

Warehousing Development and Regulatory Authority

Implementation and Support  
For  
Negotiable Warehouse Receipt System

1. Corrigendum to the RFP
2. Response to pre-bid queries from bidders

**Revised Bid Submission Date - March 1, 2013, 3 PM**  
**Revised Bid Opening - March 1, 2013, 4 PM**

## **Corrigendum: “RFP for Implementation and Support for Negotiable Warehousing Receipt System (NWRS)”**

**Bid Submission Date is extended to March 1, 2013 till 3 PM**  
**Bid Opening at 4PM on March 1, 2013 at WDRA Office**

**Changes are highlighted in Italics**

This corrigendum should be read with the “RFP for Implementation and Support for Negotiable Warehousing Receipt System (NWRS)”. Amendments to the same subject modify or replace the earlier ones.

### **I – Section 2 – Bid Data Sheet, Clause 1.5, Page 20**

The S.No. 2 is amended as

Bidder’s Annual sales turnover for each of the previous 3 financial years (2009-10, 2010-11, and 2011-12) should be *at least Rs.100 Cr* out of which at least Rs. 50 Crore must be exclusively from software development for each of the years.

### **II – Section 2 – Bid Data Sheet, Clause ITB 1.5, Page 20**

The Criteria for S.No. 5 is amended as

Bidder must in the last 2 years have successfully provided at least one year running L2/L3 support on at least 2 prior projects as on 31<sup>st</sup> March 2012.

*Ongoing projects may be considered subject to the bidder having successfully completed at least 1 project.*

### **III – Section 2 – Bid Data Sheet, Clause ITB 5.5, Page 20**

The Scoring Criteria for S.No. 1.1, 1.2, 1.3, 1.4, 1.5 is appended by

*Ongoing projects may be considered for scoring subject to the bidder having successfully completed at least 1 project under each of the qualification criteria. However, ongoing projects would get half the marks awarded to the completed projects.*

### **IV – Section 2 – Bid Data Sheet, Clause ITB 5.5, Page 20**

The Experience Criteria for S.No. 1.2 is amended as

*Bidder must have experience of successfully completing at least 1 project (which should include all of hardware, software and services) in India for Core Banking or Banking Correspondents or Insurance Solution or Mutual Fund/Equity Platform with over 100 locations out of which at least one project must be of the order value not less than Rs. 1.5 Crore.*

### **V – Section 3 – Technical Requirements, Clause 2.1 Page 31**

Point 8 is being appended as follows:

8. The system should enable signing off documents using digital signatures by the various stakeholders. *The bidder should provide the required infrastructure in addition to 50 nos. Class-2 digital signatures as a part of the bid.*

### **VI – Section 3 – Technical Requirements, Clause 5.3.1 Page 60**

The Clause 5.3.1 is appended with sub clause 14 as follows –

14. *Any application components proposed should meet, at a minimum, the following technical requirements -*

Portal	
1.	From the leader's quadrant of Gartner Magic Quadrant for "Horizontal Portals" in any of the last 2 editions
2.	The portal should support Security protocols and Digital certificates for secure authentication.
3.	Should be based on Service Oriented Architecture that can interoperate with other applications of Banks / Commodity Exchanges / other users as approved by WDRA, using Web services.
4.	Should support Bilingual (English & Hindi) features for the portal
5.	Support configurable look-and-feel at portal level, page level & portal level and Portal pages should adhere to W3C accessibility standards
6.	Support menus driven by statically defined role-based access control
7.	Ability to persist user's session, including current location in portal, across browser sessions
8.	Support configurable user friendly relative URLs for direct access to portal pages
9.	Ability to search structured information repositories, such as databases
10.	Support structured searches driven by metadata
11.	Perform federated searches across multiple indexes
12.	Search engine must provide preemptive access control of search results; content the user cannot access does not appear in the search results
13.	Support crawling of sites to build content indexes
14.	Ability to schedule periodic crawling
15.	Support relevance-based sorting of search results
16.	Ability to edit indexed content metadata
17.	Should support email integration
18.	Should provide ease of integration with other solution components of WDRA such as BI, Reporting, DMS etc. Interface to the backend applications should be based on open standards such as XML, SOAP, etc.
19.	Access control tied to portal access control
20.	Integration with search engine
21.	Should have tool for Business Users to build simple workflows. It should help to define Roles, Tasks & Actions
22.	Should support industry wide operating systems including Windows, AIX, Linux, Unix etc.
23.	Should support industry wide web servers.
24.	Should support cross-browser running (IE, Mozilla, Firefox)
25.	Should support industry wide directory servers.
26.	Should provide a mechanism for balancing the user and/or request load across several logical and/or physical servers
27.	Ability to scale vertically (take advantage of servers with multiple CPUs)
28.	Ability to scale horizontally (spread load across several physical servers with fail-over support)
29.	Ability to back up the portal configuration and related data while running (hot back-ups)
30.	Ability to recover the portal configuration from a backed up copy
31.	Provide integration with an external access manager for single sign-on (SSO) support
32.	Provide role-based access control
33.	Provide SSL support for HTTPS (web-based front-end) & LDAP (directory server)
34.	Provide front-end protocol switching support (e.g. HTTP to HTTPS)
35.	Support delegated security administration of sections of portal to super-user
36.	Provide a web-based administration tool
37.	Ability to manage users and group memberships
38.	Portal platform's administration tool must support the ability to create/update/delete portal resources, such as pages etc.

39.	Provide for non-intrusive monitoring of key activities and resources, such as sessions, threads, database connections, caches, etc.
40.	Provides Audit trails, auditing of user actions and history
41.	Should provide workflow for processes of movement, forward, approval, rejection and completion on work items etc.
42.	<p>The portal should provide the following interfaces to the stakeholders:</p> <ul style="list-style-type: none"> <li>• Online web based forms</li> <li>• PDF/ Excel etc. forms</li> <li>• Batch upload – for intermediary filings</li> <li>• Web Services for providing integration facility to the intermediaries.</li> <li>• Text File</li> </ul> <p>The Online web based forms would be handling the following services:</p> <ul style="list-style-type: none"> <li>• Online display of defaults and filing of correction statements therein.</li> <li>• Various types of queries</li> <li>• Additionally, the online forms should be capable of being saved as a draft and being submitted on completion.</li> </ul> <p>PDF/ Excel/other standard forms would be pre-defined templates which can be downloaded on the user’s desktop, with some pre-filled information. These forms would have some basic validations and the users can upload these forms through the proposed portal, after filling up the necessary details.</p> <p>The electronic forms proposed should have native support for Open Standards and compliant to XForms 1.1, XSD, XSLT, XHTML, XML DSIG,WSDL,SOAP standards as defined by W3C.</p> <p>Excel based forms are to be provided necessarily for the offline access. Additionally, bidder can propose either the PDF forms or the eForms based solution, considering the overall user convenience and experience on the portal. The offline forms should be seamless with respect to transmission of xml file to the users and they should not be expected to follow complicated upload procedures.</p>

<b>Application Server</b>	
1.	From the leader’s quadrant of Gartner Magic Quadrant for “Enterprise Application Server” in any of the last 2 editions
2.	Ability to distribute HTTP client requests
3.	Dynamic multi-protocol workload mgmt (ability to determine routing of requests based on the feedback and workload of backend servers)
4.	HA architecture
5.	Dynamic Application Update without downtime
6.	Ability to manage context of a user session across requests (Ex: Session Management)
7.	Ability to fail over user context and relevant request information during system failures (Ex. clustering)
8.	Ability to have multiple versions of the same application and dynamically routing requests between them (application zones and versions)
9.	Dynamic property configuration to avoid server restarts
<b>Scalability</b>	
10.	Vertical scalability
11.	Horizontal scalability
12.	Ability for on-demand resource allocations - dynamic clusters (ability of the server to dynamically add new machines or remove them to / from the cluster when workload changes)
<b>Security</b>	
13.	Capability to have separate administrative roles and limit scope of actions (superuser,

	monitor, configurator, operator)
14.	Secure administration of a clustered server environment
15.	Multiple security domains
16.	Capability to assign dedicated administrator to different resources (e.g. only manage subset of applications or resources)
17.	X.509 Certificates
18.	LDAP Server included
19.	Auditing
20.	Ability to leverage hardware server virtualization
<b>Monitoring and Administration</b>	
21.	Remote GUI administration tool (securely manage entire domain from a single console, full control over domain resources, start/stop, configure/deploy, etc.)
22.	Distributed management tool for asynchronous remote multi-domain and multi-server management
23.	Runtime performance monitoring tool (ability to show resource utilization, number of requests, etc.)
24.	Directory based deployment
25.	Log file analysis and intelligent guidance
<b>Support for Web Services:</b>	
26.	Enterprise web services - package and deploy components as Web services and their clients in a standard way
27.	Support for Web Services Notification, which enables Web Service applications to utilize the 'Publish and Subscribe' messaging pattern
28.	Support for WSDL 1.1
29.	Support for Web services Gateway ("firewall" or "broker" for web services, protocol translation transparent to clients and servers, logging, etc.)
30.	Support for caching of Web Services responses
31.	Support for edge serving of Web Services
32.	Support for Web Services message security APIs
<b>Clustering</b>	
33.	Support for Server clustering
34.	Support for Intelligent load balancing and support for hardware load balancer
35.	Support for Static load balancing
36.	Support for Dynamic and Weighted WLM
37.	Support for Load balancing for HTTP requests for generic HTTP traffic
38.	Should have built in support for maintaining the client state between successive client calls
39.	Should have built in support for replication of Http Session object
40.	Should provide capability of clustering of Application Servers both vertical as well as horizontal
41.	Should provide capability of clustering Application Servers running on similar/different operating systems as platform
42.	Avoid web server downtime when app server plugin configuration changes
43.	Load balancing for generic IP based traffic (any protocol over IP, including, but not limited to HTTP) on HTTPS and Telnet IP based protocols
<b>Connectivity</b>	
44.	JCA support
45.	Support for IPV4
46.	Session Initiation Protocol (SIP) Servlet support, for applications that support real time collaboration
47.	Support for WSRP (Web Services Remote Portlet)
48.	Support for Store & Forward for messaging
<b>Messaging Support</b>	

49.	Should provide facility to plug-in standard Messaging Systems
-----	---

<b>Database</b>	
1.	Database product should be available as commercial-off-the-shelf (COTS) product.
2.	Database server should be available and function in multiple operating systems like Linux, Unix, Windows with identical functionalities and look and feeling with 32 and 64 bit support.
3.	Database Should provide connectivity using native connectivity, JDBC, ODBC and connectivity to various technologies like .NET, ASP, Java etc.,
4.	Database should be capable of storing UNICODE data formats for multi-lingual language support especially Indian Languages.
5.	Database solution must ensure inter-dependency of user concurrency and data consistency. Should provide non-escalating lock mechanism and multi version read consistency for the transaction processing.
6.	Database solution should provide solution for storing file content such as images, audio, video, PDFs, spreadsheets etc with high performance, de-duplication, compression, encryption and advanced logging capabilities. Should also be able to separate LOB objects in a different storage space which can be further changed into read only/read write mode.
7.	Database solution should have a cost based optimizer which should be able to chooses the best path for your queries, based on what it knows about your data and by leveraging database features such as bitmap indexes, function-based indexes, hash joins, index-organized tables, and partitioning.
<b>Performance, Availability &amp; Scalability related features</b>	
8.	Database should have fault tolerance, parallel processing, linear scalability, mixed workload capability, recovery, real-time capability, manageability, advice to tune the query, query estimation time features.
9.	Database should have end-to-end parallel processing capabilities.
10.	Database should allow parallelism for all operations like loading, query, database administration/management operations like backup, restore, creation & updates of index, creation & refresh of materialized views etc.
11.	Database should be having a mechanism to minimize physical I/O. When a block is read by database, it should place this block into the buffer cache, so that next time when query looks for same block it should be available in primary memory, which is faster than physical memory.
12.	Database should provide horizontal scalability in such a manner that a new database node can be added (or removed) dynamically, as and when required in future, without disturbing the normal functioning of production system such as without shutdown. This should be supported by native database clustering components.
13.	Database should be able to provide database level storage management mechanism, which should enable the availability by means of creating redundancy, automatically balance the data files across the available disks, i/o balancing across the available disks for the database for performance, availability and management.
14.	Database solution should support option of different partitioning schemes within the database (Range, List, Hash & combinations) to split large volumes of data into separate pieces or partitions, which can be managed independently. The partitioning should enhance the performance, manage huge volumes of data and should provide foundation for Information Life Cycle Management (ILM).
15.	Database should have native, active-active clustering with objectives of scalability and availability. The solution should provide single image database concurrently accessed by multiple Databases, without repartitioning or changes to the database objects or 3rd party transaction routing mechanisms.
16.	Database should have built-in DR solution to replicate the changes happening in the

	database across multiple DR Sites with an option to run real-time reports from DR Sites without stopping the recovery mechanism.
17.	Database should be able to compress structured data and unstructured data such as documents, images, and multimedia, and query execution should be faster on compressed data.
<b>Data Replication and Backup &amp; Recovery Features</b>	
18.	Should support Multi-Master Replication which can replicate <ul style="list-style-type: none"> <li>• Tables</li> <li>• Indexes</li> <li>• Procedures, functions, and triggers</li> <li>• Packages</li> <li>• User-defined types</li> </ul>
19.	Database should have built-in replication solution to replicate the changes happening in the database in near real time mode across multiple read-only sites with an option to run real-time reports.
20.	Database solution should have built-in parallelism, Backup & Recovery feature, Disaster Recovery Feature, recovery for tables, rows accidentally deleted, Queue Mechanism to transfer data across to other database. Users should be able to take Complete Database Backup Online and in Parallel. The Recovery of the Complete Database should be possible in Parallel. Database must be capable of doing the partial recovery when some of the data is lost.
21.	Database should have the inbuilt capability to protect heterogeneous file systems. It should also provide Policy-driven media lifecycle management which can automate tape retention, duplication and vaulting (rotation of tapes between locations). Backup should be in encrypted format
<b>Security</b>	
22.	Database should have at least EAL4+ certification related database security
23.	Database solution should provide option for secured data storage for historic data changes for Compliance and tracking the changes without limitation of retention period.
24.	Database should provide control data access down to the row-level so that multiple users with varying access privileges can share the data within the same physical database. Should provide comprehensive auditing for inserts/deletes/updates/selects to quickly spot and respond to security breaches.
<b>Management</b>	
25.	Database solution should provide single system management view for database / database cluster. Should be using centralized database management console over network for monitoring database resources.
26.	Database should be having built-in provision to administer database / database clusters, Monitor performance, Maintain database, Backup and recovery, Disaster recovery management.

