INTERNATIONAL ORGANISATION OF PENSION SUPERVISORS

Toolkit for Risk-based pensions supervision

Case Study

Kenya

Risk-based Pensions Supervision provides a structured approach focusing on identifying potential risks faced by pension funds and assessing the financial and operational factors in place to mitigate those risks. This process then allows the supervisory authority to direct its resources towards the issues and institutions which pose the greatest threat.

The IOPS Toolkit for Risk-based Pensions Supervisors provides a 5-module framework for pensions supervisors looking to apply a system of risk-based supervision. A web-based format allows: a flexible approach to providing updates and additions; users to download each module separately as required; and a portal offering users more detailed resources, case studies and guidance. The website is accessible at www.iopsweb.org/rbstoolkit.

This document contains the **Kenyan Case Study.**

KENYA[1]

I. Background

A. Pension System

The retirement benefits sector in Kenya is composed of the civil service scheme, the National Social Security Fund (NSSF), occupational schemes and individual pension schemes. The coverage of the pension schemes is currently 15% of the total work force. The NSSF has the highest proportion of membership at 67% with estimated membership of 800,000 (the Civil Service Scheme accounting for over 20% of this coverage, with occupational and individual schemes, of which there are approximately 1350 in operation, around 10%).

Table 1: Retirement Benefits Sector - Kenya

Scheme Type	Civil Service Scheme	National Social Security Fund	Occupational Schemes	Individual Schemes
Legal Structure	Act of Parliament	Act of Parliament	Trust Deed	Trust Deed
Membership	all civil servants	formal sector workers in companies with 5+	formal sector workers in companies that have schemes	individuals formal/informal sector join voluntarily
Funding	Non-funded	funded	funded	funded
Regulation	Exempt from the Authority	Subject to the Authority	Subject to the Authority	Subject to the Authority

B. Risk-based Supervisory Approach[2]

A specialized agency, the Retirement Benefits Authority (RBA) is responsible for the supervision of funds. The risk-based supervisory approach of the RBA has also been adapted from the Australian model. The goal is to measure the solvency of DB schemes and the investment risk of DC schemes, applying a risk score to each scheme which then determines the supervisory response. The RBA will, on an annual basis, carry out a risk profiling exercise aimed at identifying scheme with high level of risk.

