## **CORRIGENDUM V- II**

#### **REQUEST FOR EXPRESSION OF INTEREST (EOI) FOR**

## "NEXT-GEN DATA WAREHOUSE SOLUTION"

Referring to the above mentioned EOI Document (EOI No.: SBI/GITC/Data Warehouse/2018/2019/34 Dated: 23.03.2019), we advise that the following changes have been further incorporated as per the details given below:

1. Under complete EOI document:

# Given in EOI Document:

Vendor

## Should be read as:

Bidder

2. Under complete EOI document:

#### **Given in EOI Document:**

Real time

#### Should be read as:

Real time/Near real time

#### 3. Under Subhead: Annexure E – Eligibility Criteria – Point 2 – on page 11:

#### **Given in EOI Document:**

<u>S. No.</u>	Eligibility Criteria	Compliance	Documents to be
		(Yes/No)	submitted
2	Vendor should have existing Next-Gen Data		The details to be
	Warehouse solution as mentioned in the EOI		provided as per
			Annexure- 'B'.

#### Should be read as:

<u>S. No.</u>	Eligibility Criteria	Compliance (Yes/No)	Documents to be submitted
2	The bidder should have existing Next-Gen Data Warehouse solution as mentioned in the EOI. If the bidder doesn't have own Next-Gen DW solution, in that case the bidder should have the ability to onboard capable OEM (s) who are able to fulfill the Bank's requirement. Such onboarding will be guided by certain set		The details to be provided as per Annexure B

of rules which Bank will publish at a later	
stage. Bidder has to fulfill all other eligibility	
conditions mentioned in the EOI	

#### 4. Under Subhead: Annexure E – Eligibility Criteria – Point 3 – on page 11:

#### **Given in EOI Document:**

<u>S. No.</u>	Eligibility Criteria	Compliance (Yes/No)	Documents to be submitted
3	The solution should have been implemented in at least 2 large scale organizations.		<ul><li>Two reference with following details for each reference to be provided:</li><li>1. Name of the Organization</li><li>2. Name of the Official</li><li>3. Contact number of Official</li><li>4. E-mail Id of Official</li></ul>

#### Should be read as:

	be reau as.		
<u>S. No.</u>	Eligibility Criteria	Compliance (Yes/No)	Documents to be submitted
3	The solution should be implemented and running by the bidder successfully for last two years or more, at any one or more BFSI organizations within India or outside India of fairly large size, engaged with all types of modern banking activities.		The details to be provided as per Annexure J. (Given below in this corrigendum)

#### 5. Under Subhead – Annexure B – Technical Criteria/Scope of Work - on page 12:

#### Given in EOI Document:

Vendor may propose one or multiple solutions to meet the scope of work of this EOI. Vendors must give comparison between multiple options highlighting pros and cons (In case they propose more than one option).

#### Should be read as:

Bidder may propose one or multiple solutions to meet the scope of work of this EOI. Bidders must give comparison between multiple options highlighting pros and cons (In case they propose more than one option). However, Bidder should propose only one best integrated solution fulfilling all the requirements given in EOI, out of different options given by the Bidder along with justification.

## 6. Under Subhead – Annexure B – Technical Criteria/Scope of Work - on page 13:

## **Given in EOI Document:**

• Proposed software specification along with OEM and features of each software product

## Should be read as:

 Proposed software specification along with OEM and features of each software product along with version. Proposed software list should be n-1 version, where n is current version of software in the market. Technology obsoletion should not impact overall performance of the proposed integrated solution.

#### 7. Under Subhead: Annexure B – Data Ingestion – Point 16 – on page 15:

#### **Given in EOI Document:**

Sr.	Parameters	Compliant
No.		(Yes/No)
16	Proposed solution should be able to scrap encrypted log, capture Metadata changes at source level completely, scrapping 4000-5000 logs daily having log size of ~ 2 TB each scalable up to 10000 logs. Proposed solution should be capable of scrapping logs generated by any type of Database. E.g. Oracle Database, IBM DB2 Database etc.	

