



Reserve Bank of India

Department of External Investments and
Operations, Mumbai - 400 001

Setting Up Of Back-up Centres for Reserve Bank of India, Department of External Investments and Operations (total end-to- end solution)

REQUEST FOR PROPOSAL - REVISED

This document is the exclusive property of Reserve Bank of India (RBI). It may not be copied, distributed or recorded on any medium, electronic or otherwise, without the prior written permission of RBI. The use of the contents of this document, even by the authorised personnel/agencies for any purpose other than the purpose specified herein, is strictly prohibited and shall amount to copyright violations and shall be punishable under the Indian Laws.

Setting Up Of Back-up Centres for Reserve Bank of India, Department of External Investments and Operations (total end-to-end solution)

Introduction:

Sealed quotations are invited for providing a comprehensive end-to-end solution for setting up two Back-up centres including, but not limited to supply, installation and operationalisation of computer systems, system software, anti-virus software, application software, data replication, transportation, reconfiguration and reinstallation of the existing hardware at the Back-Up centres etc. as detailed below for Reserve Bank of India, Department of External Investments and Operations (hereinafter referred to as 'The Bank').

Bid Details:

| | |
|---|--|
| Date of issue of tender document | March 15, 2005 |
| Last date for receiving queries | March 31, 2005 |
| Date, Time & Venue of Pre-Bid Meeting | April 15, 2005; 3.00 pm , Conference Room No.3, Reserve Bank of India, Central Office, 15th Floor, Central Office Building, Shahid Bhagat Singh Marg, Fort, Mumbai- 400001 |
| Last Date and Time for submission of tender | April 29, 2005; 3.45 pm , |
| Date, Time & Venue of Technical Bid Opening | April 29, 2005; 4.00 pm , Reserve Bank of India, Department of External Investments and Operations, Central Office, 22 nd Floor, Central Office Building, Shahid Bhagat Singh Marg, Fort, Mumbai- 400001 |
| Address for Communication | Shri H. Bhattacharya, Chief General Manager, Reserve Bank of India, Department of External Investments and Operations, 22 nd Floor, Central Office Building, Shahid Bhagat Singh Marg, Mumbai- 400001 |
| Contact Official | Sh S. K. Maheshwari, Deputy General Manager Phone : 22678805 Fax : 22664667 skmaheshwari@rbi.org.in |

1. Background:

1.1 The Bank is in the process of setting up two Back-up centres, one at RBI, Belapur, Navi Mumbai and the other at RBI, Hyderabad. These two Back-up centres are designed to store the data of the Bank's critical applications running at its primary location in Mumbai. The solution envisaged will provide for and include consolidation and replication of data for archival and retrieval purpose as well as a backup mechanism to meet any eventualities in the event of data loss due to crashing of systems, natural calamities etc. or any other reason. In the event of any disruption in the normal day-to-day operations at the Bank's primary location for any reason, the two proposed Back-up centres individually are required to provide a feasible and viable option to the Bank to run all or any of the affected

applications, either remotely from the primary location or locally at any of the Back-up centres so that business continuity is maintained with minimal interruption as set out in this RFP document. Details of the applications that are to be operationalised at the Back-up centres are furnished in **Annexure 1**. It is envisaged that these Back-up centres would facilitate the Bank as set out in this document. The proposed solution will be BS 7799/ ISO 17799 Information Security Standards compliant and the Vendor will have to interact with the consultant and the Certifying Agency appointed/ to be appointed by the Bank for this purpose.

1.2 Normal day to day operations of the applications and processing of data at the primary location would work independent of the Back-up centres but provide means to upload daily transactions data automatically at a scheduled time to these Back-up centres as specified in this document. In case of need or an emergency, as the case may be, the Bank would operate the Computer Systems from the Back-up centres as required, either remotely from the primary location using WAN or locally at one or both the Back-up centres.

1.3 The Bank uses eTreasury as its main back office-cum-accounting application for transaction processing. This application uses Oracle 8i RDBMS platform which runs on HP-UX 11i database server with Windows 2000 platform as the application server. The oracle version is proposed to be upgraded to 9i. The vendor shall be responsible for complete migration of the application and the database to version 9i. The application uses BEA Tuxedo 6.4 as the messaging middleware. Both HP UX and Windows 2000 servers have been deployed as dual node active-stand by clusters. The server and storage configuration currently deployed at the primary site for eTreasury is furnished in **Annexures 2 and 3**.

1.4 The Bank uses SWIFT for its financial and other messaging requirements. For this purpose, the Bank uses SWIFT Alliance Access (SAA) on IBM AiX platform. SWIFTnet Link (SNL) is used for SWIFTNet connectivity. The current versions in use are SAA 5.5 (patch 5530) and SNL 5.0 running on AiX 5.2. The Bank proposes to have single-P SWIFTNet connectivity at both the proposed back-up centres. The Bank has chosen M/s Infonet as its Network Partner for providing the single-p connectivity at the proposed Back-up Centres. PC Connect version 3.9 (PCC) is the middleware application used as a front-end for creating and receiving SWIFT messages. PCC interfaces with the CBT using a customized RS232 physical cable link with dial-up connectivity as the stand-by mode. The configuration of the SWIFT CBT currently in use is furnished in **Annexure-4**.

1.5 The Bank uses Reuters and Bloomberg systems for its Front Office operations. eTreasury interfaces with Reuters for forex and money market trade and market information feeds via a customised RS232 cable, with Bloomberg for securities trade details via an email based text file transfer mechanism and with PCC for SWIFT messaging via an FTP based text file transfer mechanism over LAN.

1.6 The locations identified for setting up the Back-up centres are connected with the primary location through VSATs and inter-city leased lines (2 MBPS from RBI, Main Building to RBI, Belapur and 2x4 MBPS from RBI, Main Building to IDRBT, Hyderabad). The Local Area Network is in place in the locations identified for setting up the Back-up centres. A private Class B IP address (172.16.x.x) with fixed length Subnet Mask is used on the LAN with private Class A IP address (10.x.x.x) and Variable Length Subnet Mask (VLSM) on the VSATs. These addresses are assigned to the VSAT IDU, Router, NAT/ Proxy/ Firewall and any other communication devices in the LAN connected to the VSAT. All the servers and clients within a VSAT location are assigned a unique private Class B IP address i.e. 172.16.X.X. Since all the servers to be accessed from other VSAT locations reside behind a NAT, a static IP mapping of the internal addresses to the INFINET address

need to be configured. LAN at each location is integrated with INFINET, leased lines and ISDN lines. The solution offered will use INFINET as the communication backbone.

1.7 The configurations of the new servers, storage and back-up devices etc. required for eTreasury are furnished in **Annexures 5**. The new servers and storage array will replace the existing Unix and Windows servers and storage arrays at the primary site. The two rp3440 HP UX servers will be deployed as a dual node cluster. Similarly, the two HP DL380 Windows 2000 servers will also be deployed as a dual node cluster. Both these clusters will use the EVA3000 storage array. The servers, FC switches and the storage array will be deployed in a no single point of failure (NSPOF) configuration. The existing HP UX and Windows 2000 servers will be relocated to the two proposed Back-up centres and deployed as single nodes there with the MSA30 DB external storage boxes to be supplied by the vendor as per the specifications provided in **Annexure 5**. The EVA3000 and MSA30 storage boxes will be deployed in RAID5 configuration. Oracle version 9i will be installed on the new servers and the application will be migrated to version 9i with appropriate changes as required. After the new servers are deployed in the production environment at the primary site, the version 8i on the existing servers will be upgraded to 9i and the application will be migrated to 9i before relocation of the servers to the proposed DRSs. Any upgrades required to the existing servers to serve these objectives will have to be specifically proposed and quoted for.

1.8 The configurations of the IBM AiX servers required for SAA, SNL and SAW are furnished in **Annexure 6**. One of the two new servers will be used to replace the exiting server at the primary site. The other server will be directly installed at the proposed Back-up centre at RBI, Belapur, Navi Mumbai. The existing IBM AiX server at the primary site will be relocated to the proposed Back-up centre at RBI, Hyderabad. The High level Operating system requirement for AIX 5.2 and the list of recommended patches as per the SWIFT Alliance Access 5.5 and SNL 5.0 Release Letter issued by SWIFT is given in **Annexure 7**.

1.9 The Bank intends to replicate the eTreasury data at the Back-up centres through an automated process using a redo log file transfer in an asynchronous mode as well as by manual process by obtaining such data on back-up media from the primary location. The solution offered should provide for a user configurable scheduling feature for data transfer. The data transfer will occur simultaneously from the Primary Site to both the Back-up Centres and the solution offered should enable monitoring of the replication process from the Primary Site to both the Back-up Centres. Data transfer should be possible both at either a fixed time of day or at specified intervals. Based on current volume of transactions and future projected requirements, the solution offered should be capable of data transfer at a frequency ranging from 1 hour to 1 day. The automated process will use INFINET as the communication backbone for this purpose. The vendor will provide detailed documentation on the replication procedure that will be deployed as a part of the solution, with particular reference to the course of action that the solution will adopt in case of replication failure at the appointed time for any reason. The documentation should clearly bring out the stages and extent of manual intervention required for the solution to work.

1.10 The maximum acceptable downtime for switching operations from the primary site to either of the Back-up Centres and/ or back is two hours. The Bank should be able to resume operations both in remote login and local login mode within the maximum acceptable downtime with status of data as per the last transfer. The solution should have feature to checkpoint the status of the data transfer and in the event of any disruption during data transfer for any reason, should have the capability to automatically resume transfer from the point at which disruption occurred. The system should also have an

automatic feedback feature for reporting the status of data transfer after every successful data transfer/ disruption/ resumption etc as the case may be.

1.11 As can be seen from the above, the Bank wishes to take advantage of the later technology and deploy the new machines at the primary site and move the existing older servers to the Back-up centres. The vendor is required to propose and quote for any upgrades required to the existing servers or any other hardware, apart from what has been stated in this RFP, to meet the Bank's objective. The vendor will be responsible for migrating to the new servers at the primary site without disrupting the live processing. The vendor should clearly mention and commit the extent of downtime needed for carrying out the migration. In case the Bank's stated objective of using the later technology at the primary site is not technically feasible to implement, the vendor should specifically mention the reasons thereof, suggest alternatives and quote for the same. The vendor is responsible for all activities in connection with migration of all applications both at the primary site as well as the proposed Back-up centres. The vendor's responsibility will also include but not be limited to taking all the necessary back ups, restoration activities etc. The Bank will only be responsible for providing the back up media in the required quantity, which should be specified well before undertaking back ups to enable the Bank to arrange for the same.

1.12 The Bank has already acquired 120 nos. named user Oracle licences for eTreasury. 100 licences have been deployed at the primary site. 10 each of the remaining 20 are proposed to be deployed at the proposed Back-up centres. However, if it not permissible or possible to do so for any reason and the Bank is required to go for additional licences, the same should be clearly mentioned in the technical bid with reasons and the number and type of licences that need to be procured. The bank will arrange to procure the licences separately.

2. Scope of Work

2.1 The Vendor shall supply, install, customize and operationalise all the hardware, systems software and application software etc. as per the configuration and other technical details specified in this document. The terms hardware shall include OEM specific rack assemblies as well and the price quoted shall be inclusive of racks, cables and all other accessories as required.

2.2 The Bank intends to award the contract as an end-to-end turnkey job to the successful bidder. In addition to what has been stated elsewhere in this document, the scope of work to be carried out by the vendor shall include but not be limited to:

2.2.1 Site specifications, inspection and certification.

2.2.2 Supply, installation and operationalisation of the hardware and system software mentioned in this RFP document. The items of hardware required to be ordered directly from SWIFT or its authorized partners (Secure Card Readers, ICC cards etc.) will be procured by the Bank and supplied to the vendor who will be responsible for their installation, configuration and operationalisation. The vendor shall be involved in the process of ordering and be responsible to the extent mentioned in this document. The vendor should clearly specify in the technical bid the equipment that needs to be procured directly by the Bank. In case of failure to do so or any equipment being left out, the cost thereof will be recovered from the vendor.

2.2.3 Installation and operationalisation of the application software mentioned in this RFP document (including any additional hardware/ software components required for the purpose). Interfaces existing at the primary site (eTreasury-Reuters, eTreasury-Bloomberg, eTreasury-PCC, PCC-SAA) will have to be provided at the Back-up centres as well. Physical cables and other accessories required for establishing the interfaces will have to be supplied, customized and operationalised by the vendor. Details of such cables and accessories will have to be obtained from the respective application vendors.

2.2.4 Documentation – System and User Manuals and Disaster Recovery procedures in various scenarios with recovery methods and downtime involved, data and application replication technique used (Replication has to be fully automated with no manual intervention at either end, to the extent possible) and any other documentation required for operating the Back-up centres for the purpose envisaged in this document.

2.2.5 Operationalisation of SWIFT shall include but not be limited to SAA, SNL, SAW, PCC and single-P leased line SWIFTNet connectivity through the Bank's chosen Network Partner, M/s Infonet. Configuring SWIFT shall include but not be limited to installing Secure Card Readers, ICCs, VPN boxes, routers, modems, PCC-CBT link cable, supply and installation of Hayes compatible modems for dial-up PCC-CBT connectivity etc, assistance and management of ordering of security products and any other item that may be required for the purpose. The vendor is responsible for replicating at the Back-up Centres the application set-ups and interfaces existing at the primary site as described in this RFP document. The vendor shall commission the single-P SWIFTNet connectivity packs at the two sites and produce certificates in original from the Bank's chosen network partner, i.e. M/s Infonet addressed to RBI certifying that the connectivity has been successfully established, tested and is ready for use.

2.2.6 Installation and operationalisation of eTreasury shall include, but not be limited to, installing Oracle 9i and migrating the application and the database to version 9i as and in the manner described in para 1.3 of this document. It will also include but not be limited to, installing and configuring clients as well.

2.2.7 Transportation of the existing servers to the Back-up centres and their installation, configuration and operationalisation there will be done by the vendor at its own risk. Transportation shall include packing, loading, unloading, unpacking etc. and any other connected activity. The vendor will take suitable comprehensive insurance cover in its own name for this purpose and shall assume all risks, responsibilities and liabilities in this regard and shall be liable to arrange, at its absolute cost, suitable replacement in case of damage or loss. No liability will devolve on the Bank on account of damage or loss caused in connection with transportation. The vendor shall submit a bank guarantee in this regard for Rs. 1 crore in favour of the Bank. The guarantee shall be valid till the transportation and successful installation and operationalisation of all the hardware, software, application and data is completed and certified by the respective application vendors. Transportation (including packing, unpacking, loading and unloading) insurance and related costs like octroi, entry tax etc. will be borne initially by the vendor. These will be reimbursed by the Bank at actual on production of original receipts/ documents etc. These costs will not be reckoned for evaluation of the tender price and should not be included in the commercial bid.

2.2.8 The servers currently deployed at the primary site will be removed to the Back-up centres upon successful migration of the application and data to the new servers at the primary site and producing a certificate from the respective application vendors to this effect. The existing racks at the primary site will also be shifted to the proposed back-up Centres to house the hardware which will be shifted there, as well as the new hardware to be supplied for installation at the Back-up centres. The vendor will be responsible for making modifications, if any required, to the existing racks for this purpose. The price quoted should include this component under 'implementation and other services'. No additional charges will be reimbursed on this account in addition to the quoted price. The vendor will also reconfigure the existing servers, if required, in order to deploy them at the Back-up centres. The vendor has to decide the locations where all the new hardware required to be supplied under this RFP will be delivered and advise the Bank accordingly in advance.

2.2.9 Project implementation has to follow the respective vendors' DRS policy and has to include application and other associated license issues and the vendor shall take full responsibility and any consequent liability for the same. No claim shall subsequently lie on the Bank for the vendor's failure to observe this and an undertaking-cum-indemnity to this effect should accompany the technical bid.

2.2.10 Installation and operationalisation of eTreasury, SWIFT and SWIFTNet connectivity, including all activities as detailed and defined in this document and any other activity that may be required to be done in this connection will have to be mandatorily assigned to M/s Tata Consultancy Services Ltd. (TCS), M/s Scandent Solutions Corporation Ltd (SSC) and M/s Infonet respectively. A letter of undertaking to this effect should accompany the technical bid.

2.2.11 The vendor shall hand over the fully equipped and functional Back-up centres as specified in this document in Ready-for-Use (RFU) condition and demonstrate the expected functionalities and disaster recovery features within the expiry of the agreed time period. The completion will have to be certified by M/s TCS, M/s SSC and M/s Infonet for eTreasury, SWIFT and SWIFTNet single-p connectivity respectively and the vendor will have to produce certificates addressed to the Bank issued by them, in original.