<b>Document Storage/Retrieval</b>	
1.	System should be platform independent
2.	The proposed solution should support categorization of documents in folders-subfolders just like windows interface. There should not be any limit on the number of folder and levels of sub folder
3.	The proposed solution should support storing documents in any type of electronic format including word processing, spreadsheet etc.
4.	Support archival of PDF/A format documents (open ISO standard for long term archival of documents)
5.	The proposed solution should support annotation and check-in/check-out capabilities as a part file processing, operating & tracking purpose.

6.	The proposed solution should support extensive document and folder level operation such as move / copy, email, download, delete, metadata association etc.
7.	The proposed solution should support roles and rights based security where there can be multiple levels of access to content.
8.	It should support multiple level of access rights like read, create, modify ,delete etc. on documents and folders
9.	The proposed solution should support versioning of contents. The system should support storage of complete and multiple versions of content. The end user should be able to access previous and next versions.
10.	The proposed solution should support storage and management of the meta-data or attributes of the content. The meta-data should be customizable, configurable, indexable and searchable.
11.	The proposed solution should support inbuilt Document Image Viewer for displaying image document without native viewer
12.	The proposed viewer should support comprehensive annotation features like highlighting, marking text, underlining putting sticky notes on documents, and support for text and image stamps etc.
13.	System should support automatic stamping of annotations with user name, date and time of putting annotations
14.	Built in Support for rendering and viewing PDF/A document format with support of applying annotation
15.	The proposed solution should support the search functionality within the content.
16.	The proposed solution should support search criteria like search by metadata fields, content objects, documents, pages, etc.
17.	It should support saving of search queries and search results
18.	It should support Full Text Search on image and electronic documents
19.	The proposed solution should support full indexing on documents that contain word content, including, word processing documents, tiff images, and PDF files.
20.	It should support Extensive Audit-trails at user
21.	It should have facility to generate Audit trails on separate actions
22.	It should support logging of all the actions done by individual users with user name
23.	The proposed solution should have access of the historical events (audit logs) associated with folders and document.
24.	The proposed system should have import/export facility to move objects from one repository to another
25.	System should provide support for Bulk Scanning
26.	The system shall support integration based on standards such as XML ,Web-services etc.
27.	The system should support barcode verification
28.	The system should provide support for integration with email
29.	The system should be Unicode compliant

**VII – Section 3 – Technical Requirements, Clause 5.4.1 Page 63**

The Clause 5.4.1 stands amended as follows –

The following considerations should be borne in mind for the hardware components design and specifications:

1. Maintainability, reliability and robustness of the hardware equipment’s is more important than the 'state of art' technology
2. Bidder needs to ensure uniformity in the platform proposed for all applications.

3. Components specifications should take care of future growth in traffic and expansion of services such as voice and video and for enhancement of existing service on new delivery channels.
4. With WDRA's dependence on the NWRS being critical, the NWRS should be designed in such a way as to avoid a single point of failure. The disruption in one area shall not affect others and the entire system should not fail.
5. Compatibility amongst the different components being developed should be ensured.
6. The application layer must be spanned over at least two different servers for load balancing.
7. The bidder shall prepare list of all the software proposed including off the shelf software and the system software and also all necessary documentation.
8. The Bidder shall ensure all the requirements of the application suite (including third party applications) and RDBMS are taken care of with required level of OS hardening.
9. The hardware proposed must be fault tolerant. The Bidder must provide the details of fault tolerance features proposed at all levels of servers
10. High availability should be built in within the system installed in the DC. Clustered systems should be used wherever applicable.
11. The servers should have dual power supply capable of running on either or both the power supplies.
12. The servers should have the capability to balance the load across multiple HBA interfaces in active-passive mode and seamless failover without any data corruption or Application/Database crashing. Also they should have the capability to support storage arrays of all leading storage vendors including, but not limited to EMC, Hitachi, HP, IBM, Network Appliance, SUN, etc
13. The bidder should provide a storage design, which should support at least 5 years (going forward) of data requirement.
14. Storage requirements for the application suite will have to be assessed by the Bidder and the storage solution shall be sized and procured accordingly.
15. The bidder would need to provide servers and other required storage hardware for both data center as well as Disaster Recover (DR) site.
16. The Bidder is required to provide the network schematic, network architecture of the proposed solution for connectivity. The Bidder shall submit the network plan along with the technical proposal as per their proposed solution.
17. The Bidder should provide one set of hardware which shall be shared for testing (20 users) and Training (25 users). Two separate instances are to be created for Testing and Training requirements. The bidder may choose to rationalize the server sizing in the Test (staging) & Development environment considering the nature of load on the environment. Non-production environment (Development and Quality) must be provisioned outside the production servers.
18. For any COTS products it is necessary for bidders to obtain certification from the respective OEMs that the proposed infrastructure is compatible with and sufficient for the specified number of users and fully meets the performance and scalability requirements including the increase in number of users and volume of transactions over a period of 3 years during the course of the NWRS project. **Any bids without such certification shall be liable for disqualification.**

The bidders have to perform an independent assessment of the requirements for establishment of Test (Staging) & Development Environment and IT Hardware at the Data Centre/DR site. Based on the assessment the bidder needs to provide the detailed BOM proposed in their technical proposal in line with the requirements of the project and performance on service level agreements. The proposed hardware shall be scaled up / upgraded by the successful bidder as per the requirement of the performance on the service levels at no additional cost to the WDRA.

*In addition to the above design guidelines, the proposed hardware should fulfill at least the following technical criteria:*

SERVERS	
A.	General requirements of servers

1.	The bidder should provide requisite licenses for all the system software/standard software required for the database servers including, but not limited to, Operating System, Compilers, Multi-Pathing software, File Systems, Volume Managers, OS hardening and verification tool, pre-built failover agents for database and application software, and Clustering Software etc. for unlimited number of instances.
2.	Bidder must ensure that the production environment is designed in such a way that adequate redundancy is maintained at all levels ensuring that there is no single point of failure. Failure of any server or partition should not degrade the performance or cause system reboot.
3.	A single server box should not contain hybrid type of CPUs/Cores.
4.	Offered system / processors shall have a clear road map for next 3 years. (The same needs to be certified by the OEM and the proof for the same needs to be provided with the technical proposal of the bidder)
<b>B.</b>	<b>Minimum Specifications for Database Server:</b> Following specifications are applicable to database servers for NWRS
1.	Database servers should be RISC/EPIC processor based servers with processor clock speed of at least 1.6 GHz or above.
2.	The server shall be configured with the operating system of Unix flavor.
3.	All applications shall fail over on to High availability Servers (separate physical servers) in separate partitions. It should be possible to dynamically allocate/de-allocate CPU and Memory resources from / to any partition without re-booting the system or partition.
4.	Bidder should ensure that Database servers are in (at a minimum) active-passive mode on two separate physical servers.
5.	The database and application tier for all modules have to be configured on servers which support partitioning/virtualization technology.
6.	Each partition should be populated with minimum 8 number of Gigabit full-duplex Ethernet ports OR 2 x 10Gigabit ports for LAN connectivity. Each 10G port must be capable of carving out at least 4 logical NICs with configurable speeds from one physical port.
7.	The server should have the capability to balance the load across multiple port interfaces in active-passive mode and seamless failover without any data corruption or Application/Database crashing.
8.	The Server/Partition shall have at least two numbers of 8 Gbps Fiber Channel adapters. Database partitions shall have minimum of 2 fibre channel adapter per partition. If application requires higher I/O throughput, the server shall be configured with an appropriate numbers of Fiber Channel adapters.
9.	The average CPU utilization of the environment must not go beyond 70% in a day
10.	Solution should be sized so that it should have headroom of 100% CPU/Memory upgrade in future. The database server should be vertically scalable. Each server should be scalable to deliver TPC-C (Transaction Processing Performance) of at least 15,00,000.
11.	Minimum cache of 12 MB per processor chip
12.	The Database server should deliver a minimum consolidated TPC-C (Transaction Processing Performance) of at least 25,00,000 in not more than two physical servers.
13.	The servers should be equipped with minimum 16 GB DDR 3 RAM or equivalent per core.
<b>C.</b>	<b>Following are the minimum specifications for other servers (Application Servers etc.)</b>
1.	These shall be RISC/EPIC/X-86 (Intel/AMD) CPU with at least 1.6 GHz clock speed with industry standard 64 bit Operating System.

2.	Total number of CPUs and RAM size in all servers to be defined by the bidder as per application sizing and to meet the performance SLAs.
3.	The server shall have at least 146GB dual redundant internal disks in mirror mode or option of boot from SAN.
4.	The server shall be supplied with minimum 4 nos. of GbE Ethernet ports.
5.	The application layer must be spanned over at least two different servers for load balancing.
6.	The server shall be configured with minimum two 4 Gbps FC ports or SAS ports.
7.	The server shall have n+1 power supply
8.	The offered server must have atleast 6 MB cache per processor chip.
9.	The Web servers should deliver a minimum consolidated TPC-C (Transaction Processing Performance) of atleast 8,00,000 for all the web/application servers.
10.	The servers should be equipped with minimum 16 GB DDR 3 RAM or equivalent per core.
<b>STORAGE</b>	
<b>A.</b>	<b>Storage Array (SAN)</b>
1.	The storage array shall be supplied with at least 5 TB usable capacity in a single array and should be scalable to at least 10TB usable capacity and minimum of 1024 disks in a single storage system.
2.	The Capacity breakup should be atleast
a.	5 % SSD – on RAID 5
b.	50% on SAS on RAID 1/0
c.	45% SATA/ NL SAS on RAID 6
d.	<i>The storage for DR should be a minimum of SAS/NL SAS on RAID 6</i>
3.	Performance - The storage system must have publicly audited benchmark such as SPC-1 (random workload) or SPC-2 (sequential workload).
4.	The system should be configured to cater to 50000 IOPS with a service time of < 5 ms. The vendor should submit a documentary evidence from their internal sizing tool for achieving the required performance. <i>The system for DR site should cater to 25000 IOPS with a service time of &lt; 5 ms</i>
5.	Storage-array shall be top of the line product with all in-built redundancies to provide “No Data Transaction Loss” because of any subsystem/component failure. Furthermore the storage system should be tried and tested model in production environment for minimum of six months at the time of submission of RFP.
6.	The storage system shall support automatic isolation of failed components
7.	The storage system shall support recovery from unscheduled power failure/ interruption without any data loss irrespective of the number or frequency of outages
8.	The design shall provide automatic re-routing of I/O traffic from the host in case of primary path failure. The I/O paths between the servers and storage shall be load balanced. The Storage array based host resident HBA load balancing software should be provided for maximum number of SAN attached servers supported in a heterogeneous environment. <i>The storage for DR does not require this feature.</i>
9.	The Storage Array should be configured with minimum 128 GB of usable data cache for only write mirroring, distributed such that the entire cache bandwidth if available in the proposed configuration. Cache should be scalable to 256 GB of for only write mirroring in the same box.
10.	Storage system shall be configured with at least 8 Backend FC or SAS Disk ports (towards disks) and at least 8 front end FC/SAS ports (towards FC switch) scalable to 16. Each front-end port in the storage array should have dedicated processor or cores for delivering high throughput and I/O performance. The backend port should be

	scalable to 16 by addition of backend adapters only and should not require any other hardware. <i>The corresponding minimum number of ports for DR site should 4 each for front and back, and scalable to 8.</i>
11.	The array should support automated storage tiering and movement of data within different tiers of storage namely SSD, FC/SAS and SATA/ Nearline SAS disks without requiring user intervention, depending on the frequency or pattern of the accessed data. <i>The automated storage tiering would not be required for the DR site.</i>
12.	Storage system should be configured with LUN masking software and license for all LUNs created on the storage system.
13.	In case of hard disk failure, the system shall be able to do dynamic reallocation to spare disk automatically without manual intervention.
14.	The storage array should support native front end connectivity options. The array should also support Gig-E for remote replication through FCIP Router.
15.	The storage array should support storage based replication.
16.	Storage System should support at least RAID 5, RAID1 and RAID 10.Mix and match of disks types & RAID levels shall be supported.
17.	Storage Array shall support both Spanning and Striping of volume across minimum of 16 channels in active-passive configuration.
18.	The storage array should support latest versions of operating systems like Linux (RHEL and SUSE), Unix (AIX / HPUX / Solaris etc.).The storage system should offer exhaustive support for all industry leading cluster systems.
19.	The storage system shall allow easy expansion and scalability to support future storage requirements.
20.	The array should support capability to replicate data to a remote site using storage controllers
21.	Suitable rack enclosures from the array manufacturer need to be included for the complete storage solution.
22.	The storage system should be configured with GUI-based storage management software tools for management. A single command console should be used for the entire storage system for all functionalities like SAN & Storage configuration and management, performance monitoring and reporting analyze performance data, generate customized reports. The software applied should be capable of monitoring 3rd party storage arrays in a heterogeneous environment as well.
23.	Offered SAN /storage shall have a clear road map for next 3 years. (The same needs to be certified by the OEM and the proof for the same needs to be provided with the technical proposal of the bidder)
<b>B.</b>	<b>SAN Switches</b>
1.	SAN switch should be of director class with 16 ports populated and active. Should have non-blocking architecture and scalable to 32 ports in a single domain with 8Gbps full duplex with no over subscription with local switching. Two nos. of Fibre channel switch should be provided in high availability mode.
2.	Should support at least 8 GB FC ports and also support 1Gig and 10 Gig Ethernet ports for remote replication in future. <i>The DR storage may support 4 GB FC ports.</i>
3.	Switch should support multiprotocol architecture such as FC, FCIP and emerging protocol such as Converged Enhanced Ethernet (CEE) and Fibre Channel over Ethernet (FCoE).
4.	SAN Switch should have equal performance from any port to any port on the director for consistent performance
5.	All the ports for DC should operate at minimum 8Gbps and auto-negotiate to 4Gbps/2Gbps / 1Gbps FC speeds. The DR site may have a SAN switch operating at a

	minimum of 4Gbps
6.	There should not be any single point of failure in the switch. The SAN switch should provide Enterprise-class availability features such as Dual-redundant control processors, redundant hot-swappable power and cooling subsystems. Power supply and fan assembly should have different FRU.
7.	Should have proactive fault detection and alerting capability to avoid any hot-spots in the fabric.
8.	The switch should be rack mountable.
9.	Provide Adaptive Networking services such as Quality of Service (QoS) to help optimize application performance in consolidated, virtual environments. It should be possible to define high, medium and low priority QOS zones to expedite high-priority traffic.
10.	It should be possible to configure any port in the switch for Fibre Channel Integrated Routing mode for selective device sharing while maintaining remote fabric isolation or higher levels of scalability and fault isolation.
11.	It shall be possible to configure the switches with alerts based on threshold values for temperature, fan status, Power supply status, port status.
12.	Switch shall support diagnostics features such as port mirroring, Syslog, Online system health, Port-level statistics etc.
13.	Throughput of the each switch should be 1024 Gbps or more
<b>C.</b>	<b>FC – IP routers</b>
1	At least two routers shall be provided at each location (DC & DR). The design shall support failover using redundant configurations, ensuring that in case one of the routers is down, the traffic can flow through the other router. Actual requirement would be as per the bandwidth requirement of WAN link to storage infrastructure. In case additional routers are required based on the requirement of bandwidth sizing for asynchronous storage based remote replication over IP; the same shall have to be proposed additionally ( <b>Will be provided by Hosting service provider – Bidder to provide the detailed specification</b> )

