithmetic Conventions

All measurements and calculations shall be in the metric system and calculations done to 2 (two) decimal places, with the third digit of 5 (five) or above being rounded up and below 5 (five) being rounded down except in money calculations where such amounts shall be rounded off to the nearest INR.

1.9Ambiguities within Agreement

In case of ambiguities or discrepancies within this Agreement, the following principles shall apply:

(a) as between two clauses of this Agreement, the provisions of a specific clause relevant to the issue under consideration shall prevail over those in a general clause;

(b) as between the provisions of this Agreement and the Schedules, the Agreement shall prevail, save and except as expressly provided otherwise in the Agreement or the Schedules; and

(c) as between any value written in numerals and that in words, the value in words shall prevail.

1.5 Priority of agreements

The Parties hereby expressly agree that for the purpose of giving full and proper effect to this Agreement, the MSA and this Agreement shall be read together and construed harmoniously. In the event of any conflict between the MSA and this Agreement, the provisions contained in the MSA shall prevail over this Agreement.

2. TERM

This Agreement will remain in effect for five years from the date of the last disclosure of Confidential Information ("**Term**"), at which time it will terminate, unless extended by the disclosing party in writing.

3. SCOPE OF THE AGREEMENT

(a) This Agreement shall apply to all confidential and proprietary information of a Party to which the other Party has had or will have access in connection with discussions of the Business Purpose and all confidential and proprietary information disclosed by Disclosing Party to the Receiving Party and other information which the

Disclosing Party identifies in writing or otherwise as confidential before or within (30) thirty days after disclosure to the Receiving Party ("Confidential Information"). Such Confidential Information includes without limitation certain specifications, documents, software, prototypes and/or technical information, and all copies and derivatives containing such Information that may be disclosed to the Disclosing Party for and during the Business Purpose, which a party considers proprietary or confidential.

(b) Such Confidential Information may be in any form or medium, tangible or intangible, and may be communicated/disclosed in writing, orally, graphically, or machine readable form or through visual observation or by any other means to the Receiving Party.

OBLIGATIONS OF THE RECEIVING PARTY

The Receiving Party shall:

(a) use the Confidential Information only for the Business Purpose and shall hold the Confidential Information in confidence using the same degree of care as it normally exercises to protect its own proprietary confidential information. In no way, the Receiving Party use less than a reasonable degree of care to protect and preserve the Disclosing Party' Confidential Information, and

(b) grant access to Confidential Information only to its employees on a „need to know basis' and restrict such access as and when not necessary to carry out the Business Purpose.

(c) cause its employees, agents, representatives and sub-contracted partner to comply with the provisions of this Agreement and the Receiving Party will assume full responsibility for any failure to comply with the terms of this Agreement by any such employees, agents, representatives and sub-contracted partner;

(d) prevent unauthorized disclosure of Confidential Information to third parties;

(e) disclose the Confidential Information to its agents, employees, consultants, representatives, and sub-contracted partners on a need to know basis; provided that by doing so, the Receiving Party agrees to bind such agents, consultants, employees, representatives and sub-contracted partners a to terms at least as restrictive as those stated herein. The Receiving Party upon making a disclosure under this clause shall:

(f) advise the agents, employees, consultants, representatives and sub-contracted partners of the confidentiality obligations imposed on them by this clause.

(g) upon the Disclosing Party's written request, the Receiving Party shall either return to the Disclosing Party all copies of the Confidential Information which is already in possession or within the control of the Receiving Party. Alternatively, with the Disclosing Party's prior written consent, Receiving Party may destroy such Confidential Information provided that the Confidential Information is destroyed in accordance with applicable law, rules and regulations and such Confidential Information is rendered unreadable, undecipherable and otherwise incapable of reconstruction, in which case and an officer of the Receiving Party shall certify in writing to the Disclosing Party that all media containing Confidential Information have been destroyed.

(h) Provided, however, that an archival copy of the Confidential Information may be retained in the files of the Receiving Party's counsel, solely for the purpose of proving the contents of the Confidential Information.

(i) not to remove any of the other Party's Confidential Information from the premises of the Disclosing Party without prior written approval.

(j) exercise extreme care in protecting the confidentiality of any Confidential Information which is removed, only with the Disclosing Party's prior written approval, from the Disclosing Party's premises. Each Party agrees to comply with any and all terms and conditions the Disclosing Party may impose upon any such approved removal,

such as conditions that the removed Confidential Information and all copies must be returned by a certain date, and that no copies are to be made off of the premises.