2.3 The vendor shall provide specific technical details in their offer covering the following areas:

- Additional bandwidth, if any, required for smooth operations as envisaged in this document.
- Additional hardware accessories and software products required for activities and purposes envisaged in this document, including data transfer, replication, uploading and downloading to and from the primary location to the Back-up centres and vice versa and running all and or any of the applications from the primary location individually and/ or concurrently and/ or simultaneously.

2.4 The vendor shall supply, install and operationalise suitable anti-virus software for Windows 2000 Advanced Server. The supply and installation of the anti-virus software shall provide:

- Three years' comprehensive on-site 24x7 warranty service support with free periodical updates/ upgrades/ version releases; as and when made available by the

OEM. The technical support shall also include on-site assistance to the personnel of the Bank for removal of new viruses, Trojans, Worms, etc, besides providing free telephonic/ e-mail/ Fax support.

- Connectivity to the web site of the vendor and or the OEM/ Principal of the anti-virus software supplied for free downloading of updates/ upgrades/ virus signature files, etc as and when required by the Bank during the warranty period.
- One set of media and manuals shall be provided at each location with requisite number of site licenses.

2.5 Additional hardware, accessories, software products, etc, if any, required for providing the total solution as envisaged in the RFP Document at each location should be specified and quoted for. Required technical details of such products offered by the vendor duly supported by schematic diagrams and technical specifications of each component offered should be furnished along with the reasons justifying the requirement/s for such additional components, accessories and software products as part of the Technical Bid and furnish the cost of each such component/s as part of the Commercial Bid.

2.6 A detailed documentation on the total solution that the vendor proposes to implement as per this RFP document should accompany the technical bid. The document should clearly bring out how the proposed solution will help the Bank achieve its objectives as set out in the RFP document and how the vendor proposes to implement the solution with details of the implementation stages and timelines. The document should clearly indicate the various types of disruptions/ disasters that the proposed solution will address. The document should bring out the recovery procedure involved and the down time that will be involved in each case.

3. General Instructions:

3.1 Bidders Eligibility - Only such of those vendors who satisfy the following criteria are eligible to participate in this tender:

3.1.1 The Vendor must be a registered corporate in India, registered under the Companies Act 1956 and should be registered under C.S.T. and B.S.T.

3.1.2 The Vendor should be OEM or channel partner or authorised distributor/ reseller of both IBM and HP for the class of equipment required to be supplied, installed, operationalised and configured under this RFP.

3.1.3 The Vendor should have reputed background and should be established in IT business, as system integrators in India for at least three years.

3.1.4 The Vendor should have fully functional service/support centre and qualified engineers to provide quality service support at Mumbai and Hyderabad.

3.1.5 The Vendor should have executed at least 2 system integration projects as total solution provider since January 2002, out of which at least one project should have been worth more than Rs. 1 crores. Documentary evidence has to be submitted as proof of this.

3.1.6 The Vendor should have been making profits for the past 3 years. Audited Balance sheet and Profit and Loss account (amount in Rupees) for last three years should be submitted.

3.2 The Bidder must submit Earnest Money Deposit (EMD) along with the complete bid of Rs. 5 lakhs in form of Bank Guarantee valid for at least six months/ Demand Draft in favour of Reserve Bank of India, Mumbai, payable at Mumbai. Non-submission of EMD may lead to rejection of the bid. The irrevocable Bank Guarantee issued by a Scheduled bank only, shall be in form acceptable to the Reserve Bank of India as per **Annexure 8**. The EMD of unsuccessful bidders will be returned to them. The EMD will not carry any interest. The EMD of successful bidder shall be forfeited in case the bidder fails to commence the work awarded to him within the prescribed time limit. The successful bid, if withdrawn, is also liable for forfeiture of the EMD.

3.3 All bids and supporting documentation shall be submitted in English.

3.4 Infrastructure requirements including power requirements, air conditioning, dust and humidity control, etc., necessary for successful and efficient operation of the installation at each site should be specified. Also dimensions and weight of each piece of equipment offered shall be specified with necessary power and wiring requirements.

3.5 The computer systems, accessories, software components, etc will be delivered and installed at each location (Primary site as well as Back-up centres) without disturbing any existing processing and other activities.

3.6 Names and addresses of reference sites where similar systems and products were offered, installed and operationalised by the Vendor and/ or similar total solution projects executed in the recent past shall be furnished for the reference of the Bank. If deemed necessary, the vendor will be required to give presentation on the systems offered.

3.7 The quotations shall be submitted strictly in conformity with the specifications given in **Annexure 5 to 7**. Any deviations from the specifications and or the terms and conditions of the RFP Document should invariably be furnished by the Vendor as per the format furnished in **Annexure 9**, specifying the reasons and justifying such deviation. Non-mention of deviations shall imply compliance with the specifications.

3.8 Price/ cost of hardware, accessories, software and services offered and prices of any additional/ optional components thereof required at each location shall be furnished in the Commercial Bid in a sealed cover.

3.9 The tenders not submitted in the prescribed formats and incomplete in details are liable to be rejected.

3.10 The quotations received after due date and time are liable to be rejected.

3.11 The Bank is not responsible for non-receipt of quotations within the specified date and time due to any reason including postal delays and/ or holidays.

3.12 The Bank reserves the right to accept or reject any bids without assigning any reason thereof and Reserve Bank of India's decision in this regard will be final.

3.13 The Bank reserves the right to alter the hardware and software or any other requirements as the case may be to meet its requirements.

3.14 The Company profile (**Annexure 10**), past experience of the company in the area of providing a comprehensive end-to-end solution for setting up backup centres and supply, installation and operationalisation of computer systems, system software including operating systems, Oracle, anti-virus, application software, networking, dedicated connectivity, data replication and reconfigurations etc, past experience of Reserve Bank Of India and local presence and nature of vendor's support (direct/ indirect) available at each location shall also be considered while evaluating the tenders submitted by the vendors.

3.15 The successful bidder will be required to sign an agreement on the required stamped paper containing the Bank's terms and conditions of purchase.

3.16 Vendors should submit Technical and Commercial Bids separately in sealed covers and the Bank reserves the right not to process the Commercial Bids of the Vendors whose Technical Bids is found to be unsuitable and not fulfilling eligibility criteria specified in the RFP Document.

3.17 Separate Technical Bids and Commercial Bids duly sealed and superscribed 'Quotation for setting up Back-up centres – Technical Bid' and 'Quotations for setting up Back-up centres – Commercial Bid' addressed to Mr. H. Bhattacharya, Chief General Manager, Department of External Investments and Operations, Central Office, 22nd Floor, Reserve Bank of India, Central Office Building, Shahid Bhagat Singh Road, Mumbai – 400 001 should reach us at this address at or before 3.45 pm on April 29, 2005.

3.18 Quotations submitted after due date and time and/ or incomplete in any respect and/ or not submitted in the manner indicated in the RFP are liable to be rejected. Technical bids shall be opened at 4.00 pm on April 29, 2005 in Department of External Investments and Operations, 22nd Floor, Reserve bank of India, Central Office Building, Shahid Bhagat Singh Road, Mumbai – 400 001.

3.19 Letters of authorization/ competence to bid addressed to the Bank from the respective OEMs/ application vendors should accompany the technical bid in original. The letters should also contain assurance to provide all necessary support for supply, installation and operationalisation as necessary.

3.20 The acceptance of tender, subject to contract, will be communicated in writing at the address supplied for the prime bidder in the tender response. Any change of address of the Bidder, should therefore be promptly notified to the CGM, Department of External Investments and Operations, Reserve Bank of India, 22nd floor, Central office Building, Shahid Bhagat Singh Road, Fort, Mumbai 400 001.

3.21 The successful Bidder shall be required to enter into a contract with Reserve Bank of India, within thirty (30) days of the award of the tender or within such extended period as may be specified by the CGM, Department of External Investments and Operations, Reserve Bank of India, Mumbai. At the time of execution of the form of contract a Memorandum of Understanding containing the terms and conditions necessary for the due performance of the work in accordance with the bids and acceptance thereof will be signed. Failure of the Bidder to comply with the above requirement may result in the annulment of the award.

4. Prices:

4.1 The prices quoted shall be in Indian Rupees, firm and not subject to any price escalation, if the order is placed within the validity period. The price quoted shall include all

Central/ State Government levies, taxes, sales tax, excise duty, custom duty, insurance charges, charges if any payable to the application vendors/ their authorised support partners and/ or travel/ stay and/ or other incidental expenses etc. The price quoted shall not, however, include Octroi/ Entry Tax and transportation, packing, loading, unloading, unpacking, insurance or any other charges in relation to relocation of the existing servers to the proposed Back-up centres, which, if any, shall be paid as per the actuals on production of relevant original documents.

4.2 A component-wise summary of the total solution offered should be provided in the commercial bid in the format as per **Annexure 11** with detailed break-up under each sub-head.

4.3 Subsequent to the orders being placed/agreement executed, the vendor shall pass on to the Bank all fiscal benefits arising out of reductions in Government levies viz. sales tax, excise duty, custom duty, etc. The Bank reserves the right to re-negotiate the prices in the event of change in the international market prices of both the hardware and software.

4.4 All the prices, technical specifications and other terms and conditions of the offer proposed by the vendor should be valid for a minimum period of 8 months.

4.5 The terms of payment shall be as follows:

- 90% on completion of delivery, successful installation and training as set out in this document.
- 10% on expiry of the warranty period or against submission of bank guarantee as per the Bank's format.
- The training charges, if any, shall be paid only on completion of the training to the personnel of the Bank.
- The Vendor shall submit a performance bank guarantee for performing all the obligations arising on acceptance of all the terms and conditions of purchase order and execution of the agreement. Such performance bank guarantee shall be to the extent of 10% of the total purchase consideration or purchase order value and such performance bank guarantee submitted by the Vendor shall be in force till the completion of warranty period.

4.6 The Bank reserves the right to re-negotiate the prices in the event of change in the International market prices of both the hardware and software.

4.7 All the information furnished in the Commercial Bid should be replicated in the Technical Bid, with all prices masked. Failure to comply with this requirement may result in making the bid liable for rejection.

5. Time Schedule :

5.1 The Bank would like to have the following time schedule for completion of the activities from the date of placement of order:

- i. Delivery : 8 weeks
- ii. Installation and operationalisation: 8 weeks

However, the Vendor should specify minimum and maximum possible time required by them for completion of the Back-up centres and handing them over to the Bank in ready-for-use condition.

5.2 The delivery of the Computer Systems will be deemed complete when the following are received in good working condition at each designated location of the Bank:

- Computer Systems, accessories, and other hardware components, and associated documentation.
- System Software and associated documentation.
- Anti-virus software and associated documentation.
- OEM specific racks and assembly systems as per the technical bid.

5.3 The installation will be deemed to be complete, when all the hardware, hardware components, system software and other software products specified in this document have been supplied, installed and operationalised and all the features as per the technical specifications are demonstrated and implemented, as required, to the satisfaction of the Bank. The required applications and data should be duly migrated, installed, configured and operationalised and the following completed and demonstrated at the primary site as well as the Back-up centres:

- Applications functionalities as per the terms set out in this document under both local and remote login scenarios including version upgrades, cluster failover and failback functionalities at the primary site.
- Latest and complete application data, in sync at all the three locations.
- SWIFTNet Fin login and select using SWIFTNet connectivity.
- Oracle version upgrades.
- eTreasury migration to Oracle 9i and data replication.
- All the interfaces mentioned in this document.
- Disaster recovery within committed recovery times in various disaster scenarios.
- BS 7799/ ISO 17799 certification is obtained for the solution offered.

5.4 The demonstrations will have to be carried out in the presence of the respective application vendors and the Bank's officials. A certificate of successful migration and operationalisation of applications and data at all the three sites including failover and failback capabilities from the respective application vendors should be submitted

5.5 All the software (including operating system/s, system software, application licenses etc.) supplied by the Vendor shall be legal and the Vendor shall give indemnity to that effect in the format specified in **Annexure 12**.

6. Warranty and support:

6.1 The warranty should be for a minimum period of one year from the date of acceptance of the systems by the Bank. During the warranty period, the Vendor will have to undertake comprehensive maintenance of the entire hardware, hardware components, Systems Software, Operating Systems, Oracle products, other hardware, software and accessories supplied by the Vendor. The warranty should cover 24x7 on-site support. No additional credit will be given while evaluating the commercial bid for warranty in excess of one year, if offered,

6.2 In respect of all the software products offered, the vendor should specify the warranty period available on media and on the software as per the warranty policies of the

respective principals or OEMs as the case may be. This should be specifically mentioned by the vendor in the Technical Bid.

6.3 In respect of all the software, including Operating Systems viz. HP UX 11i, IBM AIX 5.2, Windows 2000 Server Standard, etc, the Vendor should give the policy and price of supplying new version/s, releases, upgrades, updates, etc. This should be specifically quoted by the vendor in the offer.

6.4 Besides the above, the Vendor will have to confirm the terms and conditions of warranty in **Annexure 13**.

6.5 The information about service support available at each site should be furnished in the Technical Bid.

6.6 The selected vendor shall provide the preventive maintenance schedules per month, which shall be specified in advance.

6.7 In the event of system break down or failures at any stage, protection available shall be specified which would include the following.

- Diagnostics for identification of systems failures
- Protection of data
- Recovery/restart facilities
- Back-up facilities

6.8 The selected Vendor shall ensure 99.9% uptime for systems supplied (24*7*365).The vendor shall ensure that in case of a break down/ malfunctioning of hardware, hardware components, accessories, System Software, etc., the relevant defect is attended to within 2 hours of the receipt of the complaint. Further, during warranty period, proportionate penalty will be levied in case of down time of the systems, which shall include extension of warranty period to the extent of down time and/or penalty of Rs. 500/- per hour.

6.9 The Vendor shall guarantee the availability of spares for a period of at least five years in respect of all the hardware and hardware accessories. The Vendor will have to maintain the Computer Systems, System Software and other hardware and software products procured for the purpose as part of this tender for a period of at least five years after the expiry of the warranty period.

6.10 The comprehensive maintenance during warranty would be inclusive of all spares excluding consumables. The list of consumables and spares should be furnished.

7. Training:

7.1 The vendor shall train the officers of the Bank on the hardware and software products supplied, services operationalised and back-up, recovery and disaster recovery procedures implemented. Training charges, if any, should be quoted by the vendor separately in the Commercial Bid. 25 officials both from business and IT area, are to be trained in a maximum of 4 batches. The vendor should specify a training schedule covering various aspects (system administration including management of hardware and software, LAN Management under various operating systems, backup utilities, data replication process, backup and restore process, disaster recovery process etc) for proper and full utilizations of the hardware and software supplied. The bank will provide the required infrastructure for the training which will be conducted on-site.

8. Right to verification:

8.1 The Bank reserves the right to verify any or all statements made by the vendor in the RFP document and to inspect the vendor's facilities, if necessary, to establish to its satisfaction about the vendor's capacity to perform the job.

8.2 The Bank, if deemed fit, will inspect any or all of the computer systems at vendor's/OEMs' manufacturing site before shipment to the Bank, to verify that the computer systems supplied to the Bank are as per the technical specifications in the purchase agreement.

9. Indemnity to the Bank:

9.1 The vendor should furnish a photocopy of the Agreement with their Principals in respect of hardware and software products offered. Further, the vendor shall indemnify the Bank and keep indemnified against any loss or damage that the Bank may sustain on account of any violation of patents, trademark etc., by the vendor in respect of hardware, hardware components, System Software, Oracle server products etc. supplied to the Bank.

10. Penalties for delay and dispute settlement:

10.1 The vendor must strictly adhere to the implementation schedule, specified in the purchase agreement to be executed between the Bank and the vendor for performance of the obligations arising out of the purchase agreement and any delay will entitle the Bank to resort to any or both of the following:

- Claiming liquidated damages at .5% of the total purchase consideration per week or part thereof subject to a maximum limit of 5 percent of the total purchase consideration.
- Termination of the purchase agreement partly or fully.

10.2 All disputes of any kind arising out of supply, commissioning, acceptance, warranty maintenance etc., shall be referred by either party (Bank or Vendor) after issuance of 30 days notice in writing to the other party clearly mentioning the nature of dispute to a single arbitrator acceptable to both the parties. The venue for arbitration shall be specified in the purchase agreement.

10.3 All disputes or differences whatsoever arising between the parties out of or in relation to the construction, meaning and operation or effect of these Tender Documents or breach thereof shall be settled amicably. If, however, the parties are not able to resolve them amicably, the same shall be settled by arbitration in accordance with the applicable Indian Laws, and the award made in pursuance thereof shall be binding on the parties. Any appeal will be subject to the exclusive jurisdiction of Mumbai courts.

11. Insurance of the Computer Systems:

11.1 The responsibilities relating to insurance of the systems till successful installations of the Computer Systems shall lie with the vendor.