#### Should be read as:

Sr.	Parameters	Compliant
No.		(Yes/No)
16	Proposed solution should be able to scrap encrypted log, capture Metadata changes at source level completely, scrapping 4000-5000 logs daily having log size of ~ 2 GB each scalable up to 10000 logs. Proposed solution should be capable of scrapping logs generated by any type of Database. E.g. Oracle Database, IBM DB2 Database etc.	

#### 8. Under Subhead: Annexure B – Data Ingestion – Point 19 – on page 15:

#### **Given in EOI Document:**

Sr. No.	Parameters	Compliant (Yes/No)
19	When an ETL package runs, it is very important to be able to log how it executed i.e. we need to know how long it takes, what time it started/ended, who triggered it, was it successful or failed, what was the error message, etc. Apart from logging, when an ETL tool runs, it also needs to be able to run at scheduled times, re-run when failed, and limit the execution duration. ETL meta data repository should be query-able by designated user to extract this information.	

#### Should be read as:

Sr. No.	Parameters	Compliant (Yes/No)
19	When an ETL package runs, it is very important to be able to log how it executed i.e. we need to know how long it takes, what time it started/ended, who triggered it, was it successful or failed, what was the error message, etc. Apart from logging, when an ETL tool runs, it also needs to be able to run at scheduled times, re-run when failed, and limit the execution duration. ETL meta data repository should be query-able by designated user to extract this information. All this information should be available as audit trail in dashboard (MIS) on real/near real time.	

#### 9. Under Subhead: Annexure B – Data Archival and Backup – Point 6 – on page 20:

#### Given in EOI Document:

Sr.	Parameters	Compliant
No.		(Yes/No)
6	Mixing and Merging data from Current/Live to and from Archival must	
	not result in any significant loss of performance and response time	

## Should be read as:

Sr. No.	Parameters	Compliant (Yes/No)
6	While retrieving data from Archival solution and any mixing/merging of archived data with production environment data, must not result in any significant loss of performance and response time	

## 10. Under Subhead: Annexure B – Data Governance – Point 15 – on page 22:

## **Given in EOI Document:**

Sr. No.	Parameters	Compliant (Yes/No)
15	Architecture Review: The architecture including all the applications and policies of the Next-Gen DW ecosystem to be reviewed by Vendor and make necessary changes to get the maximum benefits from the setup. Vendor should provide statistics which Bank my demand in connection with this like user details who is using the services, hit rates, application runtime and downtime, hardware memory and storage usages, etc	(165/100)

## Should be read as:

Sr.	Parameters	Compliant
No.		(Yes/No)

15	Architecture Review by bidder on periodic basis: The architecture	
	including all the applications and policies of the Next-Gen DW	
	ecosystem to be reviewed by Bidder and make necessary changes to get	
	the maximum benefits from the setup. Bidder should provide statistics	
	which Bank my demand in connection with this like user details who is	
	using the services, hit rates, application runtime and downtime, hardware	
	memory and storage usages, etc	

## 11. Under Subhead: Annexure B – Data Encryption – Point 2 – on page 26:

## **Given in EOI Document:**

Sr.	Parameters	Compliant
No.		(Yes/No)
2	Data encryption applies to the following data on NEXT-GEN DW:	
	• Data at rest	
	Data in motion	
	• Data available over an API to external sources / applications	
	• Data at end users	
	Data from source system during ingestion	

## Should be read as:

Sr.	Parameters	Compliant	
No.		(Yes/No)	
2	Data encryption applies to the following data on NEXT-GEN DW:		
	• Data at rest		
	Data in motion		
	• Data in use		
	Data in store		

## 12. Under Subhead: Annexure B – Hardware Specifications – Point 50 – on page 37:

## **Given in EOI Document:**

Sr.	Parameters	Compliant
No.		(Yes/No)
50	Annexure G gives the NEXT-GEN DW sizing forecasted for next five	
	years. Sizing given in the Annexure G is in compressed form with	
	compression factor of 2.5. Vendors are expected to propose storage	
	forecast over and above given sizing in the solution to ensure fast	
	performance of system. Vendors shall propose performance benchmark	
	for this system as part of the solution. This is indicated projected growth,	
	but the solution should be scalable enough to store any volume of data.	

