Guardians' Response to Independent Review

Recommendation	Guardians' view	Comments
Recommendation 3.1: Clarify the investment objective and expectation **Recognising the importance of mission clarity, that the Guardians communicates with stakeholders to ensure a clear understanding of the meaning of its investment expectation to exceed the Treasury 90 day bill rate plus 2.5% over a 20 year period and how it was derived.**	**Agree**	June 2010: **Completed**. The website has been updated to clarify our expected rate of return and the basis for referencing T-Bills and rolling 20-year periods. Original response: The Guardians are recognised internationally for the degree of transparency around the organisation's purpose and activities. However we continue to further assist stakeholders to understand our objectives and expectations of performance via our Statement of Intent, Website and Annual Report. We are currently simplifying and standardising the language we use to explain how we invest and will incorporate this on our website; and in future public documents and communications with stakeholders.
Recommendation 3.2: Reconsideration of the specification of the financial metric **While recognising the importance of a stable mandate, that the Crown gives consideration to whether an actual investment rate of return or risk target would provide a clearer benchmark against which to judge the Guardians' performance over the medium term, rather than the current expectation to exceed the return on 90 day Treasury bills plus 2.5% over rolling 20 year periods. If so, that the Crown determines an appropriate investment target in consultation with the Guardians.**	**A matter for Government but Guardians have views**	June 2010: **A matter for Government**. No further action intended by the Guardians. Original response: We appreciate that this is a recommendation for the Government. However it is appropriate to give our views on issues critical to the success or failure of the Fund. The way that we currently articulate our expected investment outcomes has been deliberately chosen to ensure that why we are undertaking investment activities is as clear as possible; and that our investment incentives make sense at all times and to any interested party. We believe that this approach places the onus correctly on the Guardians to determine the appropriate risk/return trade-off in light of prevailing market conditions. Conversely, we believe that setting either a return or risk benchmark in the fashion suggested by Recommendation 3.2 risks creating unintended, and potentially perverse, outcomes. For example, setting a return benchmark at some margin over the risk free rate risks creating an incentive to load up on risky assets in order to achieve that benchmark, regardless of the pricing of such assets. We have seen ample evidence of exactly such behaviour over recent years. In fact, setting a risk benchmark provides no incentive to have regard to the reward being offered for risk.

		In addition to potentially perverse outcomes, a fixed returns objective could also lead to an unnecessary focus on short-term investment returns, counterproductive to one of the key 'endowments'; the Fund has to exploit i.e., a long investment horizon. Finally, given the long investment horizon of the Fund (20+ years), any changes to our investment expectations can be notified to the Minister of Finance at appropriate intervals (e.g., upon SAA reviews every two or so years).
Recommendation 3.3: **To further improve the Fund's ESG practices and bring them more in line with its general investment objectives and beliefs, we suggest that the Fund fully explores the link between ESG factors and its SAA and based on the result, pursue investment opportunities that will improve the Fund's long-term return.**	**Agree. Endorses actions already underway.**	June 2010: **Completed**. The Positive Investment Plan has been completed. ESG considerations are now integrated into the due diligence process for new mandates and specific guidelines have been developed for Private Equity and Public Markets. Original response: The Responsible Investment Activity Plan in the 2008 Statement of Intent includes a commitment to develop a Positive Investment Plan. As disclosed in the 2009 Annual Report, this work is well underway. An analysis of Environmental Social and Governance (ESG) investment beliefs has been incorporated into the Guardians' wider review of investment beliefs (also disclosed in the 2009 Annual Report) and ESG considerations are increasingly being integrated into the due diligence process for new mandates.
Recommendation 3.4**:** **The Fund should:** • **communicate more clearly to its current investment managers its position on responsible investment and ESG issues; and** • **request its external investment managers report on the extent to which ESG factors have been integrated into its investment policies and processes.**	**Agree. Endorses actions already underway.**	June 2010: **Completed**. We communicate clearly with managers and potential managers through due diligence questions in the standard RFP, by an annual review of our managers' Responsible Investment (RI) policies and practices and through our public reporting. We have made more detailed requests for information in our review of managers' RI activities and we have introduced a requirement to report on RI policies in our standard IMAs. Recommendations from the UNPRI 2009 assessment have been implemented. Original response: We currently ask our managers to report annually on how they give consideration to ESG matters and will be placing more emphasis on communicating this requirement to them. We are also reviewing recommendations for further integration of ESG within our investment practices, contained in our United Nations Principles of Responsible Investment (UNPRI) assessment for 2009.