#### **VIII – Section 4 – Bidding Forms, Clause 1.2.6 Form P6 – Bid Security form, Page 90**

The form is amended as follows:

This deed of guarantee is made on this \_\_\_\_\_ day of \_\_\_\_\_, 2012 at Delhi, by \_\_\_\_\_, constituted under \_\_\_\_\_ and having its head office/registered office at \_\_\_\_\_ and inter alia a branch office at \_\_\_\_\_ (hereinafter referred to as “the bank” or “the guarantor”, which expression shall unless it be repugnant to the subject or context hereof be deemed to include its successors and assigns) in favor of The Warehousing Development and Regulatory Authority (WDRA)

WHEREAS, the WDRA undertook the process of competitive bidding in order to select the most desirable firm/company to execute the works, for which purpose WDRA issued a request for proposal dated \_\_\_\_\_, 2012 (“RFP”) inviting proposals from various bidders to execute the scope of work specified therein (works);

WHEREAS, [name of bidder] (hereinafter called “The bidder”) has submitted its proposal dated [date] for the execution of the works (hereinafter called “the proposal”).

In the event of any breach or non-performance of any of the following terms and conditions contained in the RFP:

1. If a bidder:
  - a. Withdraws its bid during the period of bid validity specified by the bidder on the bid form or
  - b. Fails to accept the purchaser’s corrections of arithmetic errors in the bidder’s bid (if any)
2. In the case of the successful bidder, if the bidder fails to:
  - a. Sign the contract or

b. Furnish performance security.

the guarantor agrees absolutely, irrevocably and unconditionally guarantees and undertakes to pay to WDRA, a sum of rupees five lakhs, without any protest or demur and upon receipt of first written demand from WDRA, without having to substantiate its demand, provided that in its demand the WDRA will note that the amount claimed by WDRA is due to WDRA owing to the occurrence of any one or more of the conditions, specifying the occurred condition or conditions.

This guarantee will remain valid for a period of at least 30 days beyond the original validity period of bids, or at least 30 days beyond any extended period of bid validity. Any demand in respect of this guarantee should reach the bank not later than the above date.

The jurisdiction in relation to this guarantee shall be the courts at India and Indian law shall be applicable.

*NOTWITHSTANDING anything contained hereinbefore our liability under this Guarantee is restricted to Rs. \_\_\_\_\_ (amount of Performance Security) (Rupees \_\_\_\_\_ (in words). Our guarantee shall remain in force till \_\_\_\_\_ (date of validity of the guarantee).*

*Unless the demand/claim under this guarantee is served upon us in writing before \_\_\_\_\_ (date of validity of the guarantee), all the rights of the WDRA under this guarantee shall stand automatically forfeited and we shall be relieved and discharged from all liabilities mentioned hereinabove.*

IN WITNESS WHEREOF the guarantor has executed this guarantee on this \_\_\_\_\_ day of \_\_\_\_\_ and year first herein above written.

Signed and delivered by the above-named \_\_\_\_\_ Bank by its authorized signatory as authorized by:

Board resolution passed on \_\_\_\_\_

Power of attorney dated [ ].

\_\_\_\_\_  
Authorized signatory

Name:

Designation:

In the presence of

### **IX – Section 5 – Specimen Contract, Clause 1.6 Page 119**

Clause 1.6 is amended as follows:

1. If any dispute of any kind whatsoever shall arise between the WDRA and the System Integrator in connection with or arising out of the contract, the parties shall seek to resolve any such dispute or difference by mutual consultation. However, if the parties fail to resolve such a dispute or difference by mutual consultation, within fourteen (14) days after one party has notified the other in writing of the dispute or difference, then the matter will be referred in writing for arbitration.
2. *In case a dispute is referred to arbitration, it shall be decided by reference to arbitration by a Board of Arbitrators. The Board shall consist of three arbitrators, of whom each Party shall select one, and the third arbitrator shall be appointed by the two arbitrators so selected and in the event of disagreement between the two arbitrators, the appointment shall be made in accordance with the rules of Arbitration of the International Centre for Alternative Dispute Resolution, New Delhi ; or such other rules as may be mutually agreed by the Parties. The arbitration proceedings shall be subject to the provisions of the Arbitration and Conciliation Act, 1996 or any statutory modification or re-enactment thereof.*
3. *The venue of such arbitration shall be Delhi, and the language of arbitration proceedings shall be English*
4. The award of the *Board of Arbitrators* shall be final and binding on all the parties.
5. Notwithstanding any reference to the arbitration in this clause,

- a. The parties shall continue to perform their respective obligations under the contract unless they otherwise agree.
- b. The WDRA shall pay the System Integrator any monies due the System Integrator.

**X – Section 5 – Specimen Contract, Clause 4.3 Page 125**

Sub clause 3 is being appended with point d as under:

- d. Required to be disclosed by the receiving party under the compulsion of law, or by order of any court or government or regulatory body to whose supervisory authority the receiving party is subject.*

**XI – Section 5 – Specimen Contract, Clause 5.5 Page 128**

Clause 5.5 is being appended with sub clause 5 as under:

- 5. If within twenty one (21) days after receipt of the System Integrator's notice, WDRA fails to issue the Go-live Certificate OR fails to inform the System Integrator in writing of the justifiable reasons why the Go-live certificate is not being issued, the system shall be deemed to have been accepted.*

**Total Number of Changes to the RFP – 11 (Eleven)**

S.No.	Pre Bid Query Discussed	Clarification
<b>Other clarification for queries raised during pre bid conference</b>		
1	Why are two solutions for lack of connectivity being provided?	<p>The offline solution would retain data locally, issue a temporary acknowledgement and the NWR would not be activated till the data is sent to the central database. This would be employed in case of intermittent loss of connectivity for short period of times.</p> <p>In case of prolonged lack of connectivity, the warehouseman would have the option of calling the helpdesk at WDRA for issuance of receipts.</p> <p>Post issuance of receipts at WDRA helpdesk, both warehouseman and receipt holder would receive a confirmation SMS to which they would need to respond post which the receipt would become active.</p> <p>The offline solution would be developed, and available for download from WDRA website. The proposed offline solution would be a thick client application, which would store the data in the local system in an encrypted format, and would sync up the same with central database when network is available.</p> <p>The bidder is free to propose a solution so that information to be printed on the NWR can be secured at the point of origin in both offline and online modes and is subsequently verifiable .</p>
2	Request for minimum specifications for hardware and application to ensure level playing field for all vendors	Please refer to the Corrigendum
3	Who will provide the storage - Vendor or Hosting Services Provider?	Storage will be provided by the Vendor ( Please refer to the pre bid clarification for specification of the storage hardware)
4	How are the following items included in scope of Vendor and Hosting Services Provide? 1. Application Monitoring 2. Infrastructure Monitoring	<ol style="list-style-type: none"> <li>1. Application Monitoring - Vendor</li> <li>2. Infrastructure Monitoring - Hosting Services Provider</li> </ol>
5	Where will the testing environment be located?	Test environment will be located at SI or WDRA location till the end of Handholding Period for quicker turnaround. Post the handholding period, the test environment should be shifted to the WDRA selected Data Center.
6	What will be the values for the following parameters for Database and Server Sizing: 1. Peak Load	The year 5 projections given in section 2.12 of the technical requirements should be used as the peak load for compute and storage design.
7	What will be the values for the following parameters for Database and Server Sizing: 1. RTO and RPO	<p>RTO - 4 hours</p> <p>RPO - 2 hours</p>
8	What is the decided Data Retention Policy?	Post the closure/discharge of the NWR, the record should remain in the system for 3 years.
9	For how many years does support need to be provided?	There is no change to the RFP
10	Why is a Requisite Authority Letter needed for PBG?	The letter would be required in case the PBG is from a private sector bank.
11	Evaluation of the proposed solution - Page 24 ( Points 2.1, 2.2, 2.3, 2.4)	<p>Copy of the following documents are required -</p> <ol style="list-style-type: none"> <li>1. Purchase order or work order for the OEM/Bidder</li> <li>2. Agreement signed with the client</li> <li>3. Letters from the client certifying that the OEM/Bidder has successfully completed the work in the said project with relevant information on dates</li> </ol> <p>At least one of the work orders should be in the name of the bidder for the proposed technology platform/solution.</p>
12	Extension of Submission Date	Please refer to the Corrigendum

**Queries Regarding Instruction to Bidders and Bid Data Sheet**

Sr. No.	Section Reference Number (SRN) and Description	Page Number	Description	Bidders' Suggestions	WDRA's Response
1	ITB 1.6	9	Sub-Contracting is not allowed	Can the bidder have L2/L3 support on contracting basis?	There is no change to the RFP document
2	ITB 3.3 Point 4	12	"The prices must include all costs including that incidental to the performance of the services, as incurred by the successful bidder, such as travel, subsistence, office support, communications, translation, printing of materials, etc."	1) Consumables if any should be paid on actuals 2) If any travel is required above the scope of work of the bidder that should be paid on actuals.	There is no change to the RFP document. The bidder should suitably estimate the travel and consumables related to their design and delivery approach in the bid. No additional payments would be made.
3	ITB 3.3 Point 6	12	Prices quoted by the bidder shall remain fixed during gap between the bidder's performance of prequalification bid and the contract and not be subject to increases on any account. Bids that are subject to price adjustment will be summarily rejected.	What would be the time gap between the bidder's performance of prequalification bid and technical/commercial bid?	There is no change to the RFP document. The overall validity of bids is already mentioned in the section ITB 3.7
4	ITB 6.5 Point 7	18	WDRA shall also be entitled to make recoveries from the bidder's bills, PBG, or from any other amount due to him, the equivalent value of any payment made to him due to inadvertence, error, collusion, misconstruction or misstatement	Please confirm that this is limited as per the clause 6.6 on Page 130 of the RFP for Limitation of Liability.	The understanding is correct
5	ITB 1.5 Point 2	20	Bidder's Annual sales turnover for each of the previous 3 financial years (2009-10, 2010-11, and 2011-12) should be at least 150 Cr INR out of which at least Rs. 50 Crore must be exclusively from software development for each of the years.	Request you to kindly reduce the annual sales turnover for each of the 3 financial year as "average annual turnover 100 Crs for each of the financial year" for providing level playing field	Please refer to the Corrigendum
6	ITB 1.5 Point 2	20	Bidder's Annual sales for each of the previous 3 financial years should be at least 150 Cr INR out of which at least Rs. 50 Crore must be exclusively from software development for each of the years.	Will the turnover for providing software as a service be considered under this head?	Yes. SaaS revenues would be considered as software development revenues.
7	ITB 1.5 Point 2	20	Bidder's Annual sales for each of the previous 3 financial years should be at least 150 Cr INR out of which at least Rs. 50 Crore must be exclusively from software development for each of the years.	Request you to amend the clause as "Bidder's Annual sales turnover for each of the previous 3 financial years (2009-10, 2010-11, and 2011-12) should be at least 150 Cr INR out of which at least Rs. 25 Crore must be exclusively from software development /maintenance and facility management, for each of the years."	Please refer to the Corrigendum
8	ITB 1.5 Point 3	20	Bidder must be a profit making company with net worth of Rs. 50 Crores in each of the last three financial years (2009-10, 2010-11, and 2011-12).	Request you to amend the clause as "Bidder must be a positive net worth company with net worth of Rs. 50 Crores in each of the last three financial years (2009-10, 2010-11, and 2011-12)."	There is no change to the RFP document
9	ITB 1.5 Point 4	20	Bidder should have executed at least following in Government / Public Sector clients in India in the last 5 years: • Two IT/Software Design/ Development/ Implementation project of worth 1.5 Cr INR Or • Four IT/Software Design/ Development/ Implementation project of worth 1 Cr INR	Request you to amend as " Bidder should have executed at least following in Government / Public Sector clients in India in the last 5 years: • One IT/Software Design/ Development/ Implementation project of worth 1.5 Cr INR Or • Four IT/Software Design/ Development/ Implementation project of worth 1 Cr INR"	There is no change to the RFP document

