Statement of Intent
Between

National Rural Infrastructure Development Agency,
Ministry of Rural Development, Government of India

and

MSC
MicroSave Consulting

MSC India Consulting Private Limited

For

Design and strategic advisory for development of smart payment
solution for Pradhan Mantri Gram SadakYojna(PMGSY)

STATEMENT OF INTENT

Between National Rural Infrastructure Development Agency and MSC

This STATEMENT OF INTENT ("SOI") is entered on 13th September, 2021 by and between:

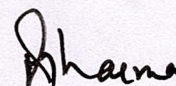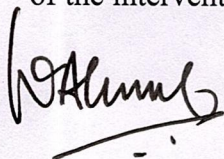1. **National Rural Infrastructure Development Agency,** having its Registered Office at 15 NBCC Tower, 5th Floor, Bhikaji Cama Place, New Delhi - 110066 (Hereinafter referred to as "NRIDA").

2. MSC India Consulting Private Limited having its registered office at 28/35, Princeton Business Park, 16 Ashok Marg, Lucknow-226001 (U.P.) India (hereinafter referred to as "MSC")

MSC and NRIDA are referred to individually as a "Party" and collectively as "Parties". Both Parties have reached the following intent:

PREAMBLE

WHEREAS:

1. NRIDA is a Registered Society operating under the Ministry of Rural Development (hereinafter referred to as MORD), Government of India mandated to provide technical assistance to regulate and implement the centrally sponsored scheme – Pradhan Mantri Gram Sadak Yojna (hereinafter referred to as "PMGSY")

2. MSC is an international consulting firm having offices at distinct locations across the globe that offers practical market-led solutions for government agencies, financial institutions and corporations focused on bringing value to the base of the pyramid.

3. MSC has received a consultancy project from Bill and Melinda Gates Foundation (hereinafter referred to as "BMGF") for implementing concepts of digital public financial management (PFM) and centrally sponsored schemes in India ("Project").

4. As part of the Project, MSC has proposed to provide strategic consulting services to NRIDA, as per the scope of work as mentioned in section 1.1 and 1.2 of Article 1 of this SOI and to achieve related objectives.

5. MSC along with BMGF has been involved in the discussions with MORD since January 2020 for discussing the potential of smart payments in PMGSY. MSC had conducted field visits and conducted a diagnostic study on the PMGSY scheme. The diagnostic study was submitted to MORD in November 2020. Consultations were held between the officials of NRIDA in February and March of 2021, where MSC introduced the concept of Smart payments and other related principles of digital PFM and gathered views regarding challenges faced during the implementation of the scheme. Subsequently, a meeting was held with the NRIDA officers on 17th April 2021, where MSC presented a conceptual view of the interventions which could potentially solve the existing challenges in PMGSY scheme

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implementation. Based on the discussion held in this meeting, MSC submitted a statement of work to NRIDA on 22nd June 2021. A virtual meeting was held between the officers of NRIDA and MSC on 15th July 2021, 4:00 PM (IST). The agenda of the meeting was to finalize the proposed scope of work and timelines. Basis the discussions as aforementioned, NRIDA confirmed its intent to engage MSC to provide strategic consulting services to NRIDA, as per the scope of work as mentioned in Article 1 of this SOI and to achieve related objectives.

6. This SOI details the potential support areas where MSC will support NRIDA for achieving objectives and deliverance's outlined as per the statement described in Article 1 and Annexure A of this document.

Article 1: Scope of Work, Roles, and Responsibilities

To advance this intent, MSC will support NRIDA in the following activities:
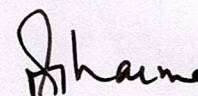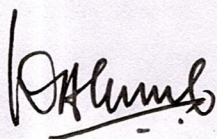
1.1 Key objectives

The design and support activities will be carried out with the following key objectives:

a) Identify gaps in the overall fund flow management at the national and state level (from MoRD to state/SRRDA/DPIU and payments to contractors) in the context of delays in the fund transfer and payment processing, float or shortages of funds, and utilization reporting and reconciliation.

b) Identify gaps in project monitoring and scheme IT system and to make OMMAS more user friendly.

c) Shortlist or identify functionalities that would address each of the identified challenges

d) Recommend functional requirement specifications, high-level design, and future vision document and implementation roadmap to conduct the proposed pilot

e) Propose a future vision document of potential of IT systems scale-up in PMGSY

1.2 Scope of Work

The scope will include conducting activities as per responsibilities mentioned in section 1.4 and activities mentioned in Annexure B and other activities necessary to formulate the deliverables mentioned in section 1.3 in regards to the following interventions:

a) **Smart payment engine (SPE)*:** Proposed SPE will be a module running if-then-else algorithms in the backend utilizing available inputs in electronic form as well as any other payment conditions and will include:
    -   A rule configurator for entering payment conditions
    -   Data input/feed and validation matrix which will run a compliance check

