University of South Africa Retirement Fund

Investment Policy Statement

Approved by the Board on 17 March 2021

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Section 1: Introduction

This document represents the Investment Policy Statement (IPS) of the University of South Africa Retirement Fund (“the Fund”) and has been adopted by the Board. The IPS is consistent with the governance principles set out in PF130 issued by the FSCA. The chart below sets out the investment strategy control process of the Fund. The IPS sets out the *key principles* adopted in respect of each control process.

Note the life stage model design refers to the default investment strategy for members that are either uncomfortable or unwilling to choose their own investment strategy. A separate investment objective and risk budget is set for each investment channel that makes up the life stage model.

The Fund’s investment strategy needs to comply with various statutory and guidance provisions. Compliance with these requirements is confirmed in Appendix A, noting the documents other than the investment policy statement serve as a record thereof.

The document is supplemented by a number of annexures which provide more detail on the derivation of the core principles and also covers the more operational aspects of the strategy.

Section 2: Fund overview

2.1 Governance

The Board has delegated the responsibility for the oversight of the Fund's investments to its Investment Committee subject to the mandate set out in Annexure 1. The Investment Committee's powers are limited to making recommendations. The Board retains control over the strategic issues related to the investment strategy and has the authority to implement the strategy and deal with operational matters. The Board also appoints the Fund's custodian, investment consultant and investment managers.

The Board takes the view that they are not experts in the field of investments. To deal with this position the Fund has appointed external investment managers. Furthermore, to bridge the knowledge gap between these investment managers and the Board, the Fund appointed an investment consultant that will advise the Board. The investment consultant holds the "trusted advisor" position and will be selected on the basis of their expertise and commitment to operate free from any conflict of interest in advising the Fund. The investment consultant is required to disclose any conflict of interest, the implications of which must be fully considered by the Board.

2.2 Nature of the Fund

The UNISA Retirement Fund ("the Fund") is primarily a defined contribution arrangement meaning that the member's benefits depend solely on the contributions set aside as retirement savings plus investment growth thereon, but with a modest defined benefit underpin for most members that entered the Fund on or before 1 September 1996.

On retirement from the Fund the member may elect to receive any combination of a life and/or living annuity from the Fund, or to secure a pension from a registered insurer.

The Fund is open to new entrants and the membership consists of employees of the University of South Africa, Universities South Africa (USAf) and Purchasing Consortium Southern Africa (PURCO SA), Universities that operates in higher education in South Africa and any other employer permitted in terms of the Rules of the Fund. A summary of the key characteristics of the Fund's membership is set out in Annexure 2.

Section 3: Mission

3.1 Mission statement for in-service members

The Fund's purpose is threefold:

- Primarily the Fund exists to provide long serving members that have preserved their benefits throughout their working lifetime with reasonable retirement benefits. Specifically, the Fund targets (but does not guarantee) that a member with an average career progression[1] and 35 years of service with around 16% of pensionable salary set aside as retirement savings should retire with a pension of around 75% of his/her pensionable salary at retirement at age 65

- The secondary purpose of the Fund is to provide a vehicle whereby employees can make provision towards retirement on a cost and tax effective basis using the bulk buying power of the membership with oversight by the Board.

- Finally, the Fund aims to guide the investment strategy for members that are uncomfortable to make investment decisions by offering a life stage model which is the Fund's default investment strategy. The aim of the life stage model is to provide an investment strategy that represents a reasonable balance between risk and return that increases the chance of a member that meets specific conditions relative to length of service, retirement age and salary increase progression achieving a target net replacement ratio (NRR) of 75% at retirement age 65.

  The life stage model will be designed in such a manner that, under normal market conditions, a member that invests his / her retirement savings according to this model should retire with a benefit close to that which he / she could reasonably expect taking into account any previous benefits for those members who joined later in their career.

  The Fund will engage with its members by providing helpful communication so that members can better understand their expected pension benefit and how their pension pot can be applied to secure an income at retirement.

In addition, the Board aims to direct the Fund's investment strategy in a manner that is supportive of sound environmental, social and governance (ESG) principles with motivation of securing positive financial outcomes. The Board has outsourced the on-going ESG oversight to its appointed investment managers but requires the managers to report on how they are complying with ESG best practice and principles.

3.2 Mission statement for pensioners (life annuitants)

The Fund's guided annuity strategy (required in terms of Regulation 39 to the Pension Funds Act), is a life annuity. For these pensioners, the Fund has a pension increase policy which targets pension increases of 50% of inflation over the long term, subject to affordability. Thus, the Fund's mission in respect of pensioners in receipt of a life annuity is to deliver the targeted pension increases of at least 50% of inflation over the long term. The same principles of seeking superior risk adjusted returns and low costs will apply to the life annuitant investment strategy.

Retirees also have the option to secure a pension that provides for future pension increases of 100% of inflation. A retiree that elects this option will receive about a 25% lower initial pension than a retiree that elects the 50% of inflation option.

[1] Members that have an above average career progression are likely to retire with a lower benefit than the target and *vice versa*.

3.3 Mission statement for living annuitants

The Fund also offers retirees the living annuity option (or a combination of a life and living annuity) from the Fund, noting that a retiree that elects to receive any part of their pension as a living annuity is opting out of the Fund's guided annuity strategy. Because the living annuity component does not form part of the Fund's guided annuity strategy the draw-down limits of Regulation 39 do not apply.

Nevertheless, the Fund offers a default investment strategy for living annuitants, together with engaging annually with such pensioners around an appropriate level of draw-down. The Fund's mission for living annuitants is to guide an appropriate level of draw-down (adjusted for inflation), which when applied together with the default investment strategy results in a less than 10% chance that the pensioners (and, if applicable, their spouses) will run out of money,

Living annuitants that don't want to follow the Fund's default investment strategy are allowed to invest in the same investment channels as in-service members and so the principles of seeking superior risk adjusted returns and low costs apply.

Finally, the Board aims to oversee the Fund's overall investment strategy (in respect of each of the membership categories above) in a manner that is supportive of sound environmental, social and governance principles with motivation of securing positive financial outcomes.

Section 4: Investment beliefs

The Board has developed a number of key beliefs about how markets work which underpin the investments strategy adopted to deliver real returns in a lower risk manner. These beliefs are set out below:

(a) Over short measurement periods the price of an asset can vary significantly from its intrinsic value – such mispricing arises from the errors the majority of other investors made. These errors arise from *inter alia* short-termism, getting caught up in fashion, over-confidence and anchoring. However, over longer periods the price of an asset tends towards its intrinsic value and therefore risk (a permanent loss of capital in real terms) is different from volatility (market noise).

The above belief is equivalent to accepting that most of the time markets are efficient, but occasionally they are inefficient and thus implies that an intelligent and patient investor can earn a superior return over the long term by exploiting volatility.

(b) Most of the time, to earn a higher return, the Fund needs to take on more risk. However, when markets are mispriced it is possible to earn a higher return without taking on additional risk (this is a different way of saying that markets are inefficient sometimes).

In general, the higher risk associated with equities should, on average, result in equities delivering a better return than bonds or cash. However, because markets can be inefficient, equities can be significantly over-priced from time to time, and at this time it would be a mistake to invest too much in equities. This means that the Board does not blindly accept the thesis of "equities for the long run at any price".

(c) The principal risk the Fund faces is over-paying for an asset. Such overpricing could occur at an asset class level or at stock specific level. It is much more difficult to assess over-pricing at an asset class level other than when markets move to extreme pricing, because so many random factors affect asset class prices. It is thus unlikely that an investment manager will add value consistently at an asset allocation level, except at extreme market prices. On the other hand, much more information is known about a specific company and therefore mispricing is generally easier to assess at a stock specific level.

(d) Consistent with (c) above, it is more important for the Fund (and its investment managers) to focus on what they own, rather than trying to predict macro-events which are difficult to get right.

(e) In general investors are compensated more for holding illiquid assets than the risk associated with holding such investments, especially if the Fund's investment manager has skill in avoiding the purchase of over-priced assets. Because the Fund can afford for some of its investments to be illiquid the Fund will have limited exposure to illiquid asset classes.

(f) Superior investment performance arises from exploiting the mistakes of the majority of other investors. The market may take a long time to recognize its error and so skilled investment managers may under-perform the market significantly from time to time and for lengthy periods.

Expressed another way, under-performance over short and even medium term measurement periods is a pre-requisite for superior long term performance. Even managers with the best long term records are likely to under-perform the market 40% of the time when their performance is measured over a short measurement period such as one year. It is equivalent to saying that the out-performance of managers comes in waves rather than in a straight line.

(g) Superior returns arise from good idea generation and/or the better management of risk. Good ideas will require patience when the Fund invests in a counter-cyclical manner; good ideas may also be found in areas most other investors avoid because of complexity or illiquidity.

Naturally the first and most robust form of risk management is sensible diversification. In addition, the Committee is prepared to consider more complex and innovative techniques to better manage risk such as a liability driven investment strategy for life annuities.

(h) Extra financial factors such as environmental impact, social responsibility, liability claims and monopolistic behaviour could have a significant negative impact on the long term value of a business.

The Board recognises that in believing that markets are inefficient from time to time, they are taking a view different from Modern Portfolio Theory that markets are efficient all the time.

The Board further accepts that a consequence of this belief is that their chosen strategy is likely to under-perform the market fairly regularly over short and medium term measurement periods. The Board is committed to have the patience to stay with their chosen investment strategy, subject to on-going review that the strategy remains appropriate.

Finally, the Board recognises that manager skill may be more difficult to assess. Accordingly, the Board will evaluate the efficacy of passive strategies for the SA and global equity asset classes as well as global listed infrastructure.

Section 5: Life stage model and guided annuity strategy

The Board has designed a default investment strategy for members that are uncomfortable or unwilling to choose their own investment strategy; the so-called life stage model. This is consistent with the requirements of Regulation 37 of the Pension Funds Act. In addition, each investment channel will comply with the requirements of Regulation 28 on a look through basis.

Consistent with requirements of Regulation 39, the Board has also developed a guided annuity strategy.

5.1 Beliefs underlying the design of the life stage model

- Most members feel that they are not equipped or alternatively not willing to make their investment decisions; hence the need for a default investment strategy (life stage model). This belief is backed by empirical evidence which suggests that in excess of 90% of retirement fund members in South Africa simply follow the Board default strategy.

- The Board aims to provide a reasonably balanced risk and return strategy, which under normal investment conditions, should result in satisfactory outcomes for most long serving members that retire at or around their normal retirement age. However, the Board accepts that the life stage model may not meet the financial needs of all members and hence members may exercise investment choice.

- This philosophy of a default investment strategy designed to be efficient for the majority of members, but with an "own choice" provision is called *libertarian paternalism*. In this instance the term "paternalism" is used in the positive sense – the Board takes actions on behalf of the member that for the majority of members is expected to be in his or her best interest. The libertarian principle gives the member the choice to opt out of the paternal solution and self-select an investment strategy from the range of portfolios that the Fund offers

- The life stage model is designed on the basis that the longer the member's investment horizon, the more risk the member can take on. The six key reasons that underpin this logic are:

  (a) Whilst the member is young he or she has relatively little money in the Fund and so the effect of a large negative return has a relatively small Rand impact on his or her retirement provision. The effect of future contributions and investment returns will swamp the effect of a large negative return whilst the member is still young.

  (b) On the other hand, when the member is close to retirement he or she has the most money in the Fund and any negative return has a large Rand amount impact which reduces the member's retirement income. In technical terms the member's retirement benefit is determined by the money weighted return (i.e. the return taking into account the incidence of the contributions) rather than the time weighted return. Generally, this risk becomes more acute as the member approaches retirement, but the extent of this risk depends almost entirely on the form of the pension the member elects at retirement.

(c) The life stage model is based on the assumption that most retirees will elect a life annuity from the Fund at retirement. The pension is priced on a fixed basis and budgets for future investment returns to be 6% p.a. Accordingly, the appropriate investment strategy for a member approaching retirement should include a significant exposure to money market type assets.

(d) The amount of investment risk a member should take is related in part to the flexibility the member has. A member that is a long way from retirement can increase his or her retirement savings if he / she considers that his / her retirement provision is inadequate. Alternatively, the member can plan to work longer. On the other hand, a member closer to retirement has much less flexibility to change his / her retirement plans and therefore a more certain investment return is desirable.

(e) The benefits of time diversification – the argument here is that over the long term "things average out" and provided that a member does not buy assets at a price far in excess of fair value, then over time the premium for a riskier asset will come through thus reducing the cost of providing for retirement.

(f) It facilitates easier retirement planning if the member's expected investment return in the period just before retirement is more certain.

The implication of the above is that the life stage model will follow a glide path from a higher expected return (and riskier strategy) at younger ages to a conservative strategy closer to retirement.