10	ITB 1.5 Point 5	20	Bidder must in the last 2 years have successfully provided at least one year running L2/L3 support on at least 2 prior projects as on 31st March 2012.	L2/L3 Support may please be considered on 1 project for a big project (Considering deployment of more than 150) Or Ongoing projects may please be considered	Please refer to the Corrigendum
11	ITB 1.5 Point 5	20	Bidder must in the last 2 years have successfully provided at least one year running L2/L3 support on at least 2 prior projects as on 31st March 2012.	Request you to amend as "Bidder must in the last 2 years have successfully provided at least one year Facility Management Services/Operation and Maintenance on at least 2 projects as on 31st March 2012."	There is no change to the RFP document
12	BDS Section 5	22	Opening of Prequalification at 11 PM on 5th February 2013.	We presume that opening of pre-qualification bids will be at 11 am on 5th February 2013.	Please refer to the Corrigendum
13	ITB 5.5 Point 1.1	22	Bidder must have exposure to IT system development and integration projects in the public warehousing sector/ warehousing related to PDS, Food and Agriculture and in the last 3 years must have successfully completed at least one project of order value not less than Rs. 1.5 Crore in these sectors.	Kindly change to : Bidder must have exposure to IT system development and integration projects in the <b>Public sector/central/state govt related to e-governance</b> and in the last 3 years must have successfully completed at least one project of order value not less than Rs. 1.5 Crore in these sectors.	There is no change to the RFP document
14	ITB 5.5 Point 1.1	22	Bidder must have exposure to IT system development and integration projects in the public warehousing sector/ warehousing related to PDS, Food and Agriculture and in the last 3 years must have successfully completed at least one project of order value not less than Rs. 1.5 Crore in these sectors.	Kindly change to : Bidder must have exposure to IT system development and integration projects in the public warehousing sector/ warehousing related to PDS, Food and Agriculture OR Financial Domain and in the last 3 years must have successfully completed / ongoing at least one project of order value not less than Rs. 30 Lakhs in these sectors.	There is no change to the RFP document
15	ITB 5.5	23	Clause 1.1, 1.2, 1.3, 1.5, 2.1, 2.2, 2.3, 2.4	Request you to consider ongoing/completed projects specifically for Government Organizations	Please refer to the Corrigendum
16	ITB 5.5 Point 1.2	23	Bidder should have experience of successfully completed at least 1 project (including hardware, software and services) in India for Core Banking or Banking Correspondents or Insurance Solution with over 100 locations out of which at least one project must be of the order value not less than Rs. 1.5 Crore.	Please nullify this point as it is not required in this context	There is no change to the RFP document
17	ITB 5.5 Point 1.2	23	Bidder should have experience of successfully completed at least 1 project (including hardware, software and services) in India for Core Banking or Banking Correspondents or Insurance Solution with over 100 locations out of which at least one project must be of the order value not less than Rs. 1.5 Crore.	Requesting you to consider successfully completed/ongoing at least 1 project (including hardware, software and services) in India for Core Banking or Banking Correspondents or Insurance Solution or <b>financial domain</b> project must be of the order value not less than Rs. 1.5 Crore.	Please refer to the Corrigendum

18	ITB 5.5 Point 1.3	23	Bidder must have successfully completed at least 3 projects IT/software design/procurement/development/implementation with over 100 rural/semi urban locations(including hardware, software and services) with a total value not less than Rs. 1.5 Crore	Kindly consider ongoing projects	Please refer point 15 above.G7
19	ITB 5.5 Point 1.3	23	Bidder must have successfully completed at least 3 projects IT/software design/procurement/development/implementation with over 100 rural/semi urban locations(including hardware, software and services) with a total value not less than Rs. 1.5 Crore	Requesting you to consider completed and ongoing projects at least 3 projects in IT/software/Facility Management/ design/procurement/ development/ implementation with over 50 rural/semi urban locations(including hardware, software and services) with a total value not less than Rs. 1.5 Crore	There is no change to the RFP document
20	ITB 5.5 Point 1.5	23	Bidder must have successfully completed at least 1 projects in IT support with over 100 rural/semi urban locations	Kindly consider ongoing projects	Please refer point 15 above.
21	ITB 5.5 Point 3.2	25	Functional Expert – Warehouse sector should have: • At least 8 years of experience • Experience of at least 1 System integration, software development, business process reengineering projects in warehousing and warehousing related to PDS sector	Functional Expert – logistics/inventory/SCM sector should have: • At least 8 years of experience • Experience of at least 1 System integration, software development, business process reengineering projects in warehousing and warehousing related to PDS sector	There is no change to the RFP document
22	4	14	Submission of bids	Number of hard and soft copies required for submission	The bidder needs to submit 1 hard copy and 1 soft copy of the pre qualification and technical proposals and only 1 hard copy of the commercial proposal
23	3.3(8) 3.2(7) 3.4(4)	12 122 123	Changes in applicable taxes for all other tax heads, except service tax, would be borne by the bidder	Need to modify as under: Changes in applicable taxes for all tax heads should be to the account WDRA	There is no change to the RFP document

**Queries Regarding Technical Requirements**

Sr. No.	Section Reference Number (SRN) and Description	Page Number	Bidders' Suggestions	WDRA's Response	Response
1	Section 1.1	29	Figure 1 - Key Stakeholders	Is the bidder also required to consider the other stakeholders such as Assaying Agency and Commodity Exchanges in the NWRs?	The understanding is correct
2	Section 2.1 Point 2	30	However, due to frequent connectivity issues in remote areas, it is essential that the solution provides critical functionality in an offline mode of operation	1. Request WDRA to define and share the list of Critical functionalities desired to work in offline mode. 2. Request WDRA to define and share the list of Non-Critical functionalities	Please refer to Section 2.4 Point 1 of Technical Requirements
3	Section 2.1 Point 3	30	Another critical consideration in the effectiveness of the proposed solution is use of vernacular support. Presently the application should support Hindi and English, with no font download dependency.	We understand that the end user machine will have standard Unicode based fonts available which support the required language and no specific fonts needs to be downloaded. Please confirm.	End User Machine will be a desktop that will contain Windows/Linux OS and/or a PDA. In case any standard service packs are required on the end user machine for the application to run, the same should be clearly mentioned in the proposal.
4	Section 2.1 Point 3	30	Another critical consideration in the effectiveness of the proposed solution is use of vernacular support. Presently the application should support Hindi and English, with no font download dependency.	We understand that local language/regional language be kept out of scope	The application needs English/Hindi support. However the technology provided should be able to support vernacular languages.
5	Section 2.1	31	"End users"	Request WDRA to share details of the End-User hardware & software with quantities if bidder's current SoW includes End-User infrastructure monitoring and End-point protection deployment also.	The end user computing monitoring is outside the scope of the bidder.
6	Section 2.1 Point 10	31	External users shall be able to access non-restricted areas of the application through Internet	For estimation of aggregated internet bandwidth & server sizing at the Data Centers, following inputs are requested: 1. Number of External users 2. Concurrency for External users. 3. Estimated Transaction size (in Kb) per user session	Please refer to Section 2.12 of Technical Requirements
7	Section 2.1 Point 10	31	External users shall be able to access non-restricted areas of the application through Internet. The public web server and the internal firewall (which is a part of the public DMZ) shall be configured to render only those application pages that can be accessed publicly	Please elaborate which areas are required to be kept as Non-Restrictive for External Users. Is this as per the users defined in Section 2.2 on page 32 of the RFP	Please refer to the diagram on page 33 of the RFP. The non restrictive features are - Grievance redressal and NWR status query.
8	Section 2.1 Point 2	31	End users of the system will have to given access to the system through multiple platforms including desktop, PDA.	Bidder request WDRA to share the Total and Per Branch / Warehouse / Agency Numbers for the following . 1. Number of Desktops with OS details 2. Number of PDAs with OS details 3. Other infrastructure (like Network devices etc)	The warehouse users would user Windows/Linux based PC. The exact numbers are not fixed as the number of registered warehouses may vary.
9	Section 2.1 Point 2	31	However, due to frequent connectivity issues in remote areas, it is essential that the solution provides critical functionality in an offline mode of operation as well. NWR transactions should not be affected and data security should be maintained. Lastly, the solution must provide for auto-sync with the centralized database as soon as connectivity is established.	Bidder request WDRA for following inputs, in addition to clarification as Who will provide the following infrastructure (at the Remote locations) for the offline mode of operations: 1. Local servers for offline operation. 2. Local storage for storing data till connectivity is restored. 3. How many days to be considered for offline operations. 4. Security solution for data in local storage 5. Database for information storage. 6. Incase of existing infrastructure, hardware and software details are	The data should be stored on the local PC of the warehouse user. The application should store the local data in an encrypted mode on the user machine.

10	Section 2.1 Point 2	31	End users of the system will have to given access to the system through multiple platforms including desktop, PDA.	Please clarify on multiplatform support. Please mention on which equipment in terms of PDA, PC's tablet it is required and the requisite OS for the same	The warehouse users would user Windows/Linux based PC. The exact numbers are not fixed as the number of registered warehouses may vary.
11	Section 2.1 Point 3	31	The system should have multilingual interface, so that based on selection the script of the portal can be changed.	We assume that this is referring only to label script change on language change, no translation/transliteration is involved.	The understanding is correct
12	Section 2.1 Point 4(a)	31	a. The application so developed shall also be mobile compatible. Stakeholders should be able to use mobile to transact.	Please confirm the exact functionality to be available on mobile. Also is any mobile application is required or is only an portal which can be opened on mobile web browser is required. Please Confirm.	At a minimum, The functionality defined in section 2.2.3 should be available on a mobile browser platform. The mobile application UI should be suitably modified to meet the usability requirements of the users
13	Section 2.1 Point 4(b)	31	b. The Graphical User Interface (GUI) of the application should be compatible (viewable) on various devices like PCs, handheld PDAs, tablets, smart phones, mobile gazettes etc	Does WDRA envisage a mobile web application or native mobile applications (iOS, Android, etc based). Please confirm	The bidder may propose its solution for native mobile applications, if so desired. At a minimum the application should run as a Mobile browser application.
14	Section 2.1 Point 4(c)	31	Read only rights and database query access should also be available to all stakeholders	We understand the every user is required to have MIS query capabilities to see specific report, as per industry standards access to database should be restricted from all stakeholders. Please Confirm	The understanding is correct. However the users should be able to check the status of the NWR from the web based application without login.
15	Section 2.1 Point 5	31	The NWR should be securely printable from a PDA handheld device or a regular PC printer.	How WDRA is visualizing this functionality? A user fires a print command from a PDA and it gets printed to the nearby printer at warehouse? Request to provide some more details for this requirement	Please refer to Section 2.9.1 of Technical Requirements
16	Section 2.1 Point 7	31	The solution should work on the latest version of the proposed RDBMS based database systems. The system database should be at least ODBC compliant.	Since the bidder is responsible for End to End system with complete SLA management, please confirm that the bidder is free to choose the type, version of the database.	Please refer to the Corrigendum
17	Section 2.1 Point 8	31	The system should enable signing off documents using digital signatures by the various stakeholders.	We understand that DSC provision is not a part of this RFP	The bidder should provide for 50 Class -2 digital signatures.
18	Section 2.1 Point 8	31	The system should enable signing off documents using digital signatures by the various stakeholders.	Request WDRA to share the Number of Digital signatures required for WDRA users.	The bidder should provide for 50 Class -2 digital signatures.
19	Section 2.1 Point 8	31	The system should enable signing off documents using digital signatures by the various stakeholders.	Please mention the following requirements below: 1. Who will provide the Digital Certificates and PKI Infrastructure 2. Which Class of Digital Signatures to be used 3. Who would provide PKI Infrastructure like tokens, application to read and verify digital signatures.	Please refer to the Corrigendum
20	Section 2.1 Point 8	31	The system should enable signing off documents using digital signatures by the various stakeholders.	Please clarify if WDRA would provide PKI infrastructure like token, application to read and verify digital signature etc ?	The bidder is expected to provide the required infrastructure in addition to procuring 50 class-2 digital signature
21	Section 2.1 Point 9	31	A secure tunnel shall be established based on username and password to enable Internal Users to access the internal web server hosting the application.	We assume that this refers to VPN connection. Please confirm.	The understanding is correct.

22	Section 2.1 Point 9	31	Internal WDRA users shall be connected over WAN and shall access the NWRS over the Intranet.	For estimation of aggregated intranet bandwidth at the Data Centers, following inputs are requested: 1. Number of WDRA offices 2. Number of WDRA internal users per office. 3. Concurrency for WDRA internal users. <del>4. Estimated Transaction size (in Kb) per user session</del>	1. Presently 1 2. Internal Users - 30 3. Concurrency - 5 4. Transaction size would depend upon the system design, as there is not historical data available.
23	Section 2.1 Point 9	31	A secure tunnel shall be established based on username and password to enable Internal Users to access the internal web server hosting the application.	Request WDRA to share the Number of VPN users.	Please see response to point 22 above.
24	Section 2.1 Point 9	31	Internal WDRA users shall be connected over WAN and shall access the NWRS over the Intranet.	What are the estimated number of WDRA users that shall access the NWRS over and their locations? Whether the bidder would need to supply the end user equipment for WAN connectivity i.e. routers, switches etc.	Point 1 - Refer to Section 2.12 of Technical Requirements Point 2 - No
25	Section 2.2	33	Overall System (functions and integrations) - NWR Modules Auction (Diagram)	Since no functional requirements have been detailed with reference to auctions, kindly confirm if this is within scope of NWRS	Yes, the actual auction is outside the NWRS system - however the information regarding the auction e.g. reason for auction, quantity auctioned, price and date etc would be captured in the NWRS
26	Section 2.2	33	Helpdesk Support	Request WDRA to share the Business operational hours/day for the following. 1. Bidder's Helpdesk support operation <del>2. Bidder Technical Support provisioning</del>	Bidder Helpdesk not needed Technical support will be as per SLA
27	Section 2.2.1	34	All accreditation agencies will receive a new digitally signed certificate over email.	1. We assume that WDRA has an existing email server with which integration is required. 2. We assume that WDRA shall be provisioning the required digital certificates.	Please refer to the Corrigendum
28	Section 2.1.1	35	All fee refunds wherever applicable would be processed through the payment gateway only, to the account of the instrument making the payment. In case of refund for payments made through the bank challans, the current system of payment through cheque or draft would continue.	Please clarify the following: 1. Who will provide the Payment Gateway Services - Selection of PG Vendor, Integration with PG Services 2. Who will pay for the recurring PG Charges	1. The payment gateway would be provided by the bidder. 2. The recurring PG charges would be borne by WDRA
29	Section 2.2.2	37	Registered warehouses should be provided with requested login information through secure automated emails.	Kindly clarify what is meant by secure automated e-mails.	E-mails sent through secure mechanisms Please refer to Section 2.9.2 of Technical Requirements
30	Section 2.2.3	42	Warehouseman should be able to take a print of the receipt and a confirmation note for withdrawal of commodities. The receipt will be given to the farmer or depositor and the signature of receipt holder would be captured on the confirmation note.	We assume that the signature verification, if any will be done manually. There is no biometrics integration envisaged.	The understanding is correct.
31	Section 2.2.4	43	Banks will be given access to the NWRS by exposing web services to all banks. Bank officials can then access the service by integrating it with their core banking solutions and login using their own bank login details. Another option of giving banks access to the system is to create few administrators for each bank after proper KYC conducted by WDRA.	Integration with banks will form a major part of the scope of work. Therefore please confirm whether the bidder is free to choose any of the two methods described in this section as this will have a financial impact on the bid value. Alternately this integration should be removed from scope and should be paid on actuals as this is future requirement.	The bidder needs to use both methods for bank integration. For a CBS integration, the solution should expose a secure web service for bank CBS providers to integrate with. The web service based solution should be tested with at least one bank as a part of the current scope.