Recommendation 4.1: **The exclusion of sources of excess return, including liquidity risk premia, from the core benchmark of the Fund ought to be considered as a means of placing further discipline on risk budgeting decisions.**	**Agree. Endorses actions already underway.**	June 2010: **Completed**. We are about to implement a new asset allocation framework in which the reference portfolio can be considered the core benchmark of the Fund. The reference portfolio consists entirely of passively managed listed assets and therefore excludes risk premiums in the actual fund associated with illiquidity, manager skill, insurance premiums (e.g. for catastrophe bonds), etc. The reference portfolio will replace the passive benchmark, which already fulfils this role. No further actions are required to implement this recommendation. Original response: The Passive Portfolio mechanism already performs this role. As set out in the 2009 Annual Report and on the Fund's website, the Passive Portfolio consists entirely of liquid public market investments that can be accessed through low-cost passive management. We are working on enhancing this construct through, for example, incorporating all other premiums (including illiquidity premiums) in the 'actual' Fund – i.e., the sum of the value added activities we undertake over and above the Passive Portfolio, as part of a dynamic, and ongoing asset allocation process. Whether the value-add activities actually *do* add value over the relevant time horizon will continue to be evaluated against the returns of the Passive Portfolio.
Recommendation 4.2 **Further research and analysis is required on the existence of and best methods to harvest liquidity premia. It is important to shift the basis for exploiting one of the key endowments of the Fund from a qualitative judgment to one based on qualitative and quantitative analysis.**	**Agree. Endorses actions already underway.**	June 2010: **Completed**. Asset Allocation and Investments are made with an explicit illiquidity hurdle. Original response: We do utilise a combination of qualitative and quantitative analysis when seeking to harvest illiquidity premiums. The proxy system for private market assets gives us flexibility to alter private market exposures within ranges. We are working on a refinement to our current approach that would enable us to evaluate potential investments and divestments at a much more 'granular' level than we currently do. We evaluate private market opportunities, such as a potential timber investment, by comparing the expected return with a 'hurdle return' that reflects the contribution the asset would make to the overall risk within of the Fund. We therefore quantify the extent to which we believe there is a risk premium imbedded in the pricing of the investment. Critically, we do so on a case-by-case basis, and update this assessment when we make investment and divestment decisions.

Recommendation 4.3 **To seek to ensure that the approach to strategy development continues to improve and remains at best practice, that the Guardians' SAA model and modelling work be made publically available including through the New Zealand Superannuation Fund web site. Given the importance of the Guardians to the New Zealand economy and its significant standing among the sovereign wealth fund community, the scrutiny and challenge engendered through this would create an external driver of continual development and improvement.**	**Agree. Endorses actions already underway.**	June 2010: **Completed**. We have been using a strategic asset allocation (SAA) framework that specified target asset allocation weights for the actual Fund. The SAA has been reviewed at approximately 2 yearly intervals. We are moving to a new asset allocation framework in which we specify a reference portfolio for the Fund. The reference portfolio is constructed using the notion of equilibrium returns and will therefore need to be reviewed less frequently than every couple of years. We will describe the model and modelling work used for the reference portfolio review on our website in August / September. We will do so at a level of detail that strikes a balance between providing transparency for our approach and protecting our intellectual property. Original response: We already go to some effort to disclose via our Annual Report and website, insights into how we go about structuring the Fund – from the SAA to the actual portfolio – and why we structure it the way that we do. We have disclosed the reviews we have done of our SAA and will continue to do so. Additionally, we invite external independent review by global experts of our SAA construct and workings. While we have been very transparent in such disclosures we must at the same time be mindful of the considerable intellectual property that goes into such work. That intellectual property is an asset of the Guardians (and by extension the Crown) and we must protect it accordingly. As discussed at Recommendation 3.1, we are currently working toward further simplifying and standardising the language we use to explain how we invest. We will incorporate this on our website; and in future public documents and communications with stakeholders.
Recommendation 4.4: **To mitigate the risks associated with strategy models developed internally, structured business and project management processes (including assessment, specification, testing, change control, review and formal sign off on models) are critical to increasing the likelihood of efficient and effective implementation of model development. It is understood that such**	**Agree. Endorses actions already underway.**	June 2010: **Completed**. Our Management Information Framework promulgates using industry standard tools rather than bespoke stand alone application software. These applications are being rolled out by GNZSF IT and once completed, software application development or integration with external systems will be owned and managed by GNZSF IT. This will ensure all software is managed, documented and maintained through standard processes. A Matlab programmer is to join the IT team to enable future enhancements to key strategic models (e.g. the Tilting model).