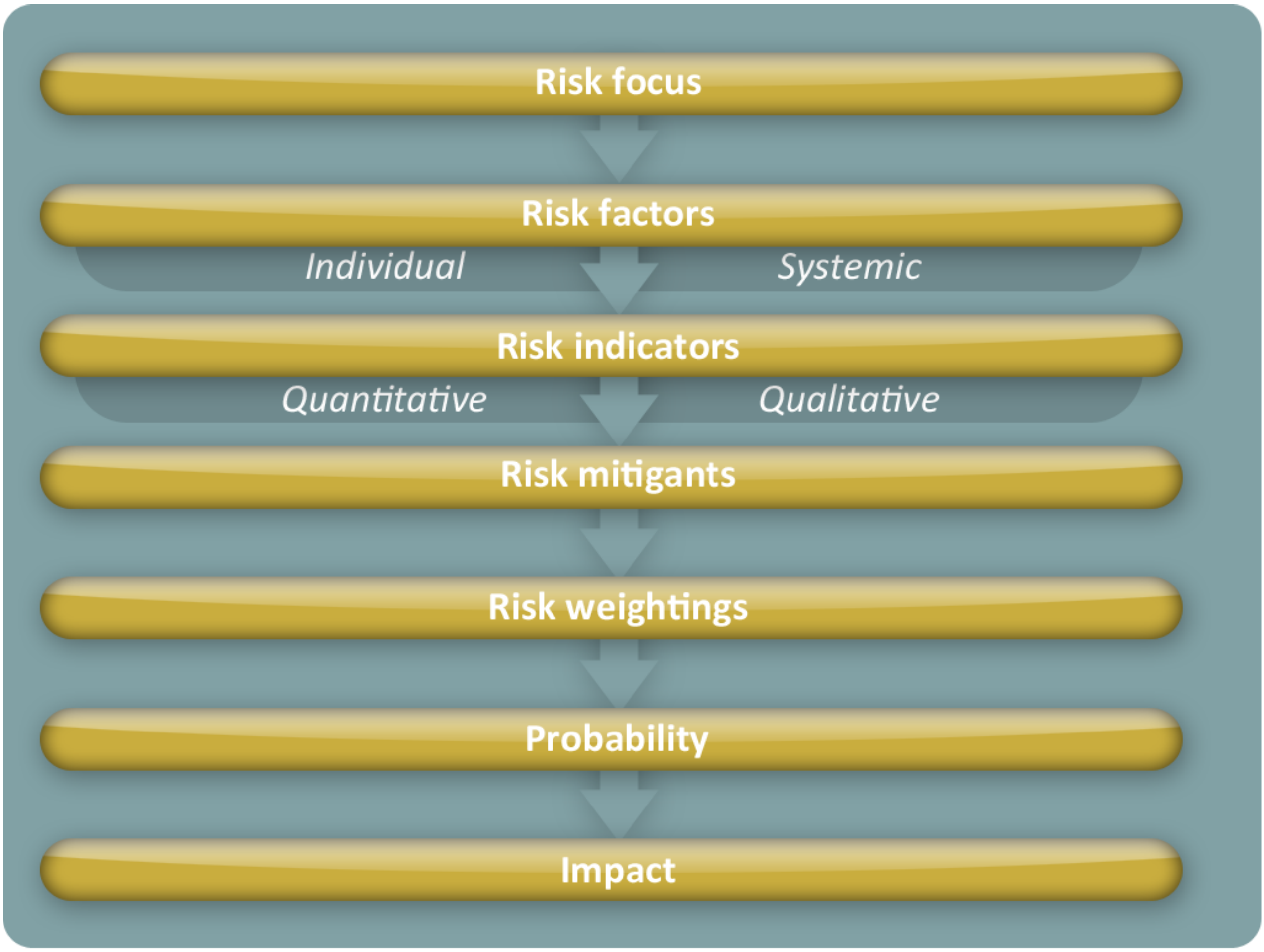
[1] This case study was prepared by the Retirement Benefits Authority, Kenya.

[2] Details of the APRA's historical development and moves towards risk-based supervision are available in *'Risk-based Supervision of Pension Funds: Emerging Practices and Challenges'*, Brunner et al 2008

As well as refining the qualitative and quantitative measures to be used in the initial risk scoring of schemes, the RBA is also looking to develop a methodology for 'stress tests' or a 'value at risk measure' and standard procedures for choosing and applying interventions.

II. Risk-based Supervision Process

Figure 1. RBS Process



1. Risk Focus

Supervisory Objectives

The RBA outline their objectives as follows:

- Regulate and supervise the establishment and management of retirement Benefits schemes
- Protect the interests of members and sponsors of retirement Benefits schemes
- Promote the development of the retirement Benefits industry

- Advise the Minister for Finance on the national policy to be followed with regard to the retirement Benefits industry

- Implement all government policies relating thereto

In addition the RBA lay out a social agenda (reduce old age poverty, education initiatives) and an economic agenda (encourage greater savings, spur development of country's capital markets etc.).

Nature of Pension System

In terms of risk measurement, the RBA has identified the following risks as the main areas for consideration:

- **Counterparty Default Risk**: Risk of loss from the failures of a counterparty to meet its obligations

- **Balance Sheet and Market Risk**: Risk of losses due to movements in interest rates and other market prices

- **Operational Risk**: The risk of losses resulting from inadequate internal processes, people and systems – whether these are internal to the regulated entity or in a service provider

- **Liquidity Risk**: The risk that an institution will not be able to meet its payment obligations as they fall due without excessive cost

- **Legal and Regulatory Risk**: The likelihood of adverse consequences arising from the failure to comply with all relevant laws and regulations

- **Strategic Risk**: Risks to the continued viability of an entity as a result of change in the operating environment, including internally driven change such as merger or introduction of new product line

- **Contagion and Related Party Risk**: Risk to an entity's business as a result of close association with another entity – the risks may be direct through financial exposure or indirect through reputation damage.

