## Government eMarketplace (GeM)

## GeM SOP – MoU State onboarding and operations through SGPA

Version 4.0







## Table of Contents

1. Metadata of the Standard	.4
2. Abbreviation	. 5
3. Introduction	.6
4. Scope	.6
5. Procedure	.6
5.1. Onboarding	.7
5.1.1. Nominate and authorize	.7
5.1.2. Opening of SGPA	.7
5.1.3. Registration	.8
5.1.4. Integrate	. 8
5.2. Operations	.8
5.2.1. Order placement on GeM	.9
5.2.2. Payment to supplier	.9
6. Roles and responsibilities	.9
7. GeM- service levels	10
8. Annexure 1 – Core elements of SGPA including its operations	11
9. Annexure 2 – Registration of Buyers	14
10. Annexure 3 – Pre-requisite for opening SGPA	17
11. Annexure 4 – Order placement process on GeM	18
12. Annexure 5 – Process of payment to Supplier	19
13. Annexure 6 – GeM – Service levels	20
14. Annexure 7 – Web Service required for integration with Banks for payment through SGPA	21
14.1. Pool Account Validation	21
14.1.1. Description of the interface	21
14.1.2. Input parameters	21
14.1.3. Output fields	21
14.1.4. Method of Integration	22
14.1.5. Error handling	22
14.1.6. Where it is invoked	22
14.2. VAN DDO/Treasury Officer/Buyer Mapping	22
14.2.1. Description of the interface	22
14.2.2. Input parameters	22
14.2.3. Output fields	23
14.2.4. Method of Integration	23
14.2.5. Error handling	23
14.2.6. Where it is invoked	24



14.3.	Balance Enquiry and Fund Blocking24
14.3.1.	Description of the interface24
14.3.2.	Input parameters24
14.3.3.	Output fields24
14.3.4.	Method of Integration25
14.3.5.	Error handling25
14.3.6.	Where it is invoked25
14.4.	Block-Unblock Amount
14.4.1.	Description of the interface
14.4.2.	Input parameters
14.4.3.	Output fields27
14.4.4.	Method of Integration
14.4.5.	Error handling27
14.4.6.	Where it is invoked
14.5.	Payment Instruction
14.5.1.	Description of the interface
14.5.2.	Input parameters
14.5.3.	Output fields
14.5.4.	Method of Integration
14.5.5.	Error handling
14.5.6.	Where it is invoked
14.6.	Payment Status
14.6.1.	Description of the interface
14.6.2.	Input parameters
14.6.3.	Output fields
14.6.4.	Method of Integration
14.6.5.	Error handling
14.6.6.	Where it is invoked
14.7.	Challan Generation
14.7.1.	Description of the interface
14.7.2.	Input Parameters
14.7.3.	14.7.2 Method of Integration
14.7.4.	14.7.3 Where its invoked
14.8.	14.8 Security
14.8.1.	Description



## **1. Metadata of the Standard**

S. No.	Data elements	Values
1.	Title	GeM SOP - MoU State onboarding and operations through
		SGPA, Version 4.0
2.	Drafted by	Upmith Singh, Vice President, GeM
3.	Approval	Competent authority of GeM
4.	Publisher	GeM
5.	Brief Description	This document covers the SOP for on-boarding MoU State, including the State PSU, Corporation and autonomous bodies. It defines the steps that will be traversed right from prerequisites to transaction closure.
6.	Target Audience	<ul><li>Designated officer of State</li><li>GeM officials</li><li>SGPA Bank</li></ul>
7.	Document Number	GeM/SOP/ MoUState/V4.0
8.	Total number of pages	Thirty



## 2. Abbreviation

S.No.	Abbreviation	Description
1.	CRAC	Consignee receipt and acceptance certificate
2.	GeM	Government eMarketplace
3.	DP	Delivery Period
4.	JSON	JavaScript Object Notation
5.	SGPA	State GeM Pool Account
6.	FMS	Financial Management System
7.	PRC	Provisional receipt certificate
8.	PSU	Public Sector Undertaking
9.	RA	Reverse Auction
10.	SBI	State Bank of India
11.	SLA	Service level agreement
12.	SOP	Standard operating procedure
13.	T&C	Terms and condition
14.	VAN	Virtual account number



## **3. Introduction**

GeM as on 13<sup>th</sup> April 2018 has signed MoUs with twenty two states and UTs for exclusive procurement through GeM. As a next step to the MoU, the state, as a single entity, is required to be on-boarded on the GeM platform as a buyer. To operationalize the MoU terms and conditions for procurement on GeM, the state's finance management system will be integrated with GeM (desirable), so that individual buyers from the state can be part of the state pool of buyers (if not already registered). As part of this onboarding process, the state will be required to open its State GeM Pool Account (SGPA), with a bank of its choice (from the list of banks which are integrated with GeM). This SGPA will be open, operated and maintained by the State for all its procurement on GeM in adherence to the procedure, terms and conditions of procurement therein.