processes are in place for more recent models such as the strategic tilting model. The monitoring and development of these business and project management processes in relation to strategy models should be a formalised part of the Guardians' risk management plan.		Original response: The processes recommended are a core part of our IT strategy. With regard to Strategic Tilting, we have a dedicated project team charged with further developing the tilting model. The team's responsibilities include project initiation, planning, execution and closure stages. We will extend this project team approach down to the development of strategy models and into our risk management framework.
Recommendation 4.5: **Sensitivity testing of the investment strategy process is a critical part of the strategy review and we recommend that it incorporates alternative cash flow profiles. This additional sensitivity testing, in conjunction with that employed for models and assumptions, would allow the Guardians to assess the level of reliance (if any) the set of cash flows assumed has on its strategy setting decisions.**	**Agree. Endorses actions already underway.**	June 2010: **Completed**. The recent Reference Portfolio review included sensitivity analysis of the cash flow profiles associated with Crown net capital contributions. Original response: Work on stress testing the portfolio is a current work stream for both the Portfolio Risk and Portfolio Research teams. We also have a liquidity policy in place. The 2009 Strategic Asset Allocation review will incorporate sensitivity testing of the net cash flow profile from the Crown.
Recommendation 4.6: **In respect of the SAA modelling, two technical improvements are:** • **With a view to ensuring that low probability extreme events are given an appropriate degree of attention in strategy development, short-term tail risks should be modelled in the primary model used to assess the strategy; and** • **While recognising the importance of the longer term timeframe for the Guardians' mission, it is recommended that more emphasis be given to the consideration of short-term timeframes through the incorporation of initial and long run assumption settings in the primary model used to assess the investment strategy.**	**Agree. Endorses actions already underway.**	June 2010: **Completed.** Original response: All SAA reviews have strongly emphasised 'fat tails' (i.e., where what should be uncommon scenarios, particularly negative scenarios, occur more frequently than modelled). We continue to emphasise this in portfolio stress-testing i.e., allocating fat tails to particular scenarios. The 2009 SAA review incorporates short-term 'fat tail' risks.

Recommendation 4.7: **A SAA of approximately 80% growth assets corresponds to a high level of confidence of meeting an expected return equivalent to 90 day Treasury bills plus 2.5% over a rolling 20 year period. This allocation to growth assets should be maintained. Stability of investment mandate is highly important for long-term wealth creation. However, should circumstances alter such that a focus on shorter term risks becomes more pressing, then a lower-risk strategy for the Guardians would correspond with:** • **a lower confidence level of meeting the same objective; or** • **the same confidence level, but with a lower hurdle.**	**Agree. Endorses actions already underway.**	June 2010: **Completed**. The Board has recently re-evaluated the appropriate risk profile for the Fund as part of the review of the Reference Portfolio. Original response: We agree that stability of mandate is very important for long-term investors and wealth creation. Our focus on short-term risks largely relates to: • stress-testing our investment beliefs and strategies; • formulating our communications; and • managing our liquidity policy.
Recommendation 5.1: **The adoption of strategic 'tilting' by the Guardians is appropriate. It should be restricted to relatively small ranges until the Guardians has developed more comfort that tilting has become an established source of excess return or risk management. The Guardians' performance and governance model should be reviewed after 12 months of operation and recalibrated as necessary.**	**Agree. Endorses actions already underway.**	June 2010: The Guardian's original response remains appropriate. The 'recalibration' is expected to take place early in the 2011 financial year. Original response: Our strategic tilting framework has been in place 12 months and we concur with Mercer's view that an initial bedding in period is appropriate. We consider that the Guardians' initial calibration of tilting is consistent with this recommendation. We envisage that we will recalibrate to enable larger tilts to be taken (and also to increase the number of potential tilts). We will do this because we have established organisational comfort that tilting has become an established source of excess return and risk management and that all operational controls are working as intended.
Recommendation 5.2 **Given the critical importance of incorporating investment risks outside the traditional mean-variance view within portfolio management, the Guardians' planned identification and analysis of macro-economic themes is endorsed. It is**	**Agree. Endorses actions already underway.**	June 2010: **Completed**. Work on themes and portfolio stress-testing is ongoing. Recent Board presentations included Fiscal and Asian growth risks and a framework for evaluating downside risks and investment implications. The Board agreed in February the macro theme priorities for the 2010 board meetings. Original response: We have a programme for prioritising and deciding the order of execution of macro-themes and scenario analysis (including potential sources of