The risk scoring model shown below breaks these risk areas into three main categories which are considered in the analysis of inherent risk: ***Investment, Insurance,*** and ***Non-financial.***

2. Risk Factors

A. Individual

The table summarizes the risk scoring system. Where a result is satisfactory the score is 0. Entries in **bold** are to be flagged for breaches of compliance and for immediate investigation, whatever the overall risk score.

Table 2: RBA Risk Scoring

Risk factor	Satisfactory result	Unsatisfactory result	Risk score
1.1 Inherent risk - investment	• Satisfactory investment policy statement • Recent review of statement • Investment return above average • Risk measures (*e.g.* diversification) below average	• Lack of satisfactory investment policy statement • Lack of evidence of updating of statement • Asset class(es) outside range 80 – 120% of average • Individual holdings above threshold (*e.g.* 2% of portfolio) • Non-compliance with asset limits • Liquidity concerns	• 1 • 0.5 • 0.25 • 0.25 to 0.5 • **1** • 0.25 – 0.5
1.2 Inherent risk - insurance	• insurance risk not present • insurance risk insured • capacity to handle non-insured risk	• uninsured life or disability benefits beyond capacity of scheme to absorb • uninsured pensions at retirement in small DB scheme • uninsured pensions at retirement in DC scheme – actuarial valuations • uninsured pensions at retirement in DC scheme – no or unsatisfactory actuarial valuations	• 0.5 • 0.25 • 0.5 • 1
1.3 Inherent risk – non-financial	• relatively simple plan provisions and procedures • transparent outsourcing procedures • capacity to handle greater complexity	• defined benefit scheme with complex provisions beyond capacity of scheme • non-transparent outsourcing of functions • large number of investment options in DC schemes where capacity not present to handle this • non-transparent declaration of interest in DC schemes	• 0.5 • 0.5 • 0.5 • 0.5 – 1
2.1 Management and control – Trustee oversight	• satisfactory Trustee oversight process	• Lack of proper oversight process • No or unsatisfactory completion of governance	• 0.5

	• satisfactorily completed governance self-assessment questionnaire • Trustees meeting fit and proper criteria • Clear lines of responsibility and accountability	self-assessment questionnaire • **Concerns about Trustees meeting fit and proper criteria** • Lack of proper documentation • Concerns about document filing and cooperation with RBA	• 0.5 • **1** • 0.5 • 0.5
2.2 Management and control – Operations and control	• satisfactory completion of interrogatories • satisfactory filing record, including payment of contributions on time • low number of complaints, complaints satisfactorily resolved • expenses as percentage of normal cost/contributions below average	• unsatisfactory completion of interrogatories • **unsatisfactory filing record and/or history of late payments** • large number of complaints not satisfactorily resolved • expenses more than 20% above industry level	• 0.25 to 0.5 • **0.5** • 0.25 to 0.5 • 0.25
2.3 Management and control – Independent review	• independent professionals used in review process • professionals in good standing • easily understandable reports without qualifications	• concerns about independence (*e.g.* professional is employee of organization) • concerns about professional standing • unclear reports and/or qualifications	• 0.25 • 0.5 to 1 • 0.5
3.1 Capital support – Fund	• DB schemes - funded ratio and solvency ratio in excess of 100% • DB schemes with unfunded liability/solvency deficit – satisfactory recovery plan in place and being implemented • DB schemes – actuarial valuation basis satisfactory compared to peers • Rates of return on fund over last 3 years in excess of average	• DB schemes - funded ratio (FR) and/or solvency ratio (SR) less than 100% • Weak valuation assumptions (*e.g.* interest rates more than 20% above average)	• FR ≥ 1, SR = 0.8 to 1 – score 1 • FR < 1, SR = 0.8 to 1 – score 1.5 • SR < 0.8 (irrespective of SR) – score 2 • SR ≥ 1 , FR = 0.8 and 1 – score .75 • SR ≥ 1 , FR < 0.8 – score 1.25 • DEDUCT 0.25 to 0.5 if recovery plan in place and being implemented • 1