(k) Upon the Disclosing Party's request, the Receiving Party shall promptly return to the Disclosing Party all tangible items containing or consisting of the Disclosing Party's Confidential Information all copies thereof.

(l) not transfer or disclose any Confidential Information to any third party without the prior written permission of the Disclosing Party and without such third party having a contractual obligation to keep such Confidential Information confidential

2. EXCEPTIONS TO CONFIDENTIAL INFORMATION

The foregoing restrictions on each party's use or disclosure of Confidential Information shall not apply to the Confidential Information that the Receiving Party can demonstrate that such Confidential Information:

(a) was independently developed by or for the Receiving Party without use of or reference to the Disclosing Party' Confidential Information, or was received without restrictions; or

(b) has become generally available to the public without breach of confidentiality obligations of the Receiving Party under this Agreement and independently of Receiving Party's knowledge of any Confidential Information; or

(c) was in the Receiving Party's lawful and demonstrable possession without restriction prior to its receipt from the Disclosing Party ; or

(d) is the subject of a subpoena, court order, statute, rule and regulation or other legal or administrative demand for disclosure; provided, however, that the Receiving Party has given the Disclosing Party prompt notice of such demand for disclosure and the Receiving Party reasonably cooperates with the Disclosing Party's efforts to secure an appropriate protective order; or

(e) is disclosed with the prior consent of the Disclosing Party; or

(f) the Receiving Party obtains or has available from a source other than the Disclosing Party without breach by the Receiving Party or such source of any obligation of confidentiality or non-use towards the disclosing party.

3. OWNERSHIP OF THE CONFIDENTIAL INFORMATION

(a) Each Party recognizes and agrees that all of the Disclosing Party's Confidential Information is owned solely by the Disclosing Party (or its licensors) and that the unauthorized disclosure or use of such Confidential Information would cause irreparable harm and significant injury, the degree of which may be difficult to ascertain.

(b) By disclosing the Confidential Information or executing this Agreement, Disclosing Party does not grant any license, explicitly or implicitly, under any trademark, patent, copyright, mask work protection right, trade secret or any other intellectual property right. The Disclosing Party disclaims all warranties regarding the information, including all warranties with respect to infringement of intellectual property rights and all warranties as to the accuracy or utility of such information.

(c) Access to Confidential Information hereunder shall not preclude an individual who has seen such Confidential Information for the purposes of this Agreement from working on future projects for the Disclosing Party which relate to similar subject matters, provided that such individual does not make reference to the Confidential Information and does not copy the substance of the Confidential Information during the Term. Furthermore, nothing contained herein shall be construed as imposing any restriction on the Receiving Party's disclosure or

use of any general learning, skills or know-how developed by the Receiving Party's personnel under this Agreement; provided the Receiving Party does not use the Confidential Information of the Disclosing Party in the development or acquisition of such skills or know-how.

(d) Execution of this Agreement and the disclosure of Confidential Information pursuant to this Agreement do not constitute or imply any commitment, promise, or inducement by either Party to make any purchase or sale, or to enter into any additional agreement of any kind.

7. DISPUTE RESOLUTION

(a) If a dispute arises in relation to the conduct of this Contract (Dispute), a party must comply with this clause 7 before starting arbitration or court proceedings (except proceedings for urgent interlocutory relief). After a party has sought or obtained any urgent interlocutory relief that party must follow this clause 7.

(b) A party claiming a Dispute has arisen must give the other parties to the Dispute notice setting out details of the Dispute.

(c) During the 14 days after a notice is given under clause 7(b) (or longer period if the parties to the Dispute agree in writing), each party to the Dispute must use its reasonable efforts through a meeting of Senior Executive (or their nominees) to resolve the Dispute. If the parties cannot resolve the Dispute within that period then any such dispute or difference whatsoever arising between the parties to this Agreement out of or relating to the construction, meaning, scope, operation or effect of this Agreement or the validity of the breach thereof shall be referred to a sole arbitrator to be appointed by mutual consent of both the parties herein. If the Parties cannot agree on the appointment of the arbitrator within a period of one month from the notification by one party to the other of existence of such dispute, then the Arbitrator shall be appointed by the High Court of the jurisdiction specified in this agreement. The provisions of the Arbitration and Conciliation Act, 1996 will be applicable and the award made there under shall be final and binding upon the parties hereto, subject to legal remedies available under the law. Such differences shall be deemed to be a submission to arbitration under the Indian Arbitration and Conciliation Act, 1996, or of any modifications, Rules or re-enactments thereof. The Arbitration proceedings will be held at the jurisdiction specified in Item 27. Any legal dispute will come under the sole jurisdiction specified in Item 27.