- Consistent with the above, whilst the member is some way from retirement, the main risk he / she faces is that his / her retirement savings do not earn a sufficiently high return compared to inflation ("inflation risk") to secure his / her targeted benefit at retirement whereas the closer he / she gets to retirement protecting the terms on which he / she has to secure a pension becomes more important ("pension conversion risk").

5.2 Life stage model design

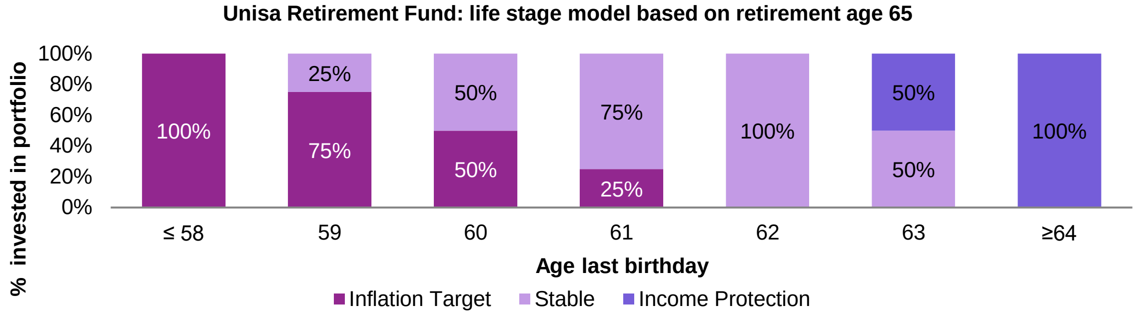
The Fund has adopted a three portfolio life stage model with the three channels being:

- Inflation Target Portfolio – investment horizon at least 7 years and a target real return of 6.0% p.a. over rolling 7 year periods.

- Stable Portfolio – investment horizon 3 to 5 years and a target real return of 3.5% p.a. over rolling 3 year periods.

- Income Protection Portfolio – investment horizon 1 year or less and a target real return of 1.5% p.a. over rolling one year periods.

The diagram overleaf sets out the structure of the life stage model of the Fund which is based on the University's normal retirement age of 65. Note that in respect of USAf members (a participating employer in the Fund) and disability income claimants arising up to 30 June 2015, normal retirement age is 60 and so the life stage model is rolled back five years to be consistent with this earlier normal retirement age. Each investment channel will comply with the requirements of Regulation 28 on a look through basis.



Notes:

- The model is designed around the normal retirement age of the member as notified by the employer.
- The member will be transitioned according to this model at the end of the month in which he or she has a birthday.
- On-going retirement saving contributions will be invested in the same proportion as the Member's Fund Credit (i.e. according to the model above).
- During the transition period, the member's accumulated retirement savings will be invested more or less in the percentages set out above (depending on the relative performance of the portfolios).
- Furthermore, during the transition period the member's actual retirement saving contributions will be allocated according to the percentages shown in the diagram above.

Members can also elect the life stage model with a retirement age of 55, 60 or 65. The default retirement age for members that don't nominate their retirement age is age 65 except in respect of USAf members and disability claimants who became disabled before July 2015, where it is age 60. Deferred pensioners (also called paid-up members) that resign but who retain their money in Fund will also default to life stage 65 unless they elect otherwise. In addition, retirees that elect to defer the receipt of their pension to a later date will remain invested according their investment strategy at their retirement date unless they elect otherwise.

The life stage model is not intended to be the optimal investment strategy for each member. Rather it aims to provide a fair balance between return and risk and should under normal market conditions result in a reasonable benefit at retirement for a long serving member. The investment risk and return payoff of the model has been designed around what the Board has assumed to be the risk appetite of the average member.

5.3 Investment choice

The Board accepts that some members may be comfortable to elect their own investment strategy – they are the so-called "own choice" members. Such a member can select any combination of the three life stage portfolios and the Shar'iah compliant portfolio. Members may elect a different investment strategy in respect of their accumulated retirement savings (or Fund Credit) and their on-going (and future) retirement saving contributions in which case they become an "own choice" member. Members are allowed to apply a different strategy to their Main and Supplementary Account. Members are permitted to change their investment strategy monthly, thus meeting the requirements of Regulation 37.

A member entitled to the minimum benefit underpin at retirement will forfeit his benefit if he / she becomes an “own choice” member but retains the underpin benefit if he / she elects a life stage model with a retirement age different from his / her normal retirement age. This restriction is required to mitigate anti-selection by the member.

The member’s investment will continue to be invested according to his or her choice unless the member makes a positive election to invest his or her money differently. Similar to the own choice members, the living annuitants can select any combination of the Inflation Target, Stable, Income Protection and Shari’ah Portfolios should such a retiree elect to opt-out of the Fund’s default investment strategy for this membership category.

5.4 Guided annuity strategy in terms of Regulation 39 of the Pension Funds Act

The Fund’s guided annuity strategy is the life annuity provided by the Fund. This life annuity provides retirees with a life-long pension (for the retiree and his or her beneficiaries) at a much lower cost than the equivalent product from an Insurer. The life annuity provides an initial higher pension, but future pension increases are expected to be 50% of inflation.

Retirees also have the option to secure a pension that provides for future pension increases of 100% of inflation. A retiree that elects this option will receive about a 25% lower initial pension than a retiree that elects the 50% of inflation option.

Section 6: Investment return objectives

As set out in section 5, the Fund operates a three portfolio life stage model consisting of the Inflation Target, Stable and Income Protection portfolios. In addition, the Fund offers a Shar'iah compliant portfolio for in-service members and has a Pensioner Portfolio in which the assets backing the Fund's pensioner liabilities are invested.

6.1 Principles and objectives for the three life stage model portfolios

As described in section 2, the Fund has four broad categories of membership, namely defined benefit and defined contribution in-service members, deferred pensioners (which may arise of a consequence of exiting the Fund prior to retirement or retirees that elect to defer receipt of their pension and pensioners (which includes life and living annuitants). The paragraphs below set out the principles adopted in setting the investment objective for each of these categories. Note that the investment objective in each case is set relative to normal market conditions and a long term inflation rate of 5.5% p.a., which is consistent with inflation expectations embedded in South African government bond yields.

6.2 Asset class returns

The return objective and risk constraint for each investment channel is set with reference to observed long term investment returns, the associated risk and correlation matrix for the three principal asset classes being cash, bonds and equities, together with a subjective overlay to take due account of current market conditions. The derivation of the assumptions are detailed in Annexure 2 and are currently as follows:

Asset class	Expected real investment return	Volatility[1]
South African equities	7.5%	23%
Developed World equities	5.500%	17%
South African bonds	4.5%	11%
Developed World bonds	1.50%	9%
SA Cash (Money Market)	1.50%	2%

If achieved, the above investment return objectives would, for the *characteristic member*, result in a replacement ratio at normal retirement age of some 75% of the member's pensionable salary at that time. The assumptions made regarding the characteristic member, are also detailed in Annexure 4.

6.3 Objectives for in-service member portfolios

A separate investment objective is set for each of the life stage investment channels offered by the Fund. The objective for a specific channel is driven primarily by its investment horizon. Portfolios with a long term investment horizon will have a higher expected return target as a higher proportion of riskier but expected higher returning growth assets can be allocated to such portfolios.

The investment objective for the channels will also be sufficiently differentiated so as to be appropriate for members with different time horizons and risk appetite. The table below sets out the typical asset allocation and associated investment horizon for the three investment channels offered:

[1] As measured by standard deviation

Investment channel	Typical asset allocation	Investment horizon
Inflation Target Portfolio	70% to 80% growth assets (e.g. equities and property) and 20% to 30% fixed interest assets (mainly bonds)	At least 7 years
Stable Portfolio	45% to 50% growth assets and 50% to 55% fixed interest assets being mainly cash and enhanced cash strategies	2 to 4 years
Income Protection Portfolio	Invested only in cash and enhanced cash strategies	1 year or less

Inflation Target Portfolio – objective and risk constraint

Investment return objective: a real investment return of 6% p.a. net of all charges over a rolling measurement period of 7 years with a risk budget as measured by standard deviation of 14% p.a.

The table below shows the modelled 10% to 1% (probability column) poorest *real returns* which may be expected over a 1-year and 7-year period for this channel assuming that the portfolio's return signature follows a normal distribution

	1 year		7 years	
Probability	**VaR[1]**	**CVaR[1]**	**VaR**	**CVaR**
10.0%	-11.7%	-17.8%	-1.3%	-3.6%
5.0%	-16.4%	-21.8%	-3.1%	-5.1%
2.5%	-20.5%	-25.3%	-4.6%	-6.5%
1.0%	-25.2%	-29.5%	-6.4%	-8.1%

Thus, there is a 10% chance that the real return over any 1 year will be worse than -11.7% ($VaR_{10\%}$) and should such an event occur the expected real return is -17.8% ($CVaR_{10\%}$). However, when measured over seven years, there is a 10% chance that the real return over any 1 year will be worse than -1.3% p.a. and once in this tail the expected real return is -3.6% p.a.

Stable Portfolio – objectives and risk constraint

Investment return objective: a real investment return of 3.5% p.a. net of all charges over a rolling measurement period of 3 years with a risk budget as measured by standard deviation of 7% p.a. Furthermore, the portfolio aims, but does not guarantee, to avoid a negative nominal return over any 12 month period.

The table below shows the modelled poorest *real returns* which may be expected over a 1-year and 3-year period for this channel assuming that the portfolio's return signature follows a normal distribution:

	1 year		3 years	
Probability	**VaR**	**CVaR**	**VaR**	**CVaR**
10.0%	-4.7%	-7.5%	-1.4%	-3.1%
5.0%	-6.9%	-9.4%	-2.7%	-4.1%
2.5%	-8.8%	-11.0%	-3.8%	-5.1%
1.0%	-11.0%	-12.9%	-5.1%	-6.2%

[1] The returns of all the portfolios follow a statistical distribution. In framing their risk budget, the Board is concerned about how poor outcomes can be over different measurement periods. For example, the Board may wish to estimate what the cut-off point is for the worst 10% of the returns (i.e. there is a 10% chance of the return being worse than this cut-off point). This point is called the Value at Risk for the 10% worst returns, abbreviated to $VaR_{10\%}$ which is -11.7% over one year. Arguably it is not sufficient to just know what the cut-off point is, it is more complete to estimate if one ends up with amongst the worst 10%, on average, how bad could it be. This statistic is called Conditional Value at Risk. The $CVaR_{10\%}$ is -17.8% over 12 months.

In addition, there is about a 6% chance that the nominal return over any 12 month period will be negative and if such an event occurs the expected return is -3.0%.

Income Protection Portfolio – objectives and risk constraint

Investment return objective: a real investment return of 1.5% p.a. net of all charges over a rolling measurement period of 12 months with a risk budget as measured by standard deviation of 2.0% p.a.

The portfolio aims to provide a high degree of certainty about the return over the next 12 months and has an extremely low risk of a nominal capital loss over any 12 month period.

Shar'iah Portfolio – objectives and risk constraint

Investment return objective: a real investment return of 3.5% p.a. net of all charges over a rolling measurement period of 7 years with a risk budget as measured by standard deviation of 14% p.a.

The Shar'iah portfolio must comply with Shar'iah law. This investment channel does not form part of the default investment strategy and is an own choice portfolio.

6.4 Investment objective for the Pensioner Portfolio

This Portfolio is only applicable to retirees in receipt of a life annuity from the Fund.

Investment objective: The Pensioner Portfolio aims to out-perform the present value of the expected pension payments making provision for pension increases of 60% of inflation (i.e. slightly higher than the 50% of inflation as per the Fund's pension increase policy) priced off the SA government bond yield curve by 1% p.a. over a 10-year period with a tracking error of less than 4% p.a. Should this objective be achieved, the Fund should be able to afford pensioner increases of close to 75% of inflation, noting that the Fund will retain its current pension increase policy of 50% of inflation.

The Pensioner Portfolio is managed employing a liability driven investment approach. This means that rather than consider the absolute level of investment return, the focus is on funding level the Pensioner Portfolio. This means for example, if the assets of the Portfolio are 100 units and the liabilities are also 100 units, it is no consequence to the Fund, if the assets earn a negative return of 10%, provided that the value of the liabilities also fall by 10%.

80% of the Pensioner Portfolio assets are allocated to the Matched Portfolio ("MP"). This portfolio is invested to deliver 60% of inflation increases on 1 April each year. However, the same 80% of the assets should aim to hedge 100% of the interest rate risk on the full pensioner liability. To illustrate the point, assume that at a time the value of the pensioner liabilities (providing for pension increases is 100) is 100 units and the MP has assets of 80 units. Assume now that interest rates increase, and the value of the liabilities reduces to 97 units; the expectation is that the value of the MP units will fall to 77 units (by more or less the same 3 units).