recommended that the Guardians gives a high priority to scenario analysis including developing a methodology and disciplined governance processes for incorporating implications of these factors as appropriate into its SAA and other areas of discretionary management, such as strategic tilting and active management.		stress on the portfolio). This work programme will include an assessment of how best to incorporate the conclusions from the analysis in the Fund.
Recommendation 5.3: **The external review of the investment strategy and the strategy development process, covering both a lateral perspective of the broad methodology as well as the technical view, should be a formalised part of the Guardians' risk management plan. In doing so, that the Guardians' seeks to incorporate a diverse range of perspectives to critically challenge its approach.**	**Agree. Endorses actions already underway.**	June 2010: **Completed**. The Board considered a peer review of the reference portfolio review by Towers Watson at the March 2010 meeting. Any subsequent "broader more lateral review" would form part of the audit program but no such review is currently scheduled. Original response: We have a regular review process in line with the SAA updates. Our current SAA review, focusing specifically on the Passive Portfolio, will be subject to external review. A subsequent, broader and more lateral review of the asset allocation framework for the actual fund will take place subsequently. We note the Guardians' Board also periodically consults an external 'reference' group comprised of external global experts it invites to discuss issues within the investment environment.
Recommendation 6.1: **The Guardians develop a formal portfolio structure for each of the underlying asset classes, in terms of targeted strategies and exposures. While this approach is core to how the Guardians' approach SAA, it is not clear that the same structured process is applied at the single asset class level. Such an approach - breaking down the asset class into its risk drivers and addressing exposures to each of the risk drivers individually - may greatly enhance the efficiency of these sub-portfolios, and ultimately the multi-asset class portfolio.**	**Agree with general point as endorses actions already underway.**	June 2010: **Completed**. As noted in our original response the Fund is moving away from locking ourselves into a pre-defined active management structure at the asset class level. Assessing and responding to the economic risks we take on is a business as usual activity for the Guardians. Original response: The Fund is moving away from thinking about asset class and active management exposures in silos. It is more appropriate to look at the underlying economic risks we take on, whether they are beta or excess return, at the portfolio level. We acknowledge this is, in part, consistent with what is suggested in the Review, albeit its recommendation is that this is done within each asset class. Locking ourselves into a pre-defined active management structure at the asset class level reduces our ability to respond to (and/or raises transaction costs when responding to) opportunities in synthetic pricing, and when there is either no beta associated with an excess return strategy.

