INFORMATION AND COMMUNICATION TECHNOLOGY

AGENCY OF SRI LANKA

ADDENDUM NO 01 - TO THE BIDDING DOCUMENT

FOR THE

PROCUREMENT OF SERVICES FOR INSTALLATION,
CONFIGURATION AND MAINTENANCE OF APPLICATION
STACKS FOR THE LANKA GOVERNMENT CLOUD 2.0

INVITATION FOR BIDS No: ICTA/GOSL/SER/NCB/2016/26

12th September 2016

ADDENDUM NO 01 - TO THE BIDDING DOCUMENT

PROCUREMENT OF SERVICES FOR INSTALLATION,
 CONFIGURATION AND MAINTENANCE OF APPLICATION
 STACKS FOR THE LANKA GOVERNMENT CLOUD 2.0

<u>INVITATION FOR BIDS No</u>: **ICTA/GOSL/SER/NCB/2016/26**

This Addendum No 01 to the Bidding Document of above procurement incorporates following amendments. All bidders shall comply with these amendments in addition to the clarifications issued.

Amendments

1.   Under Appendix A – Description of Services – Lot 1: Item no. 5 Team Composition

Team Composition is amended to read as follows;

#	Title	Minimum no of resources	Engagement Model	Experience
1	Project Manager/ Account Manager	1	Part-time	8+ years of relevant IT experience Minimum 2 years of Project Management Experience in Managing Cloud projects
2	Cloud Architect	1	Part-time	At least 10 years experience in large-scale, multi-platform networks Advanced knowledge of Linux ; significant experience designing Installing and administrating virtualized environments Experience working with public cloud providers Top cloud certification programs or similar Excellent Communication skills
3	Senior System Engineer (Cloud)	1	Full-time and on-site (during initial installation/ configuration/testing stage up-to commissioning	Specific virtualization certification for leading virtualization vendors. Excellent knowledge of leading operating systems technologies (e.g.: Linux,) At least 6 years of implementation experience with highly virtualized shared infrastructure, platforms or applications architecture at a large enterprise or service provider. Good Communication skill
		1	Part-time (should be available on-site within 20 minutes for any critical incident during the maintenance period)	

4	Senior Software Engineer (Cloud)	1	Full-time and on-site (during initial installation/ configuration/testing stage up-to commissioning	Proven experience in deploying software to cloud computing infrastructure; Experience in SOA technologies.
		1	Part-time (should be available on-site within 20 minutes for any critical incident during the maintenance period)	Experience in software development; work experience with system configuration and deployment automation technologies. Good Communication skills
5	Cloud Security Specialist	1	Part-time	Extensive experience and practical understanding of systems architecture, design and delivery, large-scale enterprise applications and multitenant technologies. Previous experience in the development and implementation of security policy frameworks specifically around standards, processes and procedures Experience dealing with security and risk within a ISP environment is preferred

2.   Under Appendix A – Description of Services – Lot 2: Item no. 5 Team Composition

Team Composition is amended to read as follows;

#	Title	Minimum Count	Engagement Model	Experience
1	Project Manager/ Account Manager	1	Part-time	8+ years of relevant IT experience Minimum 2 years of Project Management Experience in Managing Cloud projects
2	DevOps Architect	1	Part-time	8+ years of relevant IT experience Strong knowledge of cloud environments Experience with automated deployment, continuous integration, and release engineering tools Strong knowledge of infrastructure automation tools Strong knowledge and expertise in DevOps solution delivery and strategy
3	Senior DevOps Engineer	1	Full-time and on-site (during initial installation/ configuration/testing stage up-to commissioning	5+ years of relevant IT experience Strong knowledge of cloud environments Experience with automated deployment, continuous integration, and release engineering tools Strong knowledge of infrastructure automation tools Strong knowledge and expertise in DevOps solution delivery and strategy
		1	Part-time (should be available on-site within 20 minutes for any critical incident during the maintenance period)	
4	Senior Software Engineer	1	Full-time and on-site (during initial installation/ configuration/testing stage up-to commissioning	Proven experience in deploying software to cloud computing infrastructure; Experience in SOA technologies. Experience in software development; work

#	Title	Minimum Count	Engagement Model	Experience
		1	Part-time (should be available on-site within 20 minutes for any critical incident during the maintenance period)	experience with system configuration and deployment automation technologies. Good Communication skill

3.   Under Appendix A – Description of Services – Lot 3: Item no. 5 Team Composition

Table is amended to read as follows;