Conservative yield enhancement strategies are applied to a maximum of 35% of the MP. These strategies are expected to enhance the total yield of the MP by 0.4% p.a. The remaining 20% of assets are allocated to global growth assets (i.e. equities and property). It is assumed that these growth assets will deliver an equity risk premium (excess returns to government fixed assets) of 3% p.a., which if achieved would add 0.60% p.a. (i.e. 20% x 3%) to the portfolio's return over the risk free government bond yields. The aggregate of the yield enhanced strategies plus the 20% allocation to growth assets represent the targeted 1% p.a. out performance of the liabilities over 10 years.

The tail risk associated with the MP is the moral hazard of the SA government under-stating inflation to limit their interest cost if inflation is very high. The 20% investment offshore provides some hedge against such an outcome because the ZAR is likely to weaken significantly in such a scenario.

The LDI manager (Old Mutual) must structure the MP assets in such a way that it delivers the monthly schedule of pension payments as provided by the Fund. In this way sequencing risk is managed as Pensioner Portfolio will not be a forced seller of assets to meet pension payments.

Note: Should any retiree elect to target 100% of inflation increases, the liability driven investment strategy for this member would target such a level of pension increase.

Section 7: Asset classes and benchmarks

7.1 Preamble

As per Section 6, the investment return objectives for the three investment channels have been set with reference to the three principal asset classes, namely equities, bonds and money market instruments. These asset categories have much more granularity – for example equity type assets include *inter alia* listed and private equity, property, infrastructure assets and agriculture. Similarly, bonds consist of listed and unlisted debt of sovereigns or companies. Furthermore, categorisation by region is possible e.g. domestic, global developed world, emerging market and frontier markets.

7.2 Principles for inclusion of a particular asset class

The Board has applied the following principles in deciding whether to include a particular asset class in the Strategic Asset Allocation Portfolio or not:

- The Board must have a good understanding of the asset class and in particular of the factors driving returns and the risk premiums the specific asset class offers.
- The market price of a particular asset class is driven by a number of factors. The Fund looks to invest in asset classes which prices are driven by different factors or more likely a different weighting to a specific factor so as to target good diversification benefits. Thus, asset classes which offer good diversification benefits will generally be an allowable asset class for investment. The factors driving the investment returns of the main asset classes are set out in Annexure 5.
- In addition to selecting asset classes on the basis of their returns being driven by different factors, the Board will seek to build a diversified portfolio by allocating assets to a wide range of risk premiums. The possible nature of the premium per asset class is also set out in Annexure 5.
- The allocation to a particular asset class needs to comply with the restrictions of the Pension Funds Act and in particular Regulation 28 to the Act.
- A maximum of 15.0% of the Fund will be invested in unlisted equity, hedge funds, property and private equity arrangements (The Regulation 28 limit on such instruments is also 15% and the maximum investment in any private equity and hedge fund is limited to 2.5% of the portfolio market value).
- For investments in long term themes, a thorough due diligence and risk assessment needs to be undertaken

7.3 Benchmarks per asset class

In the case of listed assets, a published market capitalisation index will be available. The Board will select a market capitalisation benchmark that is a reasonable representation of the universe from which investments can be made.

In the case of unlisted assets, a suitable published benchmark may not be available. In this case the Board will set the benchmark with reference to the underlying nature of the assets (i.e. equity, bond or money market) plus an appropriate premium to reflect the specific risks taken on. The current asset class benchmarks adopted by the Fund are set out in Annexure 5.

Section 8: Asset allocation

8.1 Strategic Asset Allocation

The Board has set a Strategic Asset Allocation (SAA) for each investment channel. The strategic asset allocation represents the mix of asset classes that is expected to generate a return over the long term which is consistent with the investment objective of that investment channel. The expected risk for the Strategic Asset Allocation also sets the risk budget for the relevant investment channel.

The Strategic Asset Allocation reflects a "do nothing" or passive approach and the calculated investment return and risk for a particular investment channel (using the benchmark return for each asset class) represents the return that would have been earned had the Fund simply invested in accordance with its Strategic Asset Allocation.

However, if the Board assesses a particular asset class to be very expensive or very cheap, it could revise the Strategic Asset Allocation materially on the basis that there is an assessed high probability that the specific asset class will move towards its fair value over a period of around three to five years. This medium term approach to asset allocation is called dynamic asset allocation and are taken with at least a three year view because it may take a long time to revert to their normal state.

For the Pensioner Portfolio, the Liability Benchmark Portfolio is calculated based on life expectancy of the pensioners (and their beneficiaries) allowing for 60% pension increases on 1 April each year and the SA government nominal and inflation linked bond curve.

8.2 Methodology for deriving the Strategic Asset Allocation

In deriving the Strategic Asset Allocation for an investment channel, the Fund has used a combination of quantitative techniques (re-sampled mean variance optimisation) and subjective judgement.

The Board believes that a quantitative technique is based on too many assumptions and therefore the results of such a model should need to be interpreted with a common-sense overlay. The Strategic Asset Allocation set for each investment channel is therefore not positioned as the optimal solution; rather it represents a sensible approach which is expected to deliver reasonable outcomes under normal market conditions over the measurement period of the channel.

If the Board assesses a particular asset class to be very expensive or very cheap, it could revise the Strategic Asset Allocation materially on the basis that there is an assessed high probability that the specific asset class will move towards its fair value over a period of around three to five years. This medium term approach to asset allocation is called dynamic asset allocation.

Section 9: Portfolio construction

9.1 Active versus passive management

The Board believes that it, together with its Board and the investment consultant appointed, have a reasonable chance of identifying skilled investment managers. In addition, the Board is of the view that its governance budget allows to have a fair chance of identifying such managers and so the Fund has appointed active managers (i.e. managers that seek to out-perform a specified benchmark net of costs) for most of its mandates. This confidence in active management is, however, tempered and the Fund will utilise passive management for a proportion of the SA and global equity asset classes and the global listed infrastructure asset class will be invested entirely in a passive strategy.

9.2 The asset allocation decision

The Board recognises that if it were possible to get the asset allocation decision right, significant value can be added in the form of higher return and/or reducing risk.

The Board will seek to add value via asset allocation in the following ways:

- The Board will review the Strategic Asset Allocation for each investment channel on a quarterly basis with a view to identifying asset classes that are significantly mispriced (i.e. very cheap or very expensive) by long term measures. The identification of such situations may lead to a change to the Strategic Asset Allocation for a specific investment channel. This approach is called dynamic asset allocation.

- Within a particular asset class, the mandate given to the specialist manager could allow investment of a specified percentage of the assets in cash if the manager regards the asset class as expensive.

Having dealt with the asset allocation decision in the manner described above, the Board will appoint specialist asset managers for each asset class, but it may use multi-asset class products if this represents the best implementation route.

Given the difficulty in getting the asset allocation decision right on a consistent basis, the Board will maintain an asset allocation quite close to the strategic asset allocation (except at assessed market extremes) and as such most of the value add and risk reduction is expected to be generated from instrument selection rather than asset allocation.

9.3 Specialist asset managers

The Board believes that specialisation in a particular asset class is likely to be a competitive advantage in a field as diverse and complex as investments. Hence, as described above, the Board has appointed specialist asset class managers for almost all mandates.

It is noted that if the amount to be invested in a particular investment channel is small, the Board will prefer multi-asset class mandates on the basis that the associated implementation difficulties argue against the use of specialist mandates.

9.4 Investment approach blending

There are three principles which inform the Board's approach to blending different investment approaches, namely:

- A portion of the South African and global equity allocation will be managed on a passive basis, thus reducing the "tracking error" to the benchmark and keeping costs low.

- The most robust approach to blending managers that constitute the active management component of the strategy is to combine skilled managers that approach the market differently and where there is little overlap in their shareholdings. In this way, each manager can hold a portfolio that is very different from the benchmark (called a high "active share" portfolio), with the aggregate blend having a high active share but the combination of the managers being largely neutral on factors such as country exposure, sector exposure and style. In this way, stock picking rather than macro factors drive the portfolio returns.

  It is possible to follow this approach in relation to global equities where there is a deep opportunity set; this is the approach that the Fund has adopted. However, in narrow markets like South Africa the efficacy of such blending is reduced.

- Selecting skilled investment managers is difficult and to diversify against selection error the Fund will appoint more managers rather than fewer. The constraint on diversification is that one reaches a point where the blend represents an enhanced index strategy but at a very high cost. Accordingly, blending of active managers should be done to the extent that it keeps the active share high. Naturally, in the deep global markets the Fund can appoint more managers than in the narrow SA market.

It is highlighted that the above principles apply to the equity asset class, noting that the same principles can be used, but to a lesser extent, in appointing fixed interest managers.

The current specialist mandates and the blending of investment approaches per investment channel are set out in Annexure 7.

Section 10: Manager selection

10.1 Qualitative assessment of managers

The Board will place a much higher weighting on qualitative considerations in appointing its investment managers and so assign a lower weighting to past performance. The reason for this approach is that in a highly competitive industry only a small proportion of managers have exceptional skill and given the uncertainty in anticipating future returns, the very good observed performance by a particular investment manager could just as well be attributed to luck as opposed to skill, particularly over shorter measurement periods.[1]

The qualitative analysis must however be supplemented with a good quantitative analysis to better understand how the manager generates its performance. The quantitative analysis will include an understanding of whether the manager's performance is due to getting a few big decisions right (less attractive) or more ideas contributing to the performance (a better outcome), the manager's performance under different market conditions (upside capture and downside protection), risk taken on (tracking error) for return generated, consistency between the counters held in the manager portfolio to their stated investment approach etc.

10.2 Criteria for selecting managers

The Board has adopted the following criteria for the selection of an investment manager:

- The manager must be assessed to have a discernible competitive edge to the market. This edge could take form of inter alia an intellectual edge, superior research giving rise to an information advantage and/or avoiding the mistakes other investors routinely make (i.e. a behavioural advantage).

- The manager should be part of a firm that has superior investment driven culture. Characteristics of a superior investment culture may include a meritocracy, the ability to work together as a team, and importantly giving power to the individuals that drive strong performance to clients as opposed to gathering assets.

- The manager should have the ability to generate new ideas and implement these in a judicious manner, with strong portfolio construction skills.

- The manager should apply an insightful approach to the overall risk management for the portfolio

- The firm should have an impeccable standard of ethics and should align their interest with that of the Fund.

- Where the manager adopts a long-term investment horizon, they must thoughtfully consider ESG factors in selecting the instruments included in its portfolio. The investment approach of the manager must be consistent with the beliefs of the Board and add to the intended diversification characteristics of the portfolio.

- The manager's Black Economic Empowerment rating.

[1] Over longer measurement period the luck starts to even out and a greater weighting can be attached for past performance in assessing manager skill. There are however very few managers with a long enough track record investing with the same approach and the same key decision-makers with materially similar assets under management.

The Board accepts that it will be rare to find managers that comply with all the above criteria, but the appointed managers should meet a significant percentage of the listed criteria. Furthermore, the Board understands that assessing managers against the above criteria necessarily is somewhat subjective and therefore there is a risk that the Board could over-rate a manager's skill. In order to diversify against this risk, the Fund will appoint a number of asset managers for each asset class that constitute a significant percentage of the asset allocation of the particular investment channel.

10.3 Terminating or reducing exposure to an investment manager

The following events would lead to a review and the possible termination of the manager's appointment or the down-weighting of exposure to the manager:

- Rapid growth or decline in assets under management;
- Change in the investment philosophy and approach or a material change in the investment process;
- The manager increasing the risk profile of the portfolio significantly without being able to provide good reasons for doing so;
- Poor performance over a period if such poor performance cannot be reasonably explained by market mispricing or a once-off "extreme event" error;
- Loss of key personnel, including a situation where a key decision-maker is "promoted" to a different role;
- Perceived loss of passion and focus by the key decision- maker;
- Material change in the shareholding structure of the manager;
- Perceived adverse changes in the ethics of the manager;
- Poor policies in respect of ESG issues, especially if the manager adopts a long-term investment horizon;
- Change in market conditions or regulatory environment which has the effect that the manager's investment approach may no longer be effective;
- A significant exposure to a specific investment sector that cannot be reasonably justified;
- A negative change in the manager's Black Economic Empowerment rating
- Any other matter that is perceived to affect the ability of the investment manager to carry out its mandate effectively or is considered by the Board to necessitate a review.

Section 11: Social responsibility

The Fund's investments will be managed in a manner that is consistent with the FSCA Guidance Note 1 of June 2019 and the King IV principles.

11.1 Policy

The Board believes that part of its social responsibility is to manage and oversee the Fund in such a manner that it delivers superior risk adjusted returns as such an outcome would increase the chances of the member being able to retire with reasonable benefits.

Investment belief (h) is that ESG factors will have material impact on investment returns. In formulating its ESG policy, the Board is mindful of its fiduciary duty to restrict capital allocation to investment opportunities that offer the prospect of at least a fair risk adjusted return. Whilst the Board will consider investing in strategies that provide strong social returns, such investment is subject to the expected return being at least fair compensation for the risk taken-on.