12. Acceptance Test:

12.1 The Acceptance Test shall be carried out on the total solution jointly by the representatives of the Bank and the Vendor, after the items of work as per this RFP have been completed and RFU status is reported by the vendor in writing, i.e. his readiness for conducting the Acceptance Test/s is conveyed to the Bank.

12.2 The Acceptance Test shall be as per the comprehensive "Acceptance Test Plan" document to be prepared by the Vendor and approved by the Bank which shall contain various tests to be performed for acceptance of the computer systems offered by the Vendor. The Acceptance Test shall be deemed to be complete only on successful completion of the acceptance tests and issuance of the 'Acceptance Certificate' by the Bank to the Vendor.

12.3 The 'Acceptance Test Plan' document shall be deemed to form a part of the Agreement, to be signed between the Vendor and the Bank.

12.4 On the evaluation of the Acceptance Test results and if required in view of the performance of the Backup Centres as required under this RFP, as observed during the Acceptance Test, the Vendor shall take remedial measures including upgradation of the computer systems or of any component thereunder, including replacement thereof, at no additional cost to the Bank, to ensure that the computer systems meets the requirements of the Bank as envisaged in the Tender Document.

13. Compliance Matrix:

13.1 The Vendor shall give the information in respect of compliance as per the format given in the **Annexure 14**.

14. Pre-bid meeting and queries:

14.1 All queries must be sent in writing and addressed to The Chief General Manager, Department of External Investments and Operations, Reserve Bank of India, 22nd floor, Central office Building, Shahid Bhagat Singh Road, Fort, Mumbai 400 001, fax no. 022-22664667, 022-22633195 or by email to cgmdeio@rbi.org.in on or before 3.00 p.m. on March 31, 2005. Queries received thereafter may not be entertained. A pre-bid meeting for the vendors will be held at 3.00 p.m. on April 15, 2005 in Conference Room No. 3, 15th Floor, Central Office Building, Reserve Bank of India, Fort, Mumbai – 400 001.

15. Bid Evaluation

15.1 Commercial Bids of only those Vendors will be opened, who meet the eligibility criteria and whose Technical Bids are found suitable based on the Technical Bids.

ANNEXURE 1 (PARA 1.1)

Details of the applications which are currently installed at the primary site and are required to be operationalised at the Back-up centres

| S.No | Details of the application and vendor | Hardware and Operating System currently installed at the primary site | System and other software used |
|-------------|---|--|--|
| 1. | eTreasury - basic transaction processing and accounting application Vendor – M/s TCS | HP 9000 L1000 HP UX 11i (database server); Intel Pentium III Xeon Windows 2000 (application server). | Oracle 8i RDBMS, BEA Tuxedo 6.4 messaging middleware |
| 2. | Swift Alliance Access (SAA). Vendor – SWIFT; local support partner – M/s Scandent Solutions Corporation Ltd | IBM 610p with IBM AiX 5.2. | SwiftNet Link (SNL) & Swift Alliance Workstation (SAW) |
| 3. | PCConnect version 3.9 – SWIFT middleware with interfaces to SAA and eTreasury Vendor – SWIFT; local support partner – M/s Scandent Solutions Corporation Ltd | Windows 2000 Professional SP 3. | --- |

ANNEXURE 2 (PARA 1.3)

i. Specifications of the existing HP 9000 L1000 HP UX 11i Std. Rack Cluster Servers (to be relocated to the two Back-up centres and redeployed there as single nodes)

| Sr. No. | Component | Description | Qty |
|----------------|-------------------|--|------------|
| | | HP 9000 L1000 Server System (HP UX 11i) with following configuration: | 2 |
| 1. | CPU | 2x440MHz PA-8500 CPU with 1.5 MB Error correcting Cache | |
| 2. | Memory | 4 GB High Density SDRAM scalable to 8 GB. | |
| 3. | PCI slots | 5x64 bit PCI I/O slots. | |
| 4. | Floppy drive | 1.44 MB diskette drive | |
| 5. | CD-ROM | DVD (OEM specific) | |
| 6. | Hard drive | 2x18.2+1x73 GB ultra 2 SCSI hotplug high-uptime hard disks. | |
| 7. | Interfaces | HP-UX USB Keyboard Kit – US English Localisation (retractable keyboard for rack assembly) | |
| 8. | Ethernet card | 2x32 bit 10/100 Mbps per Ethernet cards. | |
| 9. | Fans | (n+1) hotswap, Redundant fans | |
| 10. | Power supply | (n+1) Hotswap, redundant Power supply units | |
| 11. | Graphics Adapters | PCI 2D graphics | |
| 12. | Monitor | 19" Performance CRT Monitor – Europe English Localisation | |
| 13. | Controller | Dual Ultra2 SCSI buses and controllers for mirrored storage. | |
| 14. | Power cord | Visualize C13 Power cord kit – Europe English Localisation. | |
| 15. | Backup device | HP Sure Store 40/80 external DLT drive | |
| 16. | SCSI cable | SCSI cable 2.5 MHDTs 68 M/M multimed. | |
| 17. | Software | Operating system version HP-UX 11i, | |
| | | HP-UX OE Media for Servers, HP-UX ver 11i, CDROM (disk only) – US English Localisation | |
| | | HP-UX OE LTU with System, System License for HP-9000 tier 1 SPU's | |
| | | HP-UX 11i English Documentation Manual – <i>Manuals on CDROM</i> | |
| | | HP C/ANSI C Developer Bundle Server LTU, System License for HP-9000 tier 1 SPU's – US English Localisation Single User License | |
| | | HP aC++ LTU for Servers, Release Notes | |

ii. Specifications of the existing VA7100 array

| Sr.No. | Items | Configurations | Quantity | |
|--------|------------------------|---|----------|--|
| 1. | Cache | 256 MB expandable to 1GB | | |
| 2. | HDD | Enterprise Class 8x36 GB 10K FC Disk drive | | |
| 3. | Processors/Controllers | VA 7100 Array processors | 2 | |
| 4. | HD SCSI Cable | 2.5 M68 PIN HD Lp to 68 PIN HD SCSI Cable | | |
| 5. | Fibre Optic Cable | 16 M SC Duplex 50/125 MM | | |
| 6. | Converter | GBIC SW for Surestore VA 7100 series | | |
| 7. | Software | HP Storage Works Command view SDM | | |

ANNEXURE 3 (PARA 1.3)

i. Specifications of the existing HP Windows 2000 Std. Rack Cluster Servers (to be relocated to the two Back-up centres and redeployed there as single nodes)

| S.No. | Component | Description | Qty. |
|-------|----------------------|---|----------|
| | | Intel Pentium III Xeon Server system with the following configuration | 2 |
| 1. | CPU | Intel Pentium III Xeon 700 MHz with 2 MB L2 ECC cache. | |
| 2. | Memory | 2x1 GB 100 MHz ECC SDRAM | |
| 3. | Motherboard | OEM Chipset with 4 Way Symmetric Multiprocessing capable with 100 MHz FSB | |
| 4. | Display controller | 2x2 MB Standard VRAM | |
| 5. | Hard disk | 2x36 GB Ultra 3 SCSI 10000 rpm | |
| 6. | Hard disk controller | Dual channel Wide Ultra 3 SCSI Controller | |
| 7. | Floppy drive | 3.5" 1.44 MB Floppy diskette drive | |
| 8. | CD ROM Drive | 40x CD ROM Drive | |
| 9. | Back up device | 40/80 GB external DLT drive | |
| 10. | Ports | 2 serial and 1 parallel port | |
| 11. | Power supply & Fans | n +1 redundant hot swap power supply units n+1 redundant hot swap fans | |
| 12. | Ethernet card | 2 x 10/100 Mbps PCI based 32/64 bit NI Cards | |
| 13. | Rack conversion kit | Rack conversion kit. | |
| 14. | FC Adapters | 2 x Fibre Channel Host Bus Adapters | |
| 15. | Monitor | 19" Performance CRT Monitor – Europe English Localisation | |

ii. Specifications of the existing Windows shared storage

| Sr.No. | Items | Configurations | Quantity | |
|--------|--------------------------|---|----------|--|
| 1. | Drive Bays | Four; each bay holds 3 low profile disks | | |
| 2. | HDD | Ultra3SCSI hot-swap 4x36 GB 10,000rpm disk drives | | |
| 3. | SCSI Channel | Two Ultra3 SCSI | | |
| 4. | HD SCSI Cable | 2.5 M68 PIN HD Lp to 68 PIN HD SCSI Cable | | |
| 5. | Power Supply/Cooling Fan | Dual, Hot-Swappable | | |

ANNEXURE 4 (PARA 1.4)

Specifications of the existing IBM 610p Server (to be relocated to the Back-up centre at RBI, Hyderabad)

| S. No. | Component | Description | Qty. |
|---------------|-------------------|--|-------------|
| | | IBM 610p with the following configuration: | 1 |
| 1. | CPU | 400MHz Power3-II processor, 64KB/32KB L1cache and 4 MB L2 cache. | |
| 2. | Memory | 4 GB SDRAM . | |
| 3. | PCI slots | 6 PCI slots | |
| 4. | Floppy drive | 1x1.44 MB 3.5 inch diskette drive. | |
| 5. | CD-ROM | 1x32x speed CD-ROM drive. | |
| 6. | Hard drive | 4x36.4 GB 10,000 rpm ULTRA SCSI mirrored hard disk drive. Disk/media bays is six (3 available). | |
| 7. | | Integrated external Ultra 2 SCSI port | |
| | | Integrated Ultra SCSI Adapter | |
| 8. | Interfaces | Quiet touch keyboard, stealth black, 3 button mouse-stealth black, two serial, parallel and stereo audio vertical stand. | |
| 9. | Ethernet card | 1 x Integrated Ethernet adapter 1x10/100 MBPS OEM specific Ethernet Adapter II | |
| 10. | Fans | (n+1) Redundant hotplug fans | |
| 11. | Power supply | (n+1) redundant auto sensing hotplug Power supply units | |
| 12. | Graphics Adapters | Power GXT130 P Graphics adapter (PCI) | |
| 13. | Monitor | 19" color monitor, stealth black, captured cable. | |
| 14. | Cables | Async Cable (EIA-232/V.24), V.24 cable, V.35 Cable | |
| 15. | | 2 port Multi-protocol PCI Adapter | |
| 16. | FC Adapters | 2 x Fibre Channel Host Bus Adapters | |
| 17. | Backup device | 12/24 GB 4mm internal DAT drive. | |
| 18. | Software | AIX 5.1 maintenance level 3 (ML03) with unlimited user licenses | |
| | | DCE 3.2 for AIX PTF set 2 packages (IY11194) | |
| | | AIX Link 2.0 - full version | |

ANNEXURE 5 (PARA 1.7)

i. Specifications for HP rp 3440-4 (4-Way) std. Rack Cluster Servers required (New Systems - to be deployed as cluster at the primary site, except as mentioned)

| Sr. No. | Component | Description | Qty |
|---------|---|---|----------|
| | | HP rp 3440-4 (4-Way) Server System (HP UX 11i) with following configuration: | 2 |
| 1. | CPU | 1xHP svr rp3440 1GHz PA-8800 dual core CPU; 1.5MB L1 Cache per processor; scalable to 4 CPUs | |
| 2. | Memory | 16GB High Density DDR scalable to 24 GB. | |
| 3. | PCI slots | 4x64 bit PCI I/O slots. | |
| 4. | Media | HP server DVD-ROM drive, Slimline | |
| 5. | Hard drive | 3x146GB 10K HotPlug SCSI HDD | |
| 6. | Interfaces | HP-UX USB Keyboard Kit – US English Localisation (retractable keyboard for rack assembly) | |
| 7. | I/O Cards | 2x2Gbps FC HBAs, 2 X1000 baseT Ethernet ports | |
| 8. | Fans | (n+1) Hotswap, Redundant fans | |
| 9. | Power supply | (n+1) Hotswap, redundant Power supply units | |
| 10. | Controller | OEM specific | |
| 11. | Power cord | OEM specific | |
| @12 | Backup Device | HP Ultrium 960 Tape Drive in an external rack-mount tape array | 4 |
| *13. | SCSI External Storage (Rack Mountable models) | MSA30 DB RAID5, 14x300 GB U320 10K rpm hot-swap HDDs each with HP Smart Array RAID Controller and redundant power supplies and fans to be connected as external storage to the two existing L1000 Servers that are to be re-deployed at the proposed Back-up Centres. | 2 |
| 14. | Software | Operating system version HP-UX 11i, | |
| | | HP-UX OE Media for Servers, HP-UX ver 11i, CDROM (disk only) – US English Localisation | |
| | | HP-UX OE LTU with System, System License for HP-9000 tier 1 SPU | |
| | | HP-UX 11i English Documentation Manual – <i>Manuals on CDROM</i> | |
| | | HP C/ANSI C Developer Bundle Server LTU, System License for HP-9000 tier 1 SPU – US English Localisation Single User License | |
| | | HP aC++ LTU for Servers, Release Notes | |
| | | License for Service Guard | |

@ - 2 nos. for the primary site as part of the new servers; one each for the two Back-up centres (to be added to the existing servers before relocation).

* - To be deployed at the Back-up centres as storage with the existing HP L1000 servers which are to be relocated there.

ii. Specifications for HP Windows 2000 std. Rack Cluster Servers (New System- to be deployed at the primary site)

| S.No | Component | Description | Qty. |
|-------------|-----------------------|--|-------------|
| | Servers | HP Proliant DL380 dual processor capable with following configuration | 2 |
| 1 | CPU | 2xXeon 3.4 GHz (800 MHz FSB) with 2 MB L2 Cache | |
| 2 | Memory | 8 GB PC DDR2 RAM | |
| 3 | Motherboard | Intel E7520 chipset | |
| 4 | Display controller | 2x2 MB Standard VRAM expandable to 4MB | |
| 5 | Hard disk | 2x146 GB hot-swap Ultra 320 10 K RPM | |
| 6 | Hard disk controller | Dual channel Wide Ultra 3 SCSI Controller | |
| 7 | CD ROM Drive | 40x or latest CD ROM/ DVD Drive | |
| 8 | Ports | 2 serial and 1 parallel port | |
| 9 | Power supply and Fans | redundant hot plug power supply | |
| | | redundant hot plug fan | |
| @10 | Backup device | 40/80 GB OEM specific internal DAT Drive | 4 |
| 11 | Host Bus Adapters | 2 Gbps FC HBA | 4 |
| 12 | Monitor | 17" colour TFT rack-mount Monitor | 1 |
| 13 | Keyboard | Standard 104 key PS2 quiet touch keyboard | 1 |
| 14 | Mouse | Standard Ps2 two/ three button mouse | 1 |
| 15 | KVM switch | 8 port KVM switch with cables | 1 |

@ - 2 nos. for the primary site as part of the new servers; one each for the two Back-up centres (to be added to the existing servers before relocation).

iii. Specifications of the new EVA3000 vRAID5 external storage array (to be connected to the new dual node HP rp3440 and HP Proliant ML570G2 Windows clusters at the primary site)

| Sr.No. | Items | Configurations | Quantity |
|---------------|--|--|-----------------|
| 1. | Controllers | EVA3000, 2C2Dd , dual controller | 1 |
| 2. | Cache (mirrored) | 1024 MB per Controller | 2 |
| 3. | HDD | Enterprise Class 146 GB 10K RPM FC Disk drives | 28 |
| 4. | Redundancy/ High Availability features | Redundant hot-pluggable architecture including redundant and hot-pluggable components like disks, power supplies, and cooling fans to ensure no single point of failure from servers to storage in clustered configuration with multi-pathing; | n+1 |
| 5. | Fault tolerance | Redundant drive enclosure power supplies, blowers, controllers, mirrored cache, cache battery backup and hot spare disks to ensure full fault tolerance against system outages and data loss. | n+1 |
| 6. | FC Switch | 12 port FC switch with all 12 ports populated for providing a NSPOF configuration | 2 |
| 7 | multipathing | Secure path for HP UX | 2 |

ANNEXURE 6 (PARA 1.8)

Specifications for IBM p615 model AiX servers (New Systems - one to be deployed at the primary site and the other at the proposed Back-up centre at RBI, Belapur)

| S. No. | Component | Description | Qty. |
|--------|--------------------|--|----------|
| | | IBM RS 6000 44P model p615 6C3 (AIX) with the following configuration: | 2 |
| 1 | CPU | 2 way 1.2 GHz Power4+Exp Cnfg. P615 240 C/E | |
| 2 | Memory | 4 GB (4096 MB i.e. 4X 1024 DIMMS, EXP Cfg. | |
| 3 | PCI slots | PCI-X Dual Channel U320 SCSI6 PCI slots | |
| 4 | Floppy drive | 1x1.44 MB 3.5 inch diskette drive. | |
| 5 | DVD-ROM | IDE Slimline DVD-ROM Drive Ass | |
| 6 | Hard drive | 4x146 GB 10,000 rpm ULTRA 320 SCSI mirrored hard disk drive. Disk/media bays is six (3 available). | |
| 7 | Interfaces | Integrated external Ultra 2 SCSI port | |
| | | Integrated Ultra SCSI Adapter | |
| 8 | Keyboard and mouse | Quiet touch keyboard, stealth black, 3 button mouse-stealth black | |
| 9 | Ethernet card | 10x100 Integrated Ethernet adapter 10x100/1000 MBPS OEM specific Ethernet Adapter II | |
| 10 | Fans | (n+1) Redundant hot-plug fans | |
| 11 | Power supply | 680 Watts ac,Hot-Sw,Pwr cord 250 V 16A banglh | |
| 12 | Graphics Adapters | Power GXT135 P Graphics w Digital | 1 |
| 13 | Monitor | 17" color TFT LCD flat panel OEM specific monitor | |
| 14 | Cables | Async Cable (EIA-232/V.24), V.24 cable, V.35 Cable,Ultra 2(LVD) cable 5 m | |
| 15 | | 2 port Multi-protocol PCI Adapter | |
| 16 | FC Adapters | 2 x Fibre Channel Host Bus Adapters | |
| @17 | Backup device | 40/80 GB 4mm internal DAT drive. | 3 |
| 18 | Software | Preinstall, AIX 5.2 Revision 10/2002, maintenance level 2 (ML02) (swopa083) with unlimited user licenses | |
| | | DCE 3.2 for AIX PTF set 4 (swopa081),Security Hotfix for DCE 3.2(swopa084),Run-time XLC (swopa082), TCP/IP(swopa087),Websphere MQ 5.3 CSD (swopa085), Hotfix for Websphere MQ 5.3(swopa088), X25 2.0.1.5(swopa075), vacpp Compiler(swopa 080) – details of OS level patches as per Appendix | |

@ - 1 no. each to be deployed at the primary site and the two Back-up centres. The existing 12/24 GB DAT Drive at the primary site would be replaced by 40/80 GB DAT drive while redeploying at the proposed Back-up Centre at RBI, Hyderabad.

