NATIONAL PENSIONS REGULATORY AUTHORITY

NPRA/GD/ICT/01/11

GUIDELINES ON INFORMATION COMMUNICATION TECHNOLOGY FOR APPROVED TRUSTEES

CONTENTS

1. INTRODUCTION

1.1 The purpose of these Guidelines is to provide the basic Guidelines for Approved Trustees in relation to Information Communication Technology (ICT) requirements, pursuant to provisions of the National Pensions Act, 2008 (Act 766).

1.2 In developing these requirements, the National Pensions Regulatory Authority (NPRA) has provided Corporate Trustees with minimum requirements as to how it could achieve prudential objectives of the requirements.

1.3 These Guidelines are not intended to be all encompassing, references to the Act and the regulations shall always be taken into consideration.

2. GENERAL

Pension processes require transactions and associated data to flow seamlessly between the Authority, Approved Trustees, Pension Fund Managers and Custodians.

A proactive management of the Pension Administration environment is imperative to a successful running of the system. Consequently, the desired system is based on the following major thrust:

2.1 To enable effective and efficient customer service to the delight of the contributors.

2.2 To provide cost efficient operations.

2.3 To facilitate easy flow and accuracy of information that will serve as the life blood of the Define Contribution Pension Scheme.

2.4 To make the administration of the Pension Systems transparent to all participants

2.5 Provide for easy collaboration among all participating entities

2.6 Provide for the simplification of the contribution procedures

2.7 Guarantee the adequate distribution of payments to the individual accounts

2.8 Enable Security in the flow of money and information

2.9 Guarantee accuracy on the process of payment of benefits

2.10 The key issues to be considered for efficient information flow and effective system interoperability among the scheme's stakeholders are:

2.10.1 System Management: Hardware, Operating System, Application, Database, Storage and Backup

2.10.2 Network Management: Telecom Infrastructure Management, Configuration Management, Performance and Security.

3. HARDWARE

The desired system shall have all the standard specifications found in a server used for mission critical operations like Pension Administration Package system, including a high degree of interoperability with the other RISC base system and devices.

3.1 Servers

As a minimum requirement, each Approved Trustee shall have a high grade Application Server, two Database Servers, with one to serve as a backup, and a Communication Server.

3.2 Operating System

Linux, Windows or any international recognize server operating system

3.3 Auxiliary Devices

- Security Firewall
- Intrusion Detection Devices
- Modems & Routers
- Enterprise Antivirus

3.4 Communication

- VPN link to the Authority (through any of the appropriate medium)
- Broadband Internet access.

3.5 Call Center Systems

There shall be a need for a well equipped call center to take care of contributors' enquiry and other stakeholders' information needs. IVR and other business intelligent applications would be highly desirable.

3.6 Collection/Remittance

Collection shall be operated through, amongst others, collaboration with existing payment platform such as switching systems. Consequently, the system is expected to have the capability for integration with major e-payment platforms.

3.7 Disaster Recovery

The key disaster recovery methods shall include:

- Mirroring of the database in different locations.
- Complete redundancy of all components of the server
- A Standby server to take over the functional server in case of server failure
- Regular backup of the database onto a different physical location in the form of Compact Disk or DAT Media

3.8 Security Features

The key security features shall include:

- Biometrics enabled User Security features

- Access Permissions restricted to the authenticated users only
- Data Security to be done at:
- Data entry level restricted to privileged group only
- Storage level

4.0 SOFTWARE

All the standard features found in a Pension Administration Package System, including a high degree of integration with the other standard Front Office Operations and Back Office Applications, are expected. The system shall be based on standard ODBC database platform running on a legacy Operating System at the back end.

Item No.	Requirement/Feature
1	The system shall be capable of interfacing with other external systems and reduce the dependency of processes on manual intervention and paper flows.
2	Utilization of open architecture tools for scalability and compatibility with other systems (web, legacy systems) or databases (Oracle, SQL, DB2, Ingress Server 7, Sybase).
3	The system shall be easily expandable to accommodate a database that supports a growing number of contributors
4	The system shall consist of the following modules, among others: - Registration: ▪ Employees ▪ Employers - Members Account Management: Transfers ▪ Retirement/Benefits ▪ Voluntary Contributions ▪ Customer Relationship Management ▪ Self-Service Centre - Investment & Asset Management ▪ Portfolio Management (with valuation, limit administration) ▪ Multiple Funds Management - Risk Management: Approved Trustees shall use bespoke programs that, based on certain pre-deer mined risk tolerance parameters, will be able to generate exception reports that it can use to manage its risk profile and generate appropriate risk responses. The program should have the following minimum features: - Risk Modeling & Measurement concepts ▪ Risk Types (market, credit, liquidity) ▪ Risk Factors (interest rates, exchange rates, price indexes, stock indexes, etc). ▪ Risk Concentration, volatility, sensitivity analysis, etc