32	Section 2.3	44	In addition to the above functionalities, stakeholders should be able to draw out customized reports based on their user access levels. WDRA should be able to draw from the system on monthly, quarterly and yearly basis.	Please mention the following: 1. What is the levels of reporting required ( User Levels-Who would be able to generate reports, viewers of the Reports) 2. Is MIS reporting only required 3. Is there a need for Graphical/Dashboard reporting 4. What are the types of reports and their frequency of generation	Please refer to section 2.3
33	Section 2.3.1 Point 4	44	NWRS apart from providing the facility to print and e-mail the report should also provide a printer – friendly version <del>automatically for all pages.</del>	Is WDRA expecting all applications to provide a printer friendly version or just for the reports?	The printer friendly version is required only for reports.
34	Section 2.3.1 Point 6	45	The proposed solution based upon a multi-tier (n-tier) architecture design, should allow the business rules to be changed accordingly, with either little changes, if at all, to <del>the interface or the data tier.</del>	Is WDRA expecting that the end user will make necessary changes in the business rules?	The understanding is correct
35	Section 2.4	45	Capability of taking the data in to external media (USB) and uploading the data from external endpoint (internet café). All transfers should be in encrypted format.	Please confirm who will be providing the USB (we understand that all data will be held in encrypted form on the USB).	The USB would be provided by WDRA
36	Section 2.4	45	The NWRS should provide high-performance, interactive, and rich user experiences while operating in stand-alone, connected, occasionally connected, and disconnected scenarios.	Please mention the following requirements below: 1. Are you looking at a thick client based installable application which could be installed on the desktop. Allow the users to perform all functions and later on connected to the central server. 2. What are the different OS that the installable application run on?	1. The understanding is correct 2. Windows and Linux
37	Section 2.4	45	Offline Connectivity Requirements	1. Which all stakeholders are expected to function in an offline mode? 2. What is the frequency envisaged for synchronizing?	Refer Section 2.4 for details of stakeholders and functions. The offline data should get synced up when network is established. There is no predefined frequency for the same.
38	Section 2.4 Point 4	45	Capability of taking the data in to external media (USB) and uploading the data from external endpoint (internet café). All transfers should be in encrypted format.	Request WDRA to re-look at this capability as this involves various security issues. 1. Will the End-points from where USB will be used are secured. 2. How the security of USB data will be ensured beside the secured access by user 3. Bidder recommends that downloading of data should happen at branch office as the Desktops at branches will be more secured as compared to desktops at Internet Cafe.	The offline application should store data in an encrypted format. The same may be decrypted by the central application upon uploading.
39	Section 2.5	45	Corporate warehouse groups like CWC and SWC should be able to utilize this feature for summary MIS reporting to <del>gain a view of their entire operations.</del>	Please confirm if any integration with CWC and SWC is expected. Also confirm the level of this integration. Is WDRA only expecting data integration.	No integration with CWC or SWC is envisaged. Only reports would be utilized by these entities as normal users
40	Section 2.5	45	Details as provided in Point 2.5	As we understand that the scope of activities for this will be restricted to details as mentioned i.e. issuance of receipts, accessing the master information and viewing summary MIS by the warehouse.	The understanding is correct

41	Section 2.6	46	The system shall have to be integrated with the SMS gateway to send and receive SMS from the users to track their requests.	1. Is SMS Gateway already available with the WDRA? 2. Does outgoing SMS cost needs to be considered in the proposal or it will be borne by the WDRA? 3) Please provide the details for estimation of the SMS volume, if this information is not available currently, Please provide an approximate estimate for all bidders to have a common platform for bidding.	1. No - the vendor needs to procure SMS gateway services/application as a part of the current bid 2. The recurrent SMS costs would be borne by WDRA 3. Please refer to Section 2.12 and 2.2 of Technical Requirements for details
42	Section 2.6	46	Support for SMS Based Alerts	Is WDRA registered with TRAI for sending SMSes? If not, we assume that WDRA will manage the formalities for the same along with the costs.	1 - Not as of now 2 - Yes, WDRA would fulfill the requirements prior to the system go live
43	Section 2.6	46	The system shall have to be integrated with the SMS gateway to send and receive SMS from the users to track their requests	Bidder request WDRA to share the following inputs. 1. Who will provide the SMS Gateway. 2. Who will bear the Cost of SMS Gateway. 3. Projected SMS volumes (incoming & outgoing) over next four years 4. The SMS unit transaction size (Kb)	Please see response to point 41
44	Section 2.6	46	Support for SMS Based Alerts	Please clarify the following: 1. Who will provide the SMS Infrastructure 2. Who will pay for the recurring SMS charges	Please see response to point 41
45	Section 2.7 Point 3	46	Payments Related Requirements The system should allow transaction through approved financial instruments like: a. Credit cards b. Debit cards c. Net Banking	How many banks and payment gateways are proposed to be integrated with the system?	The bidder may propose a payment gateway consolidator which supports multiple banks and credit cards.
46	Section 2.8	47	Third party Integration Requirements	Please confirm that support would be made available by WDRA for providing Integration with third party. Also confirm if any delays are there from other party side then how is WDRA managing that and what is the expectation from the bidder.	WDRA would facilitate the interactions with the banks and spot exchanges. However the bidder personnel would be responsible for the integration work.
47	Section 2.8	47	The NWRS should be able to capture the user details from CBS.	Please confirm what user details will be captured from CBS and if all required information will be provided by all CBS (responsibility ASI)	Please refer to Section 2.2 of Technical Requirements for details, and also response to point 31 above
48	Section 2.8	47	Third party Integration Requirements	Please mention the following requirements below: 1. Use of Web services is at the behest of the Banks or Bidder 2. Bidder needs to provide any training/documentation for the use of the services We suggest that interfacing with Banks system to be restricted only to the extent of use of web based link to update and access the NWRS systems.	Please refer to Section 2.2 of Technical Requirements for details, and also response to point 31 above
49	Section 2.8	47	Third party Integration Requirements	Please provide more clarity on scope of integration activities with third party solution. Would WDRA facilitate integration with third party products?	Please refer to Section 2.2 of Technical Requirements for details, and also response to point 31 above
50	Section 2.8 Point 1(a)	47	The banking users should be able to login to the NWRS application using their Core Banking Solution user IDs.	We understand that banking users will be provided a user-id of NWRS system and they will login into NWRS system to access functionality available to them.	Integration with CBS applications would be required through login on NWRS system or via exposed web services. The CBS development partners would utilize the web service for CBS integration at their end. The bidder would get the required information regarding user id, NWR details etc for NWRS from the CBS, and update the same in NWRS.

51	Section 2.8 Point 2	48	Integration with applications of commodity exchanges through exposing of web services a. The commodity exchange users should be able to check status of NWRs after entering the requisite information the specific NWR b. They should be able to perform endorsement	We understand that commodity exchange users will be provided a user-id of NWRs system and they will login into NWRs system to access functionality available to them.	The understanding is correct
52	Section 2.8 Point 2	48	Integration with applications of commodity exchanges through exposing of web services a. The commodity exchange users should be able to check status of NWRs after entering the requisite information the specific NWR b. They should be able to perform endorsement	Request you to provide details functional requirements of Integration with Commodity Exchanges.	A secure web service is proposed to be exposed to the commodity exchanges which would be used by them to integrate. The secure web services would include information on NWRs
53	Section 2.9.1	48	Physical security safeguards need to be considered for all electronically printed NWRs as well as information resources residing in static facilities (such as buildings), mobile facilities (such as PDA), and portable facilities (in-transit facility housing).	Please mention the following requirements below: 1. What devices should be supported ( PDA, Tablets, Smartphone's, etc) 2. Will this be a browser based mobile Application 3. What Application functionalities would be provide to the users <del>accessing through Mobile</del>	Please refer to point 12 above
54	Section 2.9.1	48	Local databases at the warehouses in PC/Laptop/PDA should not be accessible by users at the warehouse level.	Are any minimum specifications available for the infrastructure at offline locations.	The end users would use PC/Laptop running windows.
55	Section 2.9.1	48	Physical security safeguards need to be considered for all electronically printed NWRs as well as information resources residing in static facilities (such as buildings), mobile facilities (such as PDA), and portable facilities (in-transit facility housing).	1. Request WDRA to clarify whether WDRA requires (limited to) Fire-proof cabinets for storing NWRs. 2. Request WDRA to share as How many Fire-proof cabinets (if bidder understanding is correct) are require with also location details	Fire proof cabinets are not in the scope of work of the bidder
56	Section 2.9.1	48	Physical security safeguards need to be considered for all electronically printed NWRs as well as information resources residing in static facilities (such as buildings), mobile facilities (such as PDA), and portable facilities (in-transit facility housing).	1. Bidder understands that End-point security is required for PDA. Request WDRA to confirm. 2. Bidder request WDRA to share what is meant by In-transit facility housing. 3. Bidder request to share the Number of portable facilities (in-transit facility housing), where physical security safeguards (Fire-proof cabinets) are required. 4. Request to share the Numbers of Desktops and PDAs with Operating System installed.	Fire proof cabinets are not in the scope of work of the bidder
57	Section 2.9.1	48	All warehouse receipts should be printed with a unique, intelligent and two dimensional bar code (conforming to the GS1 standards) that may be scanned with any bar code scanner.	1. Request WDRA to share Bidder's Scope of Work at the End-user locations. 2. Request WDRA to share that Who will provide the required End-user infrastructure like printer, scanner, barcode scanners, desktops, internet connectivity etc.	1. The scope is defined in section 2.2 of technical requirements 2. End User will procure himself
58	Section 2.9.1	48	Local databases at the warehouses in PC/Laptop/PDA should not be accessible by users at the warehouse level	Are local databases expected to be in the scope of the successful bidder. If not please confirm who will be responsible for their data security and who will the SLA be governed in case to data theft from local databases.	The bidder should develop a small local application, that would store data locally in the user system. The data should be stored in an encrypted format.
59	Section 2.9.1	48	Local databases at the warehouses in PC/Laptop/PDA should not be accessible by users at the warehouse level	Is PC/Laptop/PDA expected to be provisioned by the successful Bidder.	Please refer to point 57 above

60	Section 2.9.1	48	All warehouse receipts should be printed with a unique, intelligent and two dimensional bar code (conforming to the GS1 standards) that may be scanned with any bar code scanner	We assume that bar code printers need not be provisioned by the bidder. Please confirm	The application should be able to print the bar code via a normal printer
61	Section 2.9.2	48	Use of firewalls and intrusion detection systems provided by hosting services provider should ensure that such attacks and theft are controlled.	Request WDRA to clarify whether the Firewalls, IDS and other Network devices like Routers, Switches etc (to be provided by hosting partner) will be Dedicated or Shared mode	Will be provided by hosting services provider and are out of scope of SI
62	Section 2.9.2	48	Furthermore, all the system logs should be properly stored & archived for future analysis and forensics whenever desired	1. Request WDRA to share as How system logs are proposed to be collected and stored from different solution components. Bidder understands that it's SoW includes Server provisioning only excluding other solution components like Network, Storage, Security devices and Archival hardware. 2. How the System logs of shared infrastructure will be transferred to the bidder solution. 3. Does Bidder has to provision solution for his SoW components or for other components also. 4. If Bidder has to do for all solution components, then who will do the integration with other components. 5. Request WDRA confirmation whether Bidder has to provision for SIEM tool for the same or this shall be provided by Hosting Service provider. 6. Bidder request WDRA to clarify on the retention period for these logs for	1. The bidder has to provision, procure and install the servers and storage only. The technical specification for the same is provided in corrigendum. 2. The same would be provided on request via a monitoring dashboard. 3. The bidder does not have to provide any components except the servers, storage, OS and other software 4. The bidder would be provided access to the DC/DR Site for installation and integration. 5. The infrastructure monitoring and alert would be provided by the Hosting service provider. However the application and database monitoring, trends and alerts would be managed by the bidder.
63	Section 2.9.2	48	The successful bidder shall get a security audit done for the entire solution as part of scope of work within one month of Go Live.	1. Request WDRA to clarify Whether Security audit is to be done by (external agency) Third party. 2. If yes, Who will bear the Cost for the same. 3. Request WDRA to share whether the Security Audit is to be done once or repeatedly through out the 02 years	1. Yes 2. WDRA 3. WDRA may choose to get annual/periodic security audits
64	Section 2.9.2	48	All the computing devices (servers, desktops, network devices) shall uniquely identify and authenticate the user or any process that acts on behalf of any user.	As per E-Governance Guidelines Bidder understands that Multi-Factor Authentication is required at the Remote locations. Hence bidder request WDRA for the following inputs. 1. Number of Desktops at each remote location (which shall be used to access Data Centers) 2. Number of PDAs at each remote location which shall be used to access Data Center. 3. Does bidder has to provide the tokens for all the remote users.	Token based Multi-factor authentication not envisioned for the system. OTP based authentication or any other suitable means could be provided.
65	Section 2.10	50	The system should have an ability to configure restricted and mandatory fields wherever relevant.	Kindly clarify the requirement of configuration of mandatory fields?	Please refer to Section 2.2 of Technical Requirements for details
66	Section 2.10	50	The system should have capability to cut/ paste/ format, etc. at a field level on the inputs screens, output screens, etc.	Kindly clarify the formatting requirements being referred to here.	The system user should be able to copy data from a field and paste into another field.