## 4. Scope

The scope of this document, is to bring out the process that would be followed by State and GeM during the:

- 1. Onboarding process:
  - a. Nomination and authorization of Nodal Officer for SGPA opening and authorization.
  - b. Opening of SGPA in listed Banks (on GeM)
  - c. Registration of buyers/DDO/Treasury officer with State IDs
  - d. Integration of the State financial management system with GeM for information sharing (Desirable).
- 2. Operation phase:
  - a. Transfer of funds in SGPA by the buyer's DDO/ Treasury officer.
  - b. Demand generation and placing of order on GeM platform
  - c. Acceptance, CRAC generation and payment to supplier from SGPA.
  - d. Refund due to cancellation / rejection etc

### **5. Procedure**

The lifecycle of a MoU State on GeM is categorized into two major stages ie onboarding and operations. The onboarding process is a one-time activity for a MoU State (expect for the onboarding of new/ replacement buyers) whereas the operations stage would be required for



each transaction on GeM. The word transaction implies "a uniquely identifiable order on GeM". The various sub stages under the two are as follows:



### 5.1.Onboarding

The following are the key sub-stages in the onboarding stage:

#### **5.1.1. Nominate and authorize**

The MoU State would nominate and authorize a Nodal Officer for GeM, not below the rank of Secretary, to open and authorize the "State GeM Pool Account (SGPA)".

#### 5.1.2. Opening of SGPA

GeM currently is in advance stages for integration with multiple banks, for acting as the SGPA provider. The MoU State can select any one bank (which have already signed MoU with GeM) as their provider for GPA. The pre-requisite for opening of SGPA is provided at Annexure-3 of this document. Once selected, the MoU State would open and operate the SGPA in line with:

- 1. MoU signed between the State and GeM
- 2. Core elements of the SGPA as placed in Annexure- 1 of this document
- 3. Terms and conditions of procurement on GeM
- 4. Using the web services as defined in Annexure -7 of this document



#### 5.1.3. Registration

All the users- buyers/DDO/Treasury Officer needs to be registered on GeM Platform prior to procurement. Detailed process of registration of buyers on GeM platform, including requirements etc are provided at Annexure -2.

#### 5.1.4. Integrate

The MoU State's finance management system may be integrated with the GeM platform for seamless information sharing.

#### **5.2.Operations**

The MoU State's operation (ie transactions on GeM) is an ongoing process on the GeM platform. It is clarified that in lines with GeM T&C on procurement, this single SGPA would be utilized for all procurement of value above INR 10 Lakhs, mandatory through the pool account and optional at the discretion of the entity for all procurement of value upto INR 10 Lakhs, by all the buyers of that MoU State ie:

- a. The state Departments
- b. State PSUs
- c. State Corporations
- d. State Local Bodies
- e. State Autonomous Bodies

The SGPA would provide for creation of unlimited transaction accounts within the SGPA to uniquely identify and manage the funds for each order/ transaction on GeM. Each procurement by the MoU State is referred to as a uniquely identified transaction on GeM portal.

Other buyers from the state such as State PSUs, State Corporations, State Local Bodies, State Autonomous Bodies etc. who have bank accounts for operations, will also be required to credit the 80% of the required estimated amount into the SGPA for any single procurement order greater than INR 10 Lakhs.



#### 5.2.1. Order placement on GeM

Once the 80% of the estimated cost of procurement value is transferred from the MoU State's FMS/ bank account to State Gem Pool Account, GeM will verify online, the availability of funds from the bank. Once confirmed GeM would allow the MoU State Buyer to create the draft e-bid/ reverse auction as the case may be, through the GeM Platform. Once draft BID/ RA is created, 80% of funds are tagged/ blocked as per the estimated order value; the buyer may now publish the BID/ RA & place the order to the successful bidder (decided through the system). In case the balance in SGPA is less than the order value at order creation stage, GeM will not allow the buyer to place the order until the account is recouped with the remaining balance. The consignment delivery would be initiated by the supplier as per the schedule of contract (The SLA for the contract starts from the date of contract successfully generated & e-signed by the buyer). The process flow for placement of order on GeM is placed at Annexure – 4.

#### **5.2.2. Payment to supplier**

The payment process is triggered post the successful supply, acceptance and online issuance of CRAC by the consignee as per the timelines prescribed. Once the CRAC is issued online on the GeM platform, a system generated bill is created on the basis of CRAC which will be processed by the DDO/Treasury Officer online for the payment through State GeM Pool Account. Online instruction for debiting the requisite fund against the contract for transfer to beneficiary account i.e. seller's account, is routed through GeM portal to SGPA managing bank. Against one contract, multiple payment cycle may be initiated as per the delivery of consignment, acceptance and CRAC. Payment process is triggered by the buyer, through the GeM portal in normal scenario as per the terms and conditions of procurement on GeM. The process of payment to the supplier is placed at Annexure – 5.