Recommendation 6.2: **In the context of the Guardians' planned "lifecycle" approach to determining the allocation to different sources of alpha over time, we recommend the development and documentation of process which sets out the methodology for assessing relative attractiveness. In particular, for each alpha source there may be different metrics used. It is important to document the reasons for pursuit of that alpha opportunity and the factors that may be used to determine when the opportunity set has disappeared (and be a catalyst for exit).**	**Agree. Endorses actions already underway.**	June 2010: **Ongoing**. Opportunity maps are developed and will be referenced when making investments. Original response: As part of our manager appointment process we clearly articulate our view of why an opportunity for generating excess returns exists and the factors we would look for that might signal the opportunity has diminished. We have work underway to formalise 'opportunity' maps.
Recommendation 6.3: **The Guardians consider whether greater diversification in manager styles should be more explicitly taken into account in the portfolio construction process. Associated with this is reconsideration of the degree of reliance on quantitative/systematic-based external fund managers for generating alpha (currently relatively extensive).**	**Agree. Endorses actions already underway.**	June 2010: **Completed**. Diversification of our portfolio construction is business as usual. We continue to diversify our active management approach as opportunities arise. Original response. We have continued to diversify our portfolio construction process so that it avoids any manager-style concentration.
Recommendation 6.4: **Investment manager operational due diligence is an area of focus at the Guardians. We note it should be a formalised part of the investment due diligence process prior to a new manager mandate being appointed. This could be achieved through incorporating the investment manager operational due diligence checklist from the document "Public Markets Due Diligence Process" (January 2009) into the Investment Due Diligence Policy, and potentially also the Investment Manager Selection Policy.**	**Agree. Endorses actions already underway.**	June 2010: **Partially complete**. The only remaining action is to update the Investment Policies, which is underway as part of a broader Policy Review project. The Operational Due Diligence framework has been completed and implemented. Original response: If a manager fails to meet the Guardian's standards for operational excellence then no appointment can be made. We are well down the track of developing our operational due diligence framework. In late 2008 we appointed a specialist operational due diligence advisory firm to assist us. We followed this up in June this year when we appointed an Operational Due Diligence Analyst within our Risk team to work alongside our advisor, and to build and implement our operational due diligence framework.

		Our external advisor currently uses extensive checklists when assessing prospective managers and we have developed and have implemented internally an operational due diligence process to complement their work. The relevant policies will be updated to capture what we have implemented in practice.
Recommendation 8.1: **Performance attribution data be included in regular reporting to the Board. In addition to market returns, relevant attribution data should be provided in line with the levers that the Guardians adopts for creating excess return, namely:** • **investing in private markets; active management selection; strategic tilting; and** • **looking for implementation efficiencies.** **Further, reporting of projections of year by year private equity forward commitments of capital against the Fund's liquidity situation would enable better monitoring by the Board.**	**Agree. Endorses actions already underway/ complete.**	June 2010: **Completed**. New fund performance reporting was implemented in January 2010, which includes contributions from the three value-add strategies and the performance of active managers, private markets and passive managers. Original response: Following recent work to report performance specifically against excess return strategies, tilting and portfolio completion, this is standard Board reporting practice as of October 2009. Further developments will occur over the balance of calendar 2009.
Recommendation 8.2: **Regular reporting to the Board should be rationalised and better focused on the Board's responsibility to monitor Management's performance against its objectives. It is noted that the Guardians' Board in September 2009 received recommendations on amending the contents of the Board dashboard report and these will be implemented.**	**Agree. Endorses actions already underway.**	June 2010: **Completed**. Development of the Board dashboard continues to evolve as a business as usual activity. Original response: The Board reviewed the "dashboard" in September and agreed to changes to the standard report that have the effect of reducing the frequency of some reporting, reducing the details of some fund reporting and increasing the focus on progress against investment strategy. We will continue to refine this process over time.