Negative screening

The Board draws a distinction between investments that have far-reaching social implications (e.g. climate change, child labour) and investments that may have negative ethical characteristics depending on the view of the investor (e.g. tobacco, alcohol and gaming).

The Board has decided not to apply any negative screening. The most likely candidate for negative screening is a ban on investing in fossil fuel companies on the basis that their outputs are primarily responsible for climate change. However, currently the local economy's energy supply is generated almost entirely by coal. Consequently, the economy would face enormous difficulty if all investors banned capital allocation to this sector, an outcome that the Board believes is not in the best interest of South African society.

Nevertheless, the Board is supportive of a transition plan to reduce the country's carbon footprint. To this end, the Fund will look to invest in clean energy forms (e.g. renewable energy) and will require the local investment managers that invest in fossil fuel companies to engage with the management of investee companies to improve their carbon footprint. The managers will be required to report at least annually to the Board on the outcome of such engagement. The Fund has exposure to the debt of local renewable energy projects.

Positive screening

Whilst the Board believes that positive ESG characteristics generally results in better company performance, it also takes the view that these characteristics are largely priced in by the market. Accordingly, the Board believes that investing in companies with positive ESG characteristics is unlikely to result in sustained market out-performance, although it accepts that there may be a short-term momentum effect.

ESG integration

The Board believes that investment managers need to take proper account of ESG factors in assessing the fair value of any instrument. The thoughtful inclusion of such factors is particularly important if the manager intends to hold the position for a reasonably lengthy period or owns a significant stake in the company.

Consequently, when selecting investment managers that adopt a long-term investment horizon, the extent to which the manager integrates ESG into their research process and assessment of fair value, will be an important criterion.

Active ownership

The Board recognises that as opposed to becoming an active shareholder, the investment manager has the option to sell if the firm becomes concerned about the ESG characteristics of any investee company.

However, where the manager is a large shareholder with the consequence that it will only be able to trade out of the position over an extended period, it should be a more active owner. Naturally, an investment manager whose investment thesis is part based on improving the ESG profile of the firm also needs to take an active owner role.

The Board is of the view that a key element of active ownership is effective engagement with the company's management. Accordingly, the Board places less emphasis on the voting record of the investment manager (although this is still important) and greater store on engagement that delivers positive results.

At this time the Board will delegate the voting rights to its appointed investment managers, without issuing any voting guidelines. Nevertheless, the Fund's investment managers will be required to report at least annually on their engagement with investee companies and how they have voted on the company resolutions where at least 10% of the shareholders have voted against the matter. They will also be required to report on the extent to which their voting complies with King IV Principles and CRISA.

In addition, the Fund has an exposure to a shareholder activist SA equity manager (Value Capital Partners).

Impacting investing

The Board believes that impact investing is an important social responsibility. As per the above, given the fiduciary responsibility of the Board it will only allocate capital to investment opportunities that offer the prospect of a fair risk adjusted return. Accordingly, the Fund will not compromise investment returns in pursuit of social returns. The Board is of the view that fair investment returns, and positive social returns, are not irreconcilable if the current inefficiency and multiple agents sometimes observed in such investments can be eliminated.

To date the Fund has invested in the debt of renewal energy programme in South Africa. The manager will be required to report on the social impact of these investments annually.

ESG reporting

The Board will rely on its appointed investment managers to provide at least annual reporting on company engagement and voting. Specific reporting is required in respect of companies whose activities impact negatively on climate. In addition, where the investment has a clear social return, the manager is required to report on these social returns.

Furthermore, the Board will require the investment consultant to report on the efficacy of the Fund's investment managers in integrating ESG into their research process.

11.2 Voting policy

The Board is of the view that the Fund's voting rights are a very important contractual right to protect its interest.

At this time the Board has delegated its voting rights to the appointed investment managers who are expected to exercise these rights in the best long term interest of the Fund. The Board will require its investment managers to report the following items in a periodic basis:

- How it has voted on the resolutions of all the companies in which it has invested on behalf of the Fund.
- Which annual general meetings or special shareholder meetings it has attended.
- The extent to which they subscribe and comply with the principles of the Code of Responsible Investing in South Africa (CRISA) and King IV governance principles.

Section 12: Governance principles

12.1 Conflicts of interest

The Board accepts that conflict of interest, whether actual or potential, is part and parcel of any investment strategy and that such conflicts, if left unmanaged, represent a material risk to the success of the Fund's investment strategy.

The Board requires full and transparent disclosure of actual and potential conflicts of interest from all its service providers and from Board members. Any breach of this requirement of full disclosure will be regarded in a serious light and may lead to the termination of the service provider's appointment or the Board member being required to resign.

All service providers are required to receive their entire remuneration from the Fund and so may not receive any direct or indirect benefit or remuneration from any other service providers associated with the Fund. Although difficult to assess accurately the Board will evaluate what the key motivator of a service provider is – the Board is looking to appoint service providers where the staff are driven by intrinsic motivators like "doing the right thing for the client", "continuous improvement" rather than financial reward.

The Board will look to appoint Investment Committee members that have the ability to challenge the advice and investment strategies of their service providers. As a further risk mitigation factor the Fund will only invest in strategies which, after due consideration, the Board considers it has a reasonable understanding.

In addition, the Board and sub-committee members will comply with the conditions of Directive PF No. 8 of 2018 which deals with the prohibition of the acceptance of gratuitous benefits.

12.2 Manager fees

The Board has adopted the following principles in relation to investment manager fees:

- Costs are certain whereas manager out-performance is only an expectation. As such the Board aims to keep costs low but recognises that in certain circumstances it is worth paying a premium fee in order to access high skill and alignment of interest.

- The fee arrangement must reflect and promote a clear alignment between the interests of the Fund and that of the investment manager.

- The manager's fee can be structured either on a fixed fee or performance fee basis. Where a performance fee structure is used, it must be designed in such a way that option value of the performance fee to the manager is nil (or very close thereto). This would generally require the fee system to operate on a high water mark basis with the reward for out-performance measuring manager skill (and not capital market returns).

- As a general guideline the manager's fee (including any performance fee) should allocate about 75% to 80% of the expected value added by the manager to the Fund (with the manager's share being 20% to 25%). There are circumstances in which a lower sharing ratio to the Fund may be appropriate but even in these circumstances the Fund would seek to benefit from at least 65% of the expected value added by the manager.

12.3 Manager mandates

The Board will agree a mandate with each of the investment managers it appoints. The mandate will set out the performance target, measurement period and risk constraints for the manager and will also contain specific provisions to deal with potential conflict of interest situations. The various mandate conditions per asset class are set out in Annexure 8.

12.4 Monitoring

The performance of the Fund's investment channels, and the underlying investment managers will be monitored on a quarterly basis. The manner in which the Fund's investments will be monitored is set out in Annexure 9.

The investment consultant is responsible for monitoring compliance with Regulation 28 at a Fund and per investment channel level as well as for the preparation of the quarterly SARB returns.

12.5 Registration of the Fund's assets and scrip lending

The Board is comfortable for the assets to be registered in the name of the Fund or to access investment via comingled funds (e.g. insurance policies or collective investment schemes). The use of comingled funds is however subject to the conditions set out in Annexure 10.

The Fund will not engage in scrip lending where the assets are registered in its name. The Board however recognises that where the investment is via a pooled vehicle, the investment manager may be allowed in terms of the founding documents to scrip lend – in this case scrip lending is permitted provided that the terms of such lending are disclosed to the Fund before the date of the investment manager's appointment and the manager warrants that its scrip lending programme complies with the relevant legislation.

12.6 Treating Customers Fairly

The Fund complies with the Treat Customers Fairly principles. Specifically, the Fund provides an appropriate range of options so that individual members can meet their needs is most instances. Furthermore, the Board focuses on keeping costs low and provide complete and transparent to the members regarding costs. There are not hidden fees. The Board monitors performance against the set benchmark and any limits on member choice are only included to extent that they are required to mitigate against anti-selection.

Section 13: Review of statement

In the normal course of events the Board will review the investment strategy annually or at shorter intervals where investment opportunities may also arise. The investment strategy must be reviewed within 3 months of any of the following events occurring:

- A change in exchange control regulations affecting retirement funds
- A change in the tax basis affecting the investment strategy of the Fund
- A change in the Pension Funds Act or the Long Term Insurance Act that affects investments
- A change in the economic policy regarding inflation targeting or the mandate of the South African Reserve Bank
- An indication that the Fund will have significant cash flow requirements (particularly outflows).
- Any extreme market event in which case the Principal Officer may convene a special meeting of the Investment Committee

Adopted on:

Chairperson: Board
Date: 17 March 2021

Deputy Chairperson
Date: 17 March 2021

I have reviewed the investment strategy of the Fund and am satisfied that it is appropriate in relation to the nature of the Fund's liabilities.

Valuator
Date: 17 March 2021

Appendix A: Check list of compliance with legislative requirements

Compliance with Regulation 28 Principles

Clause	Requirement	Compliance	IPS /other reference
2(a)	Fund must comply with limits of Regulation 28	✓	Annexures 6 and 8
2(b)	Fund must have an IPS which is reviewed at least annually	✓	Section 13
2(c) (i)	Education of board members in relation to investments must be promoted	✓	Fund trustee training program
2(c) (ii)	Monitor compliance with Regulation 28	✓	Annexure 9.4
2(c) (iii)	In contracting Fund must consider the need to promote board based black economic empowerment	✓	Section 10.2, Fund's transformation policy
2(c) (iv)	Assets must be appropriate to liabilities	✓	Signing page and Annexure 12
2(c) (v)	Fund must do proper due diligence of processes, risk control and liquidity risk when appointing a third party manager	✓	Sections 10.1 and 10.2; Fund's DD process in selecting managers
2(c) (vi)	For foreign assets the due diligence should extend to an understanding of currency and country risk	✓	As per above
2(c) (vii)	Credit ratings may be considered in assessing risk, but the Fund's investment managers should do independent credit analysis	✓	As per above
2(c) (viii)	Board must understand how the risk profile of the Fund may change over time	✓	Annexure 9.2 plus quarterly performance report
2(c) (ix)	Sustainability and ESG factors must be considered before making an investment	✓	Sections 10.2 and 11 read with Annexure 8.2

Compliance with requirements of Regulation 37 – default investment strategy

Clause	Requirement	Compliance	IPS /other reference
37.1	The Fund must have a default investment strategy for DC members	✓	Section 5.2
37.2 (a)	The design of the default investment strategy must include (a) objective (b) underlying asset allocation (c) fee principles and (d) risk profile.	✓	Section 6 read with annexures
37.2 (b)	The composition of the assets and performance must be communicated to members	✓	Monthly fact sheet
37.2 (c)	Fees and charges must be reasonable and competitively priced	✓	Section 12.3 read with annexure 9.3
37.2 (d)	Fees and charges must be disclosed	✓	Monthly fact sheet
37.2 (e)	Passive and active strategies must be considered	✓	Section 9.1
37.2 (f)	No loyal bonus or other complex fee structure are permitted	✓	Section 12.3
37.2 (g)	Members must not be locked into the default portfolios	✓	Section 5.3
37.2 (h)	Default strategy must be reviewed	✓	Done annually with IPS review

Compliance with requirements of Regulation 39 – guided annuity strategy

Clause	Requirement	Compliance	IPS / other reference
39.1 (b)	Provident Funds that allow a member to elect an annuity must have a guided annuity strategy	✓	Section 5.4
39.2 (a)	Guided annuity strategy must be appropriate and suitable for membership	✓	Guided strategy is a life annuity / members can opt out and elect a living annuity
39.2 (b)	Objectives, asset class composition and performance must be communicated to members	✓	Options at retirement guide and annual pension increase
39.2 (c)	Annuities have reasonable and competitive fees	✓	Section 12.3, fees much lower than insurer costs
39.2 (d)	Fees and charges and impact on benefits must be disclosed	✓	Retirement guide
39.2 (e)	Members must be given access to retirement benefit counselling	✓	Retirement guide, retirement seminar
39.2 (f)	Guided annuity strategy must be reviewed	✓	Done annually with IPS review
39.3 (a)	Permits the Fund to provide a living annuity as part of the guided annuity strategy	n/a	Fund provides the option of a living annuity, but it is not the guided annuity strategy
39.3 (b)	Sustainability of drawdowns must be monitored and communicated	✓	Fund limits drawdown on an age related basis; annual review of drawdown with living annuitant

Compliance with Guidance Note 1 of 2019 (PFA) – Sustainability of investments

Please note that the provisions of clauses 5 and 6 are advisory and not a statutory requirement

Clause	Requirement	Compliance	IPS / other reference
4.1 (a)	When IPS was approved and by whom	✓	Signature page
4.1 (b)	Frequency of the IPS reviewed	✓	Section 13
4.1 (c)	IPS must set-out policy in respect of ESG including how monitoring will be done	✓	Section 11.1
4.1 (d)	Active ownership policy	✓	Section 11.2
4.3	Investment manager mandates and reporting requirements should include provisions around ESG	✓	Section 11, read with annexure 8.2
5.1 (a)	Make a copy of IPS or an abridged version thereof <u>on request</u> and at no cost to any member and the participating employer	✓	
5.1 (b)	IPS should available on the Fund's website	✓	
5.1 (c)	Annual inform members that the IPS is available on the website, noting material changes		
6.3	Annual financial statements should include confirmation members that have requested a copy of the IPS have received such, material changes to the IPS should be noted, which of the Fund's asset comply with this guidance note and market value of such assets		

King IV Principles – Supplement for Retirement Funds as it relates to investments

The principles below are embedded in the IPS.