	- Accounting Management - Transfer of accounts between Approved Trustees - Collection & distribution of payments/remittances - Research/statistical and analytical system. - Executive Information System - Interactive Web Site
5	All the modules of the system shall be tightly integrated with one another. A multi-tier business architecture which offers differentiated access, security and look and feel for different types of users or pension related businesses.
6	The system shall be easy to learn to use, as would be reflected by an intuitive user interface and helpful tools, e.g. wizards, to introduce key concepts to new users.
7	The system shall be Web-enabled and web transaction enablement.
8	Ability of the system to link to an Intranet site and facilitate occasional users sending information to the system and obtaining reports and other information from the system.
9	The system shall offer a very high degree of reporting flexibility and offer a range of easily customizable pre-defined report templates with automated procedures, e.g. wizards, to tailor reports (content and formatting) to suit individual preferences.
10	The system shall be compatible with the standard payroll packages to enable contribution processing providing automated collection and reconciliation from HR systems.
11	Facility to accept and validate files of postings generated by external systems.
12	The system shall have the ability to output reports into spreadsheet format.
13	The system shall be able to link directly to standard word processing package that can enable mail merging and other office automation operations.
14	The system shall be capable of integrating standard Biometrics devices.
15	User defined standard reports shall be available on line.
16	The system shall be available in a full client/server version, using an industry standard database at the server.
17	The system shall be capable of performing selective, incremental and full back up and recovery.
18	The system shall have document image processing (DIP) facilities, including the ability to display scanned images of contributor forms and other source documents as part of standard enquiry routines.
19	The system shall have full support for multi-user operation.
20	The system shall have the option to post on a batch basis, with a full range of batch handling facilities, including the ability to print unfinished-posted batches, allow users to create but not post batches, with only authorized users permitted to post batches.

21	The system shall have the option to allow specified users to post on a real time basis, with each transaction posted to the system as it is entered.
22	The system shall have the facility to attach free text memorandum notes to any header record/transaction, and to view such notes on demand.
23	Ability to print hard copy output on either pre-printed or blank stationery.
24	The system shall have a context sensitive online help facility, with help available at field-level
25	Ability to capture contributions offline either on diskettes, flash drive, CDs or any other storage media and update at a later time.
26	Ability to handle registration of contributors – employers/employees on selected media (pen drive, CD, etc)
27	Capability to automatically check that the value of the sums collected and that of the amount on the instruments of payment are the same (equal)
28	Capability to distinguish a batch of transaction to be made up of each schedule from a given employer.
29	Capability to ensure that each batch balances before acceptance into the database.
30	The system must be able to facilitate the electronic/biometric identification of claimants. This could be by any or combination of the following: Photographic identity; Signature verification; Thumbprint digitalization; and It shall be capable of identifying the claimant online by accessing his bio data.
31	It shall be able to generate up to date information of all contributors that will be due for retirement pension on a regular period.
32	Capability to generate the claim history of every claimant and also to flag any duplicate claim for the same benefit.
33	The system shall provide sufficient security of access to allow user accounts to be defined for each type of user and segregation of duties to be maintained.
34	The system shall be able to maintain a permanent log file which keeps information of all creates, edits, deletes or accesses. Ability to access log files only by authorized personnel. Ability of information stored to include time and date of operation, function performed, and user identification.
35	Ability to produce exception reports on users who modify the system configuration and static data
36	Web enabled to facilitate interaction with other stakeholders (the Authority and PFC) and also enable self service by Employee & Employer.
37	Automated updating of the contributor's portfolios with transactions.
38	Capability to create and maintain individual member accounts.
39	Capability to distribute aggregate return on fund investment across individual member accounts

40	Capability to enable: ▪ Customer Relationship Management ▪ Recording of all payment related transactions for each contributor ▪ Documenting all transfers related activities ▪ Conducting reconciliation of customer accounts
41	Enable valuation of investments and risk management of the contributors' funds.
42	Enable Retirement Phase management by providing: ▪ Withdrawal facility options with detail procedures ▪ Facility for assessing accrued benefit amounts by the appropriate contributors.
43	Enable Flexible investment processing for both internal and external fund management, interest based, unit linked and unitized with profits processing and life styling
44	Enable computation of financial ratios
45	Enable comparison of each investment portfolio against regulations limits.
46	Enable analysis of: ▪ Asset Quality of Approved Trustee's portfolio ▪ Asset concentration of Approved Trustee's portfolio ▪ Diversification of income source of Approved Trustee's portfolio ▪ Maturity mismatch ▪ Future cash flow requirements of Approved Trustees ▪ Overall rate of return of investment portfolio ▪ Return of each asset class ▪ Market and industry risk of each asset class, etc
47	Immediate recall of any information the system statistically manages (e.g. contributors' historical data, display of the contributors' portfolios for any moment in the past).
48	The system shall be able to generate report into different standard format, e.g. XML, for transition to a designated location.
49	The system shall enable a rules based "engine" enabling flexible and innovative (pension) product design for the provision of an excellent platform for both today's business requirements and for your future needs.