67	Section 2.9.3 Point 3(c)	50	Data Theft - Compromise of any kind of data through network.	<p>Bidder understands that it's SoW includes Server provisioning, SLA Tool with Application only and hence Bidder solution will include components to check Data theft for bidder provided components. Request WDRA to share as How this is envisaged for other components (not provided by bidder)</p> <ol style="list-style-type: none"> <li>1. Solution components (like EMS/NMS, Storage, Archival hardware, Tape drive etc) provided by Hosting partner &amp; deployed at Data Centers.</li> <li>2. Desktops &amp; PDAs at End-User locations</li> <li>3. Security over Network links.</li> </ol>	<ol style="list-style-type: none"> <li>1. Not in scope of SI</li> <li>2. and 4. The bidder should develop a small local application, that would store data locally in the user system. The data should be stored/transmitted in an encrypted format.</li> <li>3. Application should securely transmit any information while the security of network links will be in scope of hosting provider.</li> </ol>
68	Section 2.12	52	Number of concurrent users	Request WDRA to share the Number of Concurrent Users for Warehouse and Accreditation agencies.	Please refer to Section 2.12 of Technical Requirements
69	Section 2.12	52	servers be located physically at a central location to be selected by the WDRA. Device redundancy should be maintained and all servers and network devices should be in high availability mode.	Please confirm if additional servers are required to handle the increased load in future during the operation & support phase of the project, then who will be responsible for procuring and installation of these additional servers.	The proposed hardware/application licenses should be capable to support the 5 year projected usage (as in section 2.12 of the technical requirements) within the defined SLA, and should be adhering to the technical specifications mentioned in the corrigendum . WDRA would procure any additional hardware only if the usage exceeds the numbers defined in section 2.12 of the technical requirements.
70	Section 2.12	53	It is proposed that all the servers be located physically at a central location to be selected by the WDRA. Device redundancy should be maintained and all servers and network devices should be in high availability mode.	<p>Bidder will provision redundancy at Server level (part of bidder's scope). Request WDRA to clarify as Who will be providing the other infrastructure:</p> <ol style="list-style-type: none"> <li>1. Network equipments (Routers and Switches) at the Data Centers.</li> <li>2. Security devices (Firewalls and IPS)</li> <li>3. Antivirus &amp; HIPS solution</li> <li>4. EMS/NMS solution</li> <li>5. Network links and bandwidth at Data Centers and End-User locations</li> </ol>	These services would be provided by the hosting services provider.
71	Section 2.12	53	System Performance Criteria	<p>We understand that the sizing of the Hardware/Application should be estimated based on the information given in this section. Please mention the following requirements:</p> <ol style="list-style-type: none"> <li>1. Data Archival Policy- How many years the data needs to be on the live systems before they are moved to the secondary storage devices.</li> <li>2. Who will provide the Storage Infrastructure - SAN Storage Infrastructure</li> </ol>	<ol style="list-style-type: none"> <li>1. The data needs to be retained on the live system for 3 years post the closure of the NWR.</li> <li>2. The storage infrastructure would be provided by the bidder. The same should meet the technical specifications provided in the corrigendum.</li> </ol>
72	Section 2.12	53	System Performance Criteria	Do we need to consider information provided in the RFP in the column "Next Five years" for hardware/software sizing	The understanding is correct
73	Section 2.12.1	53	Total number of banks is around 300 while the total numbers of different bank branches operating in India are around 100000.	<p>Request WDRA to share the following inputs for Data Center Server Sizing and Aggregated Intranet bandwidth</p> <ol style="list-style-type: none"> <li>1. Number. of concurrent Bank users</li> <li>2. Unit transaction size (Kb)</li> </ol>	Please refer to Section 2.12 of Technical Requirements

74	Section 2.12.1	53	1. Projections of Warehouse Users/Registered Warehouses 2. Future Projections of Accreditation Agencies Users	Request WDRA to share the following inputs for Data Center Server sizing and Aggregated Internet bandwidth 1. Number of Concurrent Warehouse & Accreditation agency users 2. Unit transaction size (Kb)	Please refer to Section 2.12 of Technical Requirements
75	Section 2.12.1	53	Projections of Warehouse Users/Registered Warehouses	Bidder understands that total Project period is Four years (three years after Go-live). Hence request WDRA to share the Projections for Next Four years in place of Five years for solution sizing.	There is no change to the RFP document
76	Section 2.12.2	53	1. Yearly Future Projections for NWR Issuance Transactions 2. Yearly Future Projections for NWR Pledging Transactions 3. Yearly Future Projections for NWR Endorsements Transactions	Request WDRA to provide clarity on the projected transaction numbers for solution sizing: 1) whether these are Daily /Weekly/ Monthly/ Yearly transactions 2) whether these are per User/ Branch/ Agency transaction numbers 3) Business hours for offices for concurrency estimation (if these are daily figures) 4) Number of working days to be considered in a month /year (if these are monthly/ yearly figures)	1. Total transactions per year 2. Total Transactions 3. Concurrency details already computed and provided - no more information needed 4. Not relevant
77	Section 2.12.2	53	NWR Transactions Volume Estimate	Request WDRA to share following inputs for each type of transactions (as mentioned in Section 2.12.2 on page 53) : 1. Number of documents needed per transfer? 2. Size of each document (Kb) 3. Concurrency to be considered for documents uploading & downloading (Qty) 4. Projected Upload & download Numbers over Four years	Please refer to Section 2.12 of Technical Requirements
78	Section 2.12.2	53	NWR Transactions Volume Estimate	Please provide information on the peak load estimates that the application is expected to experience for server sizing	Please refer to point 69 above
79	Section 2.12.2	53	These numbers for concurrency are indicative in nature. The numbers specified may vary during the course of the project and the bidder should undertake its own independent assessment to meet the desired service levels as stated in the RFP.	1) Please confirm the exact number of users and concurrent users for the WDRA NWRS application. Is the bidder expected to build the application for the current users which can be scaled up in future using additional resources at WDRA cost or the bidder is expected to account for the number of users expected in next 5 years. 2) Request WDRA to provide an estimated number of users for the application in order to provide common ground for bidding for all bidders.	Please refer to Section 2.12 of Technical Requirements
80	Section 2.12.3	54	These numbers for concurrency are indicative in nature. The numbers specified may vary during the course of the project and the bidder should undertake its own independent assessment to meet the desired service levels as stated in the RFP.	Request WDRA to freeze on the Concurrency numbers so that all Bidders consider the same number for hardware and other estimations.	The NWR lifecycle is manual right now, and there is no historical data available. The number of users and transactions are indicative in nature in line with the future NWR transaction projections. The bidder should therefore conduct an assessment based on his experience with similar systems. The 5 year projections provided in section 2.12 should be used as an indication for minimum computing requirements.

81	Section 3	54	Scope of Work	Request WDRA to share if current SoW includes any Digitization work also. If yes then following inputs are requested. 1. Number of pages to be digitized. 2. Average text size (Kb) per page 3. Availability of paper records (centrally or distributed across remote locations) 4. Sample Report format and size	None of these is in scope of SI
82	Section 3.2	55	The successful bidder should also conduct suitable hardware sizing, software license calculations and identify any other infrastructure requirements (except hosting services)	Following inputs are requested for Data Center hardware sizing (to be provided by bidder) 1. Concurrent Intranet users 2. Concurrent internet users. 3. Concurrent VPN users 4. Projected concurrent sessions for all types of transactions 5. Unit Transaction size (Kb) for all types of transactions 6. Retention period for transaction data in central storage over next four years	1-5 (Except 3). Please refer to Section 2.12 of Technical Requirements 3. Refer to point 22 above 6-7. Refer point 71 above In addition, the hardware proposed should adhere to the technical specifications provided in the corrigendum.
83	Section 3.2.1	55	The proposed software's proposed for the application should meet, at a minimum, the following interoperability standards as defined by Government of India	Can alternate equivalent standards be explored for all the listed standards while designing the solution as few standards will not support some tools or technology e.g. CSS version 2.0 is not fully supported by IE6?	Yes - However the same needs to be mentioned in the proposals with valid reasons
84	Section 3.2.2	57	Also, the hardware proposed should have been hosted for other applications at data centers hosted by BSNL or NIC or State Data Centers.	Bidder understands that the Hosting centers (limited to BSNL, NIC or State Data Centers only) shall be provided by WDRA and also the cost for the same shall be borne by WDRA.	The understanding is correct. WDRA may however choose to host at another similar data center not mentioned in the RFP.
85	Section 3.4	57	The successful bidder will host the application at the data center finalized by WDRA	Request WDRA to share the DC & DR locations, in case network connectivity is to be provided by bidder	WDRA would provide the network connectivity from the DC/DR site
86	Section 3.4	57	"related to system backup and restore, database administration and tuning, bug fixing, patch updates for software and operating system"	Request WDRA to share following inputs for Storage and Archival hardware sizing : 1. How long data has to be stored in online mode (in Central Storage) 2. How long data is to be retained in Archival mode.	Refer point 71 above
87	Section 3.4	57	"related to system backup and restore, database administration and tuning, bug fixing, patch updates for software and operating system"	Request WDRA to share the following inputs on the Backup & Archival policy for hardware sizing. 1. Backup Window in hours (For full backup) 2. Period (in days) for logs retention in Online mode and then to be pushed for archival	1-2. SI may define as a part of its design inline with downtime SLA
88	Section 3.4	57	"related to system backup and restore, database administration and tuning, bug fixing, patch updates for software and operating system"	Request WDRA to share the Operational responsibility for Backup & Archival. 1. Bidder's responsibility or 2. Hosting Service provider responsibility. If this is bidder's responsibility, then WDRA has to ensure access (from Hosting Service provider incase of shared infrastructure) of required equipment to bidder	Database administration and tuning to be provided by the bidder. VPN access would be provided to bidder for the same. Physical access to the servers could be provided on request.
89	Section 3.5	57	The successful bidder needs to provide software developers as per requirement of WDRA for a period of 3 years post successful Go-live of the application to carry out any customization or bug fixing in NWRS as and when required by the WDRA	Please confirm the expected number of software developer expected to be provided during the 3 years post Go-Live	At discretion of SI - Adherence to SLA is only requirement

90	Section 3.6	57	The bidder may indicate if it could provide hosting services for the NWRS application also. In case the bidder does have the capability, it should also provide in its proposal,	Request WDRA to share whether the Hosting Facility is to be either from BSNL, NIC or State Data centers OR alternatives are also acceptable.	The bidder may propose alternate hosting service providers, however in such a case the bidder is fully responsible for the entire application, hosting and support requirements, and would undertake all the responsibilities of the hosting service provider also
91	Section 3.6	57	Hosting Services	Bidder understands that there is no Financial implication of Hosting on the bidder.	The understanding is correct
92	Section 3.6	57	Hosting Services	Please confirm if this will form a part of the Financial for determining the L1 bidder.	Refer to point 91 above
93	Section 4	58	The successful bidder will provide the requisite servers, racks and other hardware required to collocate the applications at the data centre, and the DR site. The cost of procuring, installation, configuration and maintenance of servers is the responsibility of the successful bidder. Server cost is to be borne by the successful bidder. Its successful bidder's responsibility to successfully run the NWRS application as per the architecture proposed. Hence the successful bidder will provide WDRA the list of hardware if any required other than servers.	1. Request WDRA to define the other hardware requirements (from following list) from bidder in addition to Servers and Racks. 1. Data Center Networking devices (Routers, Switches and Load balancers) 2. Data Center Security devices (Firewall and IPS) 3. Data Center SAN infrastructure (Storage, Tape Library, Archival hardware and SAN Switches) 4. Other Data Center solution (Antivirus, HIPS, EMS/NMS, Backup and Archival solution) 5. Network links with bandwidth at Data Centers	1. Not in scope of SI 2. Not in scope of SI 3. Storage including SAN Box, Tapes and Discs, SAN Switches, Fibre Connect are in Scope of SI. The bidder shall also provide the load balancers. Other infrastructure are in Scope of Hosting Services The technical specifications for the hardware are provided in the corrigendum. 4. Not in scope of SI 5. Not in scope of SI
94	Section 4 Point 3	58	Hardware	Request WDRA to clarify on the Server & Storage requirement at other offices (if any).	There are no other server and storage requirements, as this is a central web based application
95	Section 4 Point 4	58	The successful bidder will ensure that the application is available over internet and VPN for the users	Bidder request WDRA to clarify bidder's Role and deliverables on Network links and Remote location infrastructure. In case these are not part of bidder's SoW then will the WDRA partners commit Back to Back SLA commitments	A back to back SLA would be signed with the hosting service provider supporting the application level SLA defined in the RFP
96	Section 4 Point 5	58	Bandwidth	Request WDRA to share as Who will provide Internet bandwidth at remote locations - Warehouses, Accreditation agencies and Banks	None of these is in scope of SI
97	Section 4 Point 5	58	Bandwidth	Request WDRA to share as Who will provide the Intranet bandwidth at WDRA offices.	None of these is in scope of SI
98	Section 5.3.6	63	All acceptance tests will be performed at appropriate offices	Please confirm the exact location and list of the WDRA offices along with address where the application is expected to be running.	Refer point 94 above
99	Section 5.4.1 Point 3	63	Components specifications should take care of future growth in traffic and expansion of services such as voice and video and for enhancement of existing service on new delivery channels	Request WDRA to share details of the desired services in future with projected load.	Refer point 69 above
100	Section 5.4.1 Point 4	63	With WDRA's dependence on the NWRS being critical, the NWRS should be designed in such a way as to avoid a single point of failure.	Request WDRA to clarify - whether Bidder has to provision No-Single-point-of-Failure for Non production environment also like EMS, Antivirus, HIPS etc in case the hardware for the same is to be provided by bidder	The no single point of failure relates to production environment only limited to the servers and storage only.
101	Section 5.4.1 Point 6	63	The application layer must be spanned over at least two different servers for load balancing.	Request WDRA to clarify as Who will provide the Load balancers.	Not in scope of SI
102	Section 5.4.1 Point 9	63	The hardware proposed must be fault tolerant. The Bidder must provide the details of fault tolerance features proposed at all levels of servers	Request WDRA to clearly define the minimum technical specifications on the desired Fault tolerance capabilities at the server level.	Please refer to the Corrigendum

