



BERMUDA MONETARY AUTHORITY

CONSULTATION PAPER

ON

A SOLVENCY FRAMEWORK FOR LONG-TERM INSURANCE

August 2010

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1. PURPOSE AND EXECUTIVE SUMMARY

1. The mission of the Bermuda Monetary Authority (the Authority) includes ensuring appropriate protection for policyholders and a transparent regulatory regime that provides certainty to market participants. Moreover, by maintaining a supervisory framework that keeps pace with international best practice, Bermuda's reputation and position as a leading international financial centre is enhanced.

2. Unlike the general insurance¹ business capital and solvency framework, the long-term insurer regulatory and supervisory framework has remained largely unchanged over the last several years. The recent financial crisis and global developments generally have underscored the need to ensure that supervision and regulation remains current and appropriate for the nature, scale and complexity of all market participants. Accordingly, the Authority is proposing to enhance its capital and solvency framework for Bermuda's long-term insurer sector.

3. In this regard, this consultation paper sets out the Authority's proposals to revise the long-term insurance regime. The intent is to ensure that the long-term framework encourages sound risk management, and is appropriate for the Bermuda market.

4. It is proposed that the long-term insurance solvency framework comprise three components:

- (i) capital adequacy - quantitative aspects
- (ii) governance and risk management - qualitative requirements
- (iii) transparency - reporting and disclosures

5. These components are to be applied in a proportionate manner in accordance with an insurer's risk profile. Some aspects of this framework are described in detail in other papers published by the Authority. Where this is the case, this paper includes an appropriate summary and references. Stakeholders are encouraged to read the respective papers when responding to this consultation paper in the wider context.

6. Given the commonly centralised governance and risk management functions within a group, and the risk of contagion amongst group entities, it is important that at least one supervisor has a comprehensive understanding of the group. Accordingly, the proposed long-term framework makes provision for the appointment of a Group-wide Supervisor who would coordinate the supervisory efforts of other involved supervisors to ensure effective and efficient supervision.

7. The Authority further proposes to implement a graduated licensing classification system for long-term insurers, and to apply proportionality principles in establishing regulatory requirements for all long-term insurers.

8. The Authority is committed to consulting with stakeholders as it develops its long-term insurer framework. Comments on all matters covered in this paper are welcome; responses should be sent to the Authority via e-mail, addressed to Vanessa Potts at policy@bma.bm, no later than close of business on October 29, 2010.

¹ In this paper the terms "insurance" includes "reinsurance" and "insurer" includes "reinsurer".

2. INTRODUCTION

9. The Authority's mission includes ensuring appropriate protection for policyholders and to maintain and enhance Bermuda's reputation as a leading international financial centre. To achieve this goal, the Authority must ensure that its regulatory and supervisory frameworks are both transparent and aligned with international regulatory best practice.

10. Unlike the general business capital and solvency framework, the long-term framework has remained largely unchanged for a number of years. The recent financial crisis and global developments generally among international regulatory standard setting bodies like the International Association of Insurance Supervisors (IAIS) have underscored the need to ensure that supervision and regulation remains current and appropriate for the nature, scale and complexity of market participants. Accordingly, the Authority is proposing to enhance its capital and solvency framework for Bermuda's long-term sector.

11. The proposed long-term insurer capital and solvency framework outlines requirements in respect of capital adequacy, governance and risk management, and transparency. The objective of the Authority is to ensure that long-term insurers are both sufficiently capitalised and appropriately liquid in order to meet policyholder obligations.

12. A long-term insurer that is both adequately capitalised and liquid implies that it has sufficient and appropriate capital resources to conduct long-term business in accordance with the requirements of the Insurance Act 1978 (the Act). The appropriate level of capital, or capital adequacy, is largely a function of an insurer's risk profile. Accordingly, regulators assess an insurer's risk profile to determine its regulatory capital requirement.

13. Several factors contribute to determining a risk profile, both at the solo (licensed insurer) and group level. For long-term business, these include:

- Assessments of the risk characteristics of the business written, invested assets, and contingent obligations, and the associated capital to meet obligations;
- Determining the level of governance and risk management necessary to sustain prudent operations; and
- Sufficient and transparent disclosures and reporting to ensure an effective assessment process.

14. The absence of appropriate information can prevent supervisors from gaining a full understanding of all the risks involved and making an appropriate assessment. As insurers innovate or engage in increasingly more complex transactions and structural arrangements, assessments become more difficult. Supervisors must adapt by requiring enhanced disclosures to determine risk profiles properly.

15. The approach proposed for Bermuda's long-term insurance aligns with the regulatory framework already employed for Bermuda's general business insurance sector: embracing risk modelling techniques for those long-term insurers with the capacity to do so, and utilising a standard formula-based method for long-term insurers that are not yet capable of implementing a full internal model.

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16. The capital and solvency standards proposed in this paper apply to all insurers holding a long-term business license, including “dual” or “composite” insurers, except where stated otherwise. The solvency requirements developed at a solo level through this proposed framework have been incorporated into the proposed Insurance Groups Regulatory Framework (February 2010).

3. CLASSIFICATION SYSTEM FOR LONG-TERM INSURERS

17. The proportionality principle supports the use of regulatory requirements that are appropriate and consistent with the level of risk in the regulated entity. The Authority proposes a graduated licensing system for long-term insurers, which also recognises the unique nature of Bermuda's captive insurance business.

18. The Authority proposes to leverage the class concepts used in Bermuda's captive insurance market, by extending the current general business captive insurance classifications, (Class 1 and Class 2) to long-term business as Class A and Class B. Insurers qualifying for Class A can only insure persons who are directly connected, engaged or associated with a single parent company or its affiliates. Insurers qualifying for Class B may have multiple owners, and may insure up to 20 % of their insurance risk on unrelated lives.

19. The Authority proposes to implement the following license classification standards for long-term insurers. This structure is intended to both recognise existing captive insurance arrangements and facilitate the introduction of new capital and solvency reporting standards on a proportional basis.

- Class A** Single parent captives, writing insurance risk on persons connected to its parent and affiliates only
- Class B** Multi-owner captives and single parent captives writing insurance risks with at least 80% of the net premiums written in respect of persons that are connected to the parent or its affiliates
- Class C** Commercial insurers with total assets* less than \$250 million
- Class D** Commercial insurers with total assets* equal to or greater than \$250 million, but less than \$500 million
- Class E** Commercial insurers with total assets* greater than \$500 million

* Total assets are assets held on the balance sheet for an insurer's long-term business fund, less the amounts in long-term segregated accounts.

20. Notwithstanding the above qualification requirements, the Authority may place a company in a different class other than that suggested by the above classifications

21. Implementation of the new license class system is planned for completion during the third quarter of 2011. The Authority will prepare an application form, with instructions for long-term insurers to complete and submit to the Authority by the end of September, 2011. Where an insurer has a "dual" or "composite" license, no changes are contemplated to the general business license under this exercise. The total assets held by an insurer at the end of 2010 and reported in 2011, less amounts held in segregated accounts will be used to determine the license class of long-term insurers effective on December 31, 2011.

4. CAPITAL ADEQUACY - QUANTITATIVE ASPECTS

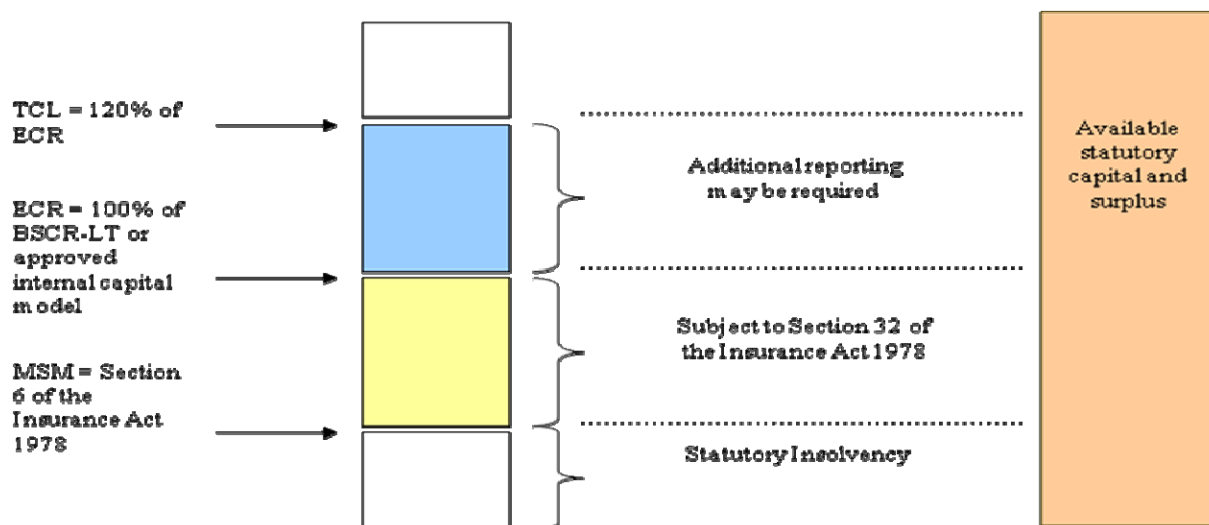
22. The purpose of capital is to provide a buffer to absorb higher than expected policyholder obligations and other losses. The higher the risk, the greater the potential for more frequent and more significant deviations to exist. It is therefore important that capital requirements are aligned with, and are a function of, an insurer's risk profile.

23. The quantitative aspects of a capital and solvency framework require insurers to maintain regulatory capital to ensure confidence that there is sufficient capital to withstand adversity emerging within a defined period. In particular, that capital should be at a level such that at the end of a defined period there are sufficient assets to provide for the transfer to another insurer or provide run-off for remaining obligations. This component of the framework comprises:

- (i) Capital requirements;
- (ii) Eligible Capital; and
- (iii) Economic Balance Sheet

4.1 Capital Requirements

24. According to the IAIS, "The solvency regime should include a range of solvency control levels which trigger different degrees of intervention by the supervisor with an appropriate degree of urgency".² The Authority has proposed to apply these principles to its general business commercial solvency regime, and proposes the same for the long-term insurer commercial sector. This includes the existing Minimum Margin of Solvency ("MSM"), Enhanced Capital Requirement ("ECR"), and Target Capital Level ("TCL").³ The following diagram depicts the structure:



25. Capital adjustments are a supervisory tool supported by the IAIS to allow supervisors to more closely align an insurer's regulatory capital requirement with its risk profile in situations where the

² "Standard on the structure of regulatory capital requirements", IAIS, October 2008.

³ Where insurers have dual licenses, the solvency levels would be the aggregate of the respective general business and long-term levels.

risk characteristics of the insurer deviate significantly from the underlying assumptions of the capital model determining its capital requirement. The Authority proposes to extend its capital adjustment policy to the long-term capital and solvency framework (see the Authority's Consultation Paper on Capital Add-on and Reduction Policy, June 2008). As in the case of its general insurer business framework, the available statutory capital and surplus for long-term insurers would be its total statutory capital and surplus, plus any adjustments. Obviously, where there are no adjustments, then the available statutory capital and surplus and total statutory capital and surplus would be the same amounts. The available statutory capital and surplus would be the amount used to determine whether a long-term insurer satisfies the solvency control levels.

26. The degree of supervisory intervention as various breaches occur is proposed as follows: where an insurer's available statutory capital and surplus is -

- Between the TCL and ECR, the insurer would not be considered insolvent under the Act, but additional reporting requirements or other enhanced oversight may be imposed by the Authority;
- Between the ECR and the MSM, the insurer is not considered insolvent under the Act, but may be subject to regulatory actions taken by the Authority under section 32 of the Act.
- Below the MSM, the insurer is in breach of the Act. The insurer is insolvent and therefore subject to such remedial measures as may be directed by the Authority in exercising its power under the Act.

27. The IAIS further asserts that the solvency regime should establish a Minimum Capital Requirement (MCR) below which no insurer is regarded to be viable to operate effectively.⁴ In the Authority's proposal, the minimum level is the MSM. The MSM would also serve as the floor for the ECR.

28. All long-term insurers, including captives, will be required to determine an MSM. The MSM would vary by license class according to the following table:

<u>Class</u>	<u>Minimum Solvency Margin</u>
A	greater of \$ 120,000 or 2.5% of total assets*
B	greater of \$ 250,000 or 2.5% of total assets*
C	greater of \$ 1,000,000 or 2.5% of total assets*
D	greater of \$ 5,000,000 or 2.5% of total assets*
E	greater of \$10,000,000 or 2.5% of total assets*

* Total assets equal those held on the balance sheet for the long-term business fund, less amounts in long-term segregated accounts.

29. The Authority will begin implementation of the ECR requirements with Class E license insurers, and subsequently cascade the requirements to the other long-term insurer commercial classes (see Proposed Timetable section below). Class E long-term insurers (and subsequently Classes C and D long-term insurers) will be required to determine an ECR by using either the

⁴ "Standard on the structure of regulatory capital requirements", IAIS, October 2008.

standard formula-based approach or the modelled approach as described below. As noted earlier, the ECR's floor will be the MSM.

30. The TCL is not a capital requirement, but rather an early warning signal that a long-term insurer is potentially approaching solvency difficulties. The TCL is 120% of the ECR. It provides a buffer to ensure that an insurer maintains adequate capital should adverse loss experience or additional capital needs occur. Breaching the TCL would not necessarily trigger a regulatory penalty, but would likely result in enhanced supervisory oversight. To establish the TCL at the group level, please see the consultation paper entitled "Insurance Groups Regulatory Framework February 2010."