(d) The Receiving Party agrees that the Disclosing Party shall have the right to obtain an immediate injunction enjoining any breach of this Agreement, as well as the right to pursue any and all other rights and remedies available at law or in equity for such a breach.

8. VARIATION

This Agreement may only be varied in writing and signed by both Parties.

9. WAIVER

Waiver including partial or conditional waiver, by either Party of any default by the other Party in the observance and performance of any provision of or obligations under this Agreement:-

   a.   shall be in writing
   b.   shall not operate or be construed as a waiver of any other or subsequent default hereof or of other provisions of or obligations under this Agreement;
   c.   shall be executed by a duly authorized representative of the Party; and
   d.   shall not affect the validity or enforceability of this Agreement in any manner.

10. EXCLUSION OF IMPLIED WARRANTIES

This Agreement expressly excludes any warranty, condition or other undertaking implied at law or by custom or otherwise arising out of any other agreement between the Parties or any representation by either Party not contained in a binding legal agreement executed by both Parties.

11. ENTIRE AGREEMENT

This Agreement and the Annexure together constitute a complete and exclusive statement of the terms of the agreement between the Parties on the subject hereof, and no amendment or modification hereto shall be valid and effective unless such modification or amendment is agreed to in writing by the Parties and duly executed by persons especially empowered in this behalf by the respective Parties. All prior written or oral understandings, offers or other communications of every kind pertaining to this Agreement are abrogated and withdrawn.

12. SEVERABILITY

If for any reason whatever, any provision of this Agreement is or becomes invalid, illegal or unenforceable or is declared by any court of competent jurisdiction or any other instrumentality to be invalid, illegal or unenforceable, the validity, legality or enforceability of the remaining provisions shall not be affected in any manner, and the Parties shall negotiate in good faith with a view to agreeing to one or more provisions which may be substituted for such invalid, unenforceable or illegal provisions, as nearly as is practicable to such invalid, illegal or unenforceable provision. Failure to agree upon any such provisions shall not be subject to the dispute resolution procedure set forth under this Agreement or otherwise.

13. NO PARTNERSHIP

This Agreement shall not be interpreted or construed to create an association, joint venture or partnership between the Parties, or to impose any partnership obligation or liability upon either Party, and neither Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, the other Party except as expressly provided under the terms of this Agreement.

14. THIRD PARTIES

This Agreement is intended solely for the benefit of the Parties and their respective successors and permitted assigns, and nothing in this Agreement shall be construed to create any duty to, standard of care with reference to, or any liability to, any person not a Party to this Agreement.

15. SUCCESSORS AND ASSIGNS

The Agreement shall be binding on and shall inure to the benefit of the Parties and their respective successors and permitted assigns.

16. NOTICES

Any notice or other communication to be given by any Party to the other Party under or in connection with the matters contemplated by this Agreement shall be in writing and shall be given by hand delivery, recognized courier, registered post, email or facsimile transmission and delivered or transmitted to the Parties at their respective addresses set forth below:

If to MOSPI:

Attn: <***>

Tel:

Fax:

Email:

Contact:

With a copy to:

If to the Bidder: Attn. <***>

Phone: <***>

Fax No. <***>

17. LANGUAGE

All notices required to be given by one Party to the other Party and all other communications, documentation and proceedings which are in any way relevant to this Agreement shall be in writing and in the English language. This Agreement may be executed in counterparts, each of which, when executed and delivered, shall constitute an original of this Agreement.

18. MITIGATION

Without prejudice to any express provisions of this Agreement on any mitigation obligations of the Parties, both MOSPI and the Bidder shall at all times take all reasonable steps to minimize and mitigate any loss for which the relevant Party is entitled to bring a claim against the other Party pursuant to this Agreement.