103	Section 5.4.1 Point 15	64	The bidder should provide a storage design, which should support at least 5 years (going forward) of data requirement. It should have Minimum Capacity of at least 1 TB on Raid 5, scalable up to 5 TB with latest available HDD capacities.	Request WDR to share the desired minimum technical specifications for storage.	Please refer to the Corrigendum
104	Section 5.4.1 Point 16	64	Storage requirements for the application suite will have to be assessed by the Bidder and the storage solution shall be sized and procured accordingly	Request WDR to clarify as Who will provide Storage and other infrastructure like SAN switches, Tape Library, Archival hardware, Backup & Archival software etc. at DC & DR.	Storage including SAN Box, Tapes and Discs, SAN Switches, Fibre channels are in Scope of SI Other infrastructure are not in scope of the SI
105	Section 5.4.1 Point 19	64	The Bidder should provide one set of hardware which shall be shared for testing (20 users) and Training (25 users). Two separate instances are to be created for Testing and Training requirements.	Request WDR to specify - Where these hardware (meant for Testing and Training) will be hosted/installed within the Data Center or outside Data Center.	Test environment will be located at SI or WDR location till the end of Handholding Period for quicker turnaround. Post the handholding period, the test environment should be shifted to the WDR selected Data Center.
106	Section 5.4.1 Point 19	64	Non-production environment (Development and Quality) must be provisioned outside the production servers	Request WDR to clarify - Where this environment will be hosted and if this is outside Data Center then who shall provide the space, power etc for the same.	Test environment will be located at SI or WDR location till the end of Handholding Period for quicker turnaround. Post the handholding period, the test environment should be shifted to the WDR selected Data Center. Development environment would be hosted at WDR premises.
107	Section 5.4.1 Point 20	64	Any bids without such certification shall be liable for disqualification	Request WDR to re-look at this condition as Bidder is responsible for solution and SLA, then why OEM sign off is required.	No change to the RFP document
108	Section 5.4.2	64	"DR site"	Request WDR to share as what environments are required at DR site in addition to production and Does bidder has to provision HA for the same.	Only production environment is required at DR site
109	Section 5.4.5	66	The successful bidder, in close coordination with Hosting service provider team shall be required to facilitate the necessary hardware set up at Data Centre (Tier III) that can suitably meet the requirements of performance, security, scalability and availability of system. The Data Center would provide the following:	Bidder understands that Server infrastructure is to be provided at the Data Centers. Request clarity on the Bidder's Role and SoW for DC & DR setup.	Refer to point 93 above
110	Section 5.4.5	66	The successful bidder, in close coordination with Hosting service provider team shall be required to facilitate the necessary hardware set up at Data Centre (Tier III) that can suitably meet the requirements of performance, security, scalability and availability of system. The Data Center would provide the following:	Request WDR to clarify - 1. How SLA will be calculated for this model (Server provided by Bidder and facility is provided by Hosting vendor decided by WDR). 2. Request WDR to ensure back to back SLA commitment from Hosting Service provider to bidder with same terms & conditions.	A back to back SLA would be signed with the hosting service provider supporting the application level SLA defined in the RFP
111	Section 5.4.5	66	The Data Center would provide the following:	Bidder understands that all Non-IT requirements like Space, UPS Power including backup like DG, Cooling etc shall be provided by Hosting Service provider.	The understanding is correct
112	Section 5.4.5	66	Implementation of hardware and servers at Data Centre	Please confirm if the bidder is expected to provide any staff, technical and supervisory to operate and manage the functioning of DRC.	Not in scope of SI
113	Section 5.4.5	66	The successful bidder in close coordination with hosting service provider team shall be required to facilitate the necessary hardware set up at DR Data Centre (Tier III) that can suitably meet the requirement of performance, security, scalability and availability of the application.	Please specify the RPO ( Recovery Point Objective) and RTO ( Recovery Time Objective) of the Proposed Solution.	RTO - 4 Hours RPO - 2 Hours

114	Section 5.4.5	66	The successful bidder in close coordination with hosting service provider team shall be required to facilitate the necessary hardware set up at DR Data Centre (Tier III) that can suitably meet the requirement of performance, security, scalability and availability of the application.	Please specify the RPO ( Recovery Point Objective) and RTO ( Recovery Time Objective) of the Proposed Solution.	Please refer to point 113 above
115	Section 5.4.5	66	The successful bidder is expected to provide all necessary equipment's to run the system (except the collocation services at the Data Centre which will be procured by the WDRA). In case, it is identified that certain components are required but not listed by the successful bidder in the proposal, bidder will procure the same free of cost for WDRA.	We understand that the bidder responsibility is to procure, supply and configure and test the hardware at DC & DR. All other support requirements would be provided by WRDA.	The understanding is correct.
116	Section 5.4.6	66	The successful bidder shall also provide staff, technical and supervisory, in sufficient numbers to operate and manage the functioning of DRC at desired service levels.	Request WDRA to clearly specify the desired Minimum Manpower numbers for O&M.	The bidder would need to provision adequate staff for remote application monitoring only, and L3 support as required. All other monitoring (infrastructure etc) would be done by hosting service provider for DC/DR locations
117	Section 5.4.6	66	DR Hardware and Software should be 50% of DC and the storage should be 100% of the DC.	Request WDRA to clarify on the hardware & software requirement stated to be 50% of DC. 1. Does this mean that No HA shall be provisioned at DR. 2. Does this mean that Hardware resource requirement is 50% of DC (i.e. if there are 100 cores required for production at DC, then for DR this should be 50 cores)	1. The understanding is correct 2. The understanding is correct
118	Section 5.4.6	66	DR Hardware and Software should be 50% of DC and the storage should be 100% of the DC.	Request WDRA to clarify as what environment shall be required at DR site beside production (like Security etc)	Only production
119	Section 5.4.6	67	The DR site for NWRS is situated at an alternative location (NIC/hosting provider Location) and it is recommended to have a "WARM" site	Request WDRA to define RPO and RTO (in minutes/hours) for solution.	Please refer to point 113 above
120	Section 5.4.6	67	The DR site for NWRS is situated at an alternative location (NIC/hosting provider Location) and it is recommended to have a "WARM" site	Please confirm who will be responsible for the network connectivity between Data Centre(DC) and Data Recovery Center (DRC)	Not in scope of SI
121	Section 5.7	70	Training	Please mention the following requirements below: 1. No. of users to be Trained/Batch Size 2. No. of Locations where the training has to be conducted 3. Infrastructure required to provide the training - space, projectors, materials, personal computers, etc. 4. Training to be conducted Centrally or Locally	1. Number of users - Please refer to section 5.7 in the RFP 2. Locations - Tier I towns only 3. Infrastructure to be provided by WDRA 4. Both
122	Section 5.8	71	3. The location users have been trained by the successful bidder. 4. Location users are able to pass transactions in the new environment	Please confirm how will this be evaluated or quantified for giving the Go-Live certificate.	Sign off from at least 10 locations Users will be taken
123	Section 5.9.3	73	Helpdesk Services - WDRA helpdesk, escalate to successful bidder as per SLA	Request WDRA to clarify on the desired Helpdesk support. 1. Location with space for bidder Helpdesk setup. 2. Desired Role of bidder helpdesk. 3. Who will provide the infrastructure including the Helpdesk Tool for Helpdesk setup. 4. How many seats desired for helpdesk	The L1 helpdesk would be managed by WDRA internally post the hand holding phase
124	Section 5.9.3	73	Managed Services for hardware	Bidder understands that beside Helpdesk setup, all other services are to be provided by Hosting service provider. Request WDRA to ensure Back to Back SLA commitments from Hosting service provider also.	A back to back SLA would be signed with the hosting service provider supporting the application level SLA defined in the RFP

125	Section 5.9.3	73	Managed Services for hardware	Bidder request WDRA to clarify as who will provide the necessary tools - EMS/NMS, Security and Backup software	The hosting service provider would provide these services. The bidder should however make arrangements for tools <del>for application monitoring.</del>
126	Section 5.9.4	73	WDRA would be setting up a L1 helpdesk internally to support the users of the NWRS system.	Request WDRA to clarify whether this Helpdesk will be different from Bidder helpdesk and also will this be managed by WDRA manpower <del>and bidder has no role here.</del>	The understanding is correct
127	Section 5.9.4	73	The support services for the NWRS shall be provided for a period of 3 years post go-live. During this period the successful bidder shall provide bug fixing support for any system problems that may arise in the NWRS system <del>developed</del>	We understand that the bidder responsibility is to provide Helpdesk support personnel and Ticketing Application. All the other requirements such as space, electricity, communication lines, etc. will be provided by WRDA	Bidder would only need to provide L3 Support for the application. L1 and L2 Helpdesk will be provided by WDRA
128	Section 5.9.4	74	The helpdesk personnel would call/email the "Service Manager" for the escalation, and the SLA measurement shall start from the time of this communication.	Request WDRA to clarify as who will provide the Phone/E-mail setup for escalation.	The bidder needs to provide a single phone/email account for the escalation
129	Section 5.9.4	74	This support level provides solutions for the requests received from Level 1 / 2. The successful bidder's support team shall monitor and accept tickets routed by Level 1/2 support team of WDRA. The successful bidder shall provide support (rectification of faults/ bugs and change management (configuration or custom developments)) for <del>the support team</del>	L3 calls are expected to be a % of the L1/L2 calls, if the casual analysis of L1/L2 calls is also required to be done by the bidder then this requires an additional effort. If the percentage of calls to be handled by bidder exceeds a limit we would request WDRA to increase the staff and people required for support at that time on extra cost.	The L3 calls would be escalated only if L1/L2 support teams are unable to resolve the issues. The bidder should satisfy himself about the adherence to SLA in all cases. No historical trends are available for prior support tickets, as no system is being used currently.
130	Section 6	75	Go- Live and Deployment - 26 weeks	Implementation time lines are too aggressive,. Please revisit the go-live of the application.	Implementation timelines remain the same - There is no change to the RFP
131	Section 7.2	77	The average application response time for users should not exceed the following when measured over the month	Request WDRA to clarify on the End-User response - Is this for LAN users (within the Data Center) or WAN users (over Internet & Intranet).	The response should be measured at LAN and intranet WAN users. Similar levels of service should be observed at users over internet with commercial 512 KBPS+ internet <del>connections</del>
132	Section 7.2	77	Measurement of Service Level Parameter	Request WDRA to share the Method for SLA measurements and how will be the delays resulting due to Hosting Service provider, Network link & bandwidth provider will be measured.	All application level failures will be attributed to SI. There will be back to back SLA with the hosting service provider
133	Section 7.2	77	Measurement of Service Level Parameter	Will other partners (like Hosting partner, Network links and bandwidth provider) sign back to back SLAs with bidder/WDRA.	The understanding is correct

134	Section 7.2	77	System Performance Related SLA's – various uptime requirements	<p>These are System Uptime requirements- are given without standard down time exclusions – to be added as under:</p> <p>The time lost due to any of the following reasons shall be taken into account while calculating the availability/ uptime requirement: (a) Time lost due to power or environmental failures; (b) Time taken to recover the system because of power or environmental failures; (c) Time lost due to damage or malfunction in the system or any units thereof due to causes attributable to WDRA such as attachment of additional devices, making alteration to the system, maintenance of the system, etc. without System Integrator 's consent and/ or failure to maintain the site as required by the bidder; (d) Time taken for scheduled maintenance/ troubleshooting either for preventive purposes or improvement in function or other purposes; (e) Time taken for reconfiguration or other planned downtime situations; (f) Scheduled shutdowns as required by WDRA ; (System Integrator may also request WDRA for a shutdown for maintenance purpose, which request will not be denied unreasonably by WDRA ); (g) Time taken for booting the system (h) Time lost due to unavailability of links.</p>	<p>A back to back SLA would be signed with the hosting service provider supporting the application level SLA defined in the RFP.</p> <p>The bidder should provide 4 hour same business day business critical support for all hardware components supplied as a part of this bid.</p>
135	Section 7.2	78	Penalty for non-achievement of SLA Requirement	<p>Request WDRA to share As How the SLA will be measured :</p> <ol style="list-style-type: none"> <li>1. Application availability at DC level</li> <li>2. Application availability at End-User locations</li> <li>3. Incase network links and remote location infrastructure is provided by other WDRA partners, then How WDRA will ensure the SLA.</li> </ol>	<p>A back to back SLA would be signed with the hosting service provider for the infrastructure supporting the application level SLA defined in the RFP</p>
136	Section 7.2	78	Penalty for non-achievement of SLA - Every failed or unsuccessful transaction shall attract a penalty as % of Quarterly Recurring Cost as per the following		<p>A back to back SLA would be signed with the hosting service provider supporting the application level SLA defined in the RFP, and a root cause analysis would be conducted</p>
137	Section 7.2	79	Measurement of service level parameter - Hardware Availability = $\frac{[(\text{Total server uptime in a month}) / (\text{Total Time in a Month})] * 100}{1}$	<p>Request WDRA to clarify as how the hardware uptime will be calculated as Solution includes Components like Servers (provided by bidder) and other components provided by other agencies and the uptime can be impacted due to failure of other components (not provided by bidder)</p>	<p>A back to back SLA would be signed with the hosting service provider for the infrastructure supporting the application level SLA defined in the RFP</p>
138	Section 7.2	79	Security and Incident Management SLA	<p>Request WDRA to clarify as who is providing the End-point protection for infrastructure at End-User locations</p>	<p>Not in scope of SI</p>