31. Dual-licensed insurers maintain separate accounts for their general insurance business and long-term insurance business. Under the proposed solvency framework, dual licensed insurers will be required to determine the capital requirements for their general business using the general business capital standards and for their long-term business using the long-term capital standards for each solvency control level.

4.2 Approaches to Calculating the Enhanced Capital Requirement

32. The Authority proposes two approaches for determining the ECR of long-term insurers, a standard formula-based approach (Bermuda Solvency Capital Requirement or BSCR-LT) and a modelled approach. The standard formula-based approach is available for all commercial long-term insurers to use. It has been developed to produce capital requirements at the 99% Tail Value at Risk (TVaR) confidence level, over a one year time horizon. However, it may not adequately reflect the risk mitigation processes in place in more sophisticated enterprises. With prior approval from the Authority, insurers with robust modelling processes may wish to use the modelled approach to more closely match their capital requirements to their actual business risks.

4.3 Standard Formula-based Approach

33. A standard formula-based approach has been developed for use by all commercial long-term insurers. The method was designed to produce capital needs at the 99% TVaR confidence level over a one year time horizon. This is aligned with the Authority's risk tolerance for commercial insurers and consistent with the framework that is being implemented for commercial general business insurers.

34. Credit (default) risk and market risk are determined by grouping assets into investment classes. Capital requirement factors commensurate with the risk characteristics of each class are applied to the assets.

35. Insurance risks factors (mortality, morbidity and lapse risks, etc.), have been developed with consideration for both volatility and catastrophic risk elements. Credits for risk mitigating arrangements such as reinsurance are also taken into account within the BSCR-LT.

36. Minimum performance guarantees on variable investment products, expose a long-term insurer to risks of a particularly volatile nature. The capital requirements for these risks are determined by applying factors reflecting risk characteristics of each product type, to the amount of liabilities and/or the amount of the current value of the guarantees.

37. To determine the ECR, for simplicity and ease of reconciliation, the Authority proposes that dual-licensed insurers use the BSCR for their general business accounts, and the BSCR-LT for their long-term business accounts. Since composite companies maintain a single set of accounts, one model capturing the full spectrum of their risks would better match their statutory financial statements. The Authority will provide a standard formula-based model to achieve this.

38. Appendix III contains the template for the BSCR-LT.

4.4 Modelled Approach

39. The modelled approach will allow insurers to determine regulatory capital using an approved acceptable internal capital model (ICM).

40. An acceptable ICM will need to consider all material, reasonably foreseeable, quantifiable risks; the relationships between these risks; and be integrated into the long-term insurer's risk management framework. In particular, the long-term insurer will need to address the risk of loss; adverse change in the value of insurance liabilities resulting from changes in the level, trend, or volatility of its insurance risks (mortality rates, morbidity rates, expenses incurred in servicing contracts, lapsation/persistency rates); market risks (interest rates, spreads, equity and currency); and credit risks (potential defaults in loans, debt instruments, derivatives and reinsurance). For each of these components of the modelling process, documentation containing supporting assumptions and associated risk parameters will be necessary.

41. As previously noted, dual-licensed insurers are required to maintain separate accounts for their general business and long-term business. To determine the ECR using the modelled approach, dual-licensed insurers will need to develop separate capital requirements for their general and long-term business. Composite licensed insurers maintain a single set of accounts for their general business and long-term business. Composite licensed insurers may develop capital requirements using an ICM on a combined basis.

42. The Authority is currently conducting a pilot project on internal capital models for general insurance business. A similar pilot project for long-term insurance business is planned for 2011. The Authority expects to commence considering applications for long-term ICM approvals in 2012.

4.5 Eligible Capital

43. In addition to the amount of capital required, the quality of capital must also be considered to ensure sufficient liquidity. In this regard, the IAIS asserts:

“The solvency regime should define the approach to determining the capital resources eligible to meet regulatory capital requirements and their value, consistent with a total balance sheet approach for solvency assessment and having regard to the quality and suitability of capital elements.

The solvency regime should establish criteria for assessing the quality and suitability of capital resources, having regard to their ability to absorb losses on both a going-concern and wind-up basis.”⁵

Accordingly, aligned with international regulatory standards, the Authority has proposed an eligible capital regime. Eligible capital is the type of capital that meets established criteria, which makes it available to meet certain obligations. As noted in its consultation paper on Eligible Capital, the Authority is proposing to introduce a three-tiered capital system (the tiered capital system) as a critical component of its solvency regime. The tiered capital system is designed to assess the quality of long-term insurers’ capital resources eligible to satisfy their regulatory capital requirement levels. The tiered capital system classifies capital instruments into specified tiers based on their loss absorbency characteristics. Eligible capital for long-term commercial insurers will be calculated in the same way as general business insurance. The consultation paper on Eligible Capital of September, 2009 provides more details; however, the limits outlined in that consultation paper are expected to be revised in upcoming draft legislation that will be published in September 2010 for consultation. The policy of requiring certain capital amounts to be deducted from Tier 1 capital, and transferred to Tier 3, outlined in that paper assumes that assets pledged against policyholder obligations are unavailable/ not transferable for the benefit of other policyholders⁶.

4.6 Economic Balance Sheet

44. The Authority believes that consideration of capital is incomplete without focus on the measurement of assets and liabilities to complement the other elements of capital adequacy (i.e. capital requirements and quality of capital). The valuation issue is particularly important for the long-term insurer sector given the nature of such insurance obligations and the possibility of an accounting or economic mismatch.

45. The Authority proposes that the values of assets and liabilities should be based upon economic principles and, where appropriate, consistent with the valuation basis required under general purpose accounting standards (e.g. US Generally Accepted Accounting Standards (US GAAP), International Financial Reporting Standards (IFRS), etc.). Accordingly, the Authority proposes to introduce an economic balance sheet for commercial insurers, including long-term insurers, for solvency purposes. The primary tenet is that assets and liabilities should be valued, using transparent economic principles, on a consistent basis to reduce or eliminate, where possible, accounting mismatches where there are no underlying economic mismatches; and that this presents a more faithful representation of solvency, and is in the best interests of policyholders. The detailed proposals are outlined in the Discussion Paper on Economic Balance Sheet and Proposed Changes to Regulatory Reporting (August 2010). This paper also identifies a number of key issues where the Authority is seeking input from stakeholders before it finalises its proposals in a consultation paper due to be published in Q1 of 2011. The implementation of certain aspects of the economic balance sheet framework will have an effect on eligible capital, for example in the treatment of the value of future premiums.

⁵ Ibid.

⁶ The Authority appreciates that this may not be the case where a long-term insurer is providing coverage in jurisdictions such as Canada. The Authority proposes to consider applications for modifications, allowing Tier 1 treatment.

5. GOVERNANCE AND RISK MANAGEMENT - QUALITATIVE REQUIREMENTS

46. The qualitative aspects of regulation focus on controls and processes. The sophistication and quality of governance and risk management required to operate an insurer appropriately are also a function of its risk profile, and extend beyond the imposition of capital requirements to ensure the prudent conduct of business at the insurer. In particular, certain risks (e.g. contagion, reputational, operational, liquidity, etc.) are difficult to quantify and appropriately reflect in regulatory capital requirements. However, such risks may still adversely impact insurers. It is therefore critical for supervisors to assess that insurers adhere to appropriate governance and risk management standards to mitigate such risks. This component of the framework comprises:

- (i) On-site inspections/off-site review and monitoring;
- (ii) Insurance Code of Conduct (the Code);
- (iii) Commercial Insurers' Solvency Self-Assessment; and
- (iv) Group-wide supervision.

47. The first two items are currently being applied so this paper will not focus on these areas. The Code, published in February 2010, became effective on July 1, 2010; however, the Authority is committed to working with insurers to assist them in meeting the standards in the Code by 31st December 2010.

5.1 Commercial Insurer's Solvency Self Assessment (CISSA)

48. A key component of understanding an insurer's governance and risk management is for the supervisor to gain insight into the insurer's projected target economic capital required to support its business strategy, the material risks the strategy presents, the quality of capital and governance and risk management applied by the insurer to this process. The CISSA is designed to provide the Authority with this insight. The principles surrounding the CISSA, also applicable to long-term insurers, were published in the Consultation Paper on the Commercial Insurers' Solvency Self-Assessment (June 2010). See Appendix IV for the long-term insurer version of the CISSA.

5.2 Group-wide Supervision

49. Group-wide supervision is a critical element of the governance and risk management component of the proposed framework. A number of factors have underscored the need for at least one supervisor to have a comprehensive understanding of the group to ensure appropriate supervision. Among these are the commonly centralised governance and risk management functions of groups, and the risk of contagion amongst group entities. The financial crisis highlighted the fact that supervisors may exercise "effective" supervision of insurance entities (solo supervision) while the group may engage in activities in unregulated entities that could pose a major threat to the group or insurers within the group. Accordingly, the proposed long-term framework makes provision for the appointment of a Group-wide Supervisor who would coordinate the supervisory efforts of other involved supervisors to ensure effective and efficient supervision. The group-wide supervisory regime is to account for the risks arising from all entities within the group (see the Consultation Paper: Insurance Groups Regulatory Framework, February, 2010, for detailed proposals).

50. Group-wide supervision will apply to commercial long-term insurers in accordance with the classifications system based on proportionality principles from the 2011 year-end.

51. Where an insurer is subject to group-wide supervision (and the Authority becomes the Group-wide Supervisor), all the group's legal entities, whether regulated or not, and whether based in Bermuda or not, must be included in the assessment of group risks and the calculation of group solvency. The Authority is currently drafting the rules for its group-wide supervisory regime. It is expected that they will be published in September 2010 for consultation with stakeholders.

6. TRANSPARENCY – REPORTING AND DISCLOSURES

52. Reporting and disclosures are to supplement the other two components of the long-term capital and solvency framework. Regulatory disclosures facilitate assessment of an insurer's compliance with capital adequacy and governance and risk management requirements of the framework, while public disclosures allow stakeholders to make informed decisions regarding their dealings with the insurer. In this regard, the IAIS Insurance Core Principle 26 states: "The supervisory authority requires insurers to disclose relevant information on a timely basis in order to give stakeholders a clear view of their business activities and financial position and to facilitate the understanding of the risks to which they are exposed." In this paper, regulatory disclosures relate to disclosures that are submitted to the Authority, and are not made public. Public disclosures on the other hand are submitted to the Authority to be published on the Authority's website.

53. The Authority has three guiding principles in respect of disclosures:

- Regulatory disclosures should be more timely and comprehensive than public disclosures, but limited to information applicable to the prudent supervision of insurers. In determining regulatory disclosures, due regard should be given to the necessary balance between the benefits of additional information and the cost incurred by insurers, taking into account disclosures made to other supervisors;
- Public disclosures should be reliable, clear, understandable, consistent, relevant, and material, having due regard for information that would compromise competitive advantage and confidentiality; and
- Disclosures should be developed and implemented in tandem with international standards and be proportional to the size, business mix, complexity, and the risk profile of insurers.

54. The disclosures in the paper are to be viewed as being incremental (i.e. in addition to the existing annual statutory financial return (SFR). Unless stated otherwise, it is proposed that they be submitted annually accompanying the SFR, and for the most part are not required to be audited. The Authority proposes to require disclosures in the following areas:

- (i) BSCR-LT and related schedules;
- (ii) CISSA;
- (iii) Underwriting performance;
- (iv) Investments and derivatives;
- (v) Group exposure and supervision (where applicable);
- (vi) Product information;
- (vii) Eligible Capital;
- (viii) Economic Balance Sheet;
- (ix) Regulatory notifications; and
- (x) Public disclosures.

The Authority will phase in requirements, including a trial run for Class E license holders at 2010 year-end. (See Appendix II).

6.1 Public Disclosures

55. The Authority proposes to initially require long-term commercial insurers to submit audited general purpose financial statements to be published on the Authority's website from the 2011 financial year-end. This would include financial statements pertaining to both the Bermuda-licensed commercial long-term entity and only those groups where the Authority is the group-wide supervisor. The same proposals will apply to commercial general business insurers; however, where an insurer has a dual license then only one audited financial statement pertaining to the Bermuda-licensed insurer would be required. If said insurer also belongs to a group where the Authority is the group-wide supervisor then audited financial statements would be required both relating to the licensed insurer and the group.

56. The Authority proposes to augment the general purpose financial statements by requiring public disclosure of corporate governance and risk management, and a financial condition and solvency report for those groups where the Authority is the Group-wide Supervisor. These proposals would be effective from the 2012 year-end with a 2011 trial run.

6.2 Regulatory Notifications

57. The Authority proposes to require all long-term insurers (and groups where the Authority is the Group-wide Supervisor) to notify the Authority of a "material change to insurance business". This provision of notifications of a "material change to insurance business" is already in effect for Class 4 insurers. The Authority considers such changes to include:

- (i) Mergers & acquisitions
- (ii) Divestitures
- (iii) Loss portfolio transfers
- (iv) Introduction of new products
- (v) Entry into new territories
- (vi) Significant expansion or reduction in volume of business (run-off)
- (vii) Other changes to the most recent business plan submitted to the Authority

58. In principle, a "material change to insurance business" includes any changes (or planned change) that has the potential to significantly impact:

- (i) Insurer's risk profile
- (ii) Insurer's solvency and/or liquidity position
- (iii) Insurer's regulatory compliance
- (iv) Insurer's reputation

6.3 Reliance on Other Regulators

59. The Authority recognises the importance of avoiding duplication in discharging its supervisory and regulatory functions. Where international insurance groups are subject to equivalent supervision elsewhere, the Authority intends to liaise with and share relevant information with those supervisors and seek to coordinate supervisory actions when possible.