19. REMOVAL OF DIFFICULTIES

The Parties acknowledge that it is conceivable that the Parties may encounter difficulties or problems in the course of implementation of the Project and the transactions envisaged under this Agreement. The Parties agree and covenant that they shall mutually discuss such difficulties and problems in good faith and take all reasonable steps necessary for removal or resolution of such difficulties or problems.

IN WITNESS WHEREOF THE PARTIES HAVE EXECUTED AND DELIVERED THIS

AGREEMENT AS OF THE DATE FIRST ABOVE WRITTEN.

SIGNED, SEALED AND DELIVERED

For and on behalf of the Bidder by:

(Signature)

(Name)

(Designation)

(Address)

(Fax No.)

SIGNED, SEALED AND DELIVERED

145496/2019/Computer Centre

For and on behalf of MOSPI by:

(Signature)

(Name)

(Designation)

(Address)

(Fax No.)

In the presence of:

1.

2.

145496/2019/Computer Centre

Section 3 Service Level Agreement

THIS AGREEMENT is made on this the <***> day of <***> 20---- at <***>, India.

BETWEEN

The President of India, acting through Ministry of Statistics & Programme Implementation having its office at --
--- India hereinafter referred to as „**MOSPI'** or „**Buyer',** which expression shall, unless the context otherwise requires, include its permitted successors and assigns);

AND

<***>**,** a Company incorporated under the Companies Act, 2013 or a partnership firm registered under LLP Act, 2008, having its registered office at <***> (hereinafter referred to as the „**Bidder'** which expression shall, unless the context otherwise requires, include its permitted successors, executors, administrators and assigns). Each of the parties mentioned above are collectively referred to as the „**Parties'** and individually as a „**Party'**.

WHEREAS:

1. MOSPI is desirous to implement the MOSPI Integrated Information Portal (MIIP) project

2. MOSPI and Bidder have entered into a Master Services Agreement dated <***> (the "**MSA**").

NOW THEREFORE, in consideration of the mutual covenants, promises, assurances, representations and provisions set forth herein, the Parties hereto agree as follows:

1. DEFINITIONS AND INTERPRETATION

1.1 Definitions

Terms and expressions used in this Agreement (including the Introduction) shall have the meanings set out in RFP Vol 1.

1.2 Interpretation

In this Agreement, unless otherwise specified:

(a) references to clauses, Sub-clauses, Paragraphs and Schedules are to clauses, sub-clauses, paragraphs of and schedules to this Agreement;

(b) use of any gender includes the other genders;

(c) references to a „**company'** shall be construed so as to include any company, corporation or other body corporate, wherever and however incorporated or established;

(d) references to a „**person'** shall be construed so as to include any individual, firm, company, government, state or agency of a state, local or municipal authority or government body or any joint venture, association or partnership (whether or not having separate legal personality);

(e) a reference to any statute or statutory provision shall be construed as a reference to the as it may have been, or may from time to time be, amended, modified or re-enacted;

(f) any reference to a „**day**' (including within the phrase „business day') shall mean a period of 24 hours running from midnight to midnight;

(g) references to a **„business day'** shall be construed as a reference to a day (other than a Sunday) on which banks in the state of -------- are generally open for business;

(h) references to times are to Indian Standard Time;

(i) a reference to any other document referred to in this Agreement is a reference to that other document as amended, varied, novated or supplemented at any time; and

(j) all headings and titles are inserted for convenience only. They are to be ignored in the interpretation of this Agreement.

1.3 Measurements and Arithmetic Conventions

All measurements and calculations shall be in the metric system and calculations done to 2 (two) decimal places, with the third digit of 5 (five) or above being rounded up and below 5 (five) being rounded down except in money calculations where such amounts shall be rounded off to the nearest INR.

1.4 Ambiguities within Agreement

In case of ambiguities or discrepancies within this Agreement, the following principles shall apply:

(a) as between two clauses of this Agreement, the provisions of a specific clause relevant to the issue under consideration shall prevail over those in a general clause;

(b) as between the provisions of this Agreement and the Schedules, the Agreement shall prevail, save and except as expressly provided otherwise in the Agreement or the Schedules; and

(c) as between any value written in numerals and that in words, the value in words shall prevail.

1.5 Priority of agreements

The Parties hereby expressly agree that for the purpose of giving full and proper effect to this Agreement, the MSA and this Agreement shall be read together and construed harmoniously. In the event of any conflict between the MSA and this Agreement, the provisions contained in the MSA shall prevail over this Agreement.