ANNEXURE 7 (PARA 1.8) – APPENDIX

List of OS patches for AiX

1.4 OS Patches for AIX

This section lists the required OS patches for AIX 5.2.

When ordering AIX patches from IBM, please specify 'SUPERCEDED=NO' in the order. When downloading, you need to clear the check boxes with 'Include fixes that correct regressions' and 'Replace superceded fixes with the latest'.

1.4.1 OS Patches for AIX ML2 (swopa083)

The following patches are part of the Maintenance Level 2.

| Patch ID | Level |
|--|----------|
| IMNSearch.rte.DBCS | 2.4.0.10 |
| IMNSearch.rte.SBCS | 2.4.0.10 |
| Java131.adt.debug | 1.3.1.9 |
| Java131.adt.includes | 1.3.1.3 |
| Java131.ext.commapi | 1.3.1.1 |
| Java131.ext.jaas | 1.3.1.3 |
| Java131.ext.java3d | 1.3.1.1 |
| Java131.ext.plugin | 1.3.1.10 |
| Java131.ext.xml4j | 1.3.1.1 |
| Java131.rte.bin | 1.3.1.11 |
| Java131.rte.lib | 1.3.1.11 |
| Java131.samples.demos | 1.3.1.2 |
| OpenGL.OpenGL_X.dev.pci.14101b02.PPC | 5.2.0.11 |
| OpenGL.OpenGL_X.dev.pci.14101b02.PPC64 | 5.2.0.11 |
| OpenGL.OpenGL_X.dev.pci.14101c02.PPC | 5.2.0.10 |
| OpenGL.OpenGL_X.dev.pci.14101c02.PPC64 | 5.2.0.10 |

| Patch ID | Level |
|--|----------|
| OpenGL.OpenGL_X.dev.pci.14106e01.PPC | 5.2.0.10 |
| OpenGL.OpenGL_X.dev.pci.14106e01.PPC64 | 5.2.0.10 |
| OpenGL.OpenGL_X.dev.pci.14107001.PPC | 5.2.0.11 |
| OpenGL.OpenGL_X.dev.pci.14107001.PPC64 | 5.2.0.11 |
| OpenGL.OpenGL_X.dev.pci.14108e00.PPC | 5.2.0.10 |
| OpenGL.OpenGL_X.dev.pci.1410b800.PPC | 5.2.0.10 |
| OpenGL.OpenGL_X.dev.vfb | 5.2.0.10 |
| OpenGL.OpenGL_X.rte.base | 5.2.0.12 |
| OpenGL.OpenGL_X.rte.base+ | 5.2.0.1 |
| OpenGL.OpenGL_X.rte.soft | 5.2.0.10 |
| OpenGL.OpenGL_X.tools.debugger | 5.2.0.10 |
| PEX_PHIGS.dev.pci.14101b02 | 5.2.0.13 |
| PEX_PHIGS.dev.pci.14101c02 | 5.2.0.13 |
| PEX_PHIGS.dev.pci.14103c00 | 5.2.0.10 |
| PEX_PHIGS.dev.pci.14105400 | 5.2.0.10 |
| PEX_PHIGS.dev.pci.14105e00 | 5.2.0.10 |
| PEX_PHIGS.dev.pci.14106e01 | 5.2.0.13 |
| PEX_PHIGS.dev.pci.14107001 | 5.2.0.13 |
| PEX_PHIGS.dev.pci.14108e00 | 5.2.0.10 |
| PEX_PHIGS.dev.pci.1410b800 | 5.2.0.10 |
| PEX_PHIGS.graPHIGS.rte.base | 5.2.0.12 |
| PEX_PHIGS.graPHIGS.rte.pipe | 5.2.0.10 |
| PEX_PHIGS.graPHIGS.rte.soft | 5.2.0.10 |
| X11.Dt.ToolTalk | 5.2.0.10 |
| X11.Dt.helprun | 5.2.0.11 |
| X11.Dt.lib | 5.2.0.10 |
| X11.Dt.rte | 5.2.0.12 |
| X11.adt.include | 5.2.0.10 |
| X11.apps.aixterm | 5.2.0.1 |
| X11.apps.msmit | 5.2.0.10 |
| X11.base.lib | 5.2.0.10 |
| X11.base.rte | 5.2.0.11 |
| X11.compat.adt.Motif12 | 5.2.0.10 |
| X11.compat.lib.X11R5 | 5.2.0.10 |
| X11.fnt.fontServer | 5.2.0.12 |
| X11.motif.lib | 5.2.0.12 |
| X11.motif.mwm | 5.2.0.1 |
| X11.samples.apps.clients | 5.2.0.10 |
| X11.samples.apps.motifdemos | 5.2.0.10 |
| bos.64bit | 5.2.0.11 |
| bos.acct | 5.2.0.13 |
| bos.adt.base | 5.2.0.11 |

| Patch ID | Level |
|----------------------------------|----------|
| bos.adt.debug | 5.2.0.11 |
| bos.adt.include | 5.2.0.14 |
| bos.adt.lib | 5.2.0.10 |
| bos.adt.libm | 5.2.0.13 |
| bos.adt.prof | 5.2.0.14 |
| bos.adt.samples | 5.2.0.11 |
| bos.adt.syscalls | 5.2.0.11 |
| bos.alt_disk_install.boot_images | 5.2.0.11 |
| bos.alt_disk_install.rte | 5.2.0.12 |
| bos.atm.atmle | 5.2.0.10 |
| bos.cdmount | 5.2.0.10 |
| bos.cifs_fs.rte | 5.2.0.10 |
| bos.cifs_fs.smit | 5.2.0.10 |
| bos.clvm.enh | 5.2.0.12 |
| bos.cpr | 5.2.0.10 |
| bos.diag.com | 5.2.0.12 |
| bos.diag.rte | 5.2.0.11 |
| bos.diag.util | 5.2.0.11 |
| bos.dlc.8023 | 5.2.0.10 |
| bos.dlc.com | 5.2.0.10 |
| bos.dlc.ether | 5.2.0.10 |
| bos.dlc.fddi | 5.2.0.10 |
| bos.dlc.qllc | 5.2.0.10 |
| bos.dlc.token | 5.2.0.10 |
| bos.eim | 5.2.0.11 |
| bos.iconv.com | 5.2.0.14 |
| bos.iconv.ja_JP | 5.2.0.10 |
| bos.iconv.ucs.ZH_CN | 5.2.0.10 |
| bos.iconv.ucs.com | 5.2.0.11 |
| bos.iocp.rte | 5.2.0.10 |
| bos.loc.adt.iconv | 5.2.0.11 |
| bos.loc.adt.imk | 5.2.0.1 |
| bos.loc.adt.locale | 5.2.0.10 |
| bos.loc.com.CN | 5.2.0.10 |
| bos.loc.com.JP | 5.2.0.11 |
| bos.loc.com.bidi | 5.2.0.10 |
| bos.loc.com.utf | 5.2.0.10 |
| bos.loc.iso.Zh_TW | 5.2.0.10 |
| bos.loc.iso.cs_CZ | 5.2.0.10 |
| bos.loc.iso.ja_JP | 5.2.0.10 |
| bos.loc.iso.ko_KR | 5.2.0.10 |
| bos.loc.iso.zh_CN | 5.2.0.10 |

| Patch ID | Level |
|----------------------|----------|
| bos.loc.iso.zh_TW | 5.2.0.10 |
| bos.loc.pc.Ja_JP | 5.2.0.10 |
| bos.loc.utf.CS_CZ | 5.2.0.10 |
| bos.loc.utf.JA_JP | 5.2.0.11 |
| bos.loc.utf.KO_KR | 5.2.0.11 |
| bos.loc.utf.ZH_TW | 5.2.0.10 |
| bos.mp | 5.2.0.14 |
| bos.mp64 | 5.2.0.14 |
| bos.net.ipsec.keymgt | 5.2.0.12 |
| bos.net.ipsec.rte | 5.2.0.11 |
| bos.net.ipsec.websm | 5.2.0.10 |
| bos.net.mobip6.rte | 5.2.0.10 |
| bos.net.nfs.adt | 5.2.0.11 |
| bos.net.nfs.cachefs | 5.2.0.12 |
| bos.net.nfs.client | 5.2.0.14 |
| bos.net.nfs.server | 5.2.0.10 |
| bos.net.nis.client | 5.2.0.10 |
| bos.net.nis.server | 5.2.0.11 |
| bos.net.nisplus | 5.2.0.13 |
| bos.net.tcp.adt | 5.2.0.10 |
| bos.net.tcp.client | 5.2.0.14 |
| bos.net.tcp.server | 5.2.0.14 |
| bos.net.tcp.smit | 5.2.0.11 |
| bos.net.uucp | 5.2.0.10 |
| bos.perf.diag_tool | 5.2.0.10 |
| bos.perf.libperfstat | 5.2.0.12 |
| bos.perf.perfstat | 5.2.0.12 |
| bos.perf.proctools | 5.2.0.11 |
| bos.perf.tools | 5.2.0.14 |
| bos.perf.tune | 5.2.0.13 |
| bos.pkcs11 | 5.2.0.1 |
| bos.pmap.events | 5.2.0.1 |
| bos.pmap.lib | 5.2.0.10 |
| bos.pmap.pmsvcs | 5.2.0.11 |
| bos.pmap.samples | 5.2.0.11 |
| bos.rte | 5.2.0.11 |
| bos.rte.ILS | 5.2.0.10 |
| bos.rte.SRC | 5.2.0.10 |
| bos.rte.aio | 5.2.0.12 |
| bos.rte.archive | 5.2.0.13 |
| bos.rte.bind_cmds | 5.2.0.11 |
| bos.rte.boot | 5.2.0.12 |

| Patch ID | Level |
|-----------------------|----------|
| bos.rte.bosinst | 5.2.0.10 |
| bos.rte.commands | 5.2.0.12 |
| bos.rte.console | 5.2.0.10 |
| bos.rte.control | 5.2.0.13 |
| bos.rte.cron | 5.2.0.12 |
| bos.rte.date | 5.2.0.10 |
| bos.rte.devices | 5.2.0.10 |
| bos.rte.devices_msg | 5.2.0.10 |
| bos.rte.diag | 5.2.0.10 |
| bos.rte.edit | 5.2.0.11 |
| bos.rte.filesystem | 5.2.0.14 |
| bos.rte.iconv | 5.2.0.10 |
| bos.rte.ifor_ls | 5.2.0.10 |
| bos.rte.im | 5.2.0.10 |
| bos.rte.install | 5.2.0.14 |
| bos.rte.libc | 5.2.0.14 |
| bos.rte.libcur | 5.2.0.10 |
| bos.rte.libpthreads | 5.2.0.12 |
| bos.rte.libs | 5.2.0.10 |
| bos.rte.loc | 5.2.0.11 |
| bos.rte.lvm | 5.2.0.14 |
| bos.rte.man | 5.2.0.10 |
| bos.rte.methods | 5.2.0.12 |
| bos.rte.misc_cmds | 5.2.0.11 |
| bos.rte.odm | 5.2.0.11 |
| bos.rte.printers | 5.2.0.12 |
| bos.rte.security | 5.2.0.13 |
| bos.rte.serv_aid | 5.2.0.11 |
| bos.rte.shell | 5.2.0.14 |
| bos.rte.streams | 5.2.0.12 |
| bos.rte.tty | 5.2.0.12 |
| bos.svpkg | 5.2.0.10 |
| bos.svprint.rte | 5.2.0.11 |
| bos.sysmgt.nim.client | 5.2.0.13 |
| bos.sysmgt.nim.master | 5.2.0.13 |
| bos.sysmgt.nim.spot | 5.2.0.11 |
| bos.sysmgt.quota | 5.2.0.1 |
| bos.sysmgt.serv_aid | 5.2.0.14 |
| bos.sysmgt.smit | 5.2.0.13 |
| bos.sysmgt.sysbr | 5.2.0.14 |
| bos.sysmgt.trace | 5.2.0.12 |
| bos.txt.ts | 5.2.0.1 |

| Patch ID | Level |
|---------------------------------|----------|
| bos.up | 5.2.0.14 |
| csm.client | 1.3.1.3 |
| csm.core | 1.3.1.3 |
| csm.diagnostics | 1.3.1.0 |
| csm.dsh | 1.3.1.0 |
| csm.gui.dcem | 1.3.1.0 |
| csm.gui.websm | 1.3.1.0 |
| csm.server | 1.3.1.3 |
| devices.artic960.diag | 5.2.0.0 |
| devices.artic960.rte | 5.2.0.1 |
| devices.artic960.unicode | 5.2.0.0 |
| devices.chrp.IBM.HPS.hpsfu | 1.1.0.0 |
| devices.chrp.IBM.HPS.rte | 1.1.0.0 |
| devices.chrp.base.ServiceRM | 1.2.0.10 |
| devices.chrp.base.diag | 5.2.0.12 |
| devices.chrp.base.rte | 5.2.0.13 |
| devices.chrp.pci.rte | 5.2.0.11 |
| devices.chrp_lpar.base.ras | 5.2.0.11 |
| devices.chrp_lpar.base.rte | 5.2.0.10 |
| devices.common.IBM.async.diag | 5.2.0.10 |
| devices.common.IBM.atm.rte | 5.2.0.10 |
| devices.common.IBM.cx.rte | 5.2.0.1 |
| devices.common.IBM.disk.rte | 5.2.0.10 |
| devices.common.IBM.ethernet.rte | 5.2.0.13 |
| devices.common.IBM.fc.hba-api | 5.2.0.11 |
| devices.common.IBM.fc.rte | 5.2.0.10 |
| devices.common.IBM.fda.diag | 5.2.0.10 |
| devices.common.IBM.hdlc.rte | 5.2.0.10 |
| devices.common.IBM.ide.rte | 5.2.0.0 |
| devices.common.IBM.mpio.rte | 5.2.0.14 |
| devices.common.IBM.scsi.rte | 5.2.0.12 |
| devices.common.IBM.sni.ml | 1.1.0.0 |
| devices.common.IBM.sni.ntbl | 1.1.0.0 |
| devices.common.IBM.sni.rte | 1.1.0.0 |
| devices.common.IBM.son.diag | 5.2.0.10 |
| devices.common.IBM.ssa.diag | 5.2.0.10 |
| devices.common.IBM.ssa.rte | 5.2.0.12 |
| devices.common.IBM.usb.diag | 5.2.0.10 |
| devices.common.base.diag | 5.2.0.10 |
| devices.common.rspcbase.rte | 5.2.0.10 |
| devices.fcp.disk.array.diag | 5.2.0.10 |
| devices.fcp.disk.array.rte | 5.2.0.14 |