6.4 Role of the Board and Senior Management

60. The board and senior management are responsible for the prudent administration of the respective organisation. This includes ensuring that appropriate controls are in place, including those around reporting systems. In this regard, the Authority expects the board and senior management to ensure that the information provided, both to the Authority and the public, has been prepared in utmost good faith and is in compliance with Bermuda's laws and regulations. The board and senior management are expected to deal with the Authority in an open and cooperative manner. Although external resources may be employed, such as external auditors and actuaries, the ultimate responsibility for public and regulatory disclosures rests with the board and senior management. It is envisioned that elements of the enhanced disclosure proposals will require formal declarations from the board and senior management.

6.5 Disclosure Timeline and Consultation

61. As international disclosure standards continue to evolve, the Authority accepts that it must also evolve in order to ensure that Bermuda's regime remains robust. For this reason, and due to the unique characteristics of the Bermudian market, the Authority has proposed a measured approach to the development of its enhanced disclosures regime. Please review the Consultation Paper on Disclosure and Transparency July 2010, and the 'Proposed Timetable' for implementation dates and disclosure requirements for Classes C, D and E at the end of this consultation paper.

62. The timeline for implementation is contingent on the speed of international developments, and may slow down or speed up accordingly. The Authority proposes to continue its phased disclosures framework approach, allowing developments to materialise, and facilitate optimal decisions.

63. Legislation will be required to effect a variety of the proposals set out in this paper. The Authority proposes to implement secondary legislation (where applicable), on an annual basis, to achieve the objectives (i.e. the disclosures to be submitted) as outlined in this section and Appendix II of this paper. The Authority will consult with the long-term sector as required in relation thereto.

6.6 Waivers and Modifications

64. The Authority appreciates that there could be unique situations where some of the proposals in this paper may not be appropriate for a given long-term insurer or group. Accordingly, provisions would be included in legislation to allow insurers or group representatives to make application for exemptions or modifications. The Authority will consider such applications on a case-by-case basis, given the merits of the application and having regard for the risk characteristics of the business, and policyholder protection.

65. To avoid duplication, the Authority would also consider applications for modified filings where a long-term insurer or group files similar information with a reputable securities exchange or another supervisor that the Authority deems to have broadly equivalent supervision or requires comparable disclosures.

66. Further, the Authority proposes to introduce provisions that would allow waiving of legal entity public disclosures and require only group disclosures in rare circumstances, which may include:

- (i) Where the associated group disclosures do not materially⁷ differ from that which would be disclosed for the Bermuda-licensed insurer; or
- (ii) Where legal entity disclosures, on account of financial accounting conventions, do not in the Authority's opinion appropriately reflect the economic characteristics of the Bermuda insurer. An example could arise in business combinations where statutory and general purpose accounting use different criteria to establish the acquirer, resulting in the economic characteristics of an insurer appearing materially dissimilar from its statutory position when reported on a general purpose accounting basis.

67. In the above cases, the Authority proposes to issue a direction that the relevant requirements are waived. An insurer should expect that some aspects of its legal entity information (partial disclosures) would be required to be made public to give stakeholders a sense of the scale of the legal entity and maintain transparency.

68. The Authority currently considers other waiver and modification applications from long-term insurers, for example admittance of certain assets. The proposals in this paper are not intended to disallow such applications.

⁷ Materiality may be assessed both quantitatively (e.g. the legal entity's assets comprise approximately 90% of the total consolidated assets of the group, etc.) and qualitatively (e.g. the risk characteristics of the legal entity resembles the group's so that key disclosures critical for a stakeholder legal entity risk-profile assessment could be discerned from group disclosures).

7. PROPOSED TIMETABLE

Class

	A	B	C	D	E
Reclassification	2011	2011	2011	2011	2011
First filing of certain disclosures outlined in this paper – trial run			2011	2011	2010
ECR effective			2012	2012	2011
Group-wide supervision effective			2011	2011	2011
Group ECR effective			2012	2012	2012
EBS (disclosures phased from 2011)			2012	2012	2012
Regulatory notifications effective	2010	2010	2010	2010	2010

Note: The above refers to year-ends and, apart from regulatory notifications, would be filed at the same time as the insurer's SFR.

8. APPENDICES

Appendix	Title
I	Summary of Other Relevant Papers Issued by the Bermuda Monetary Authority
II	Summary of Regulatory Framework Requirements for Long-term Insurers
III	Bermuda Statutory Capital Requirement (BSCR – LT)
IV	Commercial Insurers Solvency Self Assessment (CISSA)

APPENDIX I - Summary of Other Relevant Papers Issued by the Bermuda Monetary Authority

The following papers have been released by the Bermuda Monetary Authority and have relevant guidance for long-term insurers. They can be accessed on the Authority's website www.bma.bm.

Discussion Paper on Economic Balance Sheet and Proposed Changes to Regulatory Reporting	August	2010
Consultation Paper on Disclosure and Transparency	July	2010
Consultation Paper on Commercial Insurer's Solvency Self Assessment	June	2010
Consultation Paper: Insurance Groups Regulatory Framework	February	2010
Insurance Code of Conduct	February	2010
Consultation Paper on Eligible Capital	September	2009
Standards and Application Framework for the Use of Internal Capital Models for Regulatory Capital Purposes	May	2009
Capital Add-On and Reduction Consultation Paper	June	2008
Insurance - BSCR Paper	July	2007

APPENDIX II - Summary of Regulatory Framework Requirements for Long-Term Insurers

Class E - Long-term – Phase 1 Proposed Disclosures*

FINAL On going Standard Disclosure.

Trial run ✕

Proposed adoption or enforced ✓

			Class E Regulatory *		
	Sub-Category	Description	2010	2011	FINAL
1	CSR	a) Implementation BSCR filings including related schedules.	✕	✓	✓
2	CISSA	a) CISSA trial run and implementation including filing.	✕	✓	✓
3	Underwriting Performance	a) Qualitative description of underwriting strategy; and	✕	✓	✓
		b) Details of the projected annual net premiums, by product type and the projected net income or loss.	✕	✓	✓
4	Investments and Derivatives	a) Description of the process for calculating the effective duration for both investment assets and insurance obligations and key assumptions;	✕	✓	✓
		b) Description of the investment policy;	✕	✓	✓
		c) Description of the policies surrounding the use of derivatives; and		✓	✓
		d) Market value and nominal exposure of each derivative financial instrument with a nominal exposure greater than 5% of total assets listed by assets, liabilities, long and short positions, respectively.		✓	✓
5	Group exposure where the Authority is not the Group-wide Supervisor	a) Identification of the Group-wide Supervisor - for non-Bermuda Groups	✕	✓	✓
		b) Group statutory capital requirement and Group capital and surplus;		✓	✓
		c) Inventory of material intra-group transactions; and	✕	✓	✓
		d) Quarterly unaudited financial statements – legal entity basis.		✓	✓
	Product Information	Features, classification and risks associated – overview only.	✕ □	✓ □	✓
6	Eligible Capital	a) Schedule of capital instruments eligible for ECR; and	✕	✓	✓
		b) Schedule of capital instruments eligible for MSM.	✕	✓	✓
7	Economic Balance Sheet	a) Disclosures related to the economic balance sheet.		✓	✓
	Public Disclosures	Audited general purpose financial statements.		✓ □	✓ □
8	Risk Register	Risk register including material risk identified, impact assessment or categorisation (e.g. low, medium, high or other rating metric), related controls, a rating of the effectiveness of these controls, and risk owner.	✕	✓ □	✓ □

*These are regulatory disclosures unless specifically identified as public.

Class C and D - Long-term – Phase 1 Proposed Disclosures*

(Class C and D disclosures occur one year after Class E)

			Class C and D Regulatory*		
	Sub-Category	Description	2011	2012	FINAL
1	CSR	a) Implementation BSCR filings including related schedules.	✗	✓	✓
2	CISSA	a) CISSA trial run and implementation including filing.	✗	✓	✓
3	Underwriting Performance	a) Qualitative description of underwriting strategy; and	✗	✓	✓
		b) Details of the projected annual net premiums, by product type and the projected net income or loss.	✗	✓	✓
4	Investments and Derivatives	a) Description of the process for calculating the effective duration for both investment assets and insurance obligations and key assumptions;	✗	✓	✓
		b) Description of the investment policy;	✗	✓	✓
		c) Description of the policies surrounding the use of derivatives; and		✓	✓
		d) Market value and nominal exposure of each derivative financial instrument with a nominal exposure greater than 5% of total assets listed by assets, liabilities, long and short positions, respectively.		✓	✓
5	Group exposure where the Authority is not the Group-wide Supervisor	a) Identification of the Group-wide Supervisor - for non-Bermuda Groups	✗	✓	✓
		b) Group statutory capital requirement and Group capital and surplus;		✓	✓
		c) Inventory of material intra-group transactions; and	✗	✓	✓
		d) Quarterly unaudited financial statements – legal entity basis.		✓	✓
	Product Information	Features, classification and risks associated – overview only.	✗	✓	✓
6	Eligible Capital	a) Schedule of capital instruments eligible for ECR; and	✗	✓	✓
		b) Schedule of capital instruments eligible for MSM.	✗	✓	✓
7	Economic Balance Sheet	a) Disclosures related to the economic balance sheet.		✓	✓
	Public Disclosures	Audited general purpose financial statements.		✓	✓
8	Risk Register	Risk register including material risk identified, impact assessment or categorisation (e.g. low, medium, high or other rating metric), related controls, a rating of the effectiveness of these controls, and risk owner.	✗	✓	✓

*These are regulatory disclosures unless specifically identified as public.

Long-term Insurance Only Groups – Phase 1 Proposed Disclosures

FINAL On going Standard Disclosure.

Trial run ✕

Proposed adoption ✓

			Long-term Insurance Only Groups*		
	Sub-Category	Description	2011	2012	FINAL
1	Financial Reporting Requirements	a) Annual audit consolidated financials;	✕	✓	✓
		b) Business projections;	✕	✓□	✓□
		c) Quarterly unaudited consolidated financials; and	□	✓□	✓□
		d) Valuation analysis to determine economic values.	□	✓□	✓□
2	Corporate Governance	a) List of major shareholders, board and senior management;	✕	✓	✓
		b) Due diligence documents for major shareholders, board and senior management		✓	✓
		c) Organisational structure;	✕	✓	✓
		d) Terms of reference for board of directors and its sub-committees; and	□	✓	✓
		e) The structure of the board of directors and senior management, including roles and work experience of officers.	□	✓	✓
3	Risk Management	a) Risk management strategy;	✕	✓	✓
		b) Risk appetite and framework surrounding risk concentrations, intra-group transactions, off-balance sheet exposures, unregulated entities, contagion effects etc.;	□	✓	✓
		c) Stress tests and Scenarios tests;	□	✓	✓
		d) Risk Controls; and	□	✓	✓
		e) Disaster Planning.	□	✓	✓
4	Solvency	a) Group Capital and Solvency – Group BSCR and related schedules;	✕	✓	✓
		b) Intra-group transactions;	✕	✓	✓
		c) Schedule of capital instruments eligible for the Group MSM;	✕	✓	✓
		d) Schedule of capital instruments eligible for the Group ECR;	✕	✓	✓
		e) Approved Group Internal Model; and		✓	✓
		f) Restrictions on the fungibility of capital and the transferability of assets.		✓	✓
	CISSA	a) CISSA-related disclosures.		✓□	✓□
	Cat Return	a) Cat Return, including related schedules.		✓	✓
	Solvency	a) Group Capital and Solvency Return - Group BSCR and related schedules;		✓	✓
		b) Approved Group Internal Model;		✓	✓
		c) Intra-group transactions;		✓	✓
		d) Schedule of capital instruments eligible for the Group MSM;		✓	✓
		e) Schedule of capital instruments eligible for the Group ECR; and		✓	✓
		f) Restrictions on the fungibility and transferability of assets.		✓	✓
5	Underwriting and Claims Performance	a) Underwriting strategy; and		✓	✓
		b) Reserving methodology for insurance reserves.		✓	✓

BERMUDA MONETARY AUTHORITY
CONSULTATION PAPER ON A SOLVENCY FRAMEWORK FOR LONG-TERM INSURANCE
AUGUST 2010

6	Investments and Off-Balance Sheet Transactions	a) Investment strategy;		✓	✓
		b) Asset management arrangements (intra-group);		✓ □	✓ □
		c) Effective duration for investment assets and insurance obligations;		✓ □	✓ □
		d) Off-balance sheet commitments – exposure values of guarantees, contingent arrangements, loans, letters of credit, securities lending arrangements, etc.		✓ □	✓ □
	Group Structure	a) Regulated entities (including the financial sectors in which these entities operate);	✗	✓ □	✓ □
		b) Unregulated entities (including the financial sectors in which these entities operate);	✗	✓	✓
		c) Where the legal entities are located – entities grouped by country or State (for the United States entities);	✗	✓	✓
		d) The total assets of each entity;	✗	✓	✓
		e) The total net assets or equity of each entity;	✗	✓	✓
		f) Proportional ownership of each entity; and	✗	✓	✓
		g) Sector (see Appendix A).	✗	✓	✓
7	Intra-group Transactions and Risk Concentrations	a) A list of material intra-group transactions;		✓ □	✓ □
		b) Details of material intra-group transactions including (where applicable): i. Exposure value (face value or market value, if the latter is available); ii. Counterparties involved, including where they are located iii. Summary details of the transaction – including purpose, terms, transaction costs, etc.; iv. Duration of the transaction; and v. Performance triggers.		✓ □	✓ □
		c) Details surrounding reinsurance and retrocession arrangements including: i. Aggregated values of the exposure limits (gross and net) by counterparties, broken down by counterparty rating; ii. Aggregated premium flows between counterparties (gross and net); and iii. The proportion of the group's insurance business exposure covered by internal reinsurance, retrocession and other risk transfer arrangements.		✓ □	✓ □
		d) Top 10 counterparties: i. Exposure values (face value or market value, if the latter is available); and ii. Transaction type.		✓ □	✓ □
8	Compliance	a) Rating agency reports b) Regulatory action taken by a solo supervisor		✓ □	✓ □
	Public Disclosures	a) Audited groups financial statements using US GAAP or IFRS;		✗ □	✗ □
		b) Risk management;		✗ □	✗ □
		c) Corporate governance; and		✗ □	✗ □
		d) Financial Condition and Solvency Report.		✗ □	✗ □

* These are regulatory disclosures unless specifically identified as public, for long-term insurance only groups.