Recommendation 9.1: **The Guardians regularly assesses the economics of managing activities internally relative to outsourcing. A prudent approach would be to undertake a business case assessment to determine the most optimal option for the Fund in respect of sourcing different activities. Ongoing development of the internal cost/capital allocation model would provide greater rigour in allocating staff resources commensurately with the allocation of the risk budget and financial/operating budget.**	**Agree. Endorses actions already underway.**	June 2010: **Completed.** Internal cost allocation project has been operationalised. Original response: This is business as usual for the Guardians. By way of example, an assessment was done in June 2009 in respect of three externally managed mandates. A business case to in-house these mandates was approved by the Board. The outcome was publicly disclosed. Our internal cost allocation is also well progressed.
Recommendation 9.2: **The Guardians segregate Treasury functions from the operations division to be consistent with best practice risk management models.**	**Completed after consideration**	June 2010: **Completed.** The Treasury function has moved out of Operations area following a recent organisation restructure and now reports to the General Manager Asset Allocation. Original response: We have seen a number of models where the treasury unit is either part of the operational group or part of the investment group of an asset owner. The recommendation notes that best practice is that the treasury is segregated from operations, we concur that best practice is such and note that we have that segregation as the current structure. While the Head of Treasury reports to the GM Operations alongside three others including the Head of Portfolio Risk and Head of Operations, the treasury unit is physically separated from the operations team. Furthermore, there are clear accountabilities for the treasury staff and operations staff, the unit has its own head of department, all trades are made on monitored phones and the standard pre-trade and post trade compliance is performed by the Risk unit and overseen by internal audit. The Head of Internal Audit reports separately to the GM Finance. With an appropriate and effective control environment in place, together with independent internal audit oversight, we do not consider the actual reporting lines to be an issue. We will give this further thought in our upcoming Strategic Plan and we are undertaking a review of how to refine our overall Enterprise Risk Management Framework at present.

Recommendation 9.3: **Consideration should be given to appointing a CRO to assume an organisation-wide responsibility for risk management and to establish a regular internal review, assessment and testing process. This is particularly important with an increased investment focus on private equity, hedge funds and commodities as these investments require greater due diligence and coordination of compliance, tax, operations, legal and other matters.**	**Completed after consideration**	June 2010: **Completed**. We have considered the recommendation and do not propose adding a Chief Risk Officer role to the Guardians. It is not evident that it is global best practice to centralise risk responsibility with a single person, rather than ensuring responsibility and focus at the source of risk origination. Recent changes to our risk governance (approved in March 2010) now give greater responsibility to internal management committees to monitor the risks allocated to them by the Leadership team. The Head of Risk will be responsible for reviewing and co-ordinating these activities across each of the relevant internal committees. Original response: Our GM Operations performs the functions that have been outlined. We note that risk management is embedded throughout a number of the General Manager roles – covering investment, operational, strategic, reputation or regulatory risk. It is not clear that a CRO with the specific responsibility for risk management would be a more effective way of ensuring we retain a robust risk and internal control environment. It is also not evident that it is global best practice to centralise risk responsibility with a single person, rather than at the source of the risk's origination. We will give this further thought in our upcoming Strategic Plan and we are undertaking a review of how to refine our overall Enterprise Risk Management Framework at present.
Recommendation 11.1: **The Guardians establish a compliance obligation register and undertake a formal test methodology to provide ongoing sufficient assurance of compliance with legislation.**	**Agree. Endorses actions already underway.**	June 2010: **Completed**. The Legal Compliance Framework has been signed off by the Board. Original response: A revised legal compliance framework will be provided to the Board Audit and Risk Committee in November 2009.
Recommendation 13.1: **The Guardians to establish a number of key performance indicators with its custodian to better**	**Alternative view**	June 2010: **Completed – alternative view holds**. We believe we have all the indicators we need. Original response: We consider that the current SLA reporting is appropriate.