## 6. Roles and responsibilities

The diagram below depicts the roles and responsibilities of the MoU State, GeM and Bank:



## 7. GeM- service levels

GeM

The service levels for procurement on GeM are placed at Annexure - 6



## 8. Annexure 1 – Core elements of SGPA including its operations

The following are the core elements of SGPA that should be incorporated during the opening and operations (procurement and payment stages):

- 1. The MoU State will open the SGPA (as a saving account) which will be utilized by buyer through the platform owned and maintained by GeM SPV, as per SLA, and solely for procurement of goods and services on GeM.
- 2. The terms and conditions of procurement on GeM will be part of the operations manual between bank and the MoU State.
- 3. Only one SGPA would be utilized for all transactions on GeM by all the buyers of that MoU State.
- 4. The SGPA is a mother account with sub-accounts / transaction specific accounts for each transaction that is routed through the SGPA
- 5. The role of the bank will be limited to ensuring operations of the account on the instruction of the MoU State through the authorized MoU State nodal officer for GeM /buyer.
- 6. Real time details of all operations of the account will be shared by the bank, in mutually accepted format (to be amended from time to time) with the MoU State, only through the GeM Platform.
- Once a sub-account / transaction specific account is credited with an amount, the MoU State cannot withdraw this amount, apart from transfer to the designated supplier, till such time that the transaction is live.
- 8. Any withdrawal / transfer by the MoU State from this account, except for payment to the supplier, would be permitted in the following conditions
  - a. Order cancellation
  - b. Order rejection
  - c. Refund

All the above situations would first be required to be enabled/ flagged on the GeM Platform for the MoU State to be able to act accordingly.

- 9. Any fund in the SGPA should be non-lapsable.
- 10. On authorization of a payment to the supplier by the MoU State Nodal officer for GeM/ buyer, the bank should transfer the prescribed amount to the supplier mapped in the transaction.



- 11. In case of a SLA breach on the part of the MoU State in terms of payments to the supplier, GeM will intimate the buyer and bank on the same. Post such intimation, and non-action on the part of the MoU State with respect to payment transfer, bank will release 80% of the amount (or as notified in the terms and conditions of procurement on GeM) to the supplier mapped in the transaction. Such a provision is required to be incorporated in SGPA and should be considered as a standing instruction from the MoU State to the bank. The residual amount cannot be withdrawn / transferred by the MoU State, in such cases. Post remaining processing, all such remaining due payments will be made to the supplier for such transactions. The process to be followed in case of SLA breach under various scenarios is provided below:
  - a. In case, even after 10 days of issue of CRAC, the buyer has not initiated the payment process through the GeM platform, a payment trigger will be automatically generated for payment equivalent to 80% of the consignment value deduced by the system as per CRAC. Simultaneously intimation will be sent to the HoD, buyer and MoU State Nodal officer for GeM, regarding the release of payment, at their risk and cost in line with the T&C and SLA of procurement on GeM. The residual payment of 20% is to be processed by the buyer within 35 days after adjusting for any statutory deduction and damages, failing which after 35 days, the same will be released to the supplier automatically through an alert to the bank by the GeM Platform, after statutory deductions and any system know deductions.
  - b. If the consignee does not issue PRC within 48 hours of actual receipt of consignment, the supplier can upload the consignee receipt for the transaction on the GeM Portal. For such cases the system will generate alert to the consignee to issue PRC & CRAC within stipulated time line set in T&C and SLA of procurement on GeM.
  - c. In case the consignee does not respond to the system generated alerts and action requirements, after the GeM specified time period, alerts and auto escalation will be initiated as per escalation matrix specified below:
    - i. Level 1 Upto 3 days Consignee
    - ii. Level  $2\,$  4 and  $5^{th}\,day-Consignee$  and Buyer
    - iii. Level 3 6<sup>th</sup> to 10<sup>th</sup> day Consignee, Buyer, DDO/ Treasury Officer and MoU
      State Nodal Officer for GeM



- d. Post generation of CRAC, the buyer has 10 days to authorize the payment to the supplier through the GeM Platform, failing which, the GeM Portal auto initiated payment process as elaborated in point a above will be triggered.
- e. Unutilized funds after closure of the Contract will be at disposal of nominated MoU State nodal officer, who may advise banker for further action as deemed fit.

Note: All days mentioned are calendar days



## 9. Annexure 2 – Registration of Buyers

Government User Registration on GeM can be divided into two parts:

- 1. Primary User Registration
- 2. Secondary Users Registration

Sl No.	List of Documents/Information	Remark
1	Official email ID (NIC/ GOV email Id or organization	These requirements are
	domain email ID)	mandatory for primary
2	Aadhaar Number	user registration on GeM
3	Mobile number(linked with Aadhaar number)	portal.