| Patch ID | Level |
|---------------------------------------|----------|
| devices.fcp.disk.rte | 5.2.0.14 |
| devices.fcp.tape.rte | 5.2.0.13 |
| devices.ide.cdrom.diag | 5.2.0.10 |
| devices.ide.cdrom.rte | 5.2.0.11 |
| devices.ide.disk.rte | 5.2.0.11 |
| devices.isa_sio.IBM0017.diag | 5.2.0.10 |
| devices.isa_sio.pnpPNP.501.rte | 5.2.0.12 |
| devices.isa_sio.pnpPNP.700.rte | 5.2.0.10 |
| devices.msg.En_US.chrp.IBM.HPS.hpsfu | 1.1.0.0 |
| devices.msg.En_US.chrp.IBM.HPS.rte | 1.1.0.0 |
| devices.msg.En_US.common.IBM.sni.ml | 1.1.0.0 |
| devices.msg.En_US.common.IBM.sni.ntbl | 1.1.0.0 |
| devices.msg.En_US.common.IBM.sni.rte | 1.1.0.0 |
| devices.msg.en_US.chrp.IBM.HPS.hpsfu | 1.1.0.0 |
| devices.msg.en_US.chrp.IBM.HPS.rte | 1.1.0.0 |
| devices.msg.en_US.common.IBM.sni.ml | 1.1.0.0 |
| devices.msg.en_US.common.IBM.sni.ntbl | 1.1.0.0 |
| devices.msg.en_US.common.IBM.sni.rte | 1.1.0.0 |
| devices.pci.00100300.diag | 5.2.0.10 |
| devices.pci.00100300.rte | 5.2.0.10 |
| devices.pci.00100b00.rte | 5.2.0.10 |
| devices.pci.00100f00.rte | 5.2.0.11 |
| devices.pci.00102100.rte | 5.2.0.10 |
| devices.pci.14100401.rte | 5.2.0.12 |
| devices.pci.14101b02.X11 | 5.2.0.10 |
| devices.pci.14101b02.rte | 5.2.0.10 |
| devices.pci.14101c02.X11 | 5.2.0.10 |
| devices.pci.14101c02.rte | 5.2.0.10 |
| devices.pci.14102e00.diag | 5.2.0.11 |
| devices.pci.14102e00.rte | 5.2.0.11 |
| devices.pci.14103302.X11 | 5.2.0.11 |
| devices.pci.14103302.diag | 5.2.0.10 |
| devices.pci.14103302.rte | 5.2.0.11 |
| devices.pci.14103c00.com | 5.2.0.10 |
| devices.pci.14103e00.rte | 5.2.0.11 |
| devices.pci.14104e00.rte | 5.2.0.10 |
| devices.pci.14104f00.rte | 5.2.0.10 |
| devices.pci.14105000.rte | 5.2.0.10 |
| devices.pci.14105300.rte | 5.2.0.10 |
| devices.pci.14105400.rte | 5.2.0.10 |
| devices.pci.14105e00.rte | 5.2.0.10 |
| devices.pci.14105e01.com | 5.2.0.12 |

| Patch ID | Level |
|----------------------------|----------|
| devices.pci.14105e01.rte | 5.2.0.10 |
| devices.pci.14106001.rte | 5.2.0.10 |
| devices.pci.14106602.diag | 5.2.0.11 |
| devices.pci.14106602.rte | 5.2.0.11 |
| devices.pci.14106602.ucode | 5.2.0.0 |
| devices.pci.14106802.diag | 5.2.0.10 |
| devices.pci.14106802.rte | 5.2.0.11 |
| devices.pci.14106902.diag | 5.2.0.11 |
| devices.pci.14106902.rte | 5.2.0.14 |
| devices.pci.14106e01.X11 | 5.2.0.10 |
| devices.pci.14106e01.rte | 5.2.0.10 |
| devices.pci.14107001.X11 | 5.2.0.10 |
| devices.pci.14107001.rte | 5.2.0.10 |
| devices.pci.14107802.diag | 5.2.0.0 |
| devices.pci.14107802.rte | 5.2.0.1 |
| devices.pci.14107802.ucode | 5.2.0.0 |
| devices.pci.14107c00.com | 5.2.0.11 |
| devices.pci.14107c00.rte | 5.2.0.10 |
| devices.pci.14107d01.X11 | 5.2.0.10 |
| devices.pci.14107d01.diag | 5.2.0.10 |
| devices.pci.14107d01.rte | 5.2.0.10 |
| devices.pci.14108802.rte | 5.2.0.1 |
| devices.pci.14108902.rte | 5.2.0.1 |
| devices.pci.14108c00.rte | 5.2.0.11 |
| devices.pci.14108e00.X11 | 5.2.0.10 |
| devices.pci.14108e00.rte | 5.2.0.10 |
| devices.pci.14109f00.rte | 5.2.0.10 |
| devices.pci.1410b800.X11 | 5.2.0.10 |
| devices.pci.1410b800.diag | 5.2.0.10 |
| devices.pci.1410b800.rte | 5.2.0.10 |
| devices.pci.1410c101.rte | 5.2.0.10 |
| devices.pci.1410e601.rte | 5.2.0.10 |
| devices.pci.1410ff01.diag | 5.2.0.10 |
| devices.pci.1410ff01.rte | 5.2.0.12 |
| devices.pci.22100020.diag | 5.2.0.10 |
| devices.pci.23100020.diag | 5.2.0.11 |
| devices.pci.23100020.rte | 5.2.0.12 |
| devices.pci.2b101a05.X11 | 5.2.0.10 |
| devices.pci.2b101a05.rte | 5.2.0.10 |
| devices.pci.2b102005.diag | 5.2.0.10 |
| devices.pci.2b102005.rte | 5.2.0.10 |
| devices.pci.331121b9.com | 5.2.0.10 |

| Patch ID | Level |
|----------------------------|----------|
| devices.pci.331121b9.diag | 5.2.0.10 |
| devices.pci.331121b9.rte | 5.2.0.10 |
| devices.pci.4f111100.asw | 5.2.0.1 |
| devices.pci.4f111100.com | 5.2.0.13 |
| devices.pci.ad100501.rte | 5.2.0.11 |
| devices.pci.c1110358.rte | 5.2.0.10 |
| devices.pci.df1000f7.com | 5.2.0.14 |
| devices.pci.df1000f7.diag | 5.2.0.11 |
| devices.pci.df1000f7.rte | 5.2.0.10 |
| devices.pci.df1000f9.rte | 5.2.0.10 |
| devices.pci.isa.rte | 5.2.0.10 |
| devices.scsi.disk.diag.com | 5.2.0.11 |
| devices.scsi.disk.diag.rte | 5.2.0.11 |
| devices.scsi.disk.rte | 5.2.0.14 |
| devices.scsi.safte.diag | 5.2.0.10 |
| devices.scsi.sarray.rte | 5.2.0.1 |
| devices.scsi.ses.diag | 5.2.0.11 |
| devices.scsi.tape.diag | 5.2.0.10 |
| devices.scsi.tape.rte | 5.2.0.11 |
| devices.scsi.tm.rte | 5.2.0.10 |
| devices.ssa.IBM_raid.rte | 5.2.0.11 |
| devices.ssa.disk.rte | 5.2.0.11 |
| devices.tty.rte | 5.2.0.11 |
| devices.usbif.030101.rte | 5.2.0.10 |
| devices.usbif.030102.rte | 5.2.0.10 |
| ifor_ls.base.cli | 5.2.0.10 |
| ifor_ls.java.gui | 5.2.0.10 |
| invscout.com | 2.1.0.1 |
| invscout.ldb | 2.1.0.3 |
| invscout.rte | 2.1.0.2 |
| invscout.websm | 2.1.0.1 |
| perfagent.tools | 5.2.0.11 |
| printers.escpj84_JP.rte | 5.2.0.10 |
| printers.rte | 5.2.0.11 |
| rpm.rte | 3.0.5.35 |
| rsct.basic.hacmp | 2.3.1.1 |
| rsct.basic.rte | 2.3.1.3 |
| rsct.basic.sp | 2.3.1.0 |
| rsct.compat.basic.hacmp | 2.3.1.0 |
| rsct.compat.basic.rte | 2.3.1.1 |
| rsct.compat.basic.sp | 2.3.1.0 |
| rsct.compat.clients.hacmp | 2.3.1.0 |

| Patch ID | Level |
|----------------------------|----------|
| rsct.compat.clients.rte | 2.3.1.1 |
| rsct.compat.clients.sp | 2.3.1.0 |
| rsct.core.auditrm | 2.3.1.0 |
| rsct.core.errm | 2.3.1.1 |
| rsct.core.fsrn | 2.3.1.1 |
| rsct.core.gui | 2.3.1.0 |
| rsct.core.hostrm | 2.3.1.2 |
| rsct.core.rmc | 2.3.1.3 |
| rsct.core.sec | 2.3.1.3 |
| rsct.core.sensorm | 2.3.1.0 |
| rsct.core.sr | 2.3.1.0 |
| rsct.core.utils | 2.3.1.3 |
| rsct.lapi.rte | 2.3.1.0 |
| rsct.lapi.samp | 2.3.1.0 |
| rsct.sdk | 2.3.1.1 |
| rsct.vsd.cmds | 4.1.0.0 |
| rsct.vsd.rvsd | 4.1.0.0 |
| rsct.vsd.vstd | 4.1.0.0 |
| rsct.vsd.vsdrm | 4.1.0.0 |
| sysmgt.sgide.rte | 5.2.0.10 |
| sysmgt.websm.accessibility | 5.2.0.10 |
| sysmgt.websm.apps | 5.2.0.11 |
| sysmgt.websm.diag | 5.2.0.10 |
| sysmgt.websm.diskarray.fc | 5.2.0.10 |
| sysmgt.websm.framework | 5.2.0.10 |
| sysmgt.websm.icons | 5.2.0.10 |
| sysmgt.websm.rte | 5.2.0.10 |
| sysmgt.websm.webaccess | 5.2.0.10 |

1.4.2 OS Patch for the Run-time XLC (swopa082)

The following patch is part of the XLC 6.0.0.9 kernel component (C++ run-time patch).

| Patch ID | Level |
|---------------|---------|
| xlC.aix50.rte | 6.0.0.9 |

1.4.3 OS Patch for TCP/IP (swopa087)

The following patch is needed to fix a TCP/IP problem.

| Patch ID | Level |
|---------------------------------|----------|
| devices.common.IBM.ethernet.rte | 5.2.0.14 |

1.4.4 OS Patches for DCE 3.2 PTF Set 4 (swopa081)

The following patches are part of the DCE 3.2 PTF set 4.

| Patch ID | Level |
|-----------------------------|---------|
| dce.cds.rte | 3.2.0.4 |
| dce.cds.smit | 3.2.0.4 |
| dce.client.rte | 3.2.0.4 |
| dce.client.rte.admin | 3.2.0.4 |
| dce.client.rte.cds | 3.2.0.4 |
| dce.client.rte.config | 3.2.0.4 |
| dce.client.rte.rpc | 3.2.0.4 |
| dce.client.rte.security | 3.2.0.4 |
| dce.client.rte.time | 3.2.0.4 |
| dce.client.rte.web | 3.2.0.4 |
| dce.client.smit | 3.2.0.4 |
| dce.doc.JA_JP.html | 3.2.0.4 |
| dce.doc.Ja_JP.html | 3.2.0.4 |
| dce.doc.KO_KR.html | 3.2.0.4 |
| dce.doc.PT_BR.html | 3.2.0.4 |
| dce.doc.ZH_TW.html | 3.2.0.4 |
| dce.doc.Zh_TW.html | 3.2.0.4 |
| dce.doc.en_US.html | 3.2.0.4 |
| dce.doc.ja_JP.html | 3.2.0.4 |
| dce.doc.ko_KR.html | 3.2.0.4 |
| dce.doc.pt_BR.html | 3.2.0.4 |
| dce.doc.zh_TW.html | 3.2.0.4 |
| dce.msg.ES_ES.client.rte | 3.2.0.4 |
| dce.msg.ES_ES.client.smit | 3.2.0.4 |
| dce.msg.ES_ES.security.smit | 3.2.0.4 |
| dce.msg.Es_ES.client.rte | 3.2.0.4 |
| dce.msg.Es_ES.client.smit | 3.2.0.4 |
| dce.msg.Es_ES.security.smit | 3.2.0.4 |
| dce.msg.JA_JP.client.rte | 3.2.0.4 |
| dce.msg.JA_JP.client.smit | 3.2.0.4 |
| dce.msg.JA_JP.security.smit | 3.2.0.4 |
| dce.msg.Ja_JP.client.rte | 3.2.0.4 |
| dce.msg.Ja_JP.client.smit | 3.2.0.4 |
| dce.msg.Ja_JP.security.smit | 3.2.0.4 |
| dce.msg.KO_KR.client.rte | 3.2.0.4 |
| dce.msg.KO_KR.client.smit | 3.2.0.4 |
| dce.msg.KO_KR.security.smit | 3.2.0.4 |

| Patch ID | Level |
|-----------------------------|---------|
| dce.msg.PT_BR.client.rte | 3.2.0.4 |
| dce.msg.PT_BR.client.smit | 3.2.0.4 |
| dce.msg.PT_BR.security.smit | 3.2.0.4 |
| dce.msg.ZH_TW.client.rte | 3.2.0.4 |
| dce.msg.ZH_TW.client.smit | 3.2.0.4 |
| dce.msg.ZH_TW.security.smit | 3.2.0.4 |
| dce.msg.zh_TW.client.rte | 3.2.0.4 |
| dce.msg.zh_TW.client.smit | 3.2.0.4 |
| dce.msg.zh_TW.security.smit | 3.2.0.4 |
| dce.msg.en_US.client.rte | 3.2.0.4 |
| dce.msg.en_US.client.smit | 3.2.0.4 |
| dce.msg.en_US.security.smit | 3.2.0.4 |
| dce.msg.es_ES.client.rte | 3.2.0.4 |
| dce.msg.es_ES.client.smit | 3.2.0.4 |
| dce.msg.es_ES.security.smit | 3.2.0.4 |
| dce.msg.ja_JP.client.rte | 3.2.0.4 |
| dce.msg.ja_JP.client.smit | 3.2.0.4 |
| dce.msg.ja_JP.security.smit | 3.2.0.4 |
| dce.msg.ko_KR.client.rte | 3.2.0.4 |
| dce.msg.ko_KR.client.smit | 3.2.0.4 |
| dce.msg.ko_KR.security.smit | 3.2.0.4 |
| dce.msg.pt_BR.client.rte | 3.2.0.4 |
| dce.msg.pt_BR.client.smit | 3.2.0.4 |
| dce.msg.pt_BR.security.smit | 3.2.0.4 |
| dce.msg.zh_TW.client.rte | 3.2.0.4 |
| dce.msg.zh_TW.client.smit | 3.2.0.4 |
| dce.msg.zh_TW.security.smit | 3.2.0.4 |
| dce.priv.rte | 3.2.0.4 |
| dce.security.rte | 3.2.0.4 |
| dce.security.smit | 3.2.0.4 |
| dce.sysmgmt.ems.rte | 3.2.0.4 |
| dce.sysmgmt.ems.smit | 3.2.0.4 |
| dce.sysmgmt.snmpagt.rte | 3.2.0.4 |
| dce.sysmgmt.snmpagt.smit | 3.2.0.4 |
| dce.sysmgmt.webadmin.rte | 3.2.0.4 |
| dce.tools.appdev.adt | 3.2.0.4 |
| dce.xdsxom.rte | 3.2.0.4 |

1.4.5 Security Hotfix for DCE 3.2 (swopa084)

The following security hotfix must be installed on top of PTF set 4 (IY47052); it is available from the IBM web site:

<http://www-3.ibm.com/software/network.dce/support>

1.4.6 OS Patches for WebSphere MQ 5.3 CSD 05 (swopa085)

The following patches are part of the WebSphere MQ 5.3 patch level CSD 05; it is available from the IBM web site:

<http://www-3.ibm.com/software/integration/wmq/support>

This list of patches must only be installed for SAG (in the scope of MQHA) and SAA (in the scope of MQSA).