* If a Class 4 or 3B general insurer includes long-term business, they will be included in the 2010 trial run; see Consultation Paper on Insurance Groups Regulatory Framework February 2010 for details.

BERMUDA MONETARY AUTHORITY
CONSULTATION PAPER ON A SOLVENCY FRAMEWORK FOR LONG-TERM INSURANCE
AUGUST 2010

BERMUDA MONETARY AUTHORITY
CONSULTATION PAPER ON A SOLVENCY FRAMEWORK FOR LONG-TERM INSURANCE
AUGUST 2010

APPENDIX III – Bermuda Statutory Capital Requirement (BSCR-LT)

CLICK BUTTON TO NAVIGATE

Company Information

CAPITAL & SOLVENCY RETURN (INPUT SECTIONS)

Form 4

Form 8

Schedule II

Schedule III

Schedule IV

OPERATIONAL RISK CHARGE (INPUT SECTIONS)

Corporate
Governance

Risk Management

Risk Identification

Risk Measurement

Risk Response

Risk Monitoring &
Reporting

OPERATIONAL
RISK CHARGE

BSCR (CAPITAL CHARGE CALCULATIONS)

SUMMARY

Fixed Income
Investment Risk

Equity Investment
Risk

Interest and
Liquidity Risk

Long-Term
Insurance Risk

Long-Term Other
Insurance Risk

Credit Risk

LT Variable Annuity
Guarantee Risk

COMPANY INFORMATION PAGE

Sample Company

[Return to Index](#)

For the Year Ending

December 31, 2010

COMPANY INFORMATION

Company Name

[Sample Company](#)

Date Incorporated/Organized

Date Commenced Business

CONTACT PERSON FOR RISK BASED CAPITAL

First Name

Last Name

CONTACT PERSON INFORMATION

Street and Number of P.O. Box

City

Country

Postal Code

Phone Number

Extension

Email

Date Prepared

CAPITAL AND SOLVENCY RETURN DECLARATION

Sample Company
December 31, 2010

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We declare that to the best of our knowledge and belief, the information in this Capital and Solvency Return fairly represents the financial condition of the Company in all material respects.

Signatory:

Print Name:

Director

Date:

Signatory:

Print Name:

Director

Date:

Signatory:

Print Name:

Principal Representative

Date:

Insurer Name:

Sample Company

Year-end:

December 31, 2010

STATUTORY BALANCE SHEET
[Return to Index](#)
Sample Company

 As at **December 31, 2010**

Expressed in ['000s] (see Regulation 10(2))

Form 4

STMT.
LINE No.

		20XX (^{'000})	20XX (^{'000})
1.	CASH AND TIME DEPOSITS		
2.	QUOTED INVESTMENTS:		
(a)	Bonds and Debentures		
(b)	Equities		
	i. Common stocks		
	ii. Preferred stocks		
	iii. Mutual Funds		
(c)	Total equity investments	-	-
(d)	Other quoted investments		
(e)	Total quoted investments	-	-
3.	UNQUOTED INVESTMENTS:		
(a)	Bonds and Debentures		
(b)	Equities		
	i. Common stocks		
	ii. Preferred stocks		
	iii. Mutual Funds		
(c)	Total equity investments	-	-
(d)	Other unquoted investments		
(e)	Total unquoted investments	-	-
4.	INVESTMENTS IN AND ADVANCES TO AFFILIATES		
5.	INVESTMENTS IN MORTGAGE LOANS ON REAL ESTATE:		
6.	POLICY LOANS		
7.	REAL ESTATE:		
(a)	Occupied by the company (less encumbrances)		
(b)	Other properties (less encumbrances)		
(c)	Total real estate	-	-
8.	COLLATERAL LOANS		
9.	INVESTMENT INCOME DUE AND ACCRUED		
10.	ACCOUNTS AND PREMIUMS RECEIVABLE		
(a)	In course of collection		
(b)	Deferred - not yet due		
(c)	Receivables from retrocessional contracts		
(d)	Total accounts and premiums receivable	-	-
11.	REINSURANCE BALANCES RECEIVABLE		
(a)	Foreign affiliates		
(b)	Domestic affiliates		
(c)	Pools & associations		
(d)	All other insurers		
(e)	Total reinsurance balances receivable	-	-
12.	FUNDS HELD BY CEDING COMPANIES		
13.	SUNDRY ASSETS:		
(a)	Derivative instruments		
(b)	Segregated accounts companies		
(c)	Deposit assets		
(d)			
(e)	Total sundry assets	-	-
14.	LETTERS OF CREDIT, GUARANTEES AND OTHER INSTRUMENTS		
(a)	Letters of credit		
(b)	Guarantees		
(c)	Other instruments		
(d)	Total letters of credit, guarantees and other instruments	-	-
15.	TOTAL	-	-

STATUTORY BALANCE SHEET
[Return to Index](#)
Sample Company

 As at **December 31, 2010**

Expressed in [000s] (see Regulation 10(2))

Form 4

STMT.
LINE No.
20XX
20XX
LONG-TERM BUSINESS INSURANCE RESERVES, OTHER LIABILITIES AND STATUTORY CAPITAL AND SURPLUS
INSURANCE RESERVES

20.	RESERVES FOR REPORTED CLAIMS		
21.	RESERVES FOR UNREPORTED CLAIMS		
22.	POLICY RESERVES LIFE		
23.	POLICY RESERVES ACCIDENT AND HEALTH		
24.	POLICYHOLDER'S FUNDS ON DEPOSIT		
25.	LIABILITY FOR FUTURE POLICYHOLDER DIVIDENDS		
26.	OTHER INSURANCE RESERVES - LONG-TERM		
27.	TOTAL LONG-TERM BUSINESS - INSURANCE RESERVES	-	-

OTHER LIABILITIES

28.	INSURANCE AND REINSURANCE BALANCES PAYABLE		
29.	COMMISSIONS, EXPENSES, FEES AND TAXES PAYABLE		
30.	LOANS AND NOTES PAYABLE		
31.	(a) INCOME TAXES PAYABLE		
	(b) DEFERRED INCOME TAXES		
32.	AMOUNTS DUE TO AFFILIATES		
33.	ACCOUNTS PAYABLE AND ACCRUED LIABILITIES		
34.	FUNDS HELD UNDER REINSURANCE CONTRACTS		
35.	DIVIDENDS PAYABLE		
36.	SUNDRY LIABILITIES:		
(a)	Derivative instruments		
(b)	Segregated accounts companies		
(c)	Deposit liabilities		
(d)			
(e)	Total sundry liabilities	-	-
37.	LETTERS OF CREDIT, GUARANTEES AND OTHER INSTRUMENTS		
(a)	Letters of credit		
(b)	Guarantees		
(c)	Other instruments		
(d)	Total letters of credit, guarantees and other instruments	-	-
38.	TOTAL OTHER LIABILITIES	-	-
39.	TOTAL LONG-TERM BUSINESS INSURANCE RESERVES AND OTHER LIABILITIES	-	-

STATUTORY CAPITAL AND SURPLUS

40.	TOTAL STATUTORY CAPITAL AND SURPLUS	-	-
41.	TOTAL	-	-

TRUE
TRUE
CHECK
Notes to Form 4

Line 10	Collateralized balances		
Line 11	Letters of credit		

STATUTORY STATEMENT OF CAPITAL AND SURPLUS

Sample Company

For the year ending
Expressed in

December 31, 2010
['000s] (see Regulation 10(2))

[Return to Index](#)

Form 8

STMT.
LINE No.

		20XX ('000)	20XX ('000)
1.	STATUTORY CAPITAL		
	(a) Capital stock		
	authorized		
	value		
	fully paid		
		shares of par	
		each issued and	
		shares	
	(b) Contributed surplus		
	(c) Any other fixed capital		
	(d) Total Statutory Capital	-	-
2.	STATUTORY SURPLUS:		
	(a) Statutory Surplus - Beginning of Year		
	(b) Add: Income for Year		
	(c) Less: Dividends paid and payable		
	(d) Add (Deduct) change in unrealized appreciation (depreciation) of investments		
	(e) Add (Deduct) change in non-admitted assets		
	(f) Add (Deduct) change in appraisal of real estate		
	(g) Add (Deduct) change in any other statutory capital		
	(h) Statutory Surplus - End of Year	-	-
3.	TOTAL STATUTORY CAPITAL AND SURPLUS	-	-

SCHEDULE OF FIXED INCOME INVESTMENTS BY RATING CATEGORY

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Sample Company

As at

December 31, 2010

Expressed in

['000s] (see Regulation 10(2))

Schedule II

Schedule
Line no.

QUOTED INVESTMENTS
Bonds and Debentures
[Form 4 Line 2(a)]

UNQUOTED INVESTMENTS
Bonds and Debentures
[Form 4 Line 3(a)]

TOTAL
[Form 4 Lines 2(a) & 3(a)]

	20XX (^{'000})	20XX (^{'000})	20XX (^{'000})	20XX (^{'000})	20XX (^{'000})	20XX (^{'000})
1 Government					-	-
2 High Investment Grade (AAA & AA)					-	-
3 Medium Investment Grade (A)					-	-
4 Low Investment Grade (BBB)					-	-
5 Non Investment Grade					-	-
6 Mortgaged-backed Securities					-	-
7 Mutual Funds					-	-
8 Non Rated					-	-
9 Total	-	-	-	-	-	-
	TRUE	TRUE	TRUE	TRUE		CHECK

Sample Company
Schedule III (\$'000)
For the Year Ending December 31, 2010

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Schedule III

SCHEDULE OF THE LONG-TERM INSURANCE

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Bermuda Statutory Reserve	Reported DAC (if any)	Best Estimate Reserve	Best Estimate Reserve (Subject to zero floor)	Net Amount at Risk		
	('000)	('000)	('000)	('000)	Adjustable product/ treaty	Non-adjustable product/ treaty	Total
	('000)	('000)	('000)	('000)	('000)	('000)	('000)
1. Mortality (term assurance, whole life, universal life)				-			-
2. Critical Illness (including accelerated CI products)				-			-
3. Longevity (payout annuities, contingent annuities, pension blocks)				-			-
4. Deferred annuities (including index linked products with no guarantees)				-			-
5. Disability Income: active lives - incl. waiver of premium and LTC							
Length of Premium Guarantee							
(a) <= 1 year							-
(b) 1-5 years							-
(c) >5 years							-
Total				-			-
6. Disability income: active lives - other accident and sickness				-			-
7. Disability income: claims in payment - incl. waiver of premium and LTC				-			-
8. Disability income: claims in payment -other accident and sickness				-			-
9. Group Life				-			-
10. Group Disability				-			-
11. Group Health				-			-
12. Non-proportional covers				-			-
13. Other product riders not included above				-			-
Total (excluding variable annuities)	-	-	-	-			-

14. Weighted average of the difference between assets duration and liabilities duration (weighted by reported reserves)	Duration (yrs)
15. Reserves with known difference in duration / Total Reserves	% Reserves
16. FUNDS HELD BY CEDING COMPANIES	Amount Held ('000)
(a) in which the ceding company has a AAA, AA rating	
(b) in which the ceding company has a A rating	
(c) in which the ceding company has a rating lower than A	
Total funds held by ceding companies	
17. Long-Term License Class	

Sample Company
Schedule IV (\$'000)
For the Year Ending December 31, 2010

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Schedule IV

SCHEDULE OF THE LONG TERM VARIABLE ANNUITY GUARANTEES

	(1) Bermuda Statutory Reserve	(2) Account Value ⁴ Volatility (0%,10.0%]	(3) Volatility >10.0%	(4) Net Amount at Risk ^{1, 3}
	('000)	('000)	('000)	('000)
1 Guaranteed Minimum Accumulation Benefit: <5 years to maturity				
2 Guaranteed Minimum Accumulation Benefit: >=5 years to maturity				
3 Guaranteed Minimum Death Benefit: Return of Premium, Ratchet and Reset ²				
4 Guaranteed Minimum Death Benefit: Enhanced Benefits (Roll up) ²				
5 Guaranteed Minimum Income Benefit				
6 Guaranteed Minimum Withdrawal Benefit				
7 Guaranteed Enhanced Earnings Benefit				
Total (Variable Annuities)	-	-	-	-

Notes

- Factors should be applied to Net Amount at Risk (NAR) defined as:
 - GMAB Total claim payable if all contracts mature immediately
 - GMDB Total claim amount payable upon immediate death of all policyholders
 - GMIB Total claim payable upon full and immediate annuitization of all policies using an 80% factor applied to the GV (the 80% represents the ratio between current market annuitization factors and the guaranteed annuitization factors)
 - GMWB Total claim payable if 100% of the guaranteed withdrawal benefit base in excess of the current account value is withdrawn immediately
 - GEEB Total guaranteed enhanced payments upon immediate death of all policyholders
- Where ratchets, resets and roll-ups exist, please use the roll-up category.
- NAR is net of reinsurance.
- The proportion used for the account value under reinsurance is the proportion used for NAR.
- Volatility is defined as the annual volatility of the fund. In the case where there is no, or limited, history of the fund, use the volatility of the benchmark.