The process flow of registration of buyers on GeM is depicted in the diagram below:





Primary user should be an Officer of the rank of Deputy Secretary (**Grade pay – 7600 6<sup>th</sup> CPC**) to GOI or equivalent or Head of the Officers at Sub Center / Unit / Branch of Government Organization / PSU / Autonomous Bodies / Local Bodies / Constitution Bodies / Statuary Bodies. Primary user will also be required to fill following information:

- 1. Organization details like Type of organization/Ministry/Department/Name and complete address of organization.
- 2. Information about mode of payment to be used by organization
- 3. After inputting the SGPA account number, against a state, by the GeM Admin, a web service will validate the entered account number from the respective bank.
- 4. Information Designation and employee id (if any).

Following Details of verifying officer/Authority (\*):

1. Name

GeM

- 2. Designation
- 3. Aadhaar Linked mobile number(mandatory)
- 4. Official email ID (nic/gov email Id or organization domain email ID)

Verifying officer/Authority: Verifying officer/authority may be an officer form administrative wing of the organization, either superior or subordinate to the primary user. He should be an officer of the rank of undersecretary (**Grade pay – 6600 6<sup>th</sup> CPC**) or equivalent.

#### Note: private Email id like Gmail, yahoo etc cannot be used for primary user registration.

#### 2. <u>Secondary User Registration(Requirements):</u>

Primary user after registering himself as primary user can add secondary users. There are three roles/ category of secondary users on GeM portal.

- a. **<u>Buyer:</u>** Buyer will place the order and will generate the contract.
- b. <u>**Consignee:**</u> Consignee will generate the CRAC and PRC.
- c. **DDO/ TREASURY OFFICER:** DDO/Treasury Officer will make the payment for the buyer in line with the T&C and SOP requirements.

#### **Requirements:**

- a. Officer at the rank of Section officer and above.
- b. Name, official email id and designation
- c. Aadhaar Linked mobile number(mandatory)

Note:



- a. Buyer and consignee role can be assigned to the same officer but DDO/Treasury Officer role cannot be assigned to buyer or consignee.
- b. Primary user cannot add him-self as secondary user in any role.



## **10.** Annexure **3** – Pre-requisite for opening SGPA

Roles and Responsibilities									
#	Description	Responsibility							
1	Providing the web services/ data for	These services need to be							
	department lists, budgets head details and	provisioned and provided by the							
	transfer of funds to SGPA	respective MoU State.							

#### For MoU State Registration in GeM

- To get the List of all departments with DDO/Treasury Officer code mapping This web service is required to display the list of departments of MoU State at the time of govt. buyer registration.
- 2. To get the budget heads details of selected department These heads will be further available for selection to the buyer for transfer of funds to SGPA account at the time of procurement.





## **11. Annexure 4 – Order placement process on GeM**

The process flow for placement of order on GeM is provided below:





## **12. Annexure 5 – Process of payment to Supplier**

The overall process flow of payment to the supplier is provided below:





## **13. Annexure 6 – GeM – Service levels**

The major services levels for procurement on GeM are as follows:

Sl No	Description	SLA (in calendar days)
1.	Delivery Period	As decided by the buyer and defined in the contract
2.	Invoicing	Before dispatch
3.	Delivery at consignee end	Within the delivery period as identified in the contract
4.	PRC	Within 48 hours of delivery at consignee end
5.	CRAC	Within 10 days from delivery at consignee end
6.	Payment generation	Within 10 days from generation of CRAC



## 14. Annexure 7 – Web Service required for integration with Banks for payment through SGPA

Below are the details of the web services which bank need to develop after signing the MoU with the respective State.

#### **14.1. Pool Account Validation** 14.1.1. Description of the interface

Purpose of this interface is to validate the pool account number shared by Buyer as valid account and the owner of the account is same as per the details shared on GeM portal by Buyers. On receipt of the details from banks, GeM will allow Buyer to move ahead with registration process. Once GeM receives the result from RESTFUL layer the same will be persisted in database. This web services will have to be created by Banks and GeM will consume the same during Buyer Registration Process.

#### 14.1.2. Input parameters

Field Name	Length	Туре	Mandatory	Values	Parent Element
Body					
GeMReqID	20	String	TRUE	Request ID generated by GeM	body
BuyerSTATECode	5	String	TRUE	STATE Code	body
BuyerPoolAcctNo	40	Numeric	TRUE		body
IFSCode	11	String	OPTIONAL		body
AccountHolderName	100	String	TRUE	Without any Special Character	body

#### 14.1.3. Output fields

Field Name	Length	Туре	Mandatory	Values	Parent Element
Body					
GeMReqID	20	String	TRUE	GeM Request ID	body
BankTransID	40	String	TRUE	Bank Transaction ID	body
BuyerSTATECode	5	String	TRUE	STATE Code	body
BuyerPoolAcctNo	40	Numeric	TRUE		body
IFSCode	11	String	TRUE		body
AccountHolderName	100	String	TRUE	Without Special Character	body
AccountStatus	1	String	TRUE	V – Valid, I – Invalid	body
Status	1	String	TRUE	S – Success, F - Failed	body
Remarks	200	String	TRUE	Banks to share the reason of failure	body



#### 14.1.4. Method of Integration

GeM

GeM will make a call to web service exposed by RESTFUL layer which will internally make call to the Bank Service exposed by Banks. RESTFUL layer will immediately respond back with the Bank response synchronously.