		• Low rates of return (*e.g.*, greater than 20% below industry average for type of scheme)	• 0.25 for each of past three years below threshold
3.2 Capital support – Employer sponsor	• timely remittance of employee and employer contributions • DB schemes – satisfactory actuarial assumptions for current service cost • Schemes with unfunded liabilities/solvency deficits – satisfactory recovery plan • Contribution holidays well monitored • DC schemes – objectives and target of schemes well communicated • Industry and scheme sponsor in good shape financially	• Contribution delinquency[1] • Contributions below those recommended in actuarial report • Poor or no monitoring of contribution holidays • DC schemes – poor communication of targets • Industry and/or scheme sponsor in poor financial shape	• If contributions are occasionally 7 days or more in arrears, but less than 30 days score 0.5 • **If contributions are persistently more than 7 days in arrears score 1** • **If contributions are in arrears for 30 days or more score 2** • **If there is a pattern of late payment score 3** • If contributions are less than 90% of the recommended current service cost and amortization payments score a further 0.5 • 1 • 0.5 • 0.25 to 1

Note: [1] Apply bullet 1 or 2 (which apply only if there are no significant arrears) or bullet 3 or 4, no both sets.

B. Systemic

The RBA build both 'top down' and 'bottom up' risk analysis into their system, including systemic risk analysis via industry surveys (for example of governance issues, such as testing of boards of trustees).

3. Risk Indicators

A. Quantitative

The mixture of quantitative and qualitative indicators used by the RBA is shown in the risk model above.

The RBA also builds initial 'rules based' assessments into its risk-based analysis. For example the RBA still applies a broad range of investment guidelines to pension funds (including maximum limits in cash, government securities, in regionally listed shares etc.). The rule that these maximum limits may be violated in cases of asset revaluation or appreciation for a period of no more than 90 days is also applied. As the authority moves towards as risk-based approach to supervision it has built these limits into its overall risk assessment. The degree of diversification of a fund's investment portfolio and compliance with the investment guidelines count for 5% of the overall risk score - 2 marks are awarded if the scheme has complied with investment guidelines / 1 mark if invested in guaranteed funds (some penalization to take account of credit risk in such an investment instrument) and 0 for non-compliance. The RBA also considers investment income within its on-site inspection guidelines (*e.g.* recommending consideration of the volatility and distribution of income by asset class).

Late or non-submission of returns is scored negatively as part of the risk-assessment systems, with the timeliness of submission of returns contributing 10% to a pension plans' risk score.

B. Qualitative

The RBA also uses a database of complaints as further risk indicator. Legislation (Section 46 of the Retirement Benefits Act 1997) requires the Authority to maintain a database of complaints. This is called the Complaints Handling Database and is managed by the Authority's Compliance Department. There is a specific process documented for this purpose and includes provision of information, particularly the identity of both the complainant and the scheme or service provider who would be respondent in the complaint.

The Database supplies primary data for the purpose of risk based supervision which captures for each complaint a general category, currently:

1. Interpretation of the Law
2. Administration and/or record keeping
3. Benefits calculation/ payment
4. Other

It is anticipated that this information would then be used in two ways in respect of each pension plan:

1. One category of complaint(s) for a plan may attract a higher risk rating than another as it would point to a different level of operational or legal and supervisory risk.

2. An increasing number of complaints in respect of one scheme or service provider would serve as an early warning sign for the purpose of identifying plans that require intervention, as this could be an indication of lack of understanding of the trustees, poor operational systems or poorly informed members.

In considering the risk impact of this information, the supervisor would take into account any mitigating factors arising from the quality of the board of trustees and principal officer (their understanding of the law and other pertinent issues), the internal complaints management system and effective operational management systems (including management of outsourced services such as benefits payment).

While complaints would not generally capture information provided or 'tip-offs' from whistleblowers as provided for in Section 40 of the Act, these latter may be captured through a separate database which is also kept in respect of enquiries made on various issues relating to the operations of specific schemes or the pension sector in general.