Sample Company

Bermuda Solvency Capital Requirement - Long Term Business (BSCR_{LT})

For the Year Ending December 31, 2010

(\$'000)

REQUIRED CAPITAL AND SURPLUS

C_{fi}	Fixed Income Investment Risk	0
C_{eq}	Equity Investment Risk	0
C_{LTint}	Long Term Interest and Liquidity Risk	0
C_{LTmort}	Long Term Insurance Risk - mortality	0
C_{LTnp}	Long Term Insurance Risk - non-proportional	0
C_{LTTr}	Long Term Insurance Risk - riders	0
C_{LTmorb}	Long Term Insurance Risk - morbidity and disability	0
C_{LTlong}	Long Term Insurance Risk - longevity	0
C_{LTVa}	Long Term Variable Annuity Guarantee Risk	0
C_{LTOTH}	Long Term Other Insurance Risk	0
C_{LTcred}	Credit Risk	0

BSCR_{LT} (Prior to Covariance Adjustment and prior to C_{op})

BSCR_{LT} (After Covariance Adjustment and prior to C_{op})

Operational risk charge (%) **10%**

C_{op} Operational risk capital charge (\$) 0

Reserve adjustment 0

Capital add-on / reduction (BMA assessment)

Final BSCR_{LT} 0

AVAILABLE STATUTORY CAPITAL AND SURPLUS

Total eligible capital and surplus

Capital contribution

Pre-adjustment available statutory capital and surplus 0

Capital add-on / reduction (BMA Assessment) 0

Available statutory capital and surplus 0

MINIMUM MARGIN OF SOLVENCY

Minimum Margin of Solvency

Eligible Capital and Surplus for Minimum Margin of Solvency

ENHANCED CAPITAL REQUIREMENT & TARGET CAPITAL LEVEL

Enhanced Capital Requirement 0

Target Capital Level 0

RATIOS

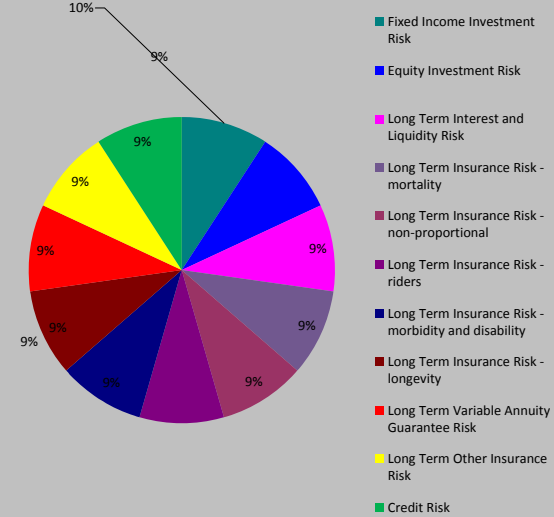
Bermuda Solvency Capital Requirement Ratio

Enhanced Capital Requirement Ratio

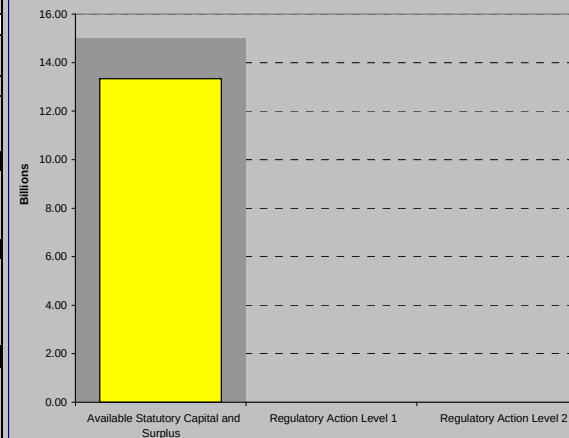
$$BSCR_{LT} = \sqrt{\{C_{fi}^2 + C_{eq}^2 + C_{LTint}^2 + (C_{LTmort} + C_{LTnp} + C_{LTTr})^2 + C_{LTmorb}^2 + C_{LTlong}^2 + C_{LTVa}^2 + C_{LTOTH}^2 + C_{LTcred}^2\} + C_{op}}$$

Solvency Capital Distribution

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Regulatory Action Level vs. Available Statutory Capital and Surplus



OPERATIONAL RISK: CORPORATE GOVERNANCE

[Return to Index](#)

Sample Company

December 31, 2010

The insurer is to review the following statements below. The insurer is to place an "X" in the column "Implemented" where the Corporate Governance function meets the criteria (200 points for each fulfilled criteria). The worksheet will automatically aggregate all scores.

The Board of Directors:

Description	Implemented	Score
Sets risk policies, practices and tolerance limits for all material foreseeable operational risks at least annually and ensures they are communicated to relevant business units		0
Monitors adherence to operational risk tolerance limits more regularly than annually		0
Receives, at least annually, reports on the effectiveness of material operational risk internal controls as well as management's plans to address related weaknesses		0
Ensures that systems and/or procedures are in place to identify, report and promptly address internal control deficiencies related to operational risks		0
Promotes full, open and timely disclosure from senior management on all significant issues related to operational risk		0
Ensures that periodic independent reviews of the risk management function are performed and receives the findings of the review		0
		0

Comments (optionally, the insurer may provide comments in the box below to support its responses above):

--

OPERATIONAL RISK: RISK IDENTIFICATION

Sample Company

December 31, 2010

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The insurer is to answer the following question. If the answer to the question is "No" then the insurer does not have to complete the matrix/grid. If the answer to the question is "Yes" then the insurer is to identify the stage of progression of each Operational Risk Area based upon the Dimension descriptor. The insurer is then to input an "X" in the grid corresponding to the stage in the matrix table under the relevant Operational Risk Area.

Has your company taken steps to identify material risks arising from the Operational Risk Areas identified below? (Y/N)

If "Y", identify the stage of each Operational Risk Area and input an "X" in the appropriate grid under each area.

Risk Identification Processes are:

Progression		Dimension	Operational Risk Areas								
Stage	Scoring		Fraud	Human Resources	Outsourcing	Distribution Channels	Business Processes	Business Continuity	Information Systems	Compliance	Total (Si)
1	50	"ad hoc"									
2	100	Implemented but not standardized across the organization									
3	150	Implemented, well documented policies and procedures that are understood by relevant staff, and standardized across the entire organization									
4	200	In addition to Stage 3, processes are reviewed at least annually with the view to assessing effectiveness and introducing improvements									
			0	0	0	0	0	0	0	0	0

OK

Comments (optionally, the insurer may provide comments in the box below to support its responses above):

OPERATIONAL RISK: RISK MEASUREMENT

Sample Company

December 31, 2010

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The insurer is to answer the following question. If the answer to the question is "No" then the insurer does not have to complete the matrix/grid. If the answer to the question is "Yes" then the insurer is to identify the stage of progression of each Operational Risk Area based upon the Dimension descriptor. The insurer is then to input an "X" in the grid corresponding to the stage in the matrix table under the relevant Operational Risk Area.

Has your company taken steps to measure material risks arising from the Operational Risk Areas identified below? (Y/N)

If "Y", identify the stage of each Operational Risk Area and input an "X" in the appropriate grid under each area.

Risk Identification Processes are:

Progression		Dimension	Operational Risk Areas								
Stage	Scoring		Fraud	Human Resources	Outsourcing	Distribution Channels	Business Processes	Business Continuity	Information Systems	Compliance	Total (Si)
1	50	"ad hoc"									
2	100	Implemented but not standardized across the organization									
3	150	Implemented, well documented policies and procedures that are understood by relevant staff, and standardized across the entire organization									
4	200	In addition to Stage 3, processes are reviewed at least annually with the view to assessing effectiveness and introducing improvements									
			0	0	0	0	0	0	0	0	0

Comments (optionally, the insurer may provide comments in the box below to support its responses above):

OPERATIONAL RISK: RISK RESPONSE

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Sample Company

December 31,2010

The insurer is to answer the following question. If the answer to the question is "No" then the insurer does not have to complete the matrix/grid. If the answer to the question is "Yes" then the insurer is to identify the stage of progression of each Operational Risk Area based upon the Dimension descriptor. The insurer is then to input an "X" in the grid corresponding to the stage in the matrix table under the relevant Operational Risk Area.

Has your company taken steps to control and/or mitigate material risks arising from the Operational Risk Areas identified below? (Y/N)

If "Y", identify the stage of each Operational Risk Area and input an "X" in the appropriate grid under each area.

Risk Response processes are:

Progression		Dimension	Operational Risk Areas								
Stage	Scoring		Fraud	Human Resources	Outsourcing	Distribution Channels	Business Processes	Business Continuity	Information Systems	Compliance	Total (Si)
1	50	"ad hoc"									
2	100	Implemented but not standardized across the organization									
3	150	Implemented, well documented policies and procedures that are understood by relevant staff, and standardized across the entire organization									
4	200	In addition to Stage 3, processes are reviewed at least annually with the view to assessing effectiveness and introducing improvements									
			0	0	0	0	0	0	0	0	0

OK

Comments (optionally, the insurer may provide comments in the box below to support its responses above):

OPERATIONAL RISK: RISK MONITORING & REPORTING

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Sample Company

December 31,2010

The insurer is to answer the following question. If the answer to the question is "No" then the insurer does not have to complete the matrix/grid. If the answer to the question is "Yes" then the insurer is to identify the stage of progression of each Operational Risk Area based upon the Dimension descriptor. The insurer is then to input an "X" in the grid corresponding to the stage in the matrix table under the relevant Operational Risk Area.

Has your company taken steps to monitor and report material risks arising from the Operational Risk Areas identified below? (Y/N)

If "Y", identify the stage of each Operational Risk Area and input an "X" in the appropriate grid under each area.

Risk Monitoring & Reporting processes are:

Progression		Dimension	Operational Risk Areas								
Stage	Scoring		Fraud	Human Resources	Outsourcing	Distribution Channels	Business Processes	Business Continuity	Information Systems	Compliance	Total (Si)
1	50	"ad hoc"									
2	100	Implemented but not standardized across the organization									
3	150	Implemented, well documented policies and procedures that are understood by relevant staff, and standardized across the entire organization									
4	200	In addition to Stage 3, processes are reviewed at least annually with the view to assessing effectiveness and introducing improvements									
			0	0	0	0	0	0	0	0	0

OK

Comments (optionally, the insurer may provide comments in the box below to support its responses above):

OPERATIONAL RISK: OPERATIONAL RISK CHARGE CALCULATION

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Subject to the Authority applying a re-assessment upon onsite inspection, the "Total Operational Risk Capital Charge" below will be applied to the insurer's BSCR (After Covariance Adjustment) sub-total in the BSCR model for purposes of arriving at its Enhanced Capital Requirement for the year-end filing.

Overall CIRA Score

0

CIRA Scoring Grid

OVERALL SCORE	APPLICABLE OPERATIONAL RISK CHARGE % OF "BSCR AFTER COVARIANCE ADJUSTMENT"
<= 5200	10%
> 5200 <= 6000	9%
> 6000 <= 6650	8%
> 6650 <= 7250	7%
> 7250 <= 7650	6%
> 7650 <= 7850	5%
> 7850 <= 8050	4%
> 8050 <= 8250	3%
> 8250 <= 8450	2%
> 8450	1%

BSCR After Covariance
Adjustment:

\$ -

Operational Risk Charge %
(Decimals):

10%

Total Operational Risk Capital
Charge:

\$ -

Signatory:

Print Name:

Resident Director

Date:

Signatory:

Print Name:

Director

Date:

Insurer Name:

[Sample Company](#)

Year-end:

[December 31, 2010](#)

Insurer Registration No.