| Patch ID | Level |
|------------------|----------|
| gskak.rte | 6.0.4.37 |
| mqm.base.runtime | 5.3.0.5 |
| mqm.base.samples | 5.3.0.5 |
| mqm.base.sdk | 5.3.0.5 |
| mqm.client.rte | 5.3.0.5 |
| mqm.dce.samples | 5.3.0.5 |
| mqm.dce.server | 5.3.0.5 |
| mqm.java.rte | 5.3.0.5 |
| mqm.msg.De_DE | 5.3.0.5 |
| mqm.msg.Es_ES | 5.3.0.5 |
| mqm.msg.Fr_FR | 5.3.0.5 |
| mqm.msg.It_IT | 5.3.0.5 |
| mqm.msg.Ja_JP | 5.3.0.5 |
| mqm.msg.Zh_CN | 5.3.0.5 |
| mqm.msg.Zh_TW | 5.3.0.5 |
| mqm.msg.de_DE | 5.3.0.5 |
| mqm.msg.en_US | 5.3.0.5 |
| mqm.msg.es_ES | 5.3.0.5 |
| mqm.msg.fr_FR | 5.3.0.5 |
| mqm.msg.it_IT | 5.3.0.5 |
| mqm.msg.ja_JP | 5.3.0.5 |
| mqm.msg.ko_KR | 5.3.0.5 |
| mqm.msg.pt_BR | 5.3.0.5 |
| mqm.msg.zh_CN | 5.3.0.5 |
| mqm.msg.zh_TW | 5.3.0.5 |
| mqm.server.rte | 5.3.0.5 |

1.4.7 Hotfix for WebSphere MQ 5.3 (swopa088)

On top of WebSphere MQ 5.3 CSD 05, you must download the hotfix identified as **IY49686**; it is available from the IBM web site:

<http://www-3.ibm.com/software/integration/wmq/support>

1.4.8 OS Patches for X25 2.0.1.5 (swopa075)

The following patches are part of the X25 version 2.0.1.5.

| Patch ID | Level |
|--------------------|---------|
| sx25.adt.comio | 2.0.1.0 |
| sx25.adt.npi | 2.0.1.1 |
| sx25.adt.rte | 2.0.1.2 |
| sx25.comio | 2.0.1.3 |
| sx25.license | 2.0.1.0 |
| sx25.msg.en_US.rte | 2.0.1.0 |
| sx25.npi | 2.0.1.3 |
| sx25.pad | 2.0.1.2 |
| sx25.rte | 2.0.1.5 |
| sx25.server | 2.0.1.3 |
| sx25.tcpip | 2.0.1.3 |

1.4.9 OS Patches for vacpp Compiler (swopa080)

These patches are for development purposes only and are part of the vacpp compiler 6.0.0.1, on top of which the patches Oct 2003 were added. You do not need to install them in a run-time environment.

| Patch ID | Level |
|------------------------|---------|
| memdbg.aix50.adt | 4.4.3.1 |
| vac.C | 6.0.0.5 |
| vac.C.readme.ibm | 6.0.0.1 |
| vac.msg.EN_US.C | 6.0.0.1 |
| vac.msg.en_US.C | 6.0.0.1 |
| vac.ndi | 6.0.0.4 |
| vacpp.cmp.aix43.lib | 6.0.0.5 |
| vacpp.cmp.aix50.lib | 6.0.0.5 |
| vacpp.cmp.aix50.tools | 6.0.0.1 |
| vacpp.cmp.core | 6.0.0.5 |
| vacpp.cmp.include | 6.0.0.5 |
| vacpp.cmp.tools | 6.0.0.5 |
| vacpp.memdbg.aix43.lib | 6.0.0.2 |

OS Levels and Patches Baseline

| Patch ID | Level |
|--------------------------|---------|
| vacpp.memdbg.aix43.rte | 6.0.0.5 |
| vacpp.memdbg.aix50.lib | 6.0.0.2 |
| vacpp.memdbg.aix50.rte | 6.0.0.5 |
| vacpp.msg.EN_US.cmp.core | 6.0.0.4 |
| vacpp.msg.JA_JP.cmp.core | 6.0.0.1 |
| vacpp.msg.Ja_JP.cmp.core | 6.0.0.1 |
| vacpp.msg.ZH_CN.cmp.core | 6.0.0.1 |
| vacpp.msg.en_US.cmp.core | 6.0.0.4 |
| vacpp.msg.ja_JP.cmp.core | 6.0.0.1 |
| vacpp.msg.zh_CN.cmp.core | 6.0.0.1 |
| vacpp.ndi | 6.0.0.4 |
| vacpp.samples.ansicl | 6.0.0.4 |
| xlC.adt.include | 6.0.0.1 |
| xlC.aix43.rte | 6.0.0.9 |
| xlC.aix50.rte | 6.0.0.9 |
| xlopt.aix41.lib | 1.3.2.0 |
| xlopt.aix43.lib | 1.3.2.2 |
| xlopt.aix50.lib | 1.3.2.2 |
| xlopt.lib | 1.3.2.0 |
| xlopt.rte | 1.3.2.0 |
| xlopt.tools | 1.3.2.2 |
| xlsmpl.aix41.rte | 1.3.8.2 |
| xlsmpl.aix43.rte | 1.3.8.1 |
| xlsmpl.aix50.rte | 1.3.8.1 |
| xlsmpl.msg.EN_US.rte | 1.3.8.0 |
| xlsmpl.msg.En_US.rte | 1.3.8.0 |
| xlsmpl.msg.JA_JP.rte | 1.3.8.1 |
| xlsmpl.msg.Ja_JP.rte | 1.3.8.1 |
| xlsmpl.msg.ZH_CN.rte | 1.3.8.0 |
| xlsmpl.msg.Zh_CN.rte | 1.3.8.0 |
| xlsmpl.msg.en_US.rte | 1.3.8.0 |
| xlsmpl.msg.ja_JP.rte | 1.3.8.1 |
| xlsmpl.msg.zh_CN.rte | 1.3.8.0 |
| xlsmpl.rte | 1.3.8.0 |

ANNEXURE 8 (PARA 3.8)

Format of the Earnest Money Deposit Bank Guarantee

To,
The Chief General Manager,
Reserve Bank of India,
Department of External Investments and Operations,
Central Office, SBS Road, Fort
Mumbai 400 001.

Dear Sir,

Setting Up Of Back-up Centres for Department of External Investments, Reserve Bank of India, Mumbai (total end-to-end solution).

WHEREAS

The Reserve Bank of India, having its Central Office at Shahid Bhagat Singh Road, Mumbai (hereinafter called the 'Employer') has invited tenders for setting up the back-up centres for Department of External Investments and Operations, Reserve Bank of India, Mumbai (a total end-to-end solution) on the terms and conditions mentioned in the tender document.

1. It is one of the terms of invitation of tenders that the tenderer shall furnish a Bank Guarantee for a sum of Rs. 5,00,000/- (Rupees Five lakhs only) as Earnest Money Deposit.
2. M/s _____, (hereinafter called as Tenderer), who are our constituents intend to submit their tender for the said work and have requested us to furnish guarantee to the Employer in respect of the said sum of Rs . _____ (Rupees _____ only).

NOW THIS GUARANTEE WITNESSETH

1. We _____ (Bank) do hereby agree with and undertake to the Reserve Bank of India, their Successors, Assigns that in the event of the Reserve Bank of India coming to the conclusion that the Tenderer have not performed their obligations under the said conditions of the tender or have committed a breach thereof, which conclusion shall be binding on us as well as the said Tenderer, we shall on demand by the Reserve Bank of India, pay without demur to the Reserve Bank of India, a sum of Rs . 5,00,000/- (Rupees Five lakhs only) or any lower amount that may be demanded by the Reserve Bank of India. Our guarantee shall be treated as equivalent to the Earnest Money Deposit for the due performance of the obligations of the Tenderer under the said Conditions, provided, however, that our liability against such sum shall not exceed the sum of Rs . 5,00,000/- (Rupees Five lakhs only).
2. We also agree to undertake to and confirm that the sum not exceeding Rs . 5,00,000/- (Rupees Five lakhs only) as aforesaid shall be paid by us without any demur or protest,

merely on demand from the Reserve Bank of India on receipt of a notice in writing stating the amount is due to them and we shall not ask for any further proof or evidence and the notice from the Reserve Bank of India shall be conclusive and binding on us and shall not be questioned by us in any respect or manner whatsoever. We undertake to pay the amount claimed by the Reserve Bank of India within a period of one week from the date of receipt of the notice as aforesaid.

3. We confirm that our obligation to the Reserve Bank of India under this guarantee shall be independent of the agreement or agreements or other understandings between the Reserve Bank of India and the Tenderer.

This guarantee shall not be revoked by us without prior consent in writing of the Reserve Bank of India.

We hereby further agree that -

- a) Any forbearance or commission on the part of the Reserve Bank of India in enforcing the conditions of the said agreement or in compliance with any of the terms and conditions stipulated in the said tender and/or hereunder or granting of any time or showing of any indulgence by the Reserve Bank of India to the Tenderer or any other matters in connection therewith shall not discharge us in any way our obligation under this guarantee. This guarantee shall be discharged only by the performance by the Tenderers of their obligations and in the event of their failure to do so, by payment by us of the sum not exceeding Rs. 5,00,000/- (Rupees Five lakhs only)
- b) Our liability under these presents shall not exceed the sum of Rs. 5,00,000/- (Rupees Five lakhs only)
- c) Our liability under this agreement shall not be affected by any infirmity or irregularity on the part of our said constituents in tendering for the said work or their obligations thereunder or by dissolution or change in the constitution of our said constituents.
- d) This guarantee shall remain in force upto..... 2004 provided that if so desired by the Reserve Bank of India, this guarantee shall be renewed for a further period as may be indicated by them on the same terms and conditions as contained herein.
- e) Our liability under this presents will terminate unless these presents are renewed as provided hereinabove on the2004 or on the day when our said constituents comply with their obligations, as to which a certificate in writing by the Reserve Bank of India alone is the conclusive proof whichever date is later. Unless a claim or suit or action is filed against us within six months from that date or any extended period, all the rights of the Reserve Bank of India against us under this guarantee shall be forfeited and we shall be released and discharged from all our obligations and liabilities hereunder.

Yours' faithfully,

For and on behalf of Bank.
Authorised official.

(NB : This guarantee will require stamp duty as applicable in the state, where it is executed and shall be signed by the official whose signature and authority shall be verified).

ANNEXURE 9 (PARA 3.7)

Deviations from Technical Specifications and Terms and Conditions of the RFP

| S.No. | RFP Document Clause | Technical Specification or terms and conditions in the RFP document | Deviation offered | Reasons and whether deviation adds to the operational efficiency in case of the systems |
|--------------|----------------------------|--|--------------------------|--|
| 1. | | | | |
| 2. | | | | |
| 3. | | | | |
| 4. | | | | |
| 5. | | | | |
| 6. | | | | |
| 7. | | | | |
| 8. | | | | |
| 9. | | | | |
| 10. | | | | |

Notes:

- i. Above information in detail should be furnished in case of each system offered separately.
- ii. Also in case of deviations from any of the terms and conditions of the RFP document should be specified.
- iii. If any deviations from the technical specifications are warranted, reasons for such variations should be specified and
- iv. Whether such variations add to improvement of the overall performance of the systems, if any, should be specifically mentioned and supported by relevant technical documentation as required above.

ANNEXURE 10 (PARA 3.14)

Company Profile and Maintenance and Service Support of the Tenderer

1. Name and address of the Company:
2. Constitution (including names of directors/partners with designation, etc.):
3. Addresses of the manufacturing plants if any:
4. Year of establishment:
5. Year of starting computer manufacturing:
6. Year of starting development of Software Applications:
7. Address of at least 1 operational institution similar or nearer to Bank's specifications with their dates of installation and operationalisation (Certificate issued by the Vendor's client should be attached):
8. Total workforce with the company
 - a. Software engineers
 - b. Hardware engineers
9. Address of company's branches/offices in major cities in India .
10. Workforce at the Mumbai:
 - a. software engineers
 - b. hardware engineers
11. Approximate time within which breakdown call is attended at the centre:
12. Enclose a copy each of the balance sheets of the last three years (duly approved in AGM):
13. List of clients, particularly in Banking sector.

ANNEXURE 11 (PARA 4.2)

Component-wise break up of the total solution

| Sl. No. | Solution Component | Quantity | Price |
|----------------|---|-----------------|--------------|
| 1. | HARDWARE: | | |
| | i (details) | | |
| | ii (details) | | |
| | iii (details) | | |
| | iv (details) | | |
| | v (details) | | |
| | vi (details) | | |
| | vii (details) | | |
| | viii (details) | | |
| 2. | SOFTWARE LICENCES: | | |
| | i (details) | | |
| | ii (details) | | |
| | iii (details) | | |
| | iv (details) | | |
| | v (details) | | |
| | vi (details) | | |
| | vii (details) | | |
| | viii (details) | | |
| 3. | IMPLEMENTATION AND OTHER SERVICES: | | |
| | i (details) | | |
| | ii (details) | | |
| | iii (details) | | |
| | iv (details) | | |
| | v (details) | | |
| | vi (details) | | |
| | vii (details) | | |
| | viii (details) | | |
| 4. | OTHERS (TO BE SPECIFIED): | | |
| | i (details) | | |
| | ii (details) | | |
| | iii (details) | | |
| | iv (details) | | |
| | v (details) | | |
| | vi (details) | | |
| | vii (details) | | |
| | viii (details) | | |

ANNEXURE 12 (PARA 5.5)

Indemnity as to the legality of software supplied

Place:

Date:

The Chief General Manager-in-Charge,
Department of External Investments and Operations,
22nd Floor, Central Office,
Reserve Bank of India,
Central Office Building,
Shahid Bhagat Singh Road,
Mumbai - 400 001.

Dear Sir,

Subject: **Computer Systems for Reserve Bank of India.**

We have supplied to you computer software, on the computer systems meant for Reserve Bank of India, Department of External Investments and Operations. We certify, that in respect of the above said computer software supplied to you, we are authors/ assignees/ licensees. We have produced for your inspection, copy of the letter of assignment/ license given by the author of the software. We further certify that the sale of the computer software to you by us and your use thereof do not infringe any provisions of the Copyright Act, 1957.

2. If any action is brought against you for infringement, of the copyright in respect of the said software supplied by us to you, we will defend the same at our cost and consequences and will indemnify you all the costs and other expenses that you may incur in this connection.

3. Any upgrades/ updates and new releases/ versions of the software supplied shall be immediately incorporated on your system at cost/ or no extra cost depending upon the corporate policy of our company.

Yours faithfully,

(Signature with designation)

ANNEXURE 13 (PARA 6.4)

Confirmation of the terms and conditions of warranty

Place:
Dated:

The Chief General Manager-in-Charge,
Department of External Investments and Operations,
22nd Floor, Central Office,
Reserve Bank of India,
Central Office Building,
Shahid Bhagat Singh Road,
Mumbai - 400 001.

Dear Sir,

Subject: **Computer systems for Reserve Bank of India**

This bears reference to our quotation Ref.
dated

2. We warrant that everything to be supplied by us shall be brand new, free from all defects and faults in material, workmanship and manufacture and shall be of the highest grade and quality and consistent with the established standards for materials specification, drawings or samples if any, and shall operate properly. We shall be fully responsible for its efficient operation and shall arrange to get the systems fully ensured till the time of successful installation of the Computer Systems.

3. For the preventive and corrective maintenance support offered to you, both during the warranty and post warranty period we shall ensure that the downtime for the following configuration shall be less than----minutes/hours/days.

4. Further, during the downtime, we shall provide at our cost, hardware and system software so as to keep the system working.