Principle	Requirement	Compliance
1.3	The board should ensure that the retirement fund is a responsible corporate citizen	✓
2.1	The board should lead the value creation process by appreciating that strategy, risk and opportunity, performance and sustainable development are inseparable elements	✓
2.2	The board should ensure that reports and other disclosures enable stakeholders to make an informed assessment of the retirement fund and its ability to create value in a sustainable manner	✓

University of South Africa Retirement Fund

Annexures to the Investment Policy Statement

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Annexure 1: Investment mandate

The responsibility and authority of the Investment Committee is:

- To assist the Board in its evaluation of the adequacy and efficiency of the Investment Policy Statement
- To assist the Board in the evaluation of the investment strategy of the Fund and the implementation of the strategy.
- To assist the Board in its identification of various investment risks and to develop a risk mitigation strategy to ensure that the Fund manages the risks in an optimal manner.
- Setting investment policies (subject to the approval of the board) and guidelines, including those relating to the asset classes, asset allocation ranges, credit, concentration and liquidity exposures and prohibited and unduly risky investments;
- The Committee shall review the performance of the Investment Managers, any material changes made by Investment Managers, and shall in appropriate circumstances recommend to the board the termination of the services of the Investment Managers, and the appointment of any other external investment managers, in conjunction with the Board
- To assist the Board in ensuring that a formal risk assessment is undertaken at least annually.
- To assist the Board in identifying and regularly monitoring investment managers, investment strategy and investment related policies and key performance indicators to ensure that its decision-making capability and the accuracy of its reporting is maintained at a high level
- To confirm annually to the Board that the Committee reviewed the Investment policy statement (IPS) and still consider it appropriate or recommend changes to IPS for Board approval

The Board has delegated the following specific powers to the Committee:

- Recommendation to the Board for approval of the investment policy statement (“IPS”) of the Fund;
- Recommendation to the Board for approval of the investment strategy of the Fund.
- Review of services of Investment Consultant, and recommendation of approval of Investment consulting fees
- Recommendation to the Board for approval of the BEE and transformation policy of the Fund.
- To inform the Board on the asset and liability management of the Fund and report on any significant mismatches

Annexure 2: Investment return objective setting

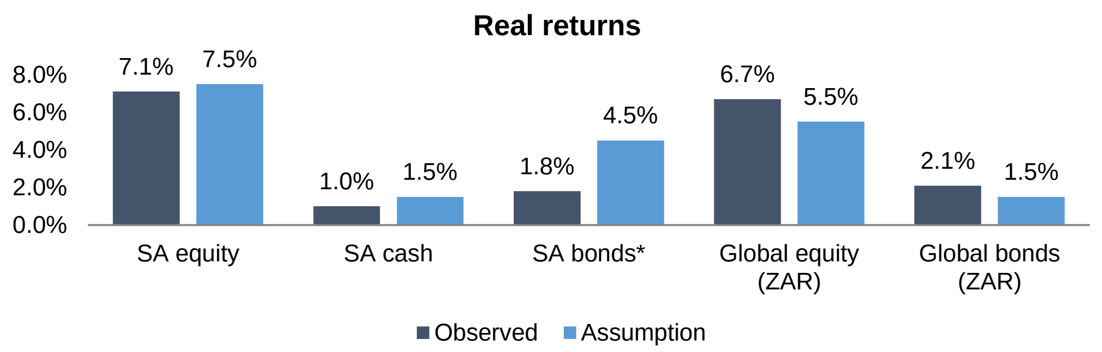
2.1 Process for setting the investment objectives

As per the Fund's Investment Policy Statement the return objective and risk constraint for each investment channel is set with reference to observed long term investment returns, the associated risk and correlation matrix for the main asset classes with a subjective overlay to take due account of current market conditions.

The three principal asset classes are equities, bonds and cash. All other asset classes are a derivative of one (or more) of these asset classes together with an appropriate risk premium (which could be positive or negative depending on the riskiness of the asset class compared to its South African equivalent).

2.2 Long term investment returns

The chart below shows the 120 year history of SA cash, bonds and equity *real returns* for the period 1 January 1900 to 31 December 2019. It also includes the same statistic for global equities in local currency and shows the long term asset class assumptions that Investment Committee has made.



* This is the assumption for nominal bonds. Data for inflation linked bonds is not available over this period and the assumption is made that such bonds will deliver a real return of 3.75% p.a. over the long term (i.e. the inflation risk premium is assumed to be 0.75% p.a.)

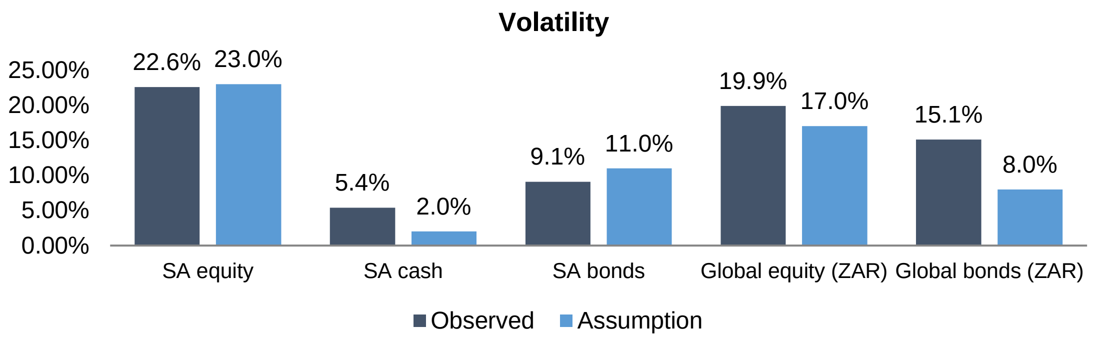
The Investment Committee has assumed that over the long term local and global equities will deliver a real return of some 7.50% and 5.50% p.a. respectively. The Investment Committee has taken the view that historical returns, with some adjustment, are a reasonable estimate of future returns except in the case of SA bonds. It should be noted that return of global assets in ZAR is some 1% p.a. higher than when expressed in US$ because the ZAR has depreciated by some 1% p.a. more than suggested by purchasing power parity as measured over the 120 year period.

The adjustment for SA equity returns takes into account, the risk premium for investing in South Africa. The 5.5% p.a. real return for global equities reflects and environment where real interest rates are expected to remain low.

The Investment Committee has assumed a future higher real return of 4.5% p.a. from longer dated South African government bonds versus the historic observed real return of 1.8% p.a. This assumption reflects a view that the political and social risks inherent to South Africa are higher and investors will demand a higher sovereign risk premium for SA bonds. The assumed future real return on SA cash at 1.50% p.a. slightly higher than the historic observation. The assumed real return for global bonds (1.5% p.a.) is below the observed long term average (2.1% p.a.) and takes into account expected lower GDP growth from developed world countries as their population ages.

2.3 Volatility

The chart below shows the 120 year historical volatility of SA cash, bonds and local and global equities, as well as the assumed future level of volatility.



The Investment Committee is of the view that the observed level of volatility of cash has been higher than is likely to be the case going forward. The more extensive use of monetary policy, with the concomitant application of more stable real cash returns, has resulted in greater stability of the inflation rate and this should reduce the volatility of cash returns.

The assumed long term volatility of SA equities (23% p.a.), SA bonds (11% p.a.) and global equities (17.0% p.a.) is reasonably close to the long term average. The observed volatility of global bonds mainly reflects exchange rate movement, with the assumption allowing for the lower risk (7.8% p.a.) of the underlying asset class.

2.4 Correlations

The table below sets out the 120 year historical correlations between the four main asset classes:

	SA equity	SA bonds	SA cash	Global equity	Global bonds
SA equity	100.0%				
SA bonds	37.7%	100.0%			
SA cash	10.1%	44.9%	100.0%		
Global equity	36.8%	5.2%	29.3%	100.0%	
Global bonds	2.3%	14.9%	54.0%	58.2%	100.0%

The Investment Committee has assumed slightly higher correlations between the asset classes prospectively for the following reasons:

- The quantum of financial assets (i.e. money that individuals have to invest) has increased over time and is expected to increase in future. As more money flows into public markets in search of returns the correlation between asset classes is likely to increase.

- With globalisation correlations are also likely to increase as the world becomes more interconnected.

Lower correlations have been assumed to global bonds as this asset class has “flight to quality” characteristics. The assumed level of correlation between the four main asset classes is set out below:

	SA equity	**SA bonds**	**SA cash**	**Global equity**	**Global bonds**
SA equity	100.0%				
SA bonds	45.0%	100.0%			
SA cash	5.0%	50.0%	100.0%		
Global equity	50.0%	10.0%	-5.0%	100.0%	
Global bonds	-15.0%	-15.0%	5.0%	45.0%	100.0%

Annexure 3: Characteristic member

The investment objectives adopted by the Fund should translate into the characteristic member receiving a retirement benefit of some 75% of his / her pensionable salary. The specific assumptions made in respect of the characteristic member are:

Retirement age:	65 years except in respect of the USAf members and disability claimants until 30 June 2015 where normal retirement age is 60
Service years:	35 years
Marital status:	Married with the husband being 3 years' older than wife
Spouse pension:	50% of member's pension before commutation of any pension
Retirement savings:	16% of pensionable salary
Salary progression:	4.0% p.a. above inflation up to age 40, 2% p.a. higher than inflation ages 40 – 49 and 1% p.a. above inflation from age 50 onwards
Basis retirement capital to pension:	6% p.a. investment returns (expected provision for pension increases 50% of inflation)

Annexure 4: Asset class features, expected return and risk

4.1 Factors affecting asset class prices

Cash offers clear diversification benefits because of the largely non-directional nature of its return. The return on cash is determined almost entirely by government policy around stimulating economic growth and/or managing inflation.

Government bonds offer diversification benefits because of their “flight to quality status” when there are significant concerns about economic growth provided that investors have confidence in the creditworthiness of the sovereign. The return from government bonds is primarily driven around government policy in the short to medium term as firstly government, via the Reserve Bank, can print or take money out of the economic system and thus set the level of interest rates. Secondly, the size of the government’s budget deficit (i.e. spending over taxation revenue) determines the amount of debt the country needs to raise with a higher deficit resulting in higher interest rates.

Over the long term interest rates are set by the economic performance of the country, with poorer performing countries having to offer higher interest rates to attract investment.

Whilst equity returns also depend on the level of interest rates, the return is more directly linked to economic growth. Economic growth is a function of government policy (e.g. taxation, labour law, ease of conducting business, competition law, etc.), natural resources, infrastructure, demographics, productivity gains and innovation. Within the equity asset class further diversification is possible because the fortunes of companies are driven by different factors (e.g. labour intensity, capital required, nature of the demand for the product and services, competition etc.) Furthermore, the equity return of a specific company will be influenced by the quality of its management.

4.2 Risk premiums

In addition to asset class prices being driven by different factors, asset class prices are affected by the premium the market offers for taking on specific risks. The various *economic risk premiums* are described in the table below:

Premium	Description
Inflation risk premium	Compensation against the risk having bought a fixed rate bond, interest rates rise as a consequence of an expectation of higher inflation.
Term premium	Compensation against the risk that interest rates rise for a bond that has been issued at a fixed interest rate for reasons other than an increase in inflation expectations. In general, the longer the term of the bond, the higher the term premium required.
Sovereign risk premium	This is the extra return that needs to be offered for the risk that the government will default on its debt. The more creditworthy the government is assessed to be, the lower the sovereign risk premium
Credit premium	Compensation for the risk that the corporate counterparty who issued the bond defaults on its debt. The quantum of the credit premium depends on the security provided against the debt and the market’s assessment of the ability of the corporate to repay its debt. The credit premium is also linked to economic growth – in times when economic growth is strong, company profits make it more likely that the company will repay its debt.

Premium	Description
Equity risk premium	This is the compensation that equity holders receive for standing last in line to share in the profits of the company and for being exposed to all the economic, social and legislative factors that will affect equity returns.
Illiquidity premium	If an asset is less easily traded, investors need to be compensation for the risk that if they were forced to sell the asset, it would need to be at a low price because there would be very few buyers.
Insurance premium	If the Fund is prepared to provide insurance, it needs to earn an insurance premium as compensation for the risk that the claims under the insurance it provides are higher than expected.