Sample Company
Fixed Income Investment Risk (\$'000)
December 31, 2010

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		(1)	(2)	(3)
TYPE OF FIXED INCOME INVESTMENTS	STATEMENT SOURCE	ASSET VALUE	CAPITAL FACTOR	REQUIRED CAPITAL
(a) Bonds By Rating Category				(1) x (2)
Government	Schedule II, Line (1)	-	0.30%	-
High Investment Grade (AAA & AA)	Schedule II, Line (2)	-	0.80%	-
Medium Investment Grade (A)	Schedule II, Line (3)	-	3.20%	-
Low Investment Grade (BBB)	Schedule II, Line (4)	-	5.00%	-
Non Investment Grade	Schedule II, Line (5)	-	26.30%	-
Mortgage-Backed Securities	Schedule II, Line (6)	-	10.00%	-
Mutual Funds	Schedule II, Line (7)	-	15.00%	-
Non Rated Bonds	Schedule II, Line (8)	-	50.00%	-
(a) SUBTOTAL - BONDS		-		-
(b) Other Fixed Income Investments				
Mortgage Loans	Form 4, Line (5)	-	5.0%	-
Other Loans	Form 4, Line (8)	-	5.0%	-
Cash and Time deposits	Form 4, Line (1)	-	0.3%	-
(b) SUBTOTAL - OTHER FIXED INCOME INVESTMENTS		-		-
(c) TOTAL FIXED INCOME INVESTMENTS [(a) + (b)]		-		-

Sample Company
Equity Investment Risk (\$'000)
December 31, 2010

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(1) (2) (3)

TYPE OF EQUITY INVESTMENTS	STATEMENT SOURCE	ASSET VALUE	CAPITAL FACTOR	REQUIRED CAPITAL
(a) Common Stocks				(1) x (2)
Non-Affiliated (Quoted)	Form 4, Line (2b)-i	-	14.4%	-
Non-Affiliated (Unquoted)	Form 4, Line (3b)-i	-	14.4%	-
Mutual Funds	Form 4, Lines (2b)-iii, (3b)-iii	-	14.4%	-
(a) SUBTOTAL - COMMON STOCKS		-		-
(b) Preferred Stocks				
Non-Affiliated (Quoted)	Form 4, Line (2b)-ii	-	14.4%	-
Non-Affiliated (Unquoted)	Form 4, Line (3b)-ii	-	14.4%	-
(b) SUBTOTAL - PREFERRED STOCKS		-		-
(c) Other Equity Investments				
<u>Real Estate</u>				
Company-Occupied Less Encumbrances	Form 4, Line (7a)	-	10.0%	-
Investments Less Encumbrances	Form 4, Line (7b)	-	20.0%	-
Other Equity Investments	Form 4, Lines (2d), (3d)	-	20.0%	-
Other Tangible Assets	Form 4, Lines (13), (14)	-	20.0%	-
(c) SUBTOTAL - OTHER EQUITY INVESTMENTS		-		-
(d) TOTAL EQUITY INVESTMENTS [(a) + (b) + (c)]		-		-

Sample Company
Interest Rate and Liquidity Risk (\$'000)
December 31, 2010

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	(1)	(2)		(3)	(5)	(6)	(7)	(8)
INTEREST RATE AND LIQUIDITY RISK CHARGE	INTEREST RATE SHOCK	WEIGHTED AVERAGE DIFFERENCE IN ASSET DURATION AND LIABILITY DURATION (MINIMUM OF 1 YEAR)	STATEMENT SOURCE	KNOWN DIFFERENCE IN DURATIONS / TOTAL	ASSET VALUE	ALM CREDIT	CAPITAL FACTOR	REQUIRED CAPITAL
(a) For assets (and liabilities) where the extent of the duration mismatch is known:	2%	1	Schedule III, Line (14)	0%	-	50.00%	0.0%	-
(b) For assets (and liabilities) where the extent of the duration mismatch is unknown:	2%	2		N/A	-	N/A	4.0%	-
TOTAL INTEREST RATE AND LIQUIDITY RISK CHARGE								-

ALM CREDIT	SOURCE CISSA - Interest and Liquidity Risk	DISCOUNT FACTOR
Has the company implemented policies on Asset Liability Management, including tolerances for deviation?	Question 6	Yes/No
Question 1: Have clear roles and responsibilities for the execution of the Asset Liability Management program been assigned?	Question 7	Yes/No Yes
Question 2: Are Asset Liability Management positions / tolerances communicated to the investment function, senior management and the board on a timely basis?	Question 8	Yes/No Yes
Question 3: Have systems and procedures been established to identify, report and promptly address asset liability management deficiencies?	Question 9	Yes/No Yes
Question 4: Are the Asset Liability Management policies and procedures reviewed and reapproved or revised at least annually?	Question 10	Yes/No Yes
Question 5: Is the company's current Asset Liability Management position in compliance with the company's policies?	Question 11	Yes/No Yes
Total discount factor to apply to Investment capital requirement:		Total 50.00%

Sample Company
Long Term Insurance Risk (\$'000)
December 31, 2010

[Return to Index](#)

(1)

(2)

(3)

(4)

(5)

TYPE OF RISK	RISK MEASURE		STATEMENT SOURCE		CAPITAL FACTORS		CAPITAL REQUIRED			
Insurance risks										
Definition of Adjustable: re/insurer has the ability to make a material adjustment to the cost of insurance, based on recent experience										
	Adjustable product/ treaty	Non-adjustable product/ treaty	Adjustable product/ treaty	Non-adjustable product/ treaty	Tier	NAR (B=\$Billions)	Adjustable product/ treaty	Non-adjustable product/ treaty	Adjustable product/ treaty	Non-adjustable product/ treaty
	Net Amount at Risk		Schedule III		Factor (per 1000 of NAR)			(1) * (3)	(2) * (4)	
Mortality	-	-	Line 1	Line 1	1	NAR <1B	1.99	3.97	-	-
(term assurance, whole life, universal life, AD&D)					2	1B - 5B	0.90	1.8	-	-
					3	5B -10B	0.72	1.44	-	-
					4	10B - 50B	0.65	1.29	-	-
					5	NAR > 50B	0.57	1.13	-	-
					Subtotal				-	-
	Net Amount at Risk				Factor (per 1000 of NAR)					
Critical Illness	-	-	Line 2	Line 2	1	NAR <1B	5.96	11.91	-	-
(Critical Illness including accelerated CI products)					2	1B - 5B	2.70	5.4	-	-
					3	5B -10B	2.16	4.32	-	-
					4	10B - 50B	1.94	3.87	-	-
					5	NAR > 50B	1.70	3.39	-	-
					Subtotal				-	-
	Net Reserve				% of Net Reserve				(1) * (4)	-
Longevity		-	Line 3		6.00%					
(payout annuities, contingent annuities)										
	Net Reserve								(1) * (4)	-
Disability income: claims in payment		-	Line 7		7.00%					
Waiver of premium and LTC										
Disability income: claims in payment		-	Line 8		10.00%				(1) * (4)	-
other accident and sickness										
	Net Annual Premium				% of Annual Premiums					
Disability income: active lives	Benefit Period <= 2 years	Benefit Period > 2 years	Line 5	Line 5	Benefit Period <= 2 years	Benefit Period > 2 years			(1) * (3) + (2) * (4)	-
(including Waiver of Premium and LTC)									(1) * (3) + (2) * (4)	-
Length of premium g'tee									(1) * (3) + (2) * (4)	-
<= 1 year	-	-	(a)	(a)	9.00%	12.00%				
1 - 5 years	-	-	(b)	(b)	15.00%	20.00%				
>5 years	-	-	(c)	(c)	22.50%	30.00%				
	Net Annual Premium				% of Annual Premiums				(1) * (4)	-
Disability income: active lives		-	Line 6		12.00%					
other accident and sickness										
	Net Annual Premium				% of Annual Premiums				(1) * (4)	-
Other products		-	Line 12		50.00%					
Non-proportional covers		-	Line 13		25.00%				(1) * (4)	-
Other product riders not included above		-								
(for example: Guaranteed Insurability Options, Conversion options, etc)										
SUBTOTAL - INSURANCE RISK										
Mortality										-
Non-proportional covers										-
Other product riders not included above										-
Morbidity										-
Longevity										-
TOTAL - INSURANCE RISK										
										-

Sample Company
Long Term Business Variable Annuity Guarantee Risk ('\$000)
December 31, 2010

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(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
TYPE OF RISK										
ACCOUNT VALUE			NAR FACTOR		MINIMUM FLOOR FACTOR		WEIGHTED AVERAGE FACTOR	TOTAL BALANCE SHEET REQUIREMENT	BERMUDA STATUTORY RESERVES	CAPITAL REQUIRED
Volatility (0%,10.0%]	Volatility >10.0%	NET AMOUNT AT RISK (NAR)	Volatility (0%,10.0%]	Volatility >10.0%	Volatility (0%,10.0%]	Volatility >10.0%				
Variable Annuity Guarantee Risk								Max [{(6) x (1) + (7) x (2)},(8) x (3)]		(9) - (10)
Guaranteed Minimum Accumulation Benefit (GMAB): <5 years to maturity					See notes			0.00%	-	-
-	-	-	65%	125%	4.00%	7.00%				
Guaranteed Minimum Accumulation Benefit (GMAB): >=5 years to maturity					20%	70%	1.50%	4.00%	0.00%	-
-	-	-								
Guaranteed Minimum Death Benefit: Return of Premium, Ratchet and Reset					4%	13%	0.25%	0.75%	0.00%	-
-	-	-								
Guaranteed Minimum Death Benefit: Enhanced Benefits (Roll up)					12%	21%	0.75%	1.25%	0.00%	-
-	-	-								
Guaranteed Minimum Income Benefit (GMIB)					100%	160%	5.00%	8.00%	0.00%	-
-	-	-								
Guaranteed Minimum Withdrawal Benefit (GMWB)					60%	90%	3.25%	5.00%	0.00%	-
-	-	-								
Guaranteed Enhanced Earnings Benefit (GEEB)					1%	17%	0.00%	1.00%	0.00%	-
-	-	-								
Total								-	-	-
								-	-	-
SUBTOTAL - VARIABLE ANNUITY GUARANTEE RISK								-	-	-

Notes

- Factors should be applied to Net Amount at Risk (NAR) defined as:

GMAB	Total claim payable if all contracts mature immediately
GMDB	Total claim amount payable upon immediate death of all policyholders
GMIB	Total claim payable upon full and immediate annuitization of all policies using an 80% factor applied to the Guaranteed Value (the 80% represents the ratio between current market annuitization factors and the guaranteed annuitization factors)
GMWB	Total claim payable if 100% of the guaranteed withdrawal benefit base in excess of the current account value is withdrawn immediately
GEEB	Total guaranteed enhanced payments upon immediate death of all policyholders
- Where ratchets, resets and roll-ups exist, please use the roll-up category.
- NAR is net of reinsurance.
- The proportion used for the account value under reinsurance is the proportion used for NAR.
- Need minimum amount when Guaranteed Value (GV) < Account Value (AV), the minimum floor factor is applied to AV.

Sample Company
Long Term Other Insurance Risk (\$'000)
December 31, 2010

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(1)

(2)

(3)

OTHER INSURANCE RISK	BERMUDA STATUTORY RESERVE	STATEMENT SOURCE	CAPITAL FACTOR	CAPITAL REQUIRED
(covering insurance risks such as policyholder behaviour, expenses, and product guarantees)				
				Max [0, (1) x (2)]
<u>Line of Business</u>				
Pay out annuities, deferred annuities	-	Schedule III, Lines 3 & 4	0.50%	-
Group business (life, health, disability)	-	Schedule III, Lines 9,10 & 11	0.50%	-
Disability claims in payment	-	Schedule III, Lines 7 & 8	0.50%	-
All other products (excluding Variable Annuity Guarantees)	-	Schedule III, Lines 1,2,5,6,12 & 13	2.00%	-
Total	-			
SUBTOTAL - RESERVE RISK	-			-

Sample Company
Credit Risk (\$'000)
December 31, 2010

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(1) (2) (3)

TYPE OF CREDITOR	STATEMENT SOURCE	RECEIVABLES/ RECOVERABLES	CAPITAL FACTOR	REQUIRED CAPITAL
(a) Accounts and Premiums Receivable				(1) x (2)
In Course of Collection	Form 4, Line (10a)	-	5.0%	-
Deferred - Not Yet Due	Form 4, Line (10b)	-	5.0%	-
Receivables from retrocessional contracts				
Less: Collateralized Balances	Form 4, Line (10c), Notes to Form 4	-	10.0%	-
(a) SUBTOTAL - ACCOUNTS AND PREMIUMS RECEIVABLE		-		-
(b) Reinsurance Balances Receivable				
Foreign Affiliates	Form 4, Line (11a)	-	10.0%	-
Domestic Affiliates	Form 4, Line (11b)	-	0.0%	-
Pools & Associations	Form 4, Line (11c)	-	10.0%	-
All Other Insurers	Form 4, Line (11d)	-	9.4%	-
Less: Letters of Credit	Notes to Form 4	-	9.0%	-
Less: Funds Held Under Reinsurance Contracts	Form 4, Line 34	-	9.7%	-
(b) SUBTOTAL - REINSURANCE BALANCES RECEIVABLE		-		-
(c) All Other Receivables				
Funds Held by Ceding Companies (AAA, AA rating)	Schedule III, Line (16a)	-	0.8%	-
Funds Held by Ceding Companies (A rating)	Schedule III, Line (16b)	-	3.2%	-
Funds Held by Ceding Companies (Below A rating)	Schedule III, Line (16c)	-	5.0%	-
Accrued Investment Income	Form 4, Line (9)	-	2.5%	-
Investments in and Advances to Affiliates	Form 4, Line (4)	-	5.0%	-
(c) SUBTOTAL - ALL OTHER RECEIVABLES		-		-
(d) TOTAL CREDIT RISK [(a) + (b) + (c)]		-		-

BERMUDA MONETARY AUTHORITY
CONSULTATION PAPER ON A SOLVENCY FRAMEWORK FOR LONG-TERM INSURANCE
AUGUST 2010

APPENDIX IV – Commercial Insurers Solvency Self- Assessment (CISSA)

**APPENDIX A: COMMERCIAL INSURER'S SOLVENCY SELF ASSESSMENT RETURN
("CISSA return") - LONG TERM INSURERS**

CISSA CAPITAL SUMMARY

Sample Company
expressed in [000s] (currency used (vide Reg. 10(2)))

Note: Documents supporting the CISSA filing should be retained for such period as specified in the [Order]

	Projected Target Economic Capital	Projected Economic Capital at 99.0% TVaR	Projected Economic Capital at 99.95% TVaR
CAPITAL			
Insurance risk - mortality	-	-	-
Insurance risk - longevity	-	-	-
Insurance risk - morbidity	-	-	-
Insurance risk - variable annuity guarantees	-	-	-
Insurance risk - other	-	-	-
Market risk	-	-	-
Credit risk	-	-	-
Interest and liquidity risk	-	-	-
Operational risk	-	-	-
Group, reputational and strategic risk	-	-	-
Other (specify)			
Capital pre-diversification between risk categories	-	-	-
Diversification credit between risk categories			
Total capital after diversification between risk categories	-	-	-

ADDITIONAL INFORMATION

- 1 What is the primary reason(s) (select multiple responses where applicable) for aiming at the disclosed Projected Target Economic Capital amount?
(select all that apply by choosing Yes/No)

- ☐ Target agency rating (e.g. "A-", "AA", etc)
☐ Market share
☐ Business expansion
☐ Nature of product(s) (e.g. risk characteristics)
☐ Manage downgrade risk

Others (briefly describe)

- 2 What methodology is used to aggregate the risk categories?