#	Title	Minimum Count	Engagement Model	Experience
1	Project Manager/ Account Manager	1	Part-time	8+ years of relevant IT experience Minimum 2 years of Project Management Experience in Managing Big data projects
2	Big-data Architect	1	Part-time	2 years on Big Data, 8 years on Database Architecture Expertise on structured and unstructured data Architecture of big data technology like Hadoop, HDFS, HIVE and other open source tools which are part of hadoop ecosystem Big Data use case analysis Knowledge of big data analytics RDBMS expertise Design Hadoop framework for development, testing, error log generation and production Design Hadoop architecture in terms of data sources, HDFS,structured and unstructured data, HIVE, research platform and other open source tools which are part of hadoop ecosystem
3	Data Scientist	1	Part-time	Excellent understanding of machine learning techniques and algorithms, such as k-NN, Naive Bayes, SVM, Decision Forests, etc. Experience with common data science toolkits,

				such as R, Weka, NumPy, MatLab, etc . Excellence in at least one of these is highly desirable
				Great communication skills
				Experience with data visualisation tools, such as D3.js, GGplot, etc.
				Proficiency in using query languages such as SQL, Hive, Pig
				Experience with NoSQL databases, such as MongoDB, Cassandra, HBase
				Good applied statistics skills, such as distributions, statistical testing, regression, etc.
				Good scripting and programming skills
				Data-oriented personality
4	Big Data (Hadoop) Admin	1	Full-time and on-site (during initial installation/ configuration/testing stage up-to commissioning	2 years Hadoop Admin, 3 years UNIX/Linux
				Experience in Hadoop cluster configuration in terms of CPU, disk space and network bandwidth management
		1	Part-time (should be available on-site within 20 minutes for any critical incident during the maintenance period)	Hands on experience in Hadoop configuration files like Name nodes, data nodes, Job tracker, Mapper and reducer configuration, replication factor etc
				Distributed commodity server management
				Installation and tuning of Hadoop cluster
				HDFS and YARN installation, configuration and tuning
				Configuration of HIVE, HBase and other Hadoop ecosystem
				Unix / Lynx admin, security, networking, configuration
				Installing of Hadoop ecosystem like Sqoop, Zookeeper etc.
				Knowledge security considerations for Hadoop
5	Senior Software Engineer (Big-data, Hadoop Developer)	1	Full-time and on-site (during initial installation/ configuration/testing	Minimum 2 years PIG, HIVE, HDFS etc, 4 years in JAVA framework
				Strong JAVA skills with JAVA frameworks

		stage up-to commissioning	Knowledge of HDFS, YARN, HIVE, HCatalog etc
			Programming skills in MapReduce, Pig, HIVE, HBase etc
	1	Part-time (should be available on-site within 20 minutes for any critical incident during the maintenance period)	Hands on experience of sqoop, flume, Tez etc.
			Familiarity with Oozie, Sqoop, Flume, Ambari, Zookeeper etc
			Knowledge of Shell script, UNIX / Lynx
	1	Full-time (8AM to 6PM (local time) during working days	ETL tools to import data to Hadoop and export to relational databases

4. (Section II. Bidding Data Sheet)

To be amended as below;

| 5.5 (d) | BDS for ITB 5.5(d) is amended as follows;

Project Manager with five (05) years experience in service of an equivalent nature and volume of the services, including no less than Three (03) years as a Manager shall be nominated for the contract for each Lot separately.

Minimum of Professional team of expert as stated below for each lot in the respective domain/discipline having minimum experience as given in Description of Services. (Refer Appendix C)

Lot-1: 5 Members

Lot-2: 4 Members

Lot-3: 5 Members |
|---|---|

5. (Section II. Bidding Data Sheet)

BDS for ITB 30.3 is amended as follows;

30.3	Alternative bids and options shall not be considered.

6.   (Section II. Bidding Data Sheet)

BDS for ITB 32.1 is amended as follows;

32	Following paragraph is added to clause 32.1 At the time the Contract is awarded, the Employer reserves the right to increase or decrease the quantity of Related Services originally specified in Appendix A –(Description of Services) by 20% without any change in the unit prices or other terms and conditions of the bid and the Bidding Documents.

7.   (Appendix A – Description of Services – Lot-1, Item 3.3 of 'OpenStack based Cloud Platform (Distribution)')

Functionality item no. 5 is amended to read as follows;

Platform Should Certified with multiple Industry leading Storage Solutions (eg-: Ceph , NetApp , EMC , Veritas, HP 3PAR etc.) - (Specify)

8.   (Appendix A – Description of Services – Lot-1, Item 3.3 of 'OpenStack based Cloud Platform (Distribution)')

The words "Support for integrate Apache Mesos endpoints" in item no. 33 are removed from the functionality requirement of this bidding document.