## Should be read as:

Sr.	Parameters	Compliant
No.		(Yes/No)
50	Annexure G gives the NEXT-GEN DW sizing forecasted for next five years. Sizing given in the Annexure G is in compressed form with compression factor of 2.5. Also, Annexure G does not include any sizing forecast for data generated from Logging solution. Bidders are expected to propose storage forecast over and above given sizing in the solution to include data generated from logging solution and ensure faster performance of the system. Bidders shall propose performance benchmark for this system as part of the solution. This is indicated projected growth, but the solution should be scalable enough to store any volume of data.	

## 13. Under Subhead: Annexure B – Hardware Specifications – Point 51 – on page 37:

## **<u>Given in EOI Document:</u>**

Sr. No.	Parameters	Compliant (Yes/No)
51	Vendor to submit all back-to-back agreement copies between Vendor and	
	SI / OEM / Parent company etc if any and tenure of the back-to-back	
	agreement should be same as selected Vendor's agreement with the Bank	

#### Should be read as:

Point removed from the EOI.

#### 14. Under Subhead: Annexure G – Next Gen Data Warehouse Sizing – on page 46:

#### Given in EOI Document:

Olven in LOI Document.					
PROD in TB					
DWH Archival Data Lake					
Dec-19	592.16	346.00	730.10		
Dec-20	717.66	557.00	730.58		
Dec-21	1075.72	612.00	731.25		
Dec-22	1541.63	734.66	732.19		
Dec-23	2251.96	838.71	733.51		

#### Should be read as:

PROD in TB				
	DWH	Archival	Data Lake (without replication factor)	
Dec-19	592.16	346.00	100	
Dec-20	717.66	557.00	150	
Dec-21	1075.72	612.00	200	
Dec-22	1541.63	734.66	250	
Dec-23	2251.96	838.71	300	

15. Under Subhead: Annexure H – Acronyms – on page 48:

#### **Given in EOI Document:**

As used in the Document	Description
SCAPM	IBM Smart Cloud

#### Should be read as:

Point removed from the EOI.

## 16. New Annexure added after page 52 :

#### **Annexure J – Client Reference Details**

## Section 1: Summary of modules implemented at client sites;

Bidder to tick mark the applicable boxes for one or multiple clients in table below.

Next-Gen Data Warehouse Solution Module Implemented	(Client Name 1)	(Client Name 2)	(Client Name 3)	(Client Namen )
Data Warehouse, Data Marts and Data Stores				
Use case driven and scalable Data Lake				
Data Virtualization/Federation				
Data Archival and backup solution				
Sandboxes for research and development				
purpose				

Mignetian from existing action to	
Migration from existing setup to	
proposed solution	
Ensuring Data Quality & Data	
Reconciliation	
Data Governance including Data	
Dictionary and Data Lineage	
Data Science Platform/Tool with AI/ML	
capabilities and real time analytics	
Business Intelligence Tools and real time	
reporting	
Compliance to Global standards and SBI	
Internal policies	
Framework for regulatory reporting	
Data protection, Data security, Data	
privacy	
Real time Data ingestion with	
spontaneous reconciliation	
Log Storage/Archive Solution	

## Section 2: Details of the Implementation for each Client given in Section 1

Bidder to give information in below format;

Sl.	Particulars	Response
No.		
1	Project Name	
2	Location of the Project	
3	Name of Client	
4	Address	
5	Name of Reference Contact Person	
6	Telephone Number (With STD Code), Mobile Number and E-Mail Address	
7	Project Scope	
8	Original Project Duration	
9	Start Date of the Project (Month & Year)	
10	Planned Completion Date of the Project (Month & Year)	

Sl.	Particulars	Response				
No.						
11	Actual Completion Date of the					
	Project (Month & Year)					
12	Total No. of team members in					
	the Assignment					
13	Name of the solution (s)					
	implemented and the version					
14	Details of the solution	Module	Implemented	Product	Month/ Year of	
			(Yes/ No)	Name/	Implementation	
				Version		
15	Narrative Description of					
	Project with present					
	status/result					
16	Provide the number of active					
	users and concurrent users					
	separately.					
17	Period of project implemented					
	& running (in number of years)					