reflect market best practice. In particular, the SLA should incorporate all key information that relates to service standards including information currently documented elsewhere, such as the issue escalation process and the relationship matrix. Also, appropriate key performance indicators should be incorporated to measure the accuracy, responsiveness and flexibility of its custodian's overall service.		Key Performance Indicators ("KPI's") are specified in the SLA, which is updated periodically, on an 'as needed' basis. Quarterly KPI reporting is undertaken which reports on the Custodian's delivery and accuracy of services and how they measure against the stated KPI's within the SLA. As the need arises to modify the SLA in terms of service or KPI, this is retained and collated for update at the next opportunity. It is our view that the KPI targets we have are consistent with best market practice. We have deliberately kept the Relationship Model (which incorporates escalation procedures) as a separate document to the SLA, as we would expect this to alter far more frequently than the SLA, particularly as individual staff come and go.
Recommendation 14.1: **In any future securities lending programme (SLP), that the Guardians obtain regular data regarding the activities and position of the collateral pool. Also that it ensures that it has the necessary internal management expertise to assess the content of SLP monitoring reports, be able to draw inferences from that content and be in a position to act upon those inferences.**	**Agree.**	June 2010: **Completed**. Recommendations have been implemented. Original response: We have always had the "*internal management expertise to assess the content of SLP monitoring reports, be able to draw inferences from that content and be in a position to act upon those inferences*." As outlined in the Review, it was not market best practice to seek such detail about collateral pools. It is only with the benefit of hindsight of the severity of the Global Financial Crisis that such advice is now valued and sought. We have subsequently expanded our internal management of cash.
Recommendation 16.1**:** **If the Guardians expect proxies to continue to comprise a significant portion of private markets, property and commodities (PPC) in the short-to-medium term, then it is recommended that the SAA development and portfolio construction processes should incorporate this expectation.**	**Agree. Endorses actions already underway.**	June 2010: We are changing our asset allocation framework so that we will have permitted ranges for exposures not in the reference portfolio rather than midpoint target weights as in our current SAA construct. Under the new framework there will be no 'shortfall' of private market assets to be replaced by public market proxies and it will no longer be meaningful to say that "proxies comprise a significant proportion of private markets, property and commodities (PPC) in the short-to-medium term". The implementation of the new framework is scheduled for 1 July 2010. Original response: The current SAA review, which focuses on the constitution of the Passive Portfolio, is consistent with this recommendation and is underway.

Recommendation 16.2 **In the light of the pause in contributions to the Fund, we recommend a review of the targeted composition of new commitments to illiquid investments, both from an ability to have sufficient cash flow to fund commitments and how best to complement the low level of diversification of the current concentrated mix of illiquid investment.**	**Agree. Endorses actions already underway.**	June 2010: **Completed**. Private market commitments are explicitly captured in our cash flow projections, incorporated into the Funding Model and reviewed by the Funding & Treasury Group. We are also using our advisors to help us make longer term projections. Original response: We track fund drawdowns vs. expected drawdowns. We will incorporate in the funding model our expectations as to future potential drawdowns. Current commitments as a percentage of the Fund are small and have been easily dealt with to date.
Recommendation 16.3: **The Guardians develops hurdles for all private equity, property and commodity investment categories for monitoring performance and that all investments involving progressive draw down of committed capital have internal rates of return calculated and monitored against targets.**	**Completed after consideration**	June 2010: **Completed**. We will maintain a record of targeted internal rates of return for the private market assets we hold. Original response: We have an existing hurdle framework for private market assets. We calculate these hurdles as required and they are made explicit to the Investment Committee. We do not consider collateralised commodity futures to be a private market category. We will consider a more dynamic asset allocation exposure to commodities as part of our strategic tilting process for public market assets.
Recommendation 16.4: **The Guardians develop and the Board regularly reviews, operational reporting of Fund exposures and commitments and investment selection resourcing including:** • **Valuation methods and assumptions to use at the point of selection of investment in all PPC investment categories in all markets.** • **Forward projections of estimated annual drawdowns of commitments (for each investment and total Fund) expected to be called on each year for investments which have already had commitments made but not fully drawn.** • **Forward projections of estimated annual cash**	**Agree. Endorses actions already underway.**	June 2010: Projections of drawdowns / annual cash flow are to be addressed by funding model enhancements. Original response: We have a valuation working group that regularly reports on these matters to the Board Audit and Risk Committee. We are also currently provide 'snapshot' reports on these issues to the full Board via our Board 'dashboard'.

flow including net cash flow from private equity) and liquidity (split by different durations of expected minimum redemption period for all investments) of total Fund investments. • **Allocation of responsibility for maintenance of these resources.**		
Recommendation 17.1: **The Guardians continue to develop and implement a set of metrics that measure the value add by each of the sources of investment performance, plus the four sources of value add over the passive portfolio.**	**Agree. Endorses actions already underway.**	June 2010: **Completed**. Performance measurement and attribution reporting has been revised. Original response: We have measures of value-add and for our absolute return against both the risk-free rate and the Passive Portfolio. These are calculated annually. Performance measurement and attribution consistent with what is recommended is currently underway and is a key priority of the Guardians. Such refinement is a constant process at the Guardians.