#### 14.1.5. Error handling

In case RESTFUL doesn't receive the response back from Bank Service in time or for some reason call to Bank Service fails then same will be notified to the GeM with proper return code and message. Same will be persisted in database.

#### 14.1.6. Where it is invoked

Whenever buyer is getting on-boarded in GeM, the online check to validate Pool Account will be triggered. In case of invalid account details, GeM will not allow buyer to go ahead with registration process. This will be a synchronous call so it will not allow the user to continue with next activity till GeM gets the response back from RESTFUL. Once we receive the response from bank Service, immediately the same will be reflected on the screen.

#### 14.2. VAN DDO/Treasury Officer/Buyer Mapping 14.2.1. Description of the interface

Purpose of this interface is to register the DDO/Treasury Officer, newly created by buyer during registration process. On receipt of the details from bank, GeM will map the Virtual Account Number (VAN) with respective DDO /Treasury Officer ID. Once GeM receives the result from RESTFUL layer the same will be persisted in database. This web services will have to be created by Banks and GeM will consume the same during Buyer Registration Process.

#### **14.2.2. Input parameters**

Field Name	Length	Туре	Mandatory	Values	Parent Element
Body					
GeMReqID	20	String	TRUE	Request ID generated by GeM	body
BuyerSTATECode	5	String	TRUE	STATE Code	body
BuyerPoolAcctNo	40	Numeric	TRUE		body
IFSCode	11	String	TRUE		body



Field Name	Length	Туре	Mandatory	Values	Parent Element
AccountHolderDesignation	100	String	TRUE	Without Special	body
				Character	
BuyerID	20	String	TRUE		body
BuyerDepartment	100	String	TRUE		body
DDO/Treasury Officer	10	String	TRUE		body
Code					

#### 14.2.3. Output fields

Field Name	Length	Туре	Mandatory	Values	Parent Element
Body					
GeMReqID	20	String	TRUE	Request ID	body
				generated by GeM	
BankTransID	40	String	TRUE	Bank Transaction	body
				ID	
BuyerSTATECode	5	String	TRUE	STATE Code	body
BuyerPoolAcctNo	40	Numeric	TRUE		body
IFSCode	11	String	TRUE		body
AccountHolderDesignation	100	String	TRUE	Without Special	body
				Character	
BuyerID	20	String	TRUE		body
BuyerDepartment	100	String	TRUE		body
DDO/Treasury Officer Code	10	String	TRUE		body
DDO/Treasury Officer	20	String	TRUE		body
RegistrationNo					
Available Balance	15.2	Numeric	TRUE		body
Status	1	String	TRUE	S – Success, F -	body
				Failed	-
Remarks	200	String	TRUE	Banks to share the reason of failure	body

#### 14.2.4. Method of Integration

GeM will make a call to web service exposed by RESTFUL layer which will internally make call to the Bank Service exposed by Banks. RESTFUL layer will immediately respond back with the Bank response synchronously.

#### 14.2.5. Error handling

In case RESTFUL doesn't receive the response back from Bank Service in time or for some reason call to Bank Service fails, then same will be notified to the GeM with proper return code and message. Same will be persisted in database. The list of expected return codes and description is mentioned above in output fields table.



#### 14.2.6. Where it is invoked

Whenever buyer is registering a user as a new DDO/Treasury Officer in GeM, the online details of DDO/Treasury Officer with DDO/Treasury Officer Code will be triggered to the respective banks. In case of invalid account details, GeM will not allow buyer to go ahead with registration process for that session. This will be a synchronous call so it will not allow the user to continue with next activity till GeM gets the response back from RESTFUL. Once we receive the response from bank Service, immediately same will be indicated on the screen.

#### **14.3. Balance Enquiry and Fund Blocking** 14.3.1. Description of the interface

Purpose of this interface is to enquire the balance of the pool account of Buyer and Fund Blocking for shared contract details. On receipt of the details from banks this will be validated against the amount of e-bid / order by GeM. Once GeM receives the result from RESTFUL layer the same will be persisted in database. Based on the result received from Bank, GeM can take appropriate action against the e-bid /order raised by the buyer.

