

June 23, 2011

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**INSURANCE (PRUDENTIAL STANDARDS) (CLASS 3A SOLVENCY REQUIREMENT)
RULES 2011**

In exercise of the powers conferred upon the Bermuda Monetary Authority by section 6A of the Insurance Act 1978, the following Rules are made—

Citation and commencement

1 These Rules may be cited as the Insurance (Prudential Standards) (Class 3A Solvency Requirement) Rules 2011 and shall come into operation on the 31st day of December 2011.

Interpretation

2 In these Rules—

“Act” means the Insurance Act 1978;

“approved internal capital model” means a model approved under paragraph 5;

“available statutory capital and surplus” has the meaning given in section 1(1) of the Act;

“BSCR-SME model” means the Bermuda Solvency Capital Requirement - Small/Medium-sized Entities model established in accordance with paragraph 4 and Schedule I;

“catastrophe risk” means the risk of a single catastrophic event or series of catastrophic events that lead to a significant deviation in actual claims from the total expected claims;

“concentration risk” means the risk of exposure to losses associated with inadequate diversification of portfolios of assets or obligations;

“credit risk” includes the risk of loss arising from an insurer’s inability to