The table below shows the risk premiums that are a function of the *"governance budget"* of the Investment Committee and so are more qualitative in nature

Premium	Description
Long term premium	This is the compensation that investors may receive for adopting a longer term investment horizon than other investors. It is sometimes also called the discomfort premium because of the patience and fortitude the investor requires to maintain a long term focus in spite of significant short term under-performance.
Complexity premium	Investors that allocate capital to more complex and/or less well known asset classes need to be compensate for greater risk of making an error.
Skill premium	Investors that appoint what is assumed to be skilful investment managers need to be compensated for the risk that they assess the skill of the manager incorrectly.

4.3 Allowable asset classes – factors driving returns and risk premiums

The table below sets out the allowable asset classes of the Fund, together with the factors driving the returns and the risk premiums targeted. Also shown is whether the asset class is included in the Reference Portfolio:

Asset class	Factors driving returns	Risk premiums targeted
Cash	Government policy	Nil, as this is the risk free rate (but negative real returns are possible if government keeps interest rates low).
Sovereign index linked bonds	Government policy, creditworthiness, "flight to quality" episodes	Sovereign and term premiums
Sovereign nominal debt	As per above plus inflation expectations	Sovereign, inflation and term premiums
Corporate debt (investment grade)	Creditworthiness and GDP growth	Credit and term premiums with inflation risk embedded in term premium (fixed rates). If floating rates then no term premium. There may also be exposure to the illiquidity premium.
Corporate debt (non-investment grade)	As per the above, but these factors have greater impact	Usually floating rates so credit premium and illiquidity premium.

Asset class	Factors driving returns	Risk premiums targeted
Commodities	Global GDP growth	Exposure to economic growth and a hedge against inflation
Listed property	GDP growth mainly; lower risk than equities because of higher initial yield	Equity and possibly the illiquidity premium
Listed equities	GDP growth and company specific factors	Equity and possibly the illiquidity premium
Listed infrastructure	GDP growth, but more secure cash flows because of take-off agreements and contractual inflation linkage	Equity risk premium

4.4 Return, risk and correlation assumptions

The table below sets out the expected return and risk for the asset classes:

Asset class	Expected real return	Volatility
SA equities	7.50%	23.0%
SA listed property	8.50%	27.0%
SA nominal bonds	4.50%	11.0%
SA inflation linked bonds	3.75%	9.0%
SA cash	1.50%	2.0%
Global equities (ZAR)	5.50%	17.0%
Global listed property (ZAR)	6.00%	19.0%
Global listed infrastructure (ZAR)	5.00%	16.00%
Global bonds (ZAR)	1.50%	8.0%

The table below sets out the assumed correlation between the assets classes, based on a combination of historical correlations and a subjective overlay. In all cases the assumed correlation is higher than the observed statistic.

	SA equity	SA property	SA bonds	SA ILB	SA cash	Global equity	Global Infra	Global Property	Global bonds
SA equity	100.0%	55.0%	45.0%	25.0%	5.0%	50.0%	30.0%	40.0%	-15.0%
SA Property	55.0%	100.0%	60.0%	30.0%	10.0%	15.0%	10.0%	20.0%	-10.0%
SA bonds	45.0%	60.0%	100.0%	45.0%	50.0%	10.0%	-5.0%	-5.0%	-15.0%
SA ILB	25.0%	30.0%	45.0%	100.0%	20.0%	5.0%	-5.0%	-1.0%	-10.0%
SA cash	5.0%	10.0%	50.0%	20.0%	100.0%	-5.0%	-15.0%	-10.0%	5.0%
Global equity	50.0%	15.0%	10.0%	5.0%	-5.0%	100.0%	80.0%	80.0%	45.0%
Global Infra	30.0%	10.0%	-5.0%	-5.0%	-15.0%	80.0%	100.0%	75.0%	60.0%
Global Property	40.0%	20.0%	-5.0%	-1.0%	-10.0%	80.0%	75.0%	100.0%	35.0%
Global bonds	-15.0%	-10.0%	-15.0%	-10.0%	5.0%	45.0%	60.0%	35.0%	100.0%

4.5 Return and risk assumptions for alternative asset classes

The table below sets out the return and risk assumptions for the alternative asset classes that will be included in the Strategic Asset Allocation:

Asset class	Expected real return	Volatility
Emerging Market Equities	8.5%	20.0%
Africa ex-SA equities	12.0%	28.0%
SA credit (average credit A^+)	2.0%	4.0%

The mandate given to the equity managers allows for the investment in commodities and in certain circumstances unlisted equities. Allocations to such asset classes is limited and allowable as “off benchmark” allocations on the expectation that they will improve the risk adjusted return of the manager.

Managers that are given multi-asset class mandates (applicable to the Stable Portfolio) may also make a small allocation to hedge funds.

Annexure 5: Asset class benchmarks

As per the IPS, in the case of listed assets, a published market capitalisation index which is a reasonable representation of the opportunity set will be used. In the case of unlisted assets, the benchmark will be set with reference to the underlying nature of the asset class. The table below sets out the benchmark adopted for each allowable asset class

Asset class	Benchmark
SA equities	FTSE / JSE Free Float Capped All Share Index (CAPI) (J303T) other than for the SA equity activist manager where the benchmark is the FTSE / JSE Mid Cap Index.
SA listed property	SA listed property index (ALPI) (J803T) *
SA nominal bonds	Bond Exchange South Africa, All Bond Index (ALBI)
SA inflation linked bonds	Bond Exchange South Africa, Inflation-Linked Government Bond Index (IGOV)
SA cash (in Money Market Portfolio)	STEFI Composite Index
Global equities	MSCI All Country World Index (MSCI ACWI) from 1 January 2013 onwards**
Emerging Market Equities	MSCI Emerging Market Index (MSCI EMI)
Global listed property	FTSE / EPRA NAREIT Developed Index
Global bonds	Barclays Global Aggregate Index
Global listed infrastructure	FTSE Global Core Infrastructure (50/50) Net
SA credit (average credit A^+)	STEFI 3-month index plus 1.00% p.a.
African ex-SA equity	MSCI EFM Africa ex-SA index

* The benchmark was previously the SA listed property index (SAPY) (J253T) (for Meago until 1 February 2019 and Ninety One until 1 October 2018)

** prior to 1 January 2012 MSCI World Index

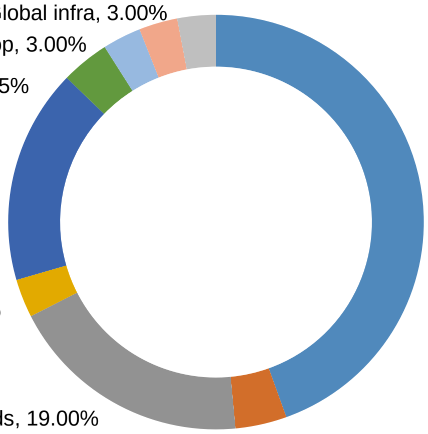
Annexure 6A: Inflation Target Portfolio

Investment objective

The investment objective of the Inflation Target Portfolio is to earn a return that exceeds headline inflation by 6% p.a. net of all manager fees over rolling measurement periods of 7 years. The portfolio will be managed with an estimated variability as measured by standard deviation of 14%.

Strategic asset allocation and re-balancing rules

The chart below sets out the strategic asset allocation of the Inflation Target Portfolio once the global listed infrastructure ("GLI") investment has been implemented – until this is done the amount allocated for GLI will be invested in global bonds.



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Notes

* 2.5% of the SA equities is allocated to the shareholder activist strategy.

The various asset classes will be managed according to the manager configuration described in Annexure 7 below. The portfolio will re-balance to its strategic asset allocation according to the following rules:

Asset class	Central allocation	Allowable range
SA equity	42.0%	38.00% - 46.00%
SA equity activist	2.5%	1.50% - 2.50%
SA property	4.0%	2.00% - 6.00%
SA bonds and cash including renewable energy debt	22.0%	17.00% - 27.00%
Global equity – developed world	16.75%	12.75% - 20.75%
Global equity – emerging markets	3.75%	2.0% - 5.5%
Global listed infrastructure	3.0%	1.0% - 5.0%
Global listed property	3.0%	1.0% - 5.0%
Africa ex-SA equities	3.0%	1.0% - 5.0%

The international exposure (ex-Africa) is limited to a maximum of 30% of the total Fund assets, although temporary breaches are allowed on account of market movements provided that they are corrected within 12 months of first having occurred (unless the SARB grants an extension). The exposure to equities is limited to 75% of the Inflation Target Portfolio.

The international exposure to Africa (ex-South Africa) assets is limited to 10% of total Fund assets, with a 12 month period being allowed to correct any breach.

Allowing for manager skill

As per the IPS the Fund will employ active managers – based on the assumed level of manager skill and the strategic asset allocation (SAA), the actual performance of the portfolio is expected to out-perform the SAA by 0.75% p.a. with a tracking error of no more than 3.5% p.a. to the SAA. Thus, the target Information Ratio (“alpha ÷ tracking error) is 0.20 or 0.20% return for every 1% of risk taken relative to the SAA.

Key result areas for the Inflation Target Portfolio

- Out-perform inflation by 6% p.a. over a rolling 7 year period with a variation of return of no more than 14%.
- Out-perform the strategic asset allocation by 0.75% p.a. with a tracking error to the SAA of no more than 3.5% p.a. implying an information ratio of 0.20.

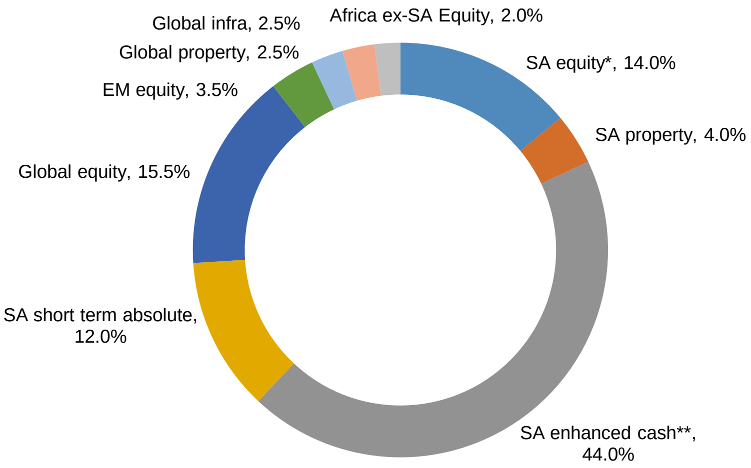
Annexure 6B: Stable Portfolio

Investment objective

The investment objective of the Stable Portfolio is to earn a return that exceeds headline inflation by 3.5% p.a. net of all manager fees over rolling measurement periods of 3 years. The portfolio will be managed with an estimated variability as measured by standard deviation of 7%.

Strategic asset allocation and re-balancing rules

The chart below sets out the strategic asset allocation of the Stable Portfolio once the global listed infrastructure investment has been implemented – until this is done, the amount allocated for this asset class will be invested in global equities.



* 1.5% of the SA equities is allocated to the shareholder activist strategy.

** The enhanced cash allocation will be invested some 20% in vanilla cash strategies and 80% in enhanced cash using credit with an average credit rating of at least A+

The portfolio will re-balance to its strategic asset allocation according to the following rules:

Asset class	Central allocation	Allowable range
SA equity	12.5%	8.0% - 17.0%
SA equity activist	1.5%	0,5% - 1.5%
SA property	4.0%	2.0% - 6.0%
SA enhanced cash	44.0%	40.0% - 48.0%
SA absolute return	12.0%	9.0% - 15.0%
Global equity	15.5%	11.5% - 19.5%
Emerging markets	3.5%	2.0% - 5.0%
Global listed property	2.5%	1.0% - 4.0%
Global listed infrastructure	2.5%	1.0% - 4.0%
Africa ex-SA equities	2.0%	1.0% - 3.0%

The international exposure (ex-Africa) is limited to a maximum of 30% of the total Fund assets, although temporary breaches are allowed on account of market movements provided that they are corrected within 12 months of first having occurred. The international exposure to Africa (ex-South Africa) assets is limited to 10% of total Fund assets, with a 12 month period being allowed to correct any breach.

The various asset classes will be managed according to the manager configuration described in Annexure 7.

Allowing for manager skill

The Fund will employ active managers – based on the assumed level of manager skill and the strategic asset allocation (SAA), the actual performance of the portfolio is expected to out-perform the SAA by 0.5% p.a. with a tracking error of no more than 2.5% p.a. to the SAA. Thus, the target Information Ratio ("alpha ÷ tracking error) is 0.20.