Field Name	Length	Туре	Mandatory	Values	Parent Element
Body					
GeMtransID	20	String	TRUE	Transaction ID generated by GeM	body
GeM Unique Reference Number	20	Numeric	TRUE	Unique reference number generated by GeM	body
BuyerStateCode	5	String	TRUE	State Code	body
BuyerTreasuryCode	20	String	OPTIONAL	StateTreasury Code	body
BuyerPoolAcctNo	40	Numeric	TRUE		body
IFSCode	11	String	TRUE		body
AccountHolderDesignation	100	String	TRUE		body
DDO/Treasury Officer RegistrationNo	20	String	TRUE		body

#### **14.3.2. Input parameters**

#### 14.3.3. Output fields



Field Name	Length	Туре	Mandatory	Values	Parent Element
Body					
GeMtransID	20	String	TRUE	Transaction ID generated by GeM	body
GeM Unique Reference Number	20	Numeric	TRUE	Unique reference number generated by GeM	body
BankTransID	40	String	TRUE	Bank Transaction ID	body
BuyerStateCode	5	String	TRUE	STATE Code	body
BuyerTreasuryCode	20	String	OPTIONAL	STATE Treasury Code	body
BuyerPoolAcctNo	40	Numeric	TRUE		body
DDO/Treasury Officer	20	String	TRUE		body
RegistrationNo					
IFSCode	11	String	TRUE		body
AccountHolderDesignation	100	String	TRUE		body
AvailableBalance	15.2	Numeric	TRUE		body
Status	1	String	TRUE	S – Success, F - Failed	body
Remarks	200	String	TRUE	Banks to share the reason of failure	body

#### **14.3.4. Method of Integration**

GeM will make a call to web service exposed by RESTFUL layer which will internally make call to the Bank Service exposed by Banks. RESTFUL layer will immediately respond back with the Bank response synchronously.

#### 14.3.5. Error handling

In case RESTFUL doesn't receive the response back from Bank Service in time or for some reason call to Bank Service fails then same will be notified to the GeM with proper return code and message. Same will be persisted in database. The list of expected return codes and description is mentioned above in output fields table.

#### 14.3.6. Where it is invoked

Whenever buyer goes for bid / order generation in GeM, the online check to enquire balance of Pool Account and blocking of funds will be triggered. In case of cancellation of bid / order in GeM, the online check to unblock the funds against cancelled order will be triggered. This will be a synchronous call so it will not allow the user to continue with next activity till we get the response back from RESTFUL. Once we receive the response from bank Service, immediately same will be indicated on the screen.



Purpose of this interface is to block or unblock the funds of order from the DDO/Treasury Officer Registered No of its respective pool account of Buyer before closing the order. On receipt of the details from Banks, GeM will decide if buyer can close the order or not.

#### 14.4.2. Input parameters

Government Marketplace

Field Name	Length	Туре	Mandatory	Values	Parent
Rody					Element
CoMPagID	20	String	TDUE	GaM Baguast ID	body
CoMUnique	20	Numaria		Unique reference number	body
Delvi Ullique Deference Number	20	Numeric	IKUE	compared by CoM	body
	20	String	TDUE	generated by Gelvi	hadr
DDO/ Treasury	20	Sumg	IKUE		body
Officer					
RegistrationNo	20	<b>a</b>	ODTIONAL		1 1
FundBlockTransID	20	String	OPTIONAL	Fund Block Transaction ID	body
	~	<b>Q</b> , 1		generated by Bank	1 1
BuyerSTATECode	5	String	TRUE	STATE Code	body
SupplyOrderNo	30	String	TRUE		body
BuyerID	10	String	TRUE		body
BuyerDept	30	String	TRUE	Department of buyer	body
DDO/Treasury	10	String	TRUE		body
Officer Code					
BudgetHead		JSON	TRUE	This information will be	body
				sent as a part of JSON and	
				bank need to store this	
				information as it is. Please	
				refer parent element for list	
				of fields under this JSON	
FunctionHead	10	String	OPTIONAL	This field will be consumed	BudgetHead
				based on diffract	
				DDO/Treasury	
	10	<b>a</b> . :	ODTIONAL	Officer/Buyer	D 1
ObjectCode	10	String	OPTIONAL	This field will be consumed	BudgetHead
				based on diffract	
				DDO/Treasury	
CurrentNa	10	C( size -	ODTIONAL	This field will be a series of	Decile et Here il
GrantNo	10	String	OPTIONAL	I his field will be consumed	BudgetHead
				Dased on diffract	
				Officer/Duver	
Catagory	20	Ctuin a	ODTIONAL	This field will be serviced	DudgetUeed
Category	20	String	OPTIONAL	has d an diffuset	BudgetHead
				Dased on diffract	
				Officer/Buyer	
Amount	15.2	Numeric	TRUE	Onicei/Buyer	body
Type	13.2	String	TRUE	B Block II Unblock	body
турс	1	Sung	INUL	D = DIOCK, U = UIIDIOCK	bouy