2 . STRUCTURE

This SLA shall operate as a legally binding services agreement specifying terms which apply to the Parties in relation to the provision of the Services by the Bidder to the Buyer and its nominated agencies under this Agreement and the MSA.

The Bidder shall be required to ensure that the Service Levels which shall ensure the following:

(a) Improving the efficiency of operations.

(b) Leveraging the benefits in new system in order to:

(i) Reduce of manual records and replace with computerized standardized documents.

(ii) Infuse transparency in operations by enabling the stakeholders to have easy access to the records and provision of login ids and biometrics to infuse accountability in operations

(iii) Enable faster request processing in delivery of services with better turnaround time.

(iv) Generate meaningful MIS from the system.

(v) Provide inbuilt mechanism of security and quality control for crucial dealer data. To meet the aforementioned objectives the Bidder will provide the Service Levels in accordance with the performance metrics as set out in detail in this Agreement. Further this Agreement shall govern the provision of the contracted professional services of the Bidder to MOSPI and its nominated agencies after the Effective Date.

3. SCOPE OF SLA

This Agreement has been executed in relation to the outsourcing portion of the Project between the Parties. The detailed Service Levels have been set out in Section 7 of the RFP Vol 2.

This Agreement shall ensure the following:

(a) Establishment of mutual responsibilities and accountability of the Parties;

(b) Defining each Party's expectations in terms of services provided;

(c) Establishment of the relevant performance measurement criteria;

(d) Definition of the availability expectations;

(e) Definition of the escalation process;

(f) Establishment of trouble reporting single point of contact; and

(g) Establishment of the framework for SLA change management

The following parties are obligated to follow the procedures as specified by this Agreement:

(a) Buyer

(b) Bidder

4. AGREEMENT OWNERS

The following personnel shall be notified to discuss the Agreement and take into consideration any proposed SLA change requests:

	Title	Telephone	Email
Buyer	Authorized Representative, MOSPI	<***>	<***>
Bidder	<***>	<***>	<***>

5. CONTACT LIST

In the event that there is any change in the listed contacts, the same shall be communicated and updated prior to such change occurring. The Single Point of Contact ("**POC**") for the Bidder shall be <***> and will be available 24X7.

	Title	Location	Telephone
Buyer	Authorized Representative, MOSPI	<***>	<***>
Bidder	<***>	<***>	<***>

6. PRINCIPAL CONTACTS

The Buyer and the Bidder will nominate a senior staff member to be the principal contact regarding operation of this Agreement. At the date of signing of this Agreement, the nominated principal contacts are:

Buyer principal contact: _____

Bidder principal contact: _____

7. COMMENCEMENT AND DURATION OF THIS AGREEMENT

Agreement shall commence on the later date on which it is executed by the Buyer and the Bidder (hereinafter the "Effective Date") and shall, unless terminated earlier in accordance with its terms or unless otherwise agreed by the Parties, expire on the date on which this Agreement expires or terminates, which shall be a period of five years starting from the date of the Final Acceptance Test.

8. EXCLUSIONS TO THE AGREEMENT

This Agreement shall not govern the following services:

(a) Consulting services; and

(b) Bidder's business processes not related to the Project.

9. TERMS OF PAYMENT AND PENALTIES

(a) In consideration of the Services and subject to the provisions of the MSA and this Agreement, the Buyer shall pay the amounts in accordance with the Terms of Payment Schedule mentioned in Section 6 of RFP Vol 2.

(b) For the avoidance of doubt, it is expressly clarified that the Buyer and/or its nominated agencies may also calculate a financial sum and debit the same against the terms of payment as defined in the Terms of Payment Schedule mentioned in RFP Vol 2 as a result of the failure of the Bidder to meet the Service Levels set out as in Section 7 of RFP Vol 2 of this Agreement, such sum being determined in accordance with the terms of the set out as RFP Vol 2 of this Agreement.

10. UPDATING OF THIS AGREEMENT

(a)The Parties anticipate that this Agreement shall need to be re-evaluated and modified to account for changes in work environment and technology from time to time. Hence they herby agree to revise the terms of the Agreement on an annual basis.