- Entitlement calculator for auto calculation of payout to vendor based on payment condition compliances
- Payment authorization matrix which will embed digital authorization/ signatures to enable the decision to pay once all payment conditions are validated

* SPE will effectively automate last mile payment processing and disbursement to road construction contractors and will capture payment conditions currently mandated by NRIDA for calculating and approving a payment to the vendor

b) **E-measurement book (eMB)**:** Proposed eMB will be part of the modular architecture to enable data entry at source by contractor and rules-based processing to aid inspection of compliances by PIU engineering staff while aligning with the needs of the OMMAS
- Enabling contractors to submit compliances digitally (material consumed, measurements, quality reports, etc.
- Defining locus of accountability for PIU engineers by limiting their role to only verification of submitted compliances
- Rules-based processing to aid PIU engineers in validating measurement data submitted by contractors

** CDAC team during our discussions mentioned of plans/ proposal to take up eMB. The same proposal or plan can be revisited in the light of recommended approach and can be considered for pilot test or PoC as a part of the proposed PMIS

c) **Single project registry (SPR)***:** Proposed SPR will be a reference data repository, based on the principle of Single Source of Truth, with data push and pull facility to enable access to real-time information to and from other applications:
- Project package (construction and maintenance plan)
- Scheduled rates
- Material and quantities
- Project delivery schedule
- Project status (physical and financial)
- Vendor quotations
- Payment schedule and conditions

*** CDAC is already working on the recommended project registry as part of a module under current PMIS pilot which may be further enhanced to capture proposed scope and functionality

d) **Recommendation for making User Interface of OMMAS more friendly and interactive**
MSC will suggest modification in user interface of OMMAS in consultation with NRIDA and NRIDA's software development agency for the purpose of making the interface more

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user friendly and interactive. The proposed suggestions will be included in the High level design (HLD) covering a),b) and c).

1.3 Design approach

Our approach will seek to introduce smart payment in order to address identified pain areas in scheme service delivery in construction phase covering a) post procurement project registry; b) construction progress reporting and validation; and c) payment processing and approval.

The solution design approach will be formulated in discussion with NRIDA officials and software development agency. The software development agency will work with MSC to finalize the FRS and agreed model for Proof of Concept (e.g. developing the proposed modules under section 1.2 externally allowing integration via API or developing them as part of the current system itself).

1.4 Deliverables

Following are the deliverables which will be given by MSC as a combined document for all three interventions defined in 1.2. A detailed workplan covering the following is provided in Annexure B.

S.No	Component	Deliverable	Timeline
1.	**Signing of SoI and kick-off meeting**	• Detailed project plan • Approved To-Be Processes	T* + 2 weeks
1.	**Functional requirement Gathering**	FRS document	T* + 14 weeks
2.	**Architecture and Design**	**High level design (HLD)** document (inclusive of strategic inputs for User interface modifications)	T* +22 weeks
		A vision document elaborating the following: • Implementation roadmap for proposed solutions on national scale • Future vision roadmap for growth potential of IT systems under PMGSY	T* + 22 weeks
3.	**Detailed System Design**	System change document or Software Requirement Specifications (strategic input only)***	T*+ 28 weeks**

Notes:

* "T" shall be the effective start date for the project post sign-off of this SoI by both NRIDA and MSC

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** Timelines are subject to change considering the following

- Availability of officials and data required
- Public holidays due to festivities/gazette holidays in offices
- COVID imposed restrictions in travel and meeting of personnel
- Any delay on account of Sign-offs or approvals by NRIDA and/or CDAC/ IT systems development agency hired by NRIDA
- Any other dependency external to MSC

*** The FRS document shall be developed by MSC in consultation and agreement with NRIDA and CDAC/ any other development agency as proposed by NRIDA. The functionalities proposed in FRS shall be detailed for CDAC/ any other software development agency to use as a reference document at the time of software development. In order to achieve such an objective, NRIDA shall facilitate a sign-off and agreement on the FRS document from CDAC/any other development agency. Further, NRIDA may instruct CDAC or any other development agency to prepare the System Change document / SRS and MSC will provide the required inputs or support during that phase. MSC will also provide their inputs / support during the User Acceptance Test phase (UAT) phase of implementation of the project, even if it is beyond the tenure of the project.