Yours faithfully

(Signature with Designation)

ANNEXURE 14 (PARA 13.1)

Compliance Matrix

| S. No. | Para No. of RFP | Requirement | Compliance status - Yes/ No/ Partial | Remarks |
|---------------|------------------------|---|---|----------------|
| | | <u>Introduction:</u> | | |
| 1. | | The vendor shall provide a comprehensive end-to-end solution for setting up two Back-up centres at RBI, Belapur, Navi Mumbai and RBI, Hyderabad, including but not limited to, supply, installation and operationalisation of computer systems, system software, anti-virus software, application software, data replication, transportation, reconfiguration and reinstallation of the existing hardware at the Back-Up centres etc. | | |
| | 1 | <u>Background:</u> | | |
| 2. | 1.1 | The two Back-up centres are designed to store the data of the Bank's critical applications running at its primary location in Mumbai. The solution envisaged will provide for and include consolidation and replication of data for archival and retrieval purpose as well as a backup mechanism to meet any eventualities in the event of data loss due to crashing of systems, natural calamities etc. or any other reason. In the event of any disruption in the normal day-to-day operations at the Bank's primary location for any reason, the two proposed Back-up centres individually are required to provide a feasible and viable option to the Bank to run all or any of the affected applications, either remotely from the primary location or locally at any of the Back-up centres so that business continuity is maintained with minimal interruption as set out in the RFP document. The proposed solution will be BS 7799 ISO 17799 Information Security Standards compliant and the Vendor will have to interact with the consultant and the Certifying Agency appointed/ to be appointed by the Bank. | | |

| S. No. | Para No. of RFP | Requirement | Compliance status - Yes/ No/ Partial | Remarks |
|---------------|------------------------|---|---|----------------|
| 3. | 1.2 | Normal day to day operations of the applications and processing of data at the primary location would work independent of the Back-up centres but provide means to upload daily transactions data automatically at a scheduled time to these Back-up centres as specified in this document. In case of need or an emergency, as the case may be, the Bank would operate the Computer Systems from the Back-up centres as required, either remotely from the primary location using WAN or locally at one or both the Back-up centres. | | |
| 4. | 1.3 | The Bank uses eTreasury as its main back office-cum-accounting application for transaction processing. This application uses Oracle 8i RDBMS platform which runs on HP-UX 11i database server with Windows 2000 platform as the application server. The oracle version is proposed to be upgraded to 9i. The vendor shall be responsible for complete migration of the application and the database to version 9i. The application uses BEA Tuxedo 6.4 as the messaging middleware. Both HP UX and Windows 2000 servers have been deployed as dual node active-stand by clusters. | | |
| 5. | 1.6 | The locations identified for setting up the Back-up centres are connected with the primary location through VSATs and inter-city leased lines (2 MBPS for RBI, Belapur and 2x2 MBPS for RBI, Hyderabad). The Local Area Network is in place in the locations identified for setting up the Back-up centres. A private Class B IP address (172.16.x.x) with fixed length Subnet Mask is used on the LAN with private Class A IP address (10.x.x.x) and Variable Length Subnet Mask (VLSM) on the VSATs. These addresses are assigned to the VSAT IDU, Router, NAT/ Proxy/ Firewall and any other communication devices in the LAN connected to the VSAT. All the servers and clients within a VSAT location are assigned a unique private Class B IP address i.e. 172.16.X.X. Since all the servers to be accessed from other VSAT locations reside behind a NAT, a static IP mapping of the internal addresses to the INFINET address need to be configured. LAN at each location is integrated with INFINET, leased lines and ISDN lines. The solution offered will use INFINET as the communication backbone. | | |

| S. No. | Para No. of RFP | Requirement | Compliance status - Yes/ No/ Partial | Remarks |
|--------|-----------------|---|--------------------------------------|---------|
| 6. | 1.7 | <p>The new HP servers and storage array will replace the existing Unix and Windows servers and storage arrays at the primary site. The two rp3440 HP UX servers will be deployed as a dual node cluster. Similarly, the two HP DL380 Windows 2000 servers will also be deployed as a dual node cluster. Both these clusters will use the EVA3000 storage array. The servers, FC switches and the storage array will be deployed in a no single point of failure (NSPOF) configuration. The existing HP UX and Windows 2000 servers will be relocated to the two proposed Back-up centres and deployed as single nodes there with the MSA30 DB external storage boxes to be supplied by the vendor as per the specifications provided in Annexure 5. The EVA3000 and MSA30 storage boxes will be deployed in RAID5 configuration. Oracle version 9i will be installed on the new servers and the application will be migrated to version 9i with appropriate changes as required. After the new servers are deployed in the production environment at the primary site, the version 8i on the existing servers will be upgraded to 9i and the application will be migrated to 9i before relocation of the servers to the proposed DRSs. Any upgrades required to the existing servers to serve these objectives will have to be specifically proposed and quoted for.</p> | | |
| 7. | 1.8 | <p>One of the two new BM AiX servers required for SAA, SNL and SAW will be used to replace the existing server at the primary site. The other server will be directly installed at the proposed Back-up centre at RBI, Belapur, Navi Mumbai. The existing IBM AiX server at the primary site will be relocated to the proposed Back-up centre at RBI, Hyderabad.</p> | | |

| S. No. | Para No. of RFP | Requirement | Compliance status - Yes/ No/ Partial | Remarks |
|---------------|------------------------|---|---|----------------|
| 8. | 1.9 | The Bank intends to replicate the eTreasury data at the Back-up centres through an automated process using a redo log file transfer in an asynchronous mode as well as by manual process by obtaining such data on back-up media from the primary location. The solution offered should provide for a user configurable scheduling feature for data transfer. The data transfer will occur simultaneously from the Primary Site to both the Back-up Centres and the solution offered should enable monitoring of the replication process from the Primary Site to both the Back-up Centres. Data transfer should be possible both at either a fixed time of day or at specified intervals. Based on current volume of transactions and future projected requirements, the solution offered should be capable of data transfer at a frequency ranging from 1 hour to 1 day. The automated process will use INFINET as the communication backbone for this purpose. The vendor will provide detailed documentation on the replication procedure that will be deployed as a part of the solution, with particular reference to the course of action that the solution will adopt in case of replication failure at the appointed time for any reason. The documentation should clearly bring out the stages and extent of manual intervention required for the solution to work. | | |
| 9. | 1.10 | The maximum acceptable downtime for switching operations from the primary site to either of the Back-up Centres and/ or back is two hours. The Bank should be able to resume operations both in remote login and local login mode within the maximum acceptable downtime with status of data as per the last transfer. The solution should have feature to checkpoint the status of the data transfer and in the event of any disruption during data transfer for any reason, should have the capability to automatically resume transfer from the point at which disruption occurred. The system should also have an automatic feedback feature for reporting the status of data transfer after every successful data transfer/ disruption/ resumption etc as the case may be. | | |
| 10. | 1.11 | The Bank wishes to take advantage of the later technology and deploy the new machines at the primary site and move the existing older servers | | |

| S. No. | Para No. of RFP | Requirement | Compliance status - Yes/ No/ Partial | Remarks |
|--------|-----------------|---|--------------------------------------|---------|
| | | to the Back-up centres. The vendor is required to propose and quote for any upgrades required to the existing servers or any other hardware, apart from what has been stated in this RFP, to meet the Bank's objective. The vendor will be responsible for migrating to the new servers at the primary site without disrupting the live processing. The vendor should clearly mention and commit the extent of downtime needed for carrying out the migration. In case the Bank's stated objective of using the later technology at the primary site is not technically feasible to implement, the vendor should specifically mention the reasons thereof, suggest alternatives and quote for the same. The vendor is responsible for all activities in connection with migration of all applications both at the primary site as well as the proposed Back-up centres. The vendor's responsibility will also include but not be limited to taking all the necessary back ups, restoration activities etc. The Bank will only be responsible for providing the back up media in the required quantity, which should be specified well before undertaking back ups to enable the Bank to arrange for the same. | | |
| 11. | 1.12 | The Bank has already acquired 120 nos. named user Oracle licences for eTreasury. 100 licences have been deployed at the primary site. 10 each of the remaining 20 are proposed to be deployed at the proposed Back-up centres. However, if it not permissible or possible to do so for any reason and the Bank is required to go for additional licences, the same should be clearly mentioned in the technical bid with reasons and the number and type of licences that need to be procured. The bank will arrange to procure the licences separately. | | |
| | 2 | <u>Scope of Work:</u> | | |
| 12. | 2.1 | The Vendor shall supply, install, customize and operationalise all the hardware, systems software and application software etc. as per the configuration and other technical details specified in this document. The terms hardware shall include OEM specific rack assemblies as well and the price quoted shall be inclusive of racks, cables and all other accessories as required. | | |
| 13. | 2.2 | The Bank intends to award the contract as an | | |

| S. No. | Para No. of RFP | Requirement | Compliance status - Yes/ No/ Partial | Remarks |
|---------------|------------------------|---|---|----------------|
| | | end-to-end turnkey job to the successful bidder. In addition to what has been stated elsewhere in this document, the scope of work to be carried out by the vendor shall include but not be limited to what is stated in para 2.2. | | |
| 14. | 2.2.1 | The vendor shall be responsible for site specifications, inspection and certification. | | |
| 15. | 2.2.2 | The vendor shall be responsible for supply, installation and operationalisation of the hardware and system software mentioned in the RFP document. The items of hardware required to be ordered directly from SWIFT or its authorized partners (Secure Card Readers, ICC cards, VPN Boxes and modems for SWIFTNet connectivity etc.) will be procured by the Bank and the vendor will be responsible for their installation, configuration and operationalisation. The vendor shall be involved in the process of ordering and be responsible to the extent mentioned in this document. The vendor should clearly specify in the technical bid the equipment that needs to be procured directly by the Bank. In case of failure to do so or any equipment being left out, the cost thereof will be recovered from the vendor. | | |
| 16. | 2.2.3 | The vendor shall be responsible for installation and operationalisation of the application software mentioned in the RFP document (including any additional hardware/ software components required for the purpose). Interfaces existing at the primary site (eTreasury-Reuters, eTreasury-Bloomberg, eTreasury-PCC, PCC-SAA) will have to be provided at the Back-up centres as well. Physical cables and other accessories required for establishing the interfaces will have to be supplied, customized and operationalised by the vendor. Details of such cables and accessories will have to be obtained from the respective application vendors. | | |
| 17. | 2.2.4 | The vendor shall provide System and User Manuals and Disaster Recovery procedures in various scenarios with recovery methods and downtime involved, data and application replication technique used (Replication has to be fully automated with no manual intervention at either end, to the extent possible) and any other documentation required for operating the Back-up centres for the purpose envisaged in this document. | | |

| | | | | |
|-----|--------------|--|--|--|
| 18. | 2.2.5 | Operationalisation of SWIFT shall include but not be limited to SAA, SNL, SAW, PCC and single-P leased line SWIFTNet connectivity through the Bank's chosen Network Partner, M/s Infonet. Configuring SWIFT shall include but not be limited to installing Secure Card Readers, ICCs, VPN boxes, routers, modems, PCC-CBT link cable, supply and installation of Hayes compatible modems for dial-up PCC-CBT connectivity etc, assistance and management of ordering of security products and any other item that may be required for the purpose. The vendor is responsible for replicating at the Back-up Centres the application set-ups and interfaces existing at the primary site as described in this RFP document. The vendor shall commission the single-P SWIFTNet connectivity packs at the two sites and produce certificates in original from the Bank's chosen network partner, i.e. M/s Infonet addressed to RBI certifying that the connectivity has been successfully established, tested and is ready for use. | | |
| 19. | 2.2.6 | Installation and operationalisation of eTreasury shall include, but not be limited to, installing Oracle 9i and migrating the database and application to version 9i as and in the manner described in para 1.3 of this document. It will also include but not be limited to, installing and configuring clients as well. | | |
| 20. | 2.2.7 | Transportation of the existing servers to the Back-up centres and their installation, configuration and operationalisation there will be done by the vendor at its own risk. Transportation shall include packing, loading, unloading, unpacking etc. and any other connected activity. The vendor will take suitable comprehensive insurance cover in its own name for this purpose and shall assume all risks, responsibilities and liabilities in this regard and shall be liable to arrange, at its absolute cost, suitable replacement in case of damage or loss. No liability will devolve on the Bank on account of damage or loss caused in connection with transportation. The vendor shall submit a bank guarantee in this regard for Rs. 1 crore in favour of the Bank. The guarantee shall be valid till the transportation and successful installation and operationalisation of all the hardware, software, application and data is completed and certified by the respective | | |

| | | | | |
|-----|---------------|--|--|--|
| | | application vendors. Transportation (including packing, unpacking, loading and unloading) insurance and related costs like octroi, entry tax etc. will be borne initially by the vendor. These will be reimbursed by the Bank at actual on production of original receipts/ documents etc. These costs will not be reckoned for evaluation of the tender price and should not be included in the commercial bid. | | |
| 21. | 2.2.8 | The servers currently deployed at the primary site will be removed to the Back-up centres upon successful migration of the application and data to the new servers at the primary site and producing a certificate from the respective application vendors to this effect. The existing racks at the primary site will also be shifted to the proposed back-up Centres to house the hardware which will be shifted there, as well as the new hardware to be supplied for installation at the Back-up centres. The vendor will be responsible for making modifications, if any required, to the existing racks for this purpose. The price quoted should include this component under 'implementation and other services'. No additional charges will be reimbursed on this account in addition to the quoted price. The vendor will also reconfigure the existing servers, if required, in order to deploy them at the Back-up centres. The vendor has to decide the locations where all the new hardware required to be supplied under this RFP will be delivered and advise the Bank accordingly in advance. | | |
| 22. | 2.2.9 | Project implementation has to follow the respective vendors' DRS policy and has to include application and other associated license issues and the vendor shall take full responsibility and any consequent liability for the same. No claim shall subsequently lie on the Bank for the vendor's failure to observe this and an undertaking-cum-indemnity to this effect should accompany the technical bid. | | |
| 23. | 2.2.10 | Installation and operationalisation of eTreasury, SWIFT and SWIFTNet connectivity, including all activities as detailed and defined in this document and any other activity that may be required to be done in this connection will have to be mandatorily assigned to M/s Tata Consultancy Services Ltd. (TCS), M/s Scandent Solutions Corporation Ltd (SSC) and M/s Infonet respectively A letter of undertaking to this effect should accompany the technical bid. | | |

| | | | | |
|-----|---------------|--|--|--|
| 24. | 2.2.11 | The vendor shall hand over the fully equipped and functional Back-up centres as specified in this document in Ready-for-Use (RFU) condition and demonstrate the expected functionalities and disaster recovery features within the expiry of the agreed time period. The completion will have to be certified by M/s TCS, M/s SSC and M/s Infonet for eTreasury, SWIFT and SWIFTNet single-p connectivity respectively and the vendor will have to produce certificates addressed to the Bank issued by them, in original. | | |
| 25. | 2.3 | The vendor shall provide specific technical details in their offer covering the following areas: | | |
| | | (i) Additional bandwidth, if any, required for smooth operations as envisaged in this document. | | |
| | | (ii) Additional hardware accessories and software products required for activities and purposes envisaged in this document, including data transfer, replication, uploading and downloading to and from the primary location to the Back-up centres and vice versa and running all and or any of the applications from the primary location individually and/ or concurrently and/ or simultaneously. | | |
| 26. | 2.4 | The vendor shall supply, install and operationalise suitable anti-virus software for Windows 2000 Advanced Server. The supply and installation of the anti-virus software shall provide: | | |
| | | (i) Three years' comprehensive on-site 24x7 warranty service support with free periodical updates/ upgrades/ version releases; as and when made available by the OEM. The technical support shall also include on-site assistance to the personnel of the Bank for removal of new viruses, Trojans, Worms, etc, besides providing free telephonic/ e-mail/ Fax support. | | |
| | | (ii) Connectivity to the web site of the vendor and or the OEM/ Principal of the anti-virus software supplied for free downloading of updates/ upgrades/ virus signature files, etc as and when required by the Bank during the warranty period. | | |

| | | | | |
|-----|-----|---|--|--|
| | | (iii) One set of media and manuals shall be provided at each location with requisite number of site licenses. | | |
| 27. | 2.5 | Additional hardware, accessories, software products, etc, if any, required for providing the total solution as envisaged in the RFP Document at each location should be specified and quoted for. Required technical details of such products offered by the vendor duly supported by schematic diagrams and technical specifications of each component offered should be furnished along with the reasons justifying the requirement/s for such additional components, accessories and software products as part of the Technical Bid and furnish the cost of each such component/s as part of the Commercial Bid. | | |

| | | | | |
|-----|-----|---|--|--|
| 28. | 2.6 | A detailed documentation on the total solution that the vendor proposes to implement as per this RFP document should accompany the technical bid. The document should clearly bring out how the proposed solution will help the Bank achieve its objectives as set out in the RFP document and how the vendor proposes to implement the solution with details of the implementation stages and timelines. The document should clearly indicate the various types of disruptions/ disasters that the proposed solution will address. The document should bring out the recovery procedure involved and the down time that will be involved in each case. | | |
| | 3 | <u>General Instructions:</u> | | |
| 29. | 3.1 | Only such of those vendors who satisfy the following criteria are eligible to participate in this tender: | | |
| | | (i) The Vendor must be a registered corporate in India, registered under the Companies Act 1956 and should be registered under C.S.T. and B.S.T. | | |
| | | (ii) The Vendor should be OEM or channel partner or authorised distributor/ reseller of both IBM and HP for the class of equipment required to be supplied, installed, operationalised and configured under this RFP. | | |
| | | (iii) The Vendor should have reputed background and should be established in IT business, as system integrators in India for at least three years. | | |
| | | (iv) The Vendor should have fully functional service/support centre and qualified engineers to provide quality service support at Mumbai and Hyderabad. | | |
| | | (v) The Vendor should have executed at least 2 system integration projects as total solution provider since January 2002, out of which at least one project should have been worth more than Rs. 1 crores. Documentary evidence has to be submitted as proof of this. | | |
| | | (vi) The Vendor should have been making profits for the past 3 years. Audited Balance sheet and Profit and Loss account (amount in Rupees) for last three years should be submitted. | | |