(b) The Parties hereby agree upon the following procedure for revising this Agreement:

(i) Any and all changes to this Agreement will be initiated in writing between the Buyer and the Bidder, The service levels in this Agreement shall be considered to be standard for the Buyer and shall only be modified if both Parties agree to an appended set of terms and conditions;

(ii) Only the Buyer or the Bidder may initiate a revision to this Agreement;

(iii) A notice of the proposed revision ("**SLA Change Request**") shall be served to the Buyer or the Bidder as the case may be;

(iv) The SLA Change request would be deemed to be denied in case it is not approved within a period of <***> days;

(v) In the event that Buyer/Bidder approves of the suggested change the change shall be communicated to all the Parties and the SLA Change request would be appended to the Agreement;

(vi) The Buyer shall update and republish the text of Agreement annually to include all the SLA Change Requests that have been appended to the Agreement during the course of the year. Such republished Agreement shall be circulated to all the Parties within <***> days of such change taking place.

11. DOCUMENT HISTORY

All revisions made to this Agreement shall be listed in chronological order as per the format set out below and a copy of the same shall be provided to the Parties:

Version	Date	Description of changes
<***>	<***>	<***>

12. SCOPE OF SERVICES

(a) The Bidder shall ensure that Services are available at various locations as per the requirements of the project;

(b) The Bidder shall provide support services for addressing problems related to the provision of services of the selected bidder through the POC. Such POC shall be available over telephone on <***> number 24 hours a day, 7 days a week

(c) The Bidder guarantees that he shall achieve the Service Levels for the Project;

(d) The Bidder shall be liable to penalties in case of failure to comply with the Service Levels. However, any delay not attributable to the Bidder shall not be taken into account while computing adherence to the Service Levels.

13. PERFORMANCE REVIEW

The POC's of both the Buyer and the Bidder shall meet on a quarterly basis to discuss priorities, service levels and system performance. Additional meetings may be held at the request of either the Bidder or the Buyer. The agenda for these meetings shall be as follows:

(a) Service performance;

(b) Review of specific problems/exceptions and priorities; and

(c) Review of the operation of this Agreement and determine corrective action to overcome deficiencies.

14. REPRESENTATIONS AND WARRANTIES OF BUYER

The Buyer hereby represents and warrants to the Bidder as follows:

(a) it has full power and authority to execute, deliver and perform its obligations under this Agreement and to carry out the transactions contemplated herein and that it has taken all actions necessary to execute this Agreement, exercise its rights and perform its obligations, under this Agreement and carry out the transactions contemplated hereby;

(b) it has taken all necessary actions under Applicable Law to authorize the execution, delivery and performance of this Agreement and to validly exercise its rights and perform its obligations under this Agreement;

(c) it has the financial standing and capacity to perform its obligations under the Agreement;

(d) this Agreement has been duly executed by it and constitutes a legal, valid and binding obligation enforceable against it in accordance with the terms hereof and its obligations under this Agreement shall be legally valid, binding and enforceable obligations against it in accordance with the terms thereof;

(e) the execution, delivery and performance of this Agreement shall not conflict with, result in the breach of, constitute a default under, or accelerate performance required by any of the Applicable Laws or any covenant, contract, agreement, arrangement, understanding, decree or order to which it is a party or by which it or any of its properties or assets is bound or affected;

(f) there are no actions, suits or proceedings pending or, to its knowledge, threatened against it at law or in equity before any court or before any other judicial, quasi-judicial or other authority, the outcome of which may result in the default or breach of this Agreement or which individually or in the aggregate may result in any material impairment of its ability to perform its material (including any payment) obligations under this Agreement;

(g) it has no knowledge of any violation or default with respect to any order, writ, injunction or any decree of any court or any legally binding order of any Government Instrumentality which may result in any material adverse effect on the Bidder's ability to perform its obligations under this Agreement and no fact or circumstance exists which may give rise to such proceedings that would adversely affect the performance of its obligations under this Agreement.

15. REPRESENTATIONS AND WARRANTIES OF THE BIDDER

The Bidder hereby represents and warrants to the Buyer as follows:

(a) it is duly organized and validly existing under the laws of India, and has full power and authority to execute and perform its obligations under this Agreement and to carry out the transactions contemplated hereby;

(b) it has taken all necessary corporate and other actions under Applicable Laws to authorize the execution and delivery of this Agreement and to validly exercise its rights and perform its obligations under this Agreement;

(c) from the Effective Date, it will have the financial standing and capacity to undertake the Project in accordance with the terms of this Agreement;

(d) in providing the Services, it shall use reasonable endeavours not to cause any unnecessary disruption to MOSPI's normal business operations