4. Risk Mitigants

The RBA identified a number of risk mitigants to be considered in the assessment process. These include:

- *Quality of the Board of Trustees:* Covers their understanding of responsibilities, their experience, competence and integrity and the presence of conflict of interest.

- *Quality of principal officer*: His/her experience, competence and integrity.

- *Effectiveness of operational management:* Includes human resource policies and management of outsourced operations by the Board of Trustees.

- *A funds information systems and financial controls:* Capacity to produce timely and reliable information for regulators and members.

- *Adequacy of risk management systems:* Quality of arrangements for identifying and measuring risk, setting limits, monitoring compliance and reporting.

- *Compliance culture and procedures:* Compliance with laws and regulations, and involves the assessment of the fund's information systems.

- *Adequacy of independent review:* Internal and external audit, actuarial reviews.

As shown in the risk model above, these are broken down into **Management and Control (**Trustees, Operations, Independent Review**) and Capital Support** (Fund, Employer Sponsor).

Annex 2 shows the guidance provided by the RBA to pensions funds on what their risk-management systems should look like.

5. Risk Weightings

Scores are summed individually for each of the three categories (Inherent risk, Management and control, Capital support). The overall risk score is obtained by taking 50% * (1. Inherent risk) + 25% * (2. Management and control) + 25% * (3. Capital support).

6. Probability

Probability is not considered separately in the RBA model – rather the risk score is taken as indicating the probability of a risk occurring.

7. Impact

Funds are divided into three categories – large, medium and small – according to their asset value, and are treated accordingly.

8. Quality Assurance

The quality of risk scoring is checked by quality assurance teams. Specialist teams are assigned to each risk category – *i.e.* there is a specialist team checking funds placed into the low, medium and high risk categories, with the most senior managers responsible for checking the rating of the funds placed in the later. A system of peer reviews is also used, along with technical team checks, leading from department heads right up to the RBA board.

9. Supervisory Response

The RBA employ the following supervisory response ladder.

Table 3: RBA Supervisory Response Ladder

Risk Level	Indicators	Actions
Risk level 0 – green light	Scheme well run, all financial and non-financial indicators within acceptable range	No action required, regular filing continue
Risk level 1 – light amber	Scheme reasonably well run, most financial and non-financial indicators within acceptable range, but few outside range or deteriorating	Regular filings continue, but more intensive monitoring indicated, until scheme returns to risk level 0
Risk level 2 – dark amber	Scheme generally in acceptable status, but a number of indicators outside range, or have been deteriorating	Supervisor questions scheme administrator regarding the issues raised by analysis. Monitoring continues until scheme risk returns to 0
Risk level 3- red	Significant number of indicators outside acceptable range, or have shown significant deterioration	Supervisor requests recovery plan from Trustees. Recovery plan is examined and monitored until scheme can be returned to at least level 1
Risk level 4 – ultra red	Scheme is in significant difficulties – scheme member interests significantly threatened	Intervention needs to be considered, including requirement for additional funding, reduced benefits, placing scheme in trusteeship, or eventually closing scheme, if all else fails

The Authority has developed a *Compliance Visit Manual* which is to be used during the on-site visit, and On-*Site Inspection Guidelines* to be used as a reference tool by the Compliance Officers during the on-site visit exercise. **Annex 1** provides examples of in-depth evaluation questionnaires for DB and DC funds.

The Authority proposed that a notice period of thirty (30) days be given to the scheme prior to the planned on-site. However, in cases of emergency, the supervision deadlines should be changed in the interest of the effectiveness of the supervision exercise. There will be three types of on-site visits: Comprehensive, targeted and follow-up. Depending on the outcome of the on –site visit, a concrete control plan will be derived. The on-site visit will be preferably conducted in teams.

ANNEX 1: IN-DEPTH EVALUATION QUESTIONNAIRE

Interrogatories – defined benefit schemes

Please complete this interrogatory to the best of your ability. If any response to a question needs further elaboration, please provide an explanation on the subsequent sheet.