Key result areas for the Stable Portfolio

- Out-perform inflation by 3.5% p.a. over a rolling 3 year period with a variation of return of no more than 7%.
- Out-perform the strategic asset allocation by 0.5% p.a. with a tracking error to the SAA of no more than 2.5% p.a. implying an information ratio of 0.20.

Annexure 6C: Income Protection Portfolio

Investment objective

The investment objective of the Income Protection Portfolio is to earn a return that exceeds headline inflation by 1.5% p.a. net of all manager fees over rolling measurement periods of 12 months with a risk measured by standard deviation of 2.5% p.a.

Strategic asset allocation

The portfolio will be invested in high quality money market instruments and the benchmark is the STEFI Composite Index. 30% of the Portfolio will be invested in more illiquid credit instruments that have an average credit rating of AA.

The portfolio will re-balance to its strategic asset allocation according to the following rules:

Asset class	Central allocation	Allowable range
SA cash	70.0%	66.0% - 74.0%
SA credit (average A^+)	30.0%	26.0% - 34.0%

The various asset classes will be managed according to the manager configuration described in Annexure 7.

Allowing for manager skill

The Fund will employ active managers – based on the assumed level of manager skill and the strategic asset allocation (SAA), the actual performance of the portfolio is expected to out-perform the SAA by 0.5% p.a. with a tracking error of 1.0% p.a. to the SAA. Thus, the target Information Ratio (“alpha ÷ tracking error) is 0.5.

Key result areas for the Income Protection Portfolio

- Out-perform inflation by 1.5% p.a. over any one year with a variation of return of no more than 2%.
- Out-perform the strategic asset allocation by 0.5% p.a. with a tracking error to the SAA of 1.0% p.a. implying an information ratio of 0.50.

Annexure 6D: Pensioner Portfolio

Investment objective

The investment objective for the Pensioner Portfolio is to track the pensioner liability priced off the SA government nominal and real bond curve allowing for future pension increases on 1 April each year of 60% of inflation with a tracking error of no more than 4.0% p.a. This 60% is higher than the 50% of inflation set-out in the Fund's pension increase policy; to maintain the principle of conservatism, the policy will remain 50% of inflation. To the extent that retirees may in future elect a pension with targeted pension increases of 100% of inflation, a separate investment objective will be defined for this category.

The risk budget of 4.0% p.a. is used mainly to fund investments in global growth assets, with the expected additional return from these asset classes, together with yield enhancements on the Matched Portfolio, being sufficient so that the Fund can target pension increases of 75% of inflation over a 10 year period, which is well above the communicated increase policy of 50% of inflation.

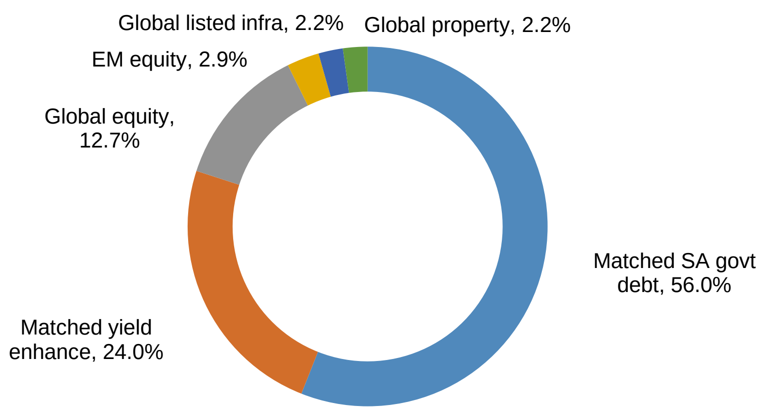
Liability Benchmark Portfolio

The Liability Benchmark Portfolio is the mix of SA government issued nominal and inflation linked bonds which will closely match the schedule of pensioner cash flows allowing for future pension increases of 60% of inflation on 1 April each year. Based on government bond yields at as 30 September 2020, this portfolio is expected to deliver a real return of between 4% and 4.5% p.a.

Strategic asset allocation

The Strategic Asset Allocation is apportioned 80% to the Matched Portfolio and 20% to the Growth Portfolio.

Within the Matched Portfolio up 35% may be invested in renewable energy debt (which may be JIBAR or inflation related) and high quality credit JIBAR linked instruments to enhance the yield. The Growth Portfolio will include an allocation developed world and emerging market equities, global listed infrastructure and property. The chart below sets out the SAA.



The targeted return above the Liability Benchmark Portfolio by the above described use of the risk budget is expected to be 1.0% p.a. If achieved, the Fund should be able to grant pensioners increases of 75 of inflation over periods of 10 years, noting that this outcome is not guaranteed.

Re-balancing rules

The various asset classes will be managed according to the manager configuration described in Annexure 7 below. In cases of over- or underweight, the allocation will be rebalanced back to the midpoint between the central allocation and upper or lower limit. The portfolio will re-balance to its strategic asset allocation according to the following rules:

Asset class	Central allocation	Lower limit (LL)	Upper limit (UL)
Matched Portfolio – SA government bonds	56.0%	52.0%	60.0%
Matched Portfolio – yield enhancement	24.0%	18.0%	22.0%
Global equity	12.7%	9.7%	15.7%
EM equity	2.9%	0.9%	2.9%
Global listed property	2.2%	1.2%	3.2%
Global listed infrastructure	2.2%	1.2%	3.2%

The minimum allocation to the Matched Portfolio (SA government and yield enhancement) is 77%. The maximum exposure to global growth assets is 23%.

Key result areas for the Pensioner Portfolio

- Out-perform of the Liability Benchmark Portfolio by 1% p.a. with a tracking error of no more than 4% p.a. over a 10-year period.

Annexure 7: Manager Configuration

7.1 Approach

The approach of the Investment Committee is firstly to pick skilful investment managers and secondly, if possible, to achieve diversification between the approaches of the managers. The limited opportunity set for SA equities inevitably results in manager configuration for this asset class where the managers adopt a materially similar approach.

Importantly this also means that the manager configuration is not a pure "core / satellite" approach, nor a style (or market capitalization) blended approach, although the particular mix of managers at a point in time may give the portfolio some core / satellite or style blended characteristics.

Furthermore, the extent to which the Investment Committee will allow managers to deviate from the benchmark (i.e. take tracking error risk) depends on the extent to which the Investment Committee has confidence in the skill of the managers – high tracking error mandates will only be awarded to managers where the Investment Committee has a high degree of confidence in the manager's skill.

Finally, the Investment Committee recognizes that it is generally not possible to be 100% certain about the skill of the manager for asset classes such as equities and bonds. To mitigate manager risk, the Fund will appoint more than one manager for such asset classes.

7.2 SA equity class

The table below describes the manager investment thesis, target allocation, performance target (expected alpha net of fees relative to the CAPI over *five years*) and budgeted tracking error of the SA equity managers excluding Value Capital Partners (see below).

Investment approach	Manager	Allocation	Allowable range	Alpha target	Tracking error
Indexation	Sanlam	25.0%	21% – 29%	0.0%	0.1%
Fundamental stock picking including mid cap shares	Visio Capital	25.0%	21% – 29%	1.5%	6.0%
Fundamental research in mid-cap and small cap shares with focus on assessing intrinsic value. Large cap part of the portfolio actively traded on a relative value basis	Abax	30.0%	26% – 34%	1.5%	6.0%
Relative value approach controlling risk back to the benchmark	Truffle Asset Management	20.0%	16% – 24%	1.5%	6.0%
Aggregate return and risk budget after assumed manager diversification benefits				**1.1%**	**3.5%**

The SA equity building block is expected to achieve an Information Ratio ("alpha" ÷ tracking error) of some 0.30 on account of the value of diversification between different investment approaches. A 5-year measurement period is chosen as empirical evidence (Fama and French) suggests that there is about a 90% chance that the company's share price will cycle through its intrinsic value within 5 years. In addition, the Fund has appointed an activist SA equity manager in the form of Value Capital Partners.

<u>Value Capital Partners</u>

The Fund also has a small allocation to Value Capital Partners (VCP). This manager follows a shareholder activist approach and their performance is benchmarked against the FTSE / JSE Mid Cap Index. The portfolio is concentrated and will consist of 10 to 12 counters and as such no tracking error constraint will be imposed.

The performance objective for VCP is to out-perform the FTSE / JSE Mid Cap Index by 4% p.a. net of fees. The strategy is currently accessed via a Qualified Investor Hedge Fund structure.

7.3 Global equities

Here the opportunity set of long term intrinsic value managers is much greater and all the offshore equities will be managed by intrinsic value managers, noting that the underlying investment thesis of the managers will differ. The table below sets out the manager configuration for the global equity building block – again the alpha target is net of fees and over 5-years

Investment approach	Manager	Allocation	Allowable range	"Alpha" target	Tracking error
Indexation to be fully implemented in January 2021	State Street	34.0%	30% to 38%	0.0%	0.1%
Fundamental research, intrinsic value assessment, long term focus, contrarian bias, some illiquidity, low portfolio turnover (± 30% p.a.)	Orbis	11.0%	8.0% to 14.0%	1.5%	8.0%
Ultra-high quality firms who are assessed to have earnings above that which the market expects	Lindsell Train	22.0%	19.0% to 25.0%	1.5%	8.0%
This manager seeks to add value by investing on a thematic basis in high quality companies with above average earnings growth prospects. The manager can have a significant cash holding if they cannot identify companies with an expected return in the 12% to 15% p.a. range	Veritas	22.0%	19.0% to 25.0%	1.5%	6.0%
Fundamental research, intrinsic value assessment, exposure to mid-cap and small-cap shares in a highly diversified fund , long-term time horizon and low portfolio turnover	Hosking Partners	11.0%	8.0% to 14.0%	1.5%	6.0%
Aggregate return and risk budget after assumed manager diversification benefits				**1.0%**	**2.5%**

The global equity building block is expected to achieve an Information Ratio ("alpha" ÷ tracking error) of around 0.40 on account of the value of diversification between different investment approaches.

7.4 Blend of emerging market global equity managers

The portfolio has exposure to a diversified blend of EM via the Sygnia Life license. The underlying manager structure is as the table below:

Manager	Central weight	Investment thesis
Coronation Fund Managers	20%	Quality growth
Global Quality Growth (GQG)	30%	Quality growth

Manager	Central weight	Investment thesis
Pzena	20%	Quality value
Sands Capital	320%	Growth orientated manager

The target out-performance of the MSCI EM Index is 1.5% p.a. net of fees and the expected tracking to the benchmark is 5.5% p.a.

7.5 Listed global property

The investment manager for the listed real estate is Resolution Capital and the target performance for this investment is the FTSE EPRA/REIT Developed Index + 1.0% net of fees (i.e. alpha of 1% p.a. in excess of the benchmark) with a tracking error of 5% p.a. The manager seeks to invest in high quality listed property companies, with strong balance sheets and high levels of corporate governance. The investment approach could be described as quality growth.

7.6 Global listed infrastructure

To be completed once the Board has made its decision.

7.7 SA bonds

The Investment Committee has a preference for a manager that can add value across a wide range of fixed interest strategies (i.e. duration, credit, curve shape changes and pricing anomalies). The Fund will appoint at least two managers to diversify manager risk.

Investment approach	Manager	Allocation	"Alpha" target net of fees over 3 years	Tracking error
Flexible mandate allowing manager to exploit opportunities in duration (value based approach to interest rate movements), credit, limited off benchmark fixed interest (up to 10%), trading and pricing anomalies	Ninety One	50%	0.75%	2.0%
Mainly a credit mandate, but with limited discretion to take off benchmark fixed interest (up to 10%)	Prudential	50%	0.75%	2.0%
Aggregate return and risk budget after assumed manager diversification benefits			0.75%	1.5%

A 3-year measurement period is chosen as this represents the typical bond cycle.

7.8 SA cash and enhanced cash mandates

The Fund uses the following cash and enhanced cash strategies:

Investment approach	Manager	"Alpha" target net of fees over 1 year	Tracking error
Standard (or vanilla) cash strategies	Ninety One	0.5%	1.00%
Enhanced cash using credit with average credit rating AA	Ninety One Credit Income	0.5%	2.00%

7.9 SA listed property

The table below sets out the manager configuration for the global equity building block:

Investment approach	Manager	Allocation	"Alpha" target net of fees over 5 years	Tracking error
Fundamental research and in-depth knowledge of the property market	Ninety One	65%	0.75%	3.0%
Fundamental research and in-depth knowledge of the property market	Meago	35%	0.75%	3.0%

A five year measurement period has been chosen for the same reasons as for SA equities.

7.10 SA absolute return

The Investment Committee has decided to appoint an investment manager that targets a real return of 4% p.a. whilst aiming to avoid a negative return over any 24 month period. The manager will aim to select the asset class combination that he/she assesses to have the best chance of meeting this performance and risk constraint objective, the so-called target return approach.