(e) this Agreement has been duly executed by it and constitutes its legal, valid and binding obligation, enforceable against it in accordance with the terms hereof, and its obligations under this Agreement shall be legally valid, binding and enforceable obligations against it in accordance with the terms hereof;

(f) the execution, delivery and performance of this Agreement shall not conflict with, result in the breach of, constitute a default under, or accelerate performance required by any of the terms of its Memorandum and Articles of Association or any Applicable Laws or any covenant, contract, agreement, arrangement, understanding, decree or order to which it is a party or by which it or any of its properties or assets is bound or affected;

(g) there are no actions, suits, proceedings, or investigations pending or, to its knowledge, threatened against it at law or in equity before any court or before any other judicial, quasihelical or other authority, the outcome of which may result in the breach of this Agreement or which individually or in the aggregate may result in any material impairment of its ability to perform any of its material obligations under this Agreement;

(e) it has no knowledge of any violation or default with respect to any order, writ, injunction or decree of any court or any legally binding order of any government instrumentality which may result in any material adverse effect on its ability to perform its obligations under this Agreement and no fact or circumstance exists which may give rise to such proceedings that would adversely affect the performance of its obligations under this Agreement;

(f) it has complied with Applicable Law in all material respects and has not been subject to any fines, penalties, injunctive relief or any other civil or criminal liabilities which in the aggregate have or may have a material adverse effect on its ability to perform its obligations under this Agreement;

(g) it and its sub-contracted partner and personnel, have the necessary experience, skill, knowledge and competence to perform the Services;

(h) it will not, nor will it suffer or permit any third party under its direction or control to negligently introduce into the Client's systems or any Deliverables any harmful code.

(i) no representation or warranty by it contained herein or in any other document furnished by it to the Buyer or to any government instrumentality in relation to the Required Consents contains or shall contain any untrue or misleading statement of material fact or omits or shall omit to state a material fact necessary to make such representation or warranty not misleading; and

(j) no sums, in cash or kind, have been paid or shall be paid, by it or on its behalf, to any person by way of fees, commission or otherwise for entering into this Agreement or for influencing or attempting to influence any officer or employee of the Buyer in connection therewith.

16. INDEMNITIES

The Bidder agrees to indemnify MOSPI under this Agreement in accordance with the terms and principles set out in the MSA.

17 . DISPUTE RESOLUTION

Any dispute, difference or claim arising out of or in connection with the Agreement which is not resolved amicably shall be decided in accordance with the dispute resolution procedure as set out in the MSA.

18. MISCELLANEOUS

(a)Assignment and charges

This Agreement shall be binding on and ensure for the benefit of each Party's successors in title. No Party shall assign, or declare any trust in favour of a third party over, all or any part of the benefit of, or its rights or benefits under, this Agreement.

(b)Governing law and jurisdiction

This Agreement shall be construed and interpreted in accordance with and governed by the laws of India, and the courts at the State of shall have jurisdiction over matters arising out of or relating to this Agreement.

(c)Waiver of sovereign immunity

The Parties unconditionally and irrevocably:

(i) agree that the execution, delivery and performance by them of the Agreement constitute commercial acts done and performed for commercial purpose;

(ii) agree that, should any proceedings be brought against a Party or its assets, property or revenues in any jurisdiction in relation to the Agreement or any transaction contemplated by the Agreement, no immunity (whether by reason of sovereignty or otherwise) from such proceedings shall be claimed by or on behalf of such Party with respect to its assets;

(iii) waive any right of immunity which it or its assets, property or revenues now has, may acquire in the future or which may be attributed to it in any jurisdiction; and

(iv) consent generally to the enforcement of any judgment or award against it in any such proceedings to the giving of any relief or the issue of any process in any jurisdiction in connection with such proceedings (including the making, enforcement or execution against it or in respect of any assets, property or revenues whatsoever irrespective of their use or intended use of any order or judgment that may be made or given in connection therewith).

(d) Variation

This Agreement may only be varied in writing and signed by both Parties.

(e) Waiver

(i) Waiver including partial or conditional waiver, by either Party of any default by the other Party in the observance and performance of any provision of or obligations under this Agreement:

- shall be in writing

- shall not operate or be construed as a waiver of any other or subsequent default hereof or of other provisions of or obligations under this Agreement;
- shall not be effective unless it is in writing and executed by a duly authorized representative of the Party; and
- shall not affect the validity or enforceability of this Agreement in any manner.