#### 14.4.3. Output fields

Field Name	Length	Туре	Mandatory	Values	Parent Element
Body			TRUE		
GeMReqID	20	String	TRUE	GeM Request ID	Body
GeM Unique Reference	20	Numeric	TRUE	Unique reference number	Body
Number				generated by GeM	
FundBlockTransID	20	String	TRUE	Fund Blocked	Body
				Transaction ID generated	
				by Bank	
Amount	15.2	Numeric	TRUE		Body
Туре	1	String	TRUE	B – Block, U – Unblock	Body
Status	1	String	TRUE	S – Success, F – Failed	Body
Remarks	200	String	TRUE	Banks to share the reason	Body
				of failure	

#### **14.4.4. Method of Integration**

GeM will make web service call to banks exposed by RESTFUL layer. RESTFUL layer will immediately respond back with the GeM response synchronously.

#### 14.4.5. Error handling

In case RESTFUL doesn't receive the response back from bank in time or for some reason call to bank fails, then same will be notified to the GeM with proper return code and message. The list of expected return codes and description is mentioned above in output fields table.

#### 14.4.6. Where it is invoked

GeM will have to make an online service request with banks, whenever buyer places the order on GeM portal. This will be a synchronous call so it will not allow the user to continue with next activity till we get the response back from RESTFUL. Once GeM receives the response from Bank Service, the same will be immediately indicated on the screen.

#### **14.5. Payment Instruction** 14.5.1. Description of the interface

Purpose of this interface is to release the funds of order from the DDO/Treasury Officer Registered No of its respective pool account of Buyer after generation of final bill by DDO/Treasury Officer.

# 14.5.2. Input parametersField NameLengthTypeMandatoryValuesParent<br/>ElementBodyImage: Image: Image:



Field Name	Length	Туре	Mandatory	Values	Parent
	•	a .		G ) ( D	Element
GeMReqID	20	String	TRUE	GeM Request ID	Body
GeM Unique Reference Number	20	Numeric	TRUE	Unique reference number generated by GeM	body
DDO/Treasury Officer RegistrationNo	20	String	TRUE		body
FundBlockTransID	20	String	TRUE	Fund Blocked Transaction ID generated by Bank	body
BuyerStateCode	5	String	TRUE	STATE Code	body
SupplyOrderNo	30	String	TRUE		body
InvoiceNo	20	String	TRUE	Generated by GeM	body
InvoiceDate	10	Date	TRUE	DD-MM- YYYY	body
BuyerID	10	String	TRUE		body
BuyerDept	100	String	TRUE	Department of buyer	body
DDO/Treasury Officer Code	10	String	TRUE		body
BudgetHead		JSON	TRUE	This information will be sent as a part of JSON and bank need to store this information as it is. Please refer parent element for list of fields under this JSON	body
FunctionHead	10	String	OPTIONAL	This field will be consumed based on diffract DDO/Treasury Officer/Buyer	BudgetHead
ObjectCode	10	String	OPTIONAL	This field will be consumed based on diffract DDO/Treasury Officer/Buyer	BudgetHead
GrantNo	10	String	OPTIONAL	This field will be consumed based on diffract DDO/Treasury Officer/Buyer	BudgetHead
Category	20	String	OPTIONAL	This field will be consumed based on diffract	BudgetHead



Field Name	Length	Туре	Mandatory	Values	Parent Element
				DDO/Treasury	
				Officer/Buyer	
Amount	15.2	Numeric	TRUE		body
Туре	1	String	TRUE	B – Block, U -	body
				Unblock	
Last Payment	1	String	TRUE	Y- Yes, N- No	body
BeneficiaryIFSCode	11	String	TRUE		body
BeneficiaryAccountNo	20	Numeric	TRUE		body
BeneficiaryAccountHolderName	100	String	TRUE		body

#### 14.5.3. Output fields

Field Name	Length	Туре	Mandatory	Values	Parent
					Element
Body			TRUE		N/A
GeMReqID	20	String	TRUE	GeM Request ID	body
GeM Unique	20	Numeric	TRUE	Unique reference number	body
Reference Number				generated by GeM	
TransID	40	String	TRUE	Transaction ID generated	body
				by Bank	
AmountBlocked	15.2	Numeric	TRUE		body
InvoiceNo	20	String	TRUE	Generated by GeM	body
InvoiceDate	10	Date	TRUE	DD-MM-YYYY	body
Status	1	String	TRUE	S – Success, F – Failed	body
Remarks	200	String	TRUE	Banks to share the reason	body
				of failure	-

#### 14.5.4. Method of Integration

GeM will make web service call to banks exposed by RESTFUL layer. RESTFUL layer will immediately respond back with the GeM response synchronously.

#### 14.5.5. Error handling

In case RESTFUL doesn't receive the response back from bank in time or for some reason call to bank fails, then same will be notified to the GeM with proper return code and message. The list of expected return codes and description is mentioned above in output fields table.