Investment approach	Manager	Allocation	Real return target over 5 years	Capital protection constraint
Multi-asset class strategy with the aim of avoiding a negative return over any 18 month period	Coronation Asset Management	100.0%	4% p.a.	No negative return over any 24 month period (note this is not guaranteed)

Note the return of this portfolio is benchmarked against a composite index which consists of a 60% exposure to SA equities (CAPI benchmark) and 40% SA cash (SteFi Composite benchmark). The manager is expected to out-perform this composite benchmark by 0,75% p.a. with a tracking error of no more than 5%.

7.11 High yield debt

The Fund has a legacy investment in the Ninety One Credit Opportunities Fund which is in the wind-down phase with capital being returned to investors.

7.12 Africa ex-SA equity

The investment manager for this mandate is Steyn Capital and the target level of out-performance of the benchmark (the MSCI EFM Africa ex-SA index) is 3% p.a. net of fees. The manager follows an absolute return approach with a focus on buying high quality companies. The tracking error is expected to be in the range of 10% to 12% p.a.

7.13 Liability driven investment for the Pensioner Portfolio

Old Mutual has been appointed as the investment manager for the liability driven investment strategy of the Pensioner Portfolio. Old Mutual will manage 80% of the Pensioner Portfolio assets (the Matched Portfolio), with the key mandate clauses being:

- The manager must hedge 60% of inflation pension increases on each 1 April for the 80% of asset allocated to them (i.e. the portfolio is hedging 60% of the inflation risk on 80% of the assets)

- They are required to hedge 100% of the interest rate risk with 80% of the assets with a target tracking error of no more than 2% p.a. To illustrate the point, assume that at a time the value of the pensioner liabilities (providing for pension increases) is 100 units and Old Mutual has assets of 80 units. Assume now that interest rates increase, and the value of the liabilities reduces to 97 units; the expectation is that the value of the Old Mutual units will fall to 77 units (by more or less the same 3 units).

- Old Mutual must deliver the monthly pension payments as per the pensioner payment schedule the Fund has provided to them.

- A minimum of 65% of the Matched Portfolio must be invested in SA government bonds; The balance of the portfolio may be invested in yield enhanced strategies. The table below describes the allowable strategies

Manager	**Strategy**	**Allocation % of MP**	**Expected yield pick-up (net of all costs)**
Old Mutual LDI	SA government nominal and inflation linked bonds(1)	65%	0% p.a.
<u>Yield enhancements</u>			
Vantage Green-X Note I	Portfolio of renewable energy debt assets with a JIBAR related return (2)	4%*	2.5% p.a.
Vantage Green-X Note II	Portfolio of renewable energy debt assets with an inflation linked return (2)	3%	1.0% p.a.
Old Mutual Credit Fund	Diversified portfolio of high quality credits	0%-20%	0.5% p.a.
Credit bonds	SOE inflation linked bonds with government guarantee / 3-10 year bank replica notes / high quality corporate inflation linked bonds	0% - 10%	1.0% p.a.
Targeted yield enhancement			0.4% p.a.

Notes:

(1) Included in the assets are a structured deposit with ABSA which runs-out in March 2022 and a swap with Nedbank. The Fund will receive the last pension payment proceeds from the Nedbank swap in December 2023 but will continue to hold the R202 and pay the coupon and repayment proceeds to Nedbank until this bond matures. The swap will be valued as the present value of the pension payment proceeds priced off the bond curve. These notes are collateralised by SA government bonds and are therefore counted as government debt.

(2) The Vantage Green-X Note 1 is fully drawn, and the investment is close to new money. The 6% allocation is at 30 September 2020 and it will decrease as a percentage of the Pensioner Portfolio over time. The Vantage Green-X Note II is still in the draw down stage and the 3% allocation is as at 30 September 2020.

The maximum allocation to renewable energy debt is 15% of the Matched Portfolio with the maximum exposure to any instrument being limited to 5%.

Annexure 8: Investment Manager mandates

8.1 Mandate restrictions

This section deals with the principal risk areas the Investment Committee will seek to control – the specific limitations and conditions will be detailed in the agreement with the appointed investment manager. The mandate given to each local investment manager will require that the particular mandate be managed on a Regulation 28 compliant basis for the particular asset class.

<u>SA equities and SA property</u>

The mandate given to the investment managers that manage the SA equity class on behalf of the Fund will include restrictions on:

- The maximum deviation from the benchmark and tracking error using a suitable risk model (e.g. BARRA)
- No borrowing (leverage) is allowed where "leverage" means that the Fund can incur a loss greater than the amount it has invested
- Use of derivatives consistent with the requirements of Regulation 28
- Compliance with the Regulation 28 provisions for the asset class
- Minimum liquidity requirements of the portfolio
- Maximum exposure to any one share in the total portfolio (i.e. Inflation Target, Stable and Pensioner Portfolios), taking into account the prudential guideline of Regulation 28 may not exceed 15%
- Holdings where the investment manager holds more than 25% of the issued share capital of the company across its entire client base
- Investment in the shares of the investment manager and its associated companies
- Scrip lending
- Investment in unlisted securities
- Underwriting of issues

<u>SA bonds (excluding the high yield debt)</u>

The mandate given to the investment managers that manage the SA bond class on behalf of the Fund will include restrictions on:

- The maximum deviation from the benchmark and tracking error using a suitable risk model
- Use of derivatives consistent with the requirements of Regulation 28
- Compliance with the Regulation 28 provisions for the asset class
- No borrowings (leverage) is allowed where "leverage" means that the Fund can incur a loss greater than the amount it has invested
- Minimum liquidity requirements of the portfolio
- Investment in non-benchmark and unlisted debt instruments
- Credit quality

- Maximum exposure to a particular issuer
- Deviation (in years) from the modified duration of the benchmark
- Investment in the instruments of the investment manager and its associated companies
- Scrip lending
- Underwriting of issues

Money market instruments

The mandate given to the investment managers that manage the SA money market on behalf of the Fund will include restrictions on:

- Maximum term of instrument (24-months)
- Credit quality
- Minimum liquidity requirements of the portfolio
- Use of derivatives
- No borrowings (or leverage) is allowed where “leverage” means that the Fund can incur a loss greater than the amount it has invested
- Compliance with the Regulation 28 provisions for the asset class
- Investment in the instruments of the investment manager and its associated companies

Global equities (Developed World and Emerging Markets)

The Fund’s investment in global equities will be via a collective investment scheme (i.e. a pooled arrangement) because the assets are too small to negotiate a segregated portfolio. The consequence of this is that the Fund can only rely on the risk constraints and limitations set out in the Prospectus of the relevant CIS (collective investment scheme). The Fund will require that *inter alia* the following matters are covered in the prospectus:

- Maximum exposure to emerging markets
- Restrictions on the exchanges in which the manager may deal
- Investment in unlisted securities
- Maximum exposure to any one Company (this may vary by market capitalization)
- Maximum exposure to a particular country (or geographic region)
- Maximum exposure to a particular industry or sector
- Maximum exposure to a particular currency
- Use of borrowings (or leverage) where “leverage” means that the Fund can incur a loss greater than the amount it has invested
- Restrictions on the use of derivatives and currency hedging
- Restrictions on scrip lending (including restrictions on counter-party risk)

Global listed property and core infrastructure

The Fund will be investing in the comingled (or pooled) vehicles and so the Fund would need to accept the specific terms set out in the prospectus of the applicable fund. The Fund will require that *inter alia* the following matters are covered in the prospectus:

- Allowable cash
- Investment in any one company
- Number of holdings
- Overweight/underweight to any country
- Exposure to emerging markets
- Unlisted shares
- Use of derivatives
- Maximum % of the issued share capital of any one company
- Investment in shares of own company or associated company

Absolute return strategies

The mandate given to the investment managers that manage the SA Absolute strategies on behalf of the Fund will include restrictions on:

- Compliance with the Regulation 28 provisions as applied to South African asset classes
- No borrowing (leverage) is allowed where "leverage" means that the Fund can incur a loss greater than the amount it has invested
- Use of derivatives consistent with the requirements of Regulation 28
- Credit quality in respect money market and bond holdings
- Minimum liquidity requirements of the portfolio

SA investment grade and non-investment grade specialist credit strategies

The Fund's investment in SA investment grade and non-investment grade credit will be via a pooled arrangement. The consequence of this is that the Funds can only rely on the risk constraints and limitations set out in the Prospectus of the relevant pooled arrangement. The Funds will require that inter alia the following matters are covered in the prospectus:

- Extent of diversification required
- Maximum holding in any one instrument
- Investment in the shares of the investment manager and its associated companies

High yield debt: Renewable energy

The investments are in specific wind and solar energy projects in South Africa. The returns from these projects have a favourable return and risk profile in that the tariffs (and escalation of these tariffs) are set by legislation, there is Power Purchasing Agreement in place and the demand for energy is reasonable stable. The projects are granted on a 20 year concession basis.

Africa ex-SA equity

The Fund will be investing in the comingled (or pooled) vehicles and so the Fund would need to accept the specific terms set out in the prospectus of the applicable fund. The table below sets out the maximum limits that the Fund would be prepared to accept:

Mandate provision	Restriction (% of market value of asset class where applicable)
Allowable cash	≤ 10%
Investment in any one company	≤ 15%
Number of holdings	≥ 15 counters
Overweight / underweight to any country	≤ 20%
Unlisted shares	≤ 5%
Off benchmark positions (mainly cash and unlisted shares)	≤ 15%

8.2 Regulation 28 and ESG requirements

The investment manager must apply the principles set out in Regulation 28, paragraph 2(c) (v) to (ix) which detail the due diligence and ESG considerations the manager must take into account before investing in a particular counter.

The obligation of the manager to actively engage with its investee companies including on report on how it has voted and complied with the principles of Code of Responsible Investing in South Africa (CRISA) and King IV governance principles.

Annexure 9: Monitoring

9.1 Qualitative assessment of investment managers

The investment consultant will provide their qualitative rating of the Fund's investment managers at each meeting. The rating covers the assessed skill of the manager, soft risk issues (i.e. organisational or personal issues which may affect future performance) and the expected deviation of the manager from the benchmark.

The Investment Committee will review the appointment of any manager or the allocation to the manager where it considers that there are material negative events affecting the manager and/or where the investment consultant has down-graded its assessed skill of the manager.

9.2 Performance reporting

The investment consultant will produce a quarterly report covering the following matters:

- An overview of market returns
- Market value of assets and actual asset allocation compared to the strategic asset allocation per investment channel
- Performance of each investment channel relative to its primary investment objective and strategic asset allocation
- Key risk statistics for each of the investment channels (upside and downside capture, downside deviation, tracking error, Sortino ratio and information ratio)
- Assessment of investment manager performance relative to their benchmarks together with key risk statistics (upside and downside capture, downside deviation, tracking error, Sortino ratio and information ratio)
- Any recommended changes to the strategy and/or manager line-up

9.3 Expense monitoring

The Investment Consultant's report will include details of the manager fees, estimated trading costs and statutory fees. This information is converted into a total expense ratio (TER) for each investment channel.

9.4 Regulation 28 monitoring

The Fund will comply with statutory requirements in respect of Regulation 28 and made the necessary submission to the FSCA and SARB.

Annexure 10: Comingled Vehicles

Conditions applicable

The following conditions are applicable to any investment in a comingled vehicle (e.g. collective investment scheme or insurance policy)

- The comingled fund must be registered in a jurisdiction where there is strong regulatory oversight of such arrangements.
- The firm in whose pooled fund the Fund’s assets are invested is one of high reputation and who is expected to stand behind the pool.
- The assets must be ring-fenced for the exclusive benefit of the investors in the pool and there is no risk that losses elsewhere can impact on the returns of the pool.
- Independent reporting, at least on a yearly basis, by a reputable auditing firm that the pool holds the said assets and the market value thereof is fairly reflected.
- To the extent that the pooled vehicle holds unlisted instruments these must be valued by an independent expert who has the necessary experience and qualifications to perform such a valuation. Alternatively, the instruments may be valued in accordance with a documented valuation policy provided that the managers’ external auditor verifies that the assets have indeed been valued in accordance with this policy. A copy of the valuation policy must be made available to the Funds on request.
- There are sufficient protections in place to protect investors from large inflows and outflows – specifically there is a requirement that the future investment returns of the remaining investors should not be adversely affected by large scale redemptions or inflows.

Annexure 11: Investment of Reserve Accounts

The table below sets out the investment strategy in respect of the various Reserve Accounts the Fund holds:

Reserve Account	Investment strategy
Minimum Guaranteed Reserve	Stable Portfolio
Employer Surplus Account	Stable Portfolio
General Account	Stable Portfolio

Annexure 12: Asset Liability monitoring

The Fund has instituted a process whereby a monthly match of assets and liabilities per investment channel is done between the Administrator and the Fund's unitiser. The results of this asset / liability process is reported to the Investment Committee meeting quarterly.