(f) Exclusion of implied warranties

This Agreement expressly excludes any warranty, condition or other undertaking implied at law or by custom or otherwise arising out of any other agreement between the Parties or any representation by either Party not contained in a binding legal agreement executed by both Parties.

(g) Survival

(i) Termination or expiration of the Term shall:

- not relieve the Bidder or the Buyer, as the case may be, of any obligations hereunder which expressly or by implication survive hereof; and
- except as otherwise provided in any provision of this Agreement expressly limiting the liability of either Party, not relieve either Party of any obligations or liabilities for loss or damage to the other Party arising out of, or caused by, acts or omissions of such Party prior to the effectiveness of such termination or expiration or arising out of such termination or expiration.

(ii) All obligations surviving termination or expiration of the Term shall cease on termination or expiration of the Term.

(h) Entire Agreement

This Agreement and the Annexure together constitute a complete and exclusive statement of the terms of the agreement between the Parties on the subject hereof, and no amendment or modification hereto shall be valid and effective unless such modification or amendment is agreed to in writing by the Parties and duly executed by persons especially empowered in this behalf by the respective Parties. All prior written or oral understandings, offers or other communications of every kind pertaining to this Agreement are abrogated and withdrawn.

(i) Severability

If for any reason whatever, any provision of this Agreement is or becomes invalid, illegal or unenforceable or is declared by any court of competent jurisdiction or any other instrumentality to be invalid, illegal or unenforceable, the validity, legality or enforceability of the remaining provisions shall not be affected in any manner, and the Parties shall negotiate in good faith with a view to agreeing to one or more provisions which may be substituted for such invalid, unenforceable or illegal provisions, as nearly as is practicable to such invalid, illegal or unenforceable provision. Failure to agree upon any such provisions shall not be subject to the dispute resolution procedure set forth under this Agreement or otherwise.

(j) No partnership

This Agreement shall not be interpreted or construed to create an association, joint venture or partnership between the Parties, or to impose any partnership obligation or liability upon either Party, and neither Party

shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, the other Party except as expressly provided under the terms of this Agreement.

(k) Third parties

This Agreement is intended solely for the benefit of the Parties and their respective successors and permitted assigns, and nothing in this Agreement shall be construed to create any duty to, standard of care with reference to, or any liability to, any person not a Party to this Agreement.

(l) Notices

Any notice or other communication to be given by any Party to the other Party under or in connection with the matters contemplated by this Agreement shall be in writing and shall be given by hand delivery, recognized courier, registered post, email or facsimile transmission and delivered or transmitted to the Parties at their respective addresses set forth below:

If to MOSPI:

Attn: <***>

Tel:

Fax:

Email:

Contact:

With a copy to:

If to the Bidder: Attn.

<***>

Phone: <***>

Fax No. <***>

(m) Language

All notices required to be given by one Party to the other Party and all other communications, documentation and proceedings which are in any way relevant to this Agreement shall be in writing and in the English language.

(n) Counterparts

This Agreement may be executed in two counterparts, each of which, when executed and delivered, shall constitute an original of this Agreement.

(o) Mitigation

Without prejudice to any express provisions of this Agreement on any mitigation obligations of the Parties, each of the Buyer and the Bidder shall at all times take all reasonable steps to minimize and mitigate any loss for which the relevant Party is entitled to bring a claim against the other Party pursuant to this Agreement.

(p) Removal of Difficulties

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The Parties acknowledge that it is conceivable that the Parties may encounter difficulties or problems in the course of implementation of the Project and the transactions envisaged under this Agreement. The Parties agree and covenant that they shall mutually discuss such difficulties and problems in good faith and take all reasonable steps necessary for removal or resolution of such difficulties or problems.

IN WITNESS WHEREOF THE PARTIES HAVE EXECUTED AND DELIVERED THIS

AGREEMENT AS OF THE DATE FIRST ABOVE WRITTEN.

SIGNED, SEALED AND DELIVERED SIGNED, SEALED AND DELIVERED

For and on behalf of the Implementation For and on behalf of the Buyer by: Agency by:

(Signature) (Signature)

(Name) (Name)

(Designation) (Designation)

(Address) (Address)

(Fax No.) (Fax No.)

In the presence of:

1.

2.