1. **Investments risks**
1.1 Have you prepared an investment policy statement?
1.2 Has this statement been reviewed within the previous year?
1.3 Have the investments been monitored regularly based on this statement?
1.4 Are all the investment made in accordance with the regulations?
1.5 Are any of the assets invested by an outside investment manager or other financial institution?
1.6 Have you conducted an asset liability management review?
1.7 Have you prepared an estimate of liquidity requirements and how these will be met over the short and medium term?

2. **Insurance risks**
2.1 Does the scheme provide insurance or disability benefits, other than survivor benefits (*e.g.* lump sum death benefits)
2.2 If such benefits are provided, are they insured by an insurance company?
2.3 If such benefits are provided and are not reinsured, has a risk analysis been performed
2.4 Are pensions paid from the fund or are they reinsured with an insurance company?

3. **Non-financial risks**
3.1 Is the scheme administered internally?
3.2 Is any part of the administration outsourced?
3.3 Has there been any change to the arrangements in the previous year?
3.4 Is an electronic data processing system used for administration?
3.5 Are there any outsourcing arrangements?
3.6 Were such arrangements selected at arm's length in a transparent manner?
3.6 If the answer to 3.5 is yes, do you have written delegations, service standards and documentation related to the appointment of the outsourcing company(ies)?

4. **Board oversight**
4.1 Is there a written governance document outlining the roles and responsibilities of the Board
4.2 Have you completed the governance self-assessment questionnaire?
4.3 Have all members of the Board of Trustees passed fit and proper tests?
4.4 Have all Board members passed the tests required?
4.5 Do you have a code of conduct for Board members?

5. **Operations and controls**
5.1 Do you have a written procedure manual for the operation of the pension scheme?
5.2 Do you have written risk control mechanism?
5.3 Do you have specific quality and timeliness standards, which are monitored?
5.4 Do you have a formal complaints resolution mechanism?
5.5 Do you have conflict of interest guidelines and a code of conduct for all members of the management?
5.6 Are any of your activities outsourced?

6. **Independent review**
6.1 Are independent professionals engaged to review the accounts and actuarial statements?
6.2 Is the appointment of these professionals reviewed regularly by the Board?
6.3 Have you changed any of these professionals in the past three years? If so, why?

7. **Fund**[3]
7.1 Are any assets invested in securities of the plan sponsor, other than through a recognized securities exchange?
7.2 Do you perform dynamic solvency testing?

8. **Employer sponsor**[4]
8.1 Have all employer and employee contributions been made to the fund within the time limits prescribed?
8.2 Are you taking a contribution holiday?
8.3 If the answer to 8.2 is yes, do you have mechanisms in place to monitor when the contribution holiday should come to an end?

[3] Most of the information regarding this risk element will come from filings of financial statements and actuarial results

[4] Again, financial data will also be used to evaluate this risk element, although there will be a considerable lag

Interrogatories – defined contribution schemes

Please complete this interrogatory to the best of your ability. If any response to a question needs further elaboration, please provide an explanation on the subsequent sheet.

1. **Investments risks**
1.1 Have you prepared an investment policy statement?
1.2 Has this statement been reviewed within the previous year?
1.3 Have the investments been monitored regularly based on this statement?
1.4 Are all the investment made in accordance with the regulations?
1.5 Are any of the assets invested by an outside investment manager or other financial institution?
1.6 Have you prepared an estimate of liquidity requirements and how these will be met over the short and medium term?

2. **Insurance risks**
2.1 Does the scheme provide insurance or disability benefits, other than survivor benefits (*e.g.* lump sum death benefits)
2.2 If such benefits are provided, are they insured by an insurance company?
2.3 If such benefits are provided and are not reinsured, has a risk analysis been performed
2.4 Are pensions paid from the fund or are they reinsured with an insurance company?

3. **Non-financial risks**
3.1 Is the scheme administered internally?
3.2 Is any part of the administration outsourced?
3.3 Has there been any change to the arrangements in the previous year?
3.4 Is an electronic data processing system used for administration?
3.5 Are there any outsourcing arrangements?
3.6 Were such arrangements selected at arm's length in a transparent manner?
3.7 If the answer to 3.5 is yes, do you have written delegations, service standards and documentation related to the appointment of the outsourcing company(ies)?