9.   (Appendix A – Description of Services – Lot-1, Item 3.3, a new requirement under 'Billing and Invoicing'

The following words are added under "Billing and Invoice";

The proposed Billing software should be certified with OpenStack

10.   (Appendix A – Description of Services – Lot-1, Item 3.3 of 'OpenStack based Cloud Platform (Distribution)')

Functionality item no. 5 is amended to read as follows;

Should be supported at least lifecycle of 3years

11.   (Appendix D – Breakdown of Contract Price in Foreign Currency)

To be amended as below;

Lot-1

1	2	3	4
Item	Description	Unit price (USD) (excluding VAT)	Total price (USD) (excluding VAT)
1	Installation, Configuration, Testing and Commissioning of OpenStack Based Cloud for General Cluster of Lanka Government Cloud 2.0 as specified in the Bid in response to requirements specified in the Bidding Documents	Not Applicable	
2	Providing Support and Maintenance services for a period of 36 months from the date of commissioning	…........... per month	Not Applicable

Indicative prices for following requirements shall be provided for future expansion requirements.

Item	Description	Unit Price (USD) (excluding VAT)
1	Additional node configuration (If different prices are applicable based on type of node, indicative separately).	…........... per month

Lot-2

1	2	3	4
Item	Description	Unit price (USD)	Total price (USD)

Item	Description		
		(excluding VAT)	(excluding VAT)
1	Installation, Configuration, Testing and Commissioning of Mesosphere for General Cluster of Lanka Government Cloud 2.0 as specified in the Bid in response to requirements specified in the Bidding Documents	Not Applicable	
2	Providing Support and Maintenance services for a period of 36 months from the date of commissioning	…............ per month	Not Applicable

Indicative prices for following requirements shall be provided for future expansion requirements.

Item	Description	Unit Price (USD) (excluding VAT)
1	Additional node configuration (If different prices are applicable based on type of node, indicative separately).	…............ per month

Lot-3

1	2	3	4
Item	Description	Unit price (USD) (excluding VAT)	Total price (USD) (excluding VAT)
1	Installation, Configuration, Testing and Commissioning of Hadoop Distribution for Big-data Cluster of Lanka Government Cloud 2.0 as specified in the Bid in response to requirements specified in the Bidding Documents	Not Applicable	
2	Providing Support and Maintenance services for a period of 36 months from the date of commissioning	…............ per month	Not Applicable

Indicative prices for following requirements shall be provided for future expansion requirements.

Item	Description	Unit Price (USD) (excluding VAT)
1	Additional node configuration (If different prices are applicable based on type of node, indicative	…............ per month

	separately).	

12.   (Appendix E - Breakdown of Contract Price in Local (Sri Lankan Rupees)

To be amended as below;

Lot-1

1	2	3	4
Item	Description	Unit price (excluding VAT)	Total price (excluding VAT)
1	Installation, Configuration, Testing and Commissioning of OpenStack Based Cloud for General Cluster of Lanka Government Cloud 2.0 as specified in the Bid in response to requirements specified in the Bidding Document	Not Applicable	
2	Providing Support and Maintenance services for a period of 36 months from the date of commissioning	….......... per month	Not Applicable

Indicative prices for following requirements shall be provided for future expansion requirements.

Item	Description	Unit Price (excluding VAT)
1	Additional node configuration (If different prices are applicable based on type of node, indicative separately).	….......... per month

Lot-2

1	2	3	4
Item	Description	Unit price (excluding VAT)	Total price (excluding VAT)
1	Installation, Configuration, Testing and Commissioning of Mesosphere for General Cluster of Lanka Government Cloud 2.0 as specified in the Bid in response to requirements specified in the Bidding Document	Not Applicable	
2	Providing Support and Maintenance services for a period of 36 months from the date of commissioning	….......... per month	Not Applicable

Indicative prices for following requirements shall be provided for future expansion requirements.

Item	Description	Unit Price (excluding VAT)
1	Additional node configuration (If different prices are applicable based on type of node, indicative separately).	…........... per month

Lot-3

1	2	3	4
Item	Description	Unit price (excluding VAT)	Total price (excluding VAT)
1	Installation, Configuration, Testing and Commissioning of Hadoop Distribution for Big-data Cluster of Lanka Government Cloud 2.0 as specified in the Bid in response to requirements specified in the Bidding Document	Not Applicable	
2	Providing Support and Maintenance services for a period of 36 months from the date of commissioning	…........... per month	Not Applicable

Indicative prices for following requirements shall be provided for future expansion requirements.

Item	Description	Unit Price (excluding VAT)
1	Additional node configuration (If different prices are applicable based on type of node, indicative separately).	…........... per month