#### 14.5.6. Where it is invoked

GeM will have to make an online service request with banks, whenever payment instruction has been initiated manually by DDO/Treasury Officer or automated by GeM portal. This will be asynchronous call so it will not allow the user to continue with next activity till we get the



response back from RESTFUL. Once GeM receives the response from Bank Service, the same will be immediately indicated on the screen.

#### **14.6. Payment Status 14.6.1. Description of the interface**

Purpose of this interface is to get the status of the payment done against the provided bill. On receipt the details from GeM, banks will have to share the details of the payment status of the amount paid against the amount of ordered by GeM.

Field Name	Length	Туре	Mandatory	Values	Parent Element
Body	N/A	N/A	TRUE		N/A
GeMReqID	20	String	TRUE	GeM Requested ID	body
GeM Unique	20	Numeric	TRUE	Unique reference number	body
Reference Number				generated by GeM	
BankTransID	40	String	TRUE	Transaction ID generated	body
				by Bank	
TransactionDate	10	Date	TRUE	DD-MM-YYYY	body

#### **14.6.2. Input parameters**

#### 14.6.3. Output fields

Field Name	Length	Туре	Mandatory	Values	Parent
					Element
Body	N/A	N/A	TRUE		N/A
GeMReqID	20	String	TRUE	Transaction ID	body
				generated by GeM	
GeM Unique Reference	20	Numeric	TRUE	Unique reference	body
Number				number generated by	
				GeM	
BankTransID	40	String	TRUE	Transaction ID	body
				generated by Bank	
TransactionDate	10	Date	TRUE	DD-MM-YYYY	body
DrCrDate	10	Date	TRUE	DD-MM-YYYY	body
PaymentTransID	40	String	TRUE		body
AmountofTransaction	15.2	Numeric	TRUE		body
TransactionStatus	5	String	TRUE		body
TransactionRemarks	200	String	TRUE		body
Status	1	String	TRUE	S – Success, F - Fail	body
Remarks	200	String	TRUE		body

#### **14.6.4. Method of Integration**

GeM will make a scheduled call (Hourly) to web service exposed by RESTFUL layer which will internally make call to the Service exposed by Bank. RESTFUL layer will immediately respond back with the GeM response synchronously.

#### 14.6.5. Error handling

GeM

In case RESTFUL doesn't receive the response back from Bank Service in time or for some reason call to Bank Service fails, then same will be notified to the GeM with proper return code and message. The list of expected return codes and description is mentioned above in output fields table.

#### 14.6.6. Where it is invoked

GeM will have to schedule a service request on an hourly basis only after payment instruction is sent to bank via GeM. Once GeM sends the response to Bank Service, the same will be immediately indicated on the screen.

#### **14.7. Challan Generation**

#### 14.7.1. Description of the interface

Purpose of this interface is to generate challan if the balance in the account is less at the time of placing bid. Bank will create the interface on their end and will share the url for the same with GeM, GeM will then share information to that URL in JSON format.

Field Name	Length	Туре	Mandatory	Values	Parent Flement
Body	N/A	N/A	TRUE		N/A
GemReqID	20	String	TRUE	GeM Requested ID	body
GeM Unique	20	Numeric	TRUE	Unique reference number	body
Reference Number				generated by GeM	-
Amount	15.2	Numeric	TRUE	Amount for which chalan	body
				need to be generated	
Date	25	datetime	TRUE	Date at which chalan request	body
				initiated DD-MM-YYYY	
				HH:MM:SS	
StateCode	5	String	TRUE		body
DdoCode	10	String	TRUE		body
DdoName	100	String	TRUE	Name of the ddo	body
BuyerDeptCode	30	String	TRUE	Buyer department code	body
BuyerDeptName	100	String	TRUE	Buyer department name	body
ProductCategory	100	String	TRUE	Name of product category	body
ProductName	100	String	TRUE	Name of Product	body
NoOfUnits	5	Numeric	TRUE	Quantity of product	body
Торир	1	String	TRUE	Y-Yes, N-No, for	body
				confirming whether chalan	
				is generated first time or not	

#### 14.7.2. Input Parameters



#### 14.7.3. 14.7.2 Method of Integration

GeM will perform a new tab redirection to bank interface form where challan will get generated from bank side. Bank will provide the url where they want request to be sent Request will be sent in json format only using post method. No information of challan generation will be captured on GeM therefore bank will not send any information back to GeM

#### **14.7.4. 14.7.3** Where its invoked

This API will be invoked if balance in account is less than the amount required for publishing bid after hitting the balance inquiry API.

Note: The length and data type mentioned in this SOP are recommendatory in nature. However if the SGPA bank's IT system follows a different length and data set requirement, the same can be adopted by GeM

#### 14.8. 14.8 Security

#### 14.8.1. Description

Clientid and secret key will be pass as header information. Bank will validate that information then only it will accept the request send by GeM. Each bank will have different client id and secret key

AES encryption key will be different for each bank.