Others (list)

- 3 Does the Company have sufficient capital and liquidity based on its CISSA to achieve its medium and long-term (e.g. 2 to 5 years, etc.) strategic objectives?

If no, briefly describe the potential adverse consequences.

CISSA CAPITAL SUMMARY

Sample Company
expressed in ['000s] (currency used (vide Reg. 10(2)))

4 What contingency plans are in place for raising additional capital under stress situations? (select all that apply by choosing Yes/No)

- ☐ Parental guarantees
- ☐ Revolving letters of credit
- ☐ Issue subordinated debt
- ☐ Issue preference shares
- ☐ Float additional shares
- ☐ Capital injections from parent
- ☐ Contingent surplus notes
- ☐ Catastrophe derivatives (e.g. bonds, swaps and options)

Others (briefly describe)

5 Does the Company have arrangements/ contractual commitments to provide support to affiliates/other companies in stressed situations?

If yes, briefly describe the arrangement(s) and the aggregate exposure.

6 Does the Company have assets, above those that are encumbered (to support regulatory capital requirements and policyholder obligations) at the subsidiary level, that are not fungible and transferable?

If yes, provide details and briefly describe how these have been reflected in the CISSA.

7 Has the Company engaged in multiple gearing?

If yes, provide details and amount of capital .

8 Briefly provide a narrative surrounding actual business continuity/disaster plans in place and any disaster mitigation and monitoring.

9 Was the CISSA return reviewed and approved by the Board of Directors?

Signatory:

Print Name:

Resident Director

Date:

Signatory:

Print Name:

Director

Date:

Insurer Name:

0

CISSA GENERAL QUESTIONS

The Company is to review the following statements and select "Yes" or "No" from the drop-down list as applicable.

- 1 Is the CISSA and its underlying information integrated (i.e. considered when making key strategic decisions) into the Company's strategic and risk management decision-making processes?

If Yes, how is CISSA and its underlying information used? (select all that apply by choosing Yes/No)

Strategic planning	
Annual business planning	
Setting risk limits	
Defining risk appetite	
Evaluation of capital adequacy	
Allocation of capital to business segments and lines of business	
Capital management	
Determination of rates of return for pricing and underwriting guidelines	
Reinsurance purchase	
Determination of investment policies and strategies	
Meeting regulatory requirements	
Improving credit rating	
Improving investor relations	
Assessing risk adjusted product profitability	
Performance measurement and assessment	
Improving mergers and acquisition decisions	

Others (list)

Concentration Risk:

2 Questions	Yes/No
Is there a potential for the Company to have an accumulation of losses to material lines of business arising from the following that could threaten its solvency?	
If yes, what are the potential cause(s) of the accumulation of losses? A severe event Series of many small events or individual claims Over concentration of exposure to one product Over concentration to one source of business Over concentration to one line of business A common cause across many years Others (list)	
Does the Company have absolute limitations set on individual policies or groups of policies to avoid threatening its solvency (such as limitations on a per life risk basis, geographical basis, product basis, line of business basis, source of business basis, etc)?	
If yes, are the limitations assessed for reasonableness and effectiveness in reducing the threat to solvency?	
Does the Company purchase reinsurance to mitigate the risk of accumulated losses?	
Does the Company have procedures in place to assess the adequacy of the reinsurance purchased both from a severity and frequency perspective for solvency purposes?	
Does the Company have procedures in place to ensure that there are no significant mismatches between the policies issued by the Company and the reinsurance programme?	
Does the Company have access to additional capital and surplus to cover claims costs (e.g., letters of credit, parental guarantees, other contingent capital sources, etc)?	

CISSA GENERAL QUESTIONS

Related Business:

3	Question	%
	What percentage of the gross premiums written cover related policyholders?	

Comments (optionally, the Company may provide comments in the box below to support its responses under questions 2 and 3 above):

- 4 Model(s)/tool(s) used to calculate the Projected Target Economic Capital

Governance	Select	Comments
Does the Board of Directors and chief and senior executives approve the design, maintenance and use of the model(s)/tool(s)?		
How often does the Board or relevant Board committees review outputs, changes and issues arising from the model(s)/tool(s) (review should be documented e.g. minutes, presentations etc)?		
Does the Board and chief and senior executives have a thorough understanding of the key assumptions/elements and the implications of the outputs (including limitations) of the model(s)/tool(s)?		
Validation	Select	Comments
Is the model(s)/tool(s) subject to a regular cycle of validation, which includes the monitoring of performance, review appropriateness of model specifications and testing of forecast results against actual results?		
How often is the validation of the model(s)/tool(s) performed?		
If yes, briefly describe the arrangement(s) and aggregate exposure.		
Documentation	Select	Comments
Does the Company have formal documentation of the structure, design, operational details, input assumptions, parameters, governance process and controls of the model(s)/tool(s)?		
Does the Company have assets, above that are encumbered (to support regulatory capital requirements and policyholder obligations) at the subsidiary level, that are not fungible and transferable?		
How often does the Board of Directors or chief and senior executives review and approve the model/input documentation?		
Internal controls	Select	Comments
How does the Company rate the effectiveness of the controls in place to monitor and evaluate the operation and maintenance of the model(s)/tool(s)?		
Are there strict protocols in place restricting access to the model(s)/tool(s) and ability to make adjustments thereto?		
Others	List	
What is the risk measure (VaR,TVaR etc), confidence interval (95%, 99.95% etc) and time horizon (1 year, 5 years etc)?		

CISSA GENERAL QUESTIONS

5 The Company's risk appetite (i.e. the amount of capital the Company is willing to lose on a single claim or a series of claims over a defined period).

a) How does the Company define its risk appetite?

b) What is the Company's risk appetite and how is it measured?

c) What are the limits imposed and how are the limits enforced?

d) How often does the Company monitor/review adherence to the risk appetite (e.g. adherence to limits set)?
Others (briefly explain)

6 Has the Company applied reverse stress testing to both identify the scenarios that could cause business failure and the required actions to manage such situations?

7 Is the CISSA process clearly documented and regularly amended for changes in strategic direction, risk management framework, and market developments?

Optionally, the Company may provide brief comments.

8 How often is the information underlying CISSA discussed/evaluated and reviewed by the Board and chief and senior executives?

Others, briefly explain.

9 Has the Board of Directors and chief and senior executives ensured that an appropriate oversight process is in place, including an appropriate level of independent verification, whereby material deficiencies are reported on a timely basis and suitable actions taken?

Optionally, the Company may provide brief comments.

10 What are the key risks that the Company faces over the course of the next 2 to 3 years, and the steps taken (if any) to manage/address these key risks? (list the risks and the steps to address the risks).

CISSA GENERAL QUESTIONS

11 Briefly describe the Company's governance structure including the:

Attach file

- i) The structure of the board of directors and executive management, including roles and work experience of officers.
- ii) The terms of reference of the board of directors and its sub-committees. A description of risk management program, including how it is used in strategic management, capital allocation and capital adequacy.

12 Provide details of material intra-group exposures between the Company and other members of the group to which it belongs.

Attach file

- a. The details of the intra-group transactions would include (where applicable):
 - i. Exposure value (face value or market value, if the latter is available);
 - ii. Counterparties involved including where they are located;
 - iii. Summary details of the transaction – including purpose, terms, transaction costs etc.;
 - iv. Duration of the transaction; and
 - v. Performance triggers.
- b. The details surrounding reinsurance and retrocessions arrangements would cover:
 - i. Aggregated values of the exposure limits (gross and net) by counterparties, broken down by counterparty rating;
 - ii. Aggregated premium flows between counterparties (gross and net); and
 - iii. The proportion of the Company's business exposure covered by internal reinsurance, retrocession and other risk transfer arrangements.

Note: materiality will be defined as follows:

- i. an intra-group transaction whose impact can cause a reduction in the Company's available statutory capital & surplus by 5% or more; and*
- ii. a series of linked intra-group transactions that can cumulatively reduce a Company's available capital & surplus by 10% or more.*

13 Briefly describe the risk management program including:

Attach file

- i) How the risk management program is used for strategic management decision making, capital allocation and capital adequacy;
- ii) The governance surrounding the risk management process including the identification of the owners of the process and the extent of the board of directors involvement; and
- iii) A description of the process undertaken to monitor material risk concentration.

14 Provide a risk register analysis disclosing:

Attach file

- i) A description of the Company's material risks ;
- ii) Owners of the respective risks;
- iii) The impact and probability of the risk and the overall risk assessment;
- iv) A summary of risk mitigation/controls in place and an assessment of their effectiveness in reducing the probability and/or impact of the risk; and
- v) Overall assessment of the impact and probability of the residual risk.

CISSA INSURANCE RISK - MORTALITY

CISSA Insurance Risk - Mortality in the Bermuda Solvency Capital requirement consists of Insurance Risk - mortality, Insurance Risk - non-proportional and Insurance Risk - riders

Risk owner (title)

Qualifications:

Responsibilities (summary)

PROJECTED TARGET ECONOMIC CAPITAL

- 1 What is the primary model(s)/tool(s) used to calculate the Projected Target Economic Capital for mortality risk?

Others (list)

- 2 What are the primary sources of data inputs for the model(s)/tool(s) used for mortality risk (e.g. Company's historical data, industry data, etc)?

- 3 What are the key assumptions used (e.g. assumed health improvements, etc) to determine the mortality risk?

- 4 What are the main drivers of mortality risk? (e.g. process, parameter, calamity?)

- 5 What approximations are used in the model(s) for mortality risk?

- 6 What products / lines of business are the main contributors to mortality risk?

PROJECTED TARGET ECONOMIC CAPITAL

7 Provide details of stress and scenario testing performed for mortality risk, include the key assumptions and the quantitative results of the tests.

Details of stress and scenario tests		Key assumptions/sensitivities	Quantitative impact of stress test on capital and surplus
			Amounts in (US \$)
a			
b			
c			
d			
e			

8 What risk mitigation/transfer techniques does the Company have in place to address mortality risk ?

List

	Pre-diversification	Diversification benefit	Post-diversification
9 Projected Target Economic Capital for Mortality risk			

PROJECTED ECONOMIC CAPITAL AT 99.0% TVAR (over 1 year time horizon)

10 Projected Economic Capital at 99.0% TVaR for mortality risk			
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PROJECTED ECONOMIC CAPITAL AT 99.95% TVAR (over 1 year time horizon)

11 Projected Economic Capital at 99.95% TVaR for mortality risk			
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12 Explain the primary reason(s) for any material deviations between the Projected Target Economic Capital at 99% TVaR calculated for mortality risk and the same capital charge in the Bermuda Solvency Capital Requirement (material being difference exceeding 10%).

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CISSA INSURANCE RISK - LONGEVITY

Risk owner (title)

Qualifications:

Responsibilities (summary)

PROJECTED TARGET ECONOMIC CAPITAL

- 1 What is the primary model(s)/tool(s) used to calculate the Projected Target Economic Capital for longevity risk?

Others (list)

- 2 What are the primary sources of data inputs for the model(s)/tool(s) used for longevity risk (e.g. Company's historical data, industry data, etc)?

- 3 What are the key assumptions used (e.g. assumed health improvements, etc) to determine the longevity risk?

- 4 What are the main drivers of longevity risk? (e.g. process, parameter, calamity?)

- 5 What approximations are used in the model(s) for longevity risk?

- 6 What products / lines of business are the main contributors to longevity risk?

PROJECTED TARGET ECONOMIC CAPITAL

7 Provide details of stress and scenario testing performed for longevity risk, include the key assumptions and the quantitative results of the tests.

Details of stress and scenario tests		Key assumptions/sensitivities	Quantitative impact of stress test on capital and surplus
			Amounts in (US \$)
a			
b			
c			
d			
e			

8 What risk mitigation/transfer techniques does the Company have in place to address longevity risk ?

List

	Pre-diversification	Diversification benefit	Post-diversification
9 Projected Target Economic Capital for Longevity risk			

PROJECTED ECONOMIC CAPITAL AT 99.0% TVAR (over 1 year time horizon)

10 Projected Economic Capital at 99.0% TVaR for longevity risk			
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PROJECTED ECONOMIC CAPITAL AT 99.95% TVAR (over 1 year time horizon)

11 Projected Economic Capital at 99.95% TVaR for longevity risk			
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12 Explain the primary reason(s) for any material deviations between the Projected Target Economic Capital at 99% TVaR calculated for longevity risk and the same capital charge in the Bermuda Solvency Capital Requirement (material being difference exceeding 10%).

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CISSA INSURANCE RISK - MORBIDITY

Risk owner (title)

Qualifications:

Responsibilities (summary)

PROJECTED TARGET ECONOMIC CAPITAL

1 What is the primary model(s)/tool(s) used to calculate the Projected Target Economic Capital for morbidity risk?

Others (list)

2 What are the primary sources of data inputs for the model(s)/tool(s) used for morbidity risk (e.g. Company's historical data, industry data, etc)?