1.5 Roles and Responsibilities

#	Activity	MSC	NRIDA
A	**Signing of SoI and kick-off meeting**		
1.	a) Agree on scope and role and responsibilities of MSC and NRIDA/MoRD b) Signing of SOI kick off the project c) Create a governance structure for timely progress reviews and decision making necessary for implementing the proposed interventions under PMGSY	**Tier 1 (Monthly Review)** ✓ Deputy Director/ Program Officer, BMGF ✓ Partner, MSC ✓ Project Manager/Associate Partner, MSC ✓ Lead Advisor/Associate partner, MSC ✓ Track lead/Manager, MSC **Tier 2 (Fortnightly Review)** ✓ Partner, MSC ✓ Lead Advisor/Associate partner, MSC ✓ Project Manager/Associate partner, MSC ✓ Track Leader/Manager,	• Structure proposed **Tier 1 (Monthly Review)** ✓ JS, MoRD (PMGSY) **Tier 2 (Fortnightly Review)** ✓ Director General /JS, MoRD (PMGSY) ✓ Directors (IT, Finance, Admin, Quality) ✓ Deputy Directors (IT, Finance, Admin, Quality) **Tier 3 (Day-to-day liaison)** ✓ Nodal Officer (designated by NRIDA/MoRD)

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#	Activity	MSC	NRIDA
		MSC **Tier 3 (Day-to-day liaison)** ✓ Track Leader/Manager, MSC	
B	**Functional Requirement Gathering**		

2	Study existing processes and systems for interventions 1, 2,3 and any other interventions mutually decided with key stakeholders to align the solution design with user or stakeholder requirements including:
	a) RBI, MoF, and CAG
	b) Software development agency, NIC and in-house IT team
	c) State Rural Roads Development Agency
	d) Project Implementation unit
	e) Project Management Consultants (PMC)
	f) Contractors
	g) Quality monitors – NQM and SQM
	h) Other consultants and/or authorities concerned
		• Introduce or ideate smart payment as well as JIT fund release with key stakeholders
		• Conduct of stakeholder consultations
		• Presentation of findings to NRIDA/MoRD for consensus
		• Document user requirement specifications for all the three interventions
			• Facilitate discussions with the identified stakeholders
			• **Lead and coordinate meetings** and **approvals with relevant** stakeholders (listed and others if any) to form consensus on recommended model/ approach
			• Provide necessary domain inputs
			• Provide necessary data for requirement analysis
			• Official sign-off and administrative approvals for the user requirement phase on the FRS covering the following:
			  - User roles
			  - System functionalities
			  - Process changes
			  - Govt. process reengineering suggestions

#	Activity	MSC	NRIDA
C	**Architecture and Design**		
3	Prepare a high-level design (HLD) document working with the IT team on-boarded by NRIDA	- Define **technology architecture** **Lead and develop a high level design** for all three interventions and integration approach - Making OMMAS UI more user friendly.	**Facilitate coordination** with necessary stakeholders (third party vendor/software development agency/NIC) - Provide sign-off on requirement documents
4	Finalize implementation approach for the proposed three interventionsand future vision document	**Prepare development and implementation plan** including - Intervention deployment plan - Pilot implementation plan - Roll-out or scale up-approach - Future vision document and IT vision roadmap	- Engage Software development agency responsible for the development of three intervention modules and integration of the same with PMIS/OMMAS and eMARG - Sign-off on development and implementation plan
D	**Detailed system design**		
5	Finalize design documents (SRS) for all three interventions	Provide strategic advisory and design inputs to the software development agency engaged by NRIDA for developing the proposed three interventions and ensure compliance to FRS	**Ensure software development agency engaged drafts the SRS/system change** document based on strategic inputs from MSC - Sign-off on the SRS documents

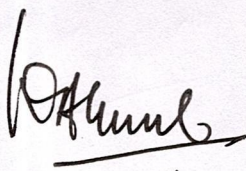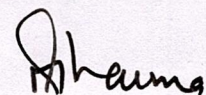### Article 2: Tenure

2.1 Tenure

This statement of Intent becomes effective from the date of its signature by the participants and will remain valid for a period of 12 months after which it can be further extended with mutual consent.

Article 3: Terms

3.1 Both Parties shall be responsible for meeting their own expenses in connection with all

matters related to this SoI and there would be no financial liability on either party to defray to the other party.

3.2 Any desired modification(s) in this SoI would be carried out by mutual consent between both the parties in writing.

3.3 BMGF will be involved in the monthly review of the engagement. Detailed governance structure is presented at Annexure A.

Article 4: Confidentiality, ownership, publishing and branding of reports

Confidentiality, Ownership, Publishing and Branding

4.1 Ownership of all data sets from the time of start of the MSC's engagement is of NRIDA. MSC would not retain any non-anonymized data with itself or share the same with any entity other than NRIDA.

4.2 MSC will not either share data or any information obtained during the engagement with or publish the progress, findings and learning experiences from the engagement without prior approval of NRIDA in writing.