| | | | | |
|-----|------------|--|--|--|
| 30. | 3.2 | The Bidder must submit Earnest Money Deposit (EMD) along with the complete bid of Rs. 5 lakhs in form of Bank Guarantee valid for at least six months/ Demand Draft in favour of Reserve Bank of India, Mumbai, payable at Mumbai. The irrevocable Bank Guarantee issued by a Scheduled bank only, shall be in form acceptable to the Reserve Bank of India as per Annexure 8 . The EMD will not carry any interest. The EMD of successful bidder shall be forfeited in case the bidder fails to commence the work awarded to him within the prescribed time limit. The successful bid, if withdrawn, is also liable for forfeiture of the EMD. | | |
| 31. | 3.3 | All bids and supporting documentation shall be submitted in English. | | |
| 32. | 3.4 | Infrastructure requirements including power requirements, air conditioning, dust and humidity control, etc., necessary for successful and efficient operation of the installation at each site should be specified. Also dimensions and weight of each piece of equipment offered shall be specified with necessary power and wiring requirements. | | |
| 33. | 3.5 | The computer systems, accessories, software components, etc will be delivered and installed at each location (Primary site as well as Back-up centres) without disturbing any existing processing and other activities. | | |
| 34. | 3.6 | Names and addresses of reference sites where similar systems and products were offered, installed and operationalised by the Vendor and/ or similar total solution projects executed in the recent past shall be furnished for the reference of the Bank. If deemed necessary, the vendor will be required to give presentation on the systems offered. | | |
| 35. | 3.7 | The quotations shall be submitted strictly in conformity with the specifications given in Annexure 5 to 7 . Any deviations from the specifications and or the terms and conditions of the RFP Document should invariably be furnished by the Vendor as per the format furnished in Annexure 9 , specifying the reasons and justifying such deviation. Non-mention of deviations shall imply compliance with the specifications. | | |
| 36. | 3.8 | Price/ cost of hardware, accessories, software and services offered and prices of any additional/ optional components thereof | | |

| | | | | |
|-----|-------------|---|--|--|
| | | required at each location shall be furnished in the Commercial Bid in a sealed cover. | | |
| 37. | 3.16 | Vendors should submit Technical and Commercial Bids separately in sealed covers. | | |
| 38. | 3.19 | Letters of authorization/ competence to bid addressed to the Bank from the respective OEMs/ application vendors should accompany the technical bid in original. The letters should also contain assurance to provide all necessary support for supply, installation and operationalisation as necessary. | | |
| | 4 | <u>Prices:</u> | | |
| 39. | 4.1 | The prices quoted shall be in Indian Rupees, firm and not subject to any price escalation, if the order is placed within the validity period. The price quoted shall include all Central/ State Government levies, taxes, sales tax, excise duty, custom duty, insurance charges, charges if any payable to the application vendors/ their authorised support partners and/ or travel/ stay and/ or other incidental expenses etc. The price quoted shall not, however, include Octroi/ Entry Tax and transportation, packing, loading, unloading, unpacking, insurance or any other charges in relation to relocation of the existing servers to the proposed Back-up centres, which, if any, shall be paid as per the actuals on production of relevant original documents. | | |
| 40. | 4.2 | A component-wise summary of the total solution offered should be provided in the commercial bid in the format as per Annexure 11 with detailed break-up under each sub-head. | | |
| 41. | 4.3 | Subsequent to the orders being placed/agreement executed, the vendor shall pass on to the Bank all fiscal benefits arising out of reductions in Government levies viz. sales tax, excise duty, custom duty, etc. The Bank reserves the right to re-negotiate the prices in the event of change in the international market prices of both the hardware and software. | | |
| 42. | 4.4 | All the prices, technical specifications and other terms and conditions of the offer proposed by the vendor should be valid for a minimum period of 8 months. | | |
| 43. | 4.5 | The terms of payment shall be as follows: | | |

| | | | | |
|-----|-----|--|--|--|
| | | (i) 90% on completion of delivery, successful installation and training as set out in this document. | | |
| | | (ii) 10% on expiry of the warranty period or against submission of bank guarantee as per the Bank's format. | | |
| | | (iii) The training charges, if any, shall be paid only on completion of the training to the personnel of the Bank. | | |
| | | (iv) The Vendor shall submit a performance bank guarantee for performing all the obligations arising on acceptance of all the terms and conditions of purchase order and execution of the agreement. Such performance bank guarantee shall be to the extent of 10% of the total purchase consideration or purchase order value and such performance bank guarantee submitted by the Vendor shall be in force till the completion of warranty period. | | |
| 44. | 4.6 | The Bank reserves the right to re-negotiate the prices in the event of change in the International market prices of both the hardware and software. | | |
| 45. | 4.7 | All the information furnished in the Commercial Bid should be replicated in the Technical Bid, with all prices masked. Failure to comply with this requirement may result in making the bid liable for rejection. | | |
| | 5 | <u>Time Schedule:</u> | | |
| 46. | 5.1 | The Bank would like to have the following time schedule for completion of the activities from the date of placement of order: i. Delivery : 8 weeks ii. Installation and operationalisation: 8 weeks However, the Vendor should specify minimum and maximum possible time required by them for completion of the Back-up centres and handing them over to the Bank in ready-for-use condition. | | |
| 47. | 5.2 | The delivery of the Computer Systems will be deemed complete when the following are received in good working condition at each designated location of the Bank: | | |
| | | (i) Computer Systems, accessories, and other hardware components, and associated documentation. | | |
| | | (ii) System Software and associated documentation. | | |

| | | | | |
|--|--|--|--|--|
| | | (iii) Anti-virus software and associated documentation. | | |
| | | (iv) OEM specific racks and assembly systems as per the technical bid. | | |

| | | | | |
|-----|-----|--|--|--|
| 48. | 5.3 | The installation will be deemed to be complete, when all the hardware, hardware components, system software and other software products specified in this document have been supplied, installed and operationalised and all the features as per the technical specifications are demonstrated and implemented, as required, to the satisfaction of the Bank. The required applications and data should be duly migrated, installed, configured and operationalised and the following completed and demonstrated at the primary site as well as the Back-up centres: | | |
| | | (i) Applications functionalities as per the terms set out in this document under both local and remote login scenarios including version upgrades, cluster failover and failback functionalities at the primary site. | | |
| | | (ii) Latest and complete application data, in sync at all the three locations. | | |
| | | (iii) SWIFTNet Fin login and select using SWIFTNet connectivity. | | |
| | | (iv) Oracle version upgrades. | | |
| | | (v) eTreasury migration to Oracle 9i and data replication. | | |
| | | (vi) All the interfaces mentioned in this document. | | |
| | | (vii) Disaster recovery within committed recovery times in various disaster scenarios. | | |
| | | (viii) BS 7799 ISO 17799 certification is obtained for the solution offered. | | |
| 49. | 5.4 | The demonstrations will have to be carried out in the presence of the respective application vendors and the Bank's officials. A certificate of successful migration and operationalisation of applications and data at all the three sites including failover and failback capabilities from the respective application vendors should be submitted. | | |
| 50. | 5.5 | All the software (including operating system/s, system software, application licenses etc.) supplied by the Vendor shall be legal and the Vendor shall give indemnity to that effect in the format specified in Annexure 12. | | |
| | 6. | <u>Warranty and support:</u> | | |
| 51. | 6.1 | The warranty should be for a minimum period of one year from the date of acceptance of the systems by the Bank. During the warranty period, the Vendor will have to undertake | | |

| | | | | |
|-----|------------|--|--|--|
| | | comprehensive maintenance of the entire hardware, hardware components, Systems Software, Operating Systems, Oracle products, other hardware, software and accessories supplied by the Vendor. The warranty should cover 24x7 on-site support. No additional credit will be given while evaluating the commercial bid for warranty in excess of one year, if offered. | | |
| 52. | 6.2 | In respect of all the software products offered, the vendor should specify the warranty period available on media and on the software as per the warranty policies of the respective principals or OEMs as the case may be. This should be specifically mentioned in the Technical Bid. | | |
| 53. | 6.3 | In respect of all the software, including Operating Systems viz. HP UX 11i, IBM AIX 5.2, Windows 2000 Server Standard, etc, the Vendor should give the policy and price of supplying new version/s, releases, upgrades, updates, etc. This should be specifically quoted by the vendor in the offer. | | |
| 54. | 6.4 | The Vendor will have to confirm the terms and conditions of warranty in Annexure 13. | | |
| 55. | 6.5 | The information about service support available at each site should be furnished in the Technical Bid. | | |
| 56. | 6.6 | The selected vendor shall provide the preventive maintenance schedules per month, which shall be specified in advance. | | |
| 57. | 6.7 | In the event of system break down or failures at any stage, protection available shall be specified which would include the following: | | |
| | | (i) Diagnostics for identification of systems failures | | |
| | | (ii) Protection of data | | |
| | | (iii) Recovery/restart facilities | | |
| | | (iv) Back-up facilities | | |

| | | | | |
|-----|-----|--|--|--|
| 48. | 5.3 | The installation will be deemed to be complete, when all the hardware, hardware components, system software and other software products specified in this document have been supplied, installed and operationalised and all the features as per the technical specifications are demonstrated and implemented, as required, to the satisfaction of the Bank. The required applications and data should be duly migrated, installed, configured and operationalised and the following completed and demonstrated at the primary site as well as the Back-up centres: | | |
| | | (i) Applications functionalities as per the terms set out in this document under both local and remote login scenarios including version upgrades, cluster failover and failback functionalities at the primary site. | | |
| | | (ii) Latest and complete application data, in sync at all the three locations. | | |
| | | (iii) SWIFTNet Fin login and select using SWIFTNet connectivity. | | |
| | | (iv) Oracle version upgrades. | | |
| | | (v) eTreasury migration to Oracle 9i and data replication. | | |
| | | (vi) All the interfaces mentioned in this document. | | |
| | | (vii) Disaster recovery within committed recovery times in various disaster scenarios. | | |
| | | (viii) BS 7799 ISO 17799 certification is obtained for the solution offered. | | |
| 49. | 5.4 | The demonstrations will have to be carried out in the presence of the respective application vendors and the Bank's officials. A certificate of successful migration and operationalisation of applications and data at all the three sites including failover and failback capabilities from the respective application vendors should be submitted. | | |
| 50. | 5.5 | All the software (including operating system/s, system software, application licenses etc.) supplied by the Vendor shall be legal and the Vendor shall give indemnity to that effect in the format specified in Annexure 12. | | |
| | 6. | <u>Warranty and support:</u> | | |
| 51. | 6.1 | The warranty should be for a minimum period of one year from the date of acceptance of the systems by the Bank. During the warranty period, the Vendor will have to undertake | | |

| | | | | |
|-----|------------|--|--|--|
| | | comprehensive maintenance of the entire hardware, hardware components, Systems Software, Operating Systems, Oracle products, other hardware, software and accessories supplied by the Vendor. The warranty should cover 24x7 on-site support. No additional credit will be given while evaluating the commercial bid for warranty in excess of one year, if offered. | | |
| 52. | 6.2 | In respect of all the software products offered, the vendor should specify the warranty period available on media and on the software as per the warranty policies of the respective principals or OEMs as the case may be. This should be specifically mentioned in the Technical Bid. | | |
| 53. | 6.3 | In respect of all the software, including Operating Systems viz. HP UX 11i, IBM AIX 5.2, Windows 2000 Server Standard, etc, the Vendor should give the policy and price of supplying new version/s, releases, upgrades, updates, etc. This should be specifically quoted by the vendor in the offer. | | |
| 54. | 6.4 | The Vendor will have to confirm the terms and conditions of warranty in Annexure 13. | | |
| 55. | 6.5 | The information about service support available at each site should be furnished in the Technical Bid. | | |
| 56. | 6.6 | The selected vendor shall provide the preventive maintenance schedules per month, which shall be specified in advance. | | |
| 57. | 6.7 | In the event of system break down or failures at any stage, protection available shall be specified which would include the following: | | |
| | | (i) Diagnostics for identification of systems failures | | |
| | | (ii) Protection of data | | |
| | | (iii) Recovery/restart facilities | | |
| | | (iv) Back-up facilities | | |

| | | | | |
|-----|-------------|---|--|--|
| 58. | 6.8 | The selected Vendor shall ensure 99.9% uptime for systems supplied (24*7*365).The vendor shall ensure that in case of a break down/malfunctioning of hardware, hardware components, accessories, System Software, etc., the relevant defect is attended to within 2 hours of the receipt of the complaint. Further, during warranty period, proportionate penalty will be levied in case of down time of the systems, which shall include extension of warranty period to the extent of down time and/or penalty of Rs. 500/- per hour. | | |
| 59. | 6.9 | The Vendor shall guarantee the availability of spares for a period of at least five years in respect of all the hardware and hardware accessories. The Vendor will have to maintain the Computer Systems, System Software and other hardware and software products procured for the purpose as part of this tender for a period of at least five years after the expiry of the warranty period. | | |
| 60. | 6.10 | The comprehensive maintenance during warranty would be inclusive of all spares excluding consumables. The list of consumables and spares should be furnished. | | |
| | 7 | <u>Training:</u> | | |
| 61. | 7.1 | The vendor shall train the officers of the Bank on the hardware and software products supplied, services operationalised and back-up, recovery and disaster recovery procedures implemented. Training charges, if any, should be quoted by the vendor separately in the Commercial Bid. 25 officials both from business and IT area, are to be trained in a maximum of 4 batches. The vendor should specify a training schedule covering various aspects (system administration including management of hardware and software, LAN Management under various operating systems, backup utilities, data replication process, backup and restore process, disaster recovery process etc) for proper and full utilizations of the hardware and software supplied. | | |
| | 9 | <u>Indemnity to the Bank:</u> | | |
| 62. | 9.1 | The vendor should furnish a photocopy of the Agreement with their Principals in respect of hardware and software products offered. Further, the vendor shall indemnify the Bank and keep indemnified against any loss or damage that the Bank may sustain on account of any violation of patents, trademark etc., by the vendor in respect of hardware, hardware | | |

| | | | | |
|-----|-------------|--|--|--|
| | | components, System Software, Oracle server products etc. supplied to the Bank. | | |
| | 10 | <u>Penalties for delay and dispute settlement:</u> | | |
| 63. | 10.1 | The vendor must strictly adhere to the implementation schedule, specified in the purchase agreement to be executed between the Bank and the vendor for performance of the obligations arising out of the purchase agreement and any delay will entitle the Bank to resort to any or both of the following: | | |
| | | (i) Claiming liquidated damages at 5% of the total purchase consideration. | | |
| | | (ii) Termination of the purchase agreement fully or partly and claim liquidated damages | | |
| 64. | 10.2 | All disputes of any kind arising out of supply, commissioning, acceptance, warranty maintenance etc., shall be referred by either party (Bank or Vendor) after issuance of 30 days notice in writing to the other party clearly mentioning the nature of dispute to a single arbitrator acceptable to both the parties. The venue for arbitration shall be specified in the purchase agreement. | | |
| 65. | 10.3 | All disputes or differences whatsoever arising between the parties out of or in relation to the construction, meaning and operation or effect of these Tender Documents or breach thereof shall be settled amicably. If, however, the parties are not able to resolve them amicably, the same shall be settled by arbitration in accordance with the applicable Indian Laws, and the award made in pursuance thereof shall be binding on the parties. Any appeal will be subject to the exclusive jurisdiction of Mumbai courts. | | |
| | 11 | <u>Insurance of the Computer Systems:</u> | | |
| 66. | 11.1 | The responsibilities relating to insurance of the systems till successful installations of the Computer Systems shall lie with the vendor. | | |
| | 12 | <u>Acceptance Test:</u> | | |
| 67. | 12.1 | The Acceptance Test shall be carried out on the total solution jointly by the representatives of the Bank and the Vendor, after the items of work as per this RFP have been completed and RFU status is reported by the vendor in writing, i.e. his readiness for conducting the Acceptance Test/s is conveyed to the Bank. | | |
| 68. | 12.2 | The Acceptance Test shall be as per the comprehensive "Acceptance Test Plan" | | |

| | | | | |
|-----|-------------|---|--|--|
| | | document to be prepared by the Vendor and approved by the Bank which shall contain various tests to be performed for acceptance of the computer systems offered by the Vendor. The Acceptance Test shall be deemed to be complete only on successful completion of the acceptance tests and issuance of the 'Acceptance Certificate' by the Bank to the Vendor. | | |
| 69. | 12.3 | The 'Acceptance Test Plan' document shall be deemed to form a part of the Agreement, to be signed between the Vendor and the Bank. | | |
| 70. | 12.4 | On the evaluation of the Acceptance Test results and if required in view of the performance of the Backup Centres as required under this RFP, as observed during the Acceptance Test, the Vendor shall take remedial measures including upgradation of the computer systems or of any component thereunder, including replacement thereof, at no additional cost to the Bank, to ensure that the computer systems meets the requirements of the Bank as envisaged in the Tender Document. | | |