3 What are the key assumptions used (e.g. assumed health risks, medical care, etc) to determine the morbidity risk?

4 What are the main drivers of morbidity risk? (e.g. process, parameter, calamity?)

5 What products / lines of business are the main contributors to morbidity risk?

6 What approximations are used in the model(s) for morbidity risk?

PROJECTED TARGET ECONOMIC CAPITAL

7 Provide details of stress and scenario testing performed for morbidity risk, include the key assumptions and the quantitative results of the tests.

Details of stress and scenario tests		Key assumptions/sensitivities	Quantitative impact of stress test on capital and surplus
			Amounts in (US \$)
a			
b			
c			
d			
e			

8 What risk mitigation/transfer techniques does the Company have in place to address morbidity risk ?

List

	Pre-diversification	Diversification benefit	Post-diversification
9 Projected Target Economic Capital for morbidity risk			

PROJECTED ECONOMIC CAPITAL AT 99.0% TVAR (over 1 year time horizon)

10 Projected Economic Capital at 99.0% TVaR for morbidity risk			
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PROJECTED ECONOMIC CAPITAL AT 99.95% TVAR (over 1 year time horizon)

11 Projected Economic Capital at 99.95% TVaR for morbidity risk			
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12 Explain the primary reason(s) for any material deviations between the Projected Target Economic Capital at 99% TVaR calculated for morbidity risk and the same capital charge in the Bermuda Solvency Capital Requirement (material being difference exceeding 10%).

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CISSA INSURANCE RISK - VARIABLE ANNUITY GUARANTEES

Risk owner (title)

Qualifications:

Responsibilities (summary)

PROJECTED TARGET ECONOMIC CAPITAL

- 1 What is the primary model(s)/tool(s) used to calculate the Projected Target Economic Capital for variable annuity guarantee risk?
Others (list)

- 2 What are the primary sources of data inputs for the model(s)/tool(s) used for variable annuity guarantee risk (e.g. public domain economic analysis, direct fund historical data, etc)?

- 3 What are the key assumptions used (e.g. fund volatility, mortality/longevity risk, etc) to determine the variable annuity guarantee risk?

- 4 What are the main drivers of variable annuity guarantee risk? (e.g. process, parameter, calamity?)

- 5 What variable annuity product types are the main contributors to variable annuity guarantee risk?

- 6 What approximations are used in the model(s) for variable annuity guarantee risk?

PROJECTED TARGET ECONOMIC CAPITAL

7 Provide details of stress and scenario testing performed for variable annuity guarantee risk, include the key assumptions and the quantitative results of the tests.

Details of stress and scenario tests		Key assumptions/sensitivities	Quantitative impact of stress test on capital and surplus
			Amounts in (US \$)
a			
b			
c			
d			
e			

8 What risk mitigation/transfer techniques does the company have in place to address variable annuity guarantee risk ?
List

	Pre-diversification	Diversification benefit	Post-diversification
9 Projected Target Economic Capital for variable annuity guarantee risk			

PROJECTED ECONOMIC CAPITAL AT 99.0% TVAR (over 1 year time horizon)

10 Projected Economic Capital at 99.0% TVaR for variable annuity guarantee risk			
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PROJECTED ECONOMIC CAPITAL AT 99.95% TVAR (over 1 year time horizon)

11 Projected Economic Capital at 99.95% TVaR for variable annuity guarantee risk			
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12 Explain the primary reason(s) for any material deviations between the Projected Target Economic Capital at 99% TVaR calculated for variable annuity guarantee risk and the same capital charge in the Bermuda Solvency Capital Requirement (material being difference exceeding 10%).

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CISSA INSURANCE RISK - OTHER

Insurance risk - Other covers insurance risks not covered elsewhere such as policyholder behavior risks, expense risks and product guarantee risks

Risk owner (title)

Qualifications:

Responsibilities (summary)

PROJECTED TARGET ECONOMIC CAPITAL

- 1 What is the primary model(s)/tool(s)) used to calculate the Projected Target Economic Capital for other insurance risks?
Others (list)
- 2 What are the primary sources of data inputs for the model(s)/tool(s) used for other insurance risk (e.g. Company's historical data, industry data, etc)?
- 3 What are the key assumptions used (e.g. considerations for market movements, withdrawal, lapse, etc) to determine other insurance risks?
- 4 What are the main drivers of other insurance risk? (e.g. lapse assumptions, withdrawal assumptions?)
- 5 What products / lines of business are the main contributors to other insurance risks?
- 6 What approximations are used in the model(s) for other insurance risk?

PROJECTED TARGET ECONOMIC CAPITAL

7

Provide details of stress and scenario testing performed for other insurance risks. Include the key assumptions and the quantitative results of the tests.

Details of stress and scenario tests

Key assumptions/sensitivities

Quantitative impact of
stress test on capital and
surplus

Amounts in (US \$)

a
b
c
d
e

8 What risk mitigation/transfer techniques does the Company have in place to address other insurance risks?

List

Pre-diversification

Diversification benefit

Post-diversification

9 Projected Target Economic Capital for other insurance risks

PROJECTED ECONOMIC CAPITAL AT 99.0% TVAR (over 1 year time horizon)10 Projected Economic Capital at 99.0% TVaR for other
insurance risks**PROJECTED ECONOMIC CAPITAL AT 99.95% TVAR (over 1 year time horizon)**11 Projected Economic Capital at 99.95% TVaR for other
insurance risk

12

Explain the primary reason(s) for any material deviations between the Projected Target Economic Capital at 99% TVaR calculated for other insurance risk and the provision for other insurance risk capital charge in the Bermuda Solvency Capital Requirement (material being difference exceeding 10%).

CISSA MARKET RISK

Market risk on the Bermuda Solvency Capital Requirement consists of Equity Investment risk and Fixed Income Investment risk

Risk owner (title)

Qualifications:

Responsibilities (summary)

PROJECTED TARGET ECONOMIC CAPITAL

1 What is the primary model(s)/tool(s) used to calculate the Projected Target Economic Capital for market risk?

Others (list)

2 What are the primary sources of data inputs for the model(s)/tool(s) used for market risk (e.g. market prices from Bloomberg, asset ratings, interest rates etc)?

3 What are the key assumptions used (inflation rate, duration, assumed correlation considerations and the diversification benefits, etc) to determine the market risk?

4 What are the main drivers for the Company's market risk?

5 What approximations are used in the model(s) for market risk?

CISSA MARKET RISK

Market risk on the Bermuda Solvency Capital Requirement consists of Equity Investment risk and Fixed Income Investment risk

PROJECTED TARGET ECONOMIC CAPITAL

6 Provide details of stress and scenario testing performed for market risk, include the key assumptions and the quantitative results of the tests.

Details of stress and scenario tests		Key assumptions/sensitivities	Quantitative impact of stress test on capital and surplus
			Amounts in (US \$)
a			
b			
c			
d			
e			

7 What risk mitigation/transfer techniques does the Company have in place to address market risk (e.g. the hedging strategies applied)?

List

Pre-diversification

Diversification benefit

Post-diversification

8 Projected Target Economic Capital for market risk

PROJECTED ECONOMIC CAPITAL AT 99.0% TVAR (over 1 year time horizon)

9 Projected Economic Capital at 99.0% TVaR for market risk

PROJECTED ECONOMIC CAPITAL AT 99.95% TVAR (over 1 year time horizon)

10 Projected Economic Capital at 99.95% TVaR for market risk

11 Explain the primary reason(s) for any material deviations between the Projected Target Economic Capital at 99% TVaR calculated for market risk and the same capital charge in the Bermuda Solvency Capital Requirement (material being difference exceeding 10%).

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CISSA CREDIT RISK

Risk owner (title)

Qualifications:

Responsibilities (summary)

PROJECTED TARGET ECONOMIC CAPITAL

- 1 What is the primary model(s)/tool(s) used to calculate the Projected Target Economic Capital for credit risk?

Others (list)

- 2 What are the primary sources of data inputs for the model(s)/tool(s) used for credit risk (e.g. rating agency, Company's historical data, etc)?

- 3 What are the key assumptions used (e.g. probabilities of default used, assumed correlation considerations and the diversification benefits, etc) to determine the credit risk?

- 4 What are the main drivers for the Company's credit risk?

- 5 What approximations are used in the model(s) for credit risk?

CISSA CREDIT RISK

PROJECTED TARGET ECONOMIC CAPITAL

6 Provide details of stress and scenario testing performed for Credit risk, include the key assumptions and the quantitative results of the tests.

	Details of stress and scenario tests	Key assumptions/sensitivities	Quantitative impact of stress test on capital and surplus
			Amounts in (US \$)
a			
b			
c			
d			
e			

7 What risk mitigation/transfer techniques does the Company have in place to address credit risk?

List

Pre-diversification

Diversification benefit

Post-diversification

8 Projected Target Economic Capital for credit risk

PROJECTED ECONOMIC CAPITAL AT 99.0% TVAR (over 1 year time horizon)

9 Projected Economic Capital at 99.0% TVaR for credit risk

PROJECTED ECONOMIC CAPITAL AT 99.95% TVAR (over 1 year time horizon)

10 Projected Economic Capital at 99.95% TVaR for credit risk

11 Explain the primary reason(s) for any material deviations between the Projected Target Economic Capital at 99% TVaR calculated for credit risk and the same capital charge in the Bermuda Solvency Capital Requirement (material being difference exceeding 10%).

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CISSA INTEREST RATE AND LIQUIDITY RISK

Risk owner (title)

Qualifications:

Responsibilities (summary)

PROJECTED TARGET ECONOMIC CAPITAL

1 What is the primary model(s)/tool(s) used to calculate the Projected Target Economic Capital for interest rate / liquidity risk?

Others (list)

2 What are the primary sources of data inputs for the model(s)/tool(s) used for interest rate / liquidity risk?

3 What are the key assumptions used (inflation rate, duration, assumed correlation considerations and the diversification benefits etc) to determine the interest rate / liquidity risk?

4 What are the main drivers for the Company's interest rate / liquidity risk?

5 What approximations are used in the model(s) for interest rate / liquidity risk?

6 Has the company implemented policies on Asset Liability Management, including tolerances for deviation?

No

7 Have clear roles and responsibilities for the execution of the Asset Liability Management program been assigned?

No

8 Are Asset Liability Management positions / tolerances communicated to the investment function, senior management and the board on a timely basis?

No

9 Have systems and procedures been established to identify, report and promptly address asset liability management deficiencies?

No

10 Are the Asset Liability Management policies and procedures reviewed and reapproved or revised at least annually?

No

11 Is the company's current Asset Liability Management position in compliance with the company's policies?

No

12 Provide details of stress and scenario testing performed for interest rate / liquidity risk, include the key assumptions and the quantitative results of the tests.

Details of stress and scenario tests		Key assumptions/sensitivities	Quantitative results of stress test
			Amounts in (US \$)
a			
b			
c			
d			
e			

13 What risk mitigation/transfer techniques does the Company have in place to address interest rate and liquidity risk?

List

	Pre-diversification	Diversification benefit	Post-diversification
14 Projected Target Economic Capital for interest rate and liquidity risk			

PROJECTED ECONOMIC CAPITAL AT 99.0% TVAR (over 1 year time horizon)

15 Projected Economic Capital at 99.0% TVaR for interest rate and liquidity risk			
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PROJECTED ECONOMIC CAPITAL AT 99.95% TVAR (over 1 year time horizon)

16 Projected Economic Capital at 99.95% TVaR for interest rate and liquidity risk			
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CISSA OPERATIONAL RISK

Risk owner (title)

Qualifications:

Responsibilities (summary)

PROJECTED TARGET ECONOMIC CAPITAL

1 What are the main drivers for the Company's operational risk?

2 Provide details of stress and scenario testing performed for operational risk, include the key assumptions and the quantitative results of the tests.

Details of stress and scenarios tests		Key assumptions/sensitivities	Quantitative results of stress test
			Amounts in (US \$)
a			
b			
c			
d			
e			

3 What risk mitigation/transfer techniques does the Company have in place to address operational risk?

List

4 Projected Target Economic Capital for operational risk

Pre-diversification

Diversification benefit

Post-diversification

PROJECTED ECONOMIC CAPITAL AT 99.0% TVAR (over 1 year time horizon)

5 Projected Economic Capital at 99.0% TVaR for operational risk

PROJECTED ECONOMIC CAPITAL AT 99.95% TVAR (over 1 year time horizon)

6 Projected Economic Capital at 99.95% TVaR for operational risk

CISSA GROUP REPUTATIONAL AND STRATEGIC RISK

Risk owner (title)

Qualifications:

Responsibilities (summary)

PROJECTED TARGET ECONOMIC CAPITAL

1 What are the main drivers for the Company's group, reputational and strategic risk?

Provide details of stress and scenario testing performed for group, reputational and strategic risk, include the key assumptions and the quantitative results of the tests.

Details of stress and scenario tests		Key assumptions/sensitivities	Quantitative results of stress test
			Amounts in (US \$)
a			
b			
c			
d			
e			

3 What risk mitigation/transfer techniques does the Company have in place to address group, reputational and strategic risk?

List

Pre-diversification

Diversification benefit

Post-diversification

4 Projected Target Economic Capital for group, reputational and strategic risk

PROJECTED ECONOMIC CAPITAL AT 99.0% TVAR (over 1 year time horizon)

5 Projected Economic Capital at 99.0% TVaR for group, reputational and strategic risk

PROJECTED ECONOMIC CAPITAL AT 99.95% TVAR (over 1 year time horizon)

6 Projected Economic Capital at 99.95% TVaR for group, reputational and strategic risk