4.3 MSC shall use the logo/branding of NRIDA only after prior permission in writing.

Article 5: Termination & Non-Binding Nature
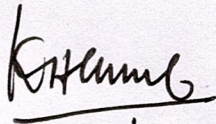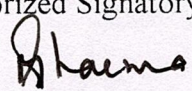
5.1 Termination for Convenience:

Either party may terminate this Statement of Intent by giving a one-month notice to the other parties.

5.2 Non-Binding nature

This SoI is not intended to create any legally binding obligations on either Party. This SoI replaces and supersedes any prior understandings, communications and representations whether verbal or written. This SoI may only be amended by execution of a written document duly signed by the authorized representatives of both parties.

IN WITNESS WHEREOF the Parties have executed this SoI by their duly authorized representatives in the manner below the day and year first above written.

For National Rural Infrastructure Development Agency	For MSC India Consulting Private Limited
Authorized Signatory	Authorized Signatory
Name (DEEPAK ASHISH KAUL)	Name Manoj K. Sharma
Designation (DIR FA)	Designation Managing Director

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Annexure A –Governance Structure

Following is the governance structure for the engagement:

Roles & Responsibilities

Steering Committee
- Review overall project status
- Ensure project alignment with overall vision and strategy

Program Management Team
- Review project progress & key issues
- Set future direction & make critical decisions
- Review risks and take measures to mitigate
- Review KPIs & metrics to monitor delivery

Implementation team
- Monitor project execution
- Monitor performance on SLAs
- Resolve delivery issues
- Review monthly projects

Interactions

Steering Committee
- Monthly reporting
- Conflict resolution
- Strategic decision making
- Convergence planning

Program Management Team
- Monthly meetings and progress reports

Implementation team
- Fortnightly progress updates
- Daily coordination of tasks

(Members)

Steering Committee
- Director General, NRIDA
- Nodal Director, NRIDA
- Deputy Director, (BMGF)
- Program Officer (BMGF)
- Partner - Govt. and Social Impact (GSI)- (MSC)
- Infrastructure lead- GSI, Associate Partner (MSC)
- Project Manager, (MSC)
- Technology lead- GSI(MSC)
- PFM Expert (MSC)

Program Management Team
- Director - Projects/Admin/Finance/Quality/IT
- Deputy Director(s) (as decided by NRIDA)
- Infrastructure lead (MSC)
- IT specialist (MSC)
- Track lead,(MSC)
- Research specialist (MSC)

Implementation team
- Nodal SPOC , Projects department ,NRIDA
- Nodal SPOC, IT team, NRIDA
- Nodal SPOC, CDAC local team
- Track lead, (MSC)
- Research specialist (MSC)
- IT specialist (MSC)
- IT expert (MSC)

S.No.	Component	M1	M2	M3	M4	M5	M6	M7
1	**Signing of SOI and Kick-off Meeting**							
1.1	Create a detailed project plan, Governance structure for timely progress reviews and decision making necessary for implementing the proposed interventions under PMGSY							
Deliverable: Detailed project plan and Approved To-Be Processes (T+2 Weeks)		★						
1.2	Consensus and sign-off on detailed Plan, governance structure and proposed To-Be process for implementing smart payments	★						
2	**Functional requirement gathering**							
2.1	Preliminary study - Overview of scheme processes & digital IT systems in use							
2.2	Consultation with the following stakeholders: a) RBI, MoF, and CAG b) SOFTWARE DEVELOPMENT AGENCY, NIC and in-house IT team c) State Rural Roads Development Agency d) Project Implementation unit e) Project Management Consultants (PMC) f) Contractors g) Quality monitors – NQM and SQM h) Other consultants and/or authorities concerned							
2.3	FRS document preparation							
Deliverable: FRS document Submission (T+14 weeks)					★			
2.4	FRS document sign-off (T+16 weeks)					★		
3	**Architecture and Design**							
3.1	Prepare a High-level design (HLD) document working back with the CDAC or IT team on-boarded by NRIDA							
3.2	Finalize future vision roadmap for growth potential of IT systems and deployment of technological solutions in PMGSY and implementation							

S.No.	Component	M1	M2	M3	M4	M5	M6	M7
	roadmap for the proposed three interventions							
Deliverable: High-level design document (T+22 weeks)							★	
Deliverable: Implementation roadmap and vision document(T+22 weeks)							★	
3	**Detailed system design**							
3.1	Provide strategic input to CDAC or IT vendor of NRIDA to create System change document / SRS for all three interventions							
Deliverable: System Change Document / SRS (T+28 weeks)								★

★	MSC responsibility
★	NRIDA and CDAC/ NRIDA's IT Vendor responsibility