4. **Board oversight**
4.1 Is there a written governance document outlining the roles and responsibilities of the Board
4.2 Have you completed the governance self-assessment questionnaire?
4.3 Have all members of the Board of Trustees passed fit and proper tests?
4.4 Have all Board members passed the tests required?
4.5 Do you have a code of conduct for Board members?

ANNEX 2: GUIDANCE ON RISK-MANAGEMENT TAKING FROM ON-SITE INSPECTION GUIDELINES[5]

Introduction

The objective of undertaking the on-site inspection work is to improve the understanding by the Authority of the level of risks inherent in the particular retirement benefits scheme, focusing in particular on those areas deemed to be significant.

The on-site visit will provide an opportunity to clarify any points arising from the preliminary off-site risk assessment and to gain a better understanding of the operation and management of the retirement benefits scheme.

IT Systems

To assess whether the IT infrastructure, in place, is appropriate to meet the business needs of the retirement benefit scheme under on-site inspection, the Authority shall consider the following:

- Extent to which IT supports the current user requirements or restricts planned initiatives,
- Extent to which IT systems have been assessed in terms of threats to the confidentiality, integrity and availability of key information,
- Adequacy and viability of the IT strategy for the planned initiatives,
- Flexibility to deal with external events

Internal Controls

The objective is to determine the adequacy of the internal control framework and to achieve this, the Authority will assess the decision making framework, the risk management framework, limits and standards, information technology, financial and management reporting, staff policies, segregation of responsibilities, audit and compliance functions.

The sophistication of internal controls will depend on the size of the retirement benefits scheme. The Authority will therefore identify the nature of the activities to be controlled before determining whether the process controls in place are adequate.

Decision making framework

To determine whether the decision making framework is appropriate with delegated authorities and clear accountability at all levels, the Authority will consider; the level of delegation, the adequacy of communication mechanism, means to prohibit individuals without authority from taking decisions or committing the scheme to a transaction, and the adequacy of documentation.

[5] This case study is taken from the Kenya country report prepared for the IOPS Working Paper No.4 (IOPS 2007)

Risk management framework

The Authority will assess the adequacy of systems in place to identify, measure, monitor, and control risk in an appropriate and timely manner. The Authority, in particular, shall focus on the risks associated with the investments and the solvency of the sponsor.

The risks that will be assessed shall include, but are not limited to: operational, credit, interest rate, liquidity, strategic, legal, and information technology. In assessing the risk management framework the Authority will consider; the risk identification responsibility, process and regularity; risk measurement policies; risk monitoring methodologies; risk control measures, and limits and standards

Limit and standards

The Authority will focus on assessing the Board of Trustees and Administrator's risk tolerance and the adequacy of methods used to convey that risk tolerance to the other stakeholders. The Authority will, in particular, assess the experience, background and authority of individuals involved in setting limits; the policy and procedural guidelines; and the processes for setting and changing limits.

Information technology

The Authority will also assess whether controls over the IT infrastructure are appropriate. The Authority will consider the following when assessing the information technology; adequacy of IT resources, prioritization, planning and development; and adequacy of the business continuation plan.

Financial and management reporting

To evaluate the adequacy of the financial and management reporting, the Authority will consider the following:

- Adequacy, accuracy and timeliness of financial and management reporting,
- Ability to assess the quality of assets and maintain an effective level of provisioning,
- Effectiveness and efficiency of distribution, including information sent to Board of Trustees
- Frequency of budget preparation and appropriateness of budgeting process, and
- Explanation of variances

Staff policies

In assessing the various staff policies, the Authority will consider the training initiatives to ensure compliance with the regulations.

Audit and compliance functions

In assessing the audit and compliance functions and procedures, the Authority shall consider the following:

- Responsibility and reporting lines, including their independence,

- Adequacy of processes for addressing exceptions or recommendations on a timely basis,
- Quality and experience of internal audit and compliance management and staff, and
- Links between external audit, internal audit, and compliance