**Queries Regarding Bidding Forms**

Sr. No.	Section Reference Number (SRN) and Description	Page Number	Description	Bidders' Suggestions	WDRA's Response
1	Section 1.2.5	89	Affidavit on a non judicial stamp paper of Rs 100 as per form on Conviction Undertaking in Bidding Forms	1.2.5. Form P5 – No conviction undertaking on page 89 is asked on company's letterhead whereas on page 21 its is asked on a non judicial stamp paper of Rs 100 . Which would apply in this case	The non conviction undertaking would be required on Company letterhead by an authorized signatory.
2	Section 1.2.6	90	Bid Security Format	This Bank Guarantee format given hereunder - does not have standard Bank clause in it – need to add as under: NOTWITHSTANDING anything contained hereinbefore our liability under this Guarantee is restricted to Rs. _____ (amount of Performance Security ) (Rupees _____ (in words). Our guarantee shall remain in force till _____ (date of validity of the guarantee). Unless the demand/claim under this guarantee is served upon us in writing before _____ (date of validity of the guarantee).all the rights of the WDRA under this guarantee shall stand automatically forfeited and we shall be relieved and discharged from	Please refer to the Corrigendum
3	Section 3.2.1	111	Please provide taxes/rates applicable for every line item	Taxes are getting applied 2 times in the Financial Forms, once for every line item and then on the total value in Form F2, Section 3.2 Pg 110.	The taxes on forms 3.2, 3.2.1 and 3.2.2 are for any taxes which are not included in the line items above. The total payable under the contract would not exceed the grand total on form F2, except for service tax increase
4	Section 3.3	113	Unit charges for hardware infrastructure and software licenses	Please confirm how this value is getting to the other forms provided on Summary Cost Table (Pg 110), Supply and Installation Cost Summary Table (Pg 111) & Recurrent cost Summary table (Pg 112)	The values would be multiplied by number of units provided to arrive at line items in the summary tables.
5	Section 3.4	114	Charges for additional work/scope change	Please confirm whether these will form part of the financial bid for the determination of the L1 bidder.	The charges for additional work would not be considered for determination of L1 bidder.
6	Section 3.5	115	Form F3 – Quotes for optional services	Please confirm whether these will form part of the financial bid for the determination of the L1 bidder.	The charges for optional work would not be considered for determination of L1 bidder.
7	Section 3.2	110	Form F2	As per Form F2 only Table 3.2.1 & Table 3.2.2 are getting used for determining the L1 Bidder. Please confirm that only these are required as part of the Financial Bid and table 3.3 and Table 3.4 are optional for the Bidder to provide as part of the RFP Response	The bidder needs to provide the item wise details of proposed solution in table 3.3 mandatorily. However for the determination of L1 bidder, the tables 3.2, 3.2.1 and 3.2.2 would be considered.
8	Section 3.4	114	Recurrent cost summary table (Extension)	Project is expected to be for a duration of 4 years, hence these details cannot be provided at present. Request you to please delete this requirement.	This is an optional quote.
9	Section 3.4	114	Total daily Charge (INR)	As per Industry standards the Resource charges are provided in person month, hence request you to modify this table and allow the bidder to submit this information in person month.	There is no change to the RFP document
10	Section 3.4	114	Resource Title	The bidder is expected to provide L3 support during the operation and support phase, please confirm where to put the cost for the manpower to be deployed for L3 support in the Recurrent Cost Summary Table on Pg 112.	No dedicated resourcing is required - Only adherence to SLA is mandatory
11	Section 3.2.2	112	Software licenses and updates	Please confirm that only updates need to be provided as part of the scope of the RFP or the Bidder is expected to provide the upgrades as well. This is required to submit the Financial Bid response.	<u>Only software updates are to be provided</u> , except if the OEM/application software vendors decide to withdraw support for the version provided to WDRA. In such a case the bidder would be required to provide the upgrades
12	Section 2.2.3	96	Copy of the certifications: Functional Expert – Warehouse Sector, Financial/Banking Hardware and Data center expert Application Expert	Please clarify whether providing certifications for these profiles is mandatory, if so, what certifications are expected to be provided	There are no certifications mandatory for these profiles

13	Section 2.2.12	107	Previous deployment of proposed hardware/OS platform	<ol style="list-style-type: none"><li>1. Please clarify whether the form would need to be filled for each item of requirement mentioned in form.</li><li>2. The computing infrastructure specifications are dynamic and keep changing frequently, it would not be feasible to provide previous deployments of proposed hardware.</li></ol>	<ol style="list-style-type: none"><li>1. The understanding is correct.</li><li>2. There is no change to the RFP document</li></ol>
----	----------------	-----	--	--	--

**Queries Regarding Draft Contract**

Sr. No.	Section Reference Number (SRN) and Description	Page Number	Description	Bidders' Suggestions	WDRA's Response
1	Section 1.6	119	Settlement of disputes	We would prefer to have arbitration through a panel of three arbitrators consisting of one arbitrator each appointed by either party and such appointed arbitrators appointing third arbitrator.	Please refer to the Corrigendum
2	Section 3.2 Point 4	122	Payments shall be made promptly by the WDRA, but in no case later than twenty one (21) days after submission of a valid invoice by the System Integrator subject to compliance of financial milestone.	Need to add following to this clause :  All payments due for more than twenty one (21) days will attract an interest at the rate of 1.5% per month on the invoice amount calculated from the date the payment became due until the recovery is made in full with interest. Without prejudice to the other rights available, bidder also reserves the right to withhold the provision of services till such time all the payments due to it under this Agreement have been made by WDRA and any such withholding by the bidder shall not be treated as breach by it of the provisions of this Agreement.	There is no change to the RFP document
3	Section 4.1	123	Intellectual Property Rights+E9	The clause does not have a provision to protect Bidders pre-existing Intellectual Property Rights – need to add it as under:  The intellectual property rights and the ownership in all the tools, processes, software, utilities, and methodology including any System Integrator proprietary products or components thereof used in the provision of services and/or development of deliverables hereunder and all new ideas, inventions, innovations, or developments conceived, developed or made thereto by System Integrator while providing services hereunder shall remain the sole and absolute property of System Integrator, with full ownership rights therein ("System Integrator Property"). System Integrator shall grant in favour of the WDRA a non-exclusive, non-transferable license to use the System Integrator Property provided that the rights of the WDRA to use such System Integrator Property does not include the rights to (a) sell, lease, exchange, mortgage, pledge, license, sub license, assign or in any other way convey, transfer or alienate the System Integrator Property in favour of any person (either for commercial consideration or not (including by way of transmission)), and/or (b) reverse compile or in any other way arrive at or attempt to arrive at the source code of the System Integrator Property.	There is no change to the RFP document
4	Section 4.3 Point 3	125	The obligation of a party under this clause, however, shall not apply to that information which: a. Now or hereafter enters the public domain through no fault of the receiving party b. Can be proven to have been possessed by the receiving party at the time of disclosure and that was not previously obtained, directly or indirectly, from the disclosing party c. Otherwise lawfully becomes available to the receiving party from a third party that has no obligation of confidentiality.	These are exceptions to confidentiality obligations – need to add following to it :  d.) is independently developed by receiving party without reference to Confidential Information of the disclosing party. e) required to be disclosed by the receiving party under the compulsion of law, or by order of any court or government or regulatory body to whose supervisory authority the receiving party is subject.	Please refer to the Corrigendum
5	Section 5.4 Point 4	127	During the performance of the contract and the warranty period, the System Integrator will provide at no additional cost to the WDRA all new versions, releases, and updates for all standard software that are used in the system, within thirty (30) days of their availability from the System Integrator to other clients of the System Integrator in the India, and no later than twelve (12) months after they are released in the country of origin of the software.	Need to amend –as under  During the performance of the contract and the warranty period, the System Integrator will provide at no additional cost to the WDRA all new versions, releases, and updates for all standard software that are used in the system, within thirty (30) days of their availability from the System Integrator to other clients of the System Integrator in the India, and no later than twelve (12) months after they are released in the country of origin of the software, <u>provided the same are given at no cost to all other clients or else they shall be provided at a cost.</u>	There is no change to the RFP document

6	Section 5.5	128	Go-live Definition	<p>Need to add one more sub-clause as under:</p> <p>5. The system shall also be deemed to have been accepted by WDRA if within 14 days of System Integrator's notice, WDRA does not comply with requirement of aforesaid sub-clause (3) or starts using the system in live environment for commercial purposes before that .</p>	Please refer to the Corrigendum
7	Section 6.1 Point 2	128	<p>If the System Integrator fails to supply, install, commission, and achieve go-live of the system within the time for achieving go-live specified in the implementation schedule in the technical requirement or the agreed and finalized project plan, the System Integrator shall pay to the WDRA liquidated damages at the rate mentioned in SLA section of technical requirements. The aggregate amount of such liquidated damages shall in no event exceed 10% of the total price of the contract. Once the maximum is reached, the WDRA may consider termination of the contract.</p>	<p>Need to modify as under:</p> <p>If the System Integrator fails to supply, install, commission, and achieve go-live of the system within the time for achieving go-live specified in the implementation schedule in the technical requirement or the agreed and finalized project plan for <u>reasons solely and entirely attributable to the System Integrator</u>, the System Integrator shall pay to the WDRA liquidated damages at the rate mentioned in SLA section of technical requirements. The aggregate amount of such liquidated damages shall in no event exceed 10% of the total price of the <u>delayed part of the</u> contract. Once the maximum is reached, the WDRA may consider termination of the contract.</p>	There is no change to the RFP document
8	Section 6.2	128	Defect liability	<p>These are warranty provision – however are without standard exceptions and exclusions – need to add them as under:</p> <p>System Integrator shall have no liability in the case of breach of the above warranties due to (i) use of the deliverables on any environment (hardware or software) other than the environment recommended or approved by System Integrator , (ii) the combination, operation, or use of some or all of the deliverables with information, software, specifications, instructions, data, or materials not approved by System Integrator; (iii) the deliverables having been tampered with, altered or modified by WDRA without the written permission of System Integrator or (iv) use of the deliverables otherwise than in terms of the relevant documentation. In case of breach of this warranty, WDRA's exclusive remedy will be to obtain (1) the re-performance of the service or the correction or replacement of the affected deliverable that provides substantially similar functionality or (2) if both parties mutually determines that such remedies are not practicable, a refund of the project fees allocable to that portion of the deliverable will be due to WDRA if already paid by WDRA.</p> <p>THE WARRANTIES PROVIDED HEREIN ABOVE BY SYSTEM INTEGRATOR ARE IN LIEU OF ALL OTHER WARRANTIES, BOTH EXPRESS AND IMPLIED, AND ALL OTHER WARRANTIES, INCLUDING WITHOUT LIMITATION THAT OF MERCHANTABILITY OR FITNESS FOR INTENDED PURPOSE IS SPECIFICALLY DISCLAIMED BY SYSTEM INTEGRATOR. Notwithstanding anything contained in this Agreement, with respect to any third party software or component including equipments (irrespective of whether procured by System Integrator or by WDRA), the warranties, representations, indemnities and other license terms and conditions provided by the concerned third party will apply.</p>	There is no change to the RFP document

9	Section 6.5	130	<p>Intellectual property rights indemnity</p> <p>1. No services covered under the contract shall be sold or disposed by the System Integrator in violation of any right whatsoever of third party, and in particular, but without prejudice to the generality of the forgoing, any patent right, trademark or similar right, or any charge mortgage or lien. the System Integrator shall indemnify the WDRA from all actions, costs, claims, demands, expenses and liabilities, whatsoever, resulting from any actual or alleged infringement as aforesaid, and at the expenses of the System Integrator, the WDRA shall be defended in any of the proceedings which may be brought in that connection. All the deliverables, hardware and custom software submitted by the System Integrator under the contract will be the sole property of WDRA.</p>	<p>These indemnity provisions are without standard exclusions and exceptions – need to add them- as under.</p> <p>System Integrator shall have no liability for any claim of infringement based on: (i) use of a superseded or altered release of some or all of the deliverables including, but not limited to, WDRA’s failure to use corrections, fixes, or enhancements made available by System Integrator ; (ii) the combination, operation, or use of some or all of the deliverables or any modification thereof furnished under this Agreement with information, software, specifications, instructions, data, or materials not furnished by System Integrator if the infringement would have been avoided by not combining, operating, or using the deliverables or the modification thereof; (iii) some or all of the deliverables or the modification thereof, which is based on WDRA’s material, data or design; (iv) any change, not made by System Integrator , to some or all of the deliverables or any modification thereof or (v) use of the deliverables otherwise than for the purposes authorised hereunder.</p> <p>if any of the deliverables is held or is believed by System Integrator to infringe, System Integrator shall have the option, at its expense, to (i) modify the deliverables so as to make it non-infringing, (ii) obtain for WDRA a license to continue using the deliverables, or (iii) terminate the license for the infringing part of the deliverables and refund a pro rata portion of the fees paid for that portion of deliverables. This clause provides for System Integrator’s entire liability and WDRA’s exclusive remedy for claims of infringement of intellectual property rights related to the deliverables.</p> <p>Each of the parties shall separately defend, indemnify and hold the each other harmless from and against any liability, loss, costs or expenses (including reasonable Attorney’s fees) arising out of or resulting from breach of the provisions herein.</p> <p>Further last line of this clause need to modify as under:</p> <p>All the <del>deliverables, hardware and</del> custom software submitted by the System Integrator under the contract will be the sole property of WDRA.</p>	There is no change to the RFP document
10	Section 6.6	130	<p>Limitation of liability</p> <p>1. The aggregate liability of the System Integrator to the WDRA, whether under the contract, in tort or otherwise, shall not exceed the total contract price, provided that this limitation shall not apply to any obligation of the System Integrator to indemnify the WDRA with respect to intellectual property rights infringement.</p>	<p>This clause is incomplete –does not have exclusion of Indirect liabilities –need to add as under:</p> <p>Neither party shall be liable to the other for any special, indirect, incidental, consequential (including loss of profit or revenue), exemplary or punitive damages whether in contract, tort or other theories of law, even if such party has been advised of the possibility of such damages.</p> <p>System Integrator shall be excused and not be liable or responsible for any delay or failure to perform the services or failure of the services or a deliverable under this Agreement, to the extent that such delay or failure has arisen as a result of any delay or failure by the WDRA or its employees or agents or third party service providers to perform any of its duties and obligations as set out in this Agreement. In the event that System Integrator is delayed or prevented from performing its obligations due to such failure or delay on the part of or on behalf of the Bank, then System Integrator shall be allowed an additional period of time to perform its obligations and unless otherwise agreed the additional period shall be equal to the amount of time for which System Integrator is delayed or prevented from performing its obligations due to such failure or delay on the part of or on behalf of the Bank. Such failures or delays shall be brought to the notice of the WDRA and subject to mutual agreement with WDRA , then System Integrator shall take such actions as may be necessary to correct or remedy the failures or delays. System Integrator shall be entitled to invoice WDRA for additional costs incurred in connection with correction or remedy as above at time &amp; material rate card as agreed upon between the parties.</p>	There is no change to the RFP document
11	Section 8.2	135	Termination of contract	<p>Need to have termination for breach right also available for to the System Integrator as under :</p> <p>System Integrator shall also have a right to terminate this Agreement in event of breach of any of its terms and conditions by WDRA by giving 30 days notice to WDRA, provided the breach is not cured by WDRA within such notice period</p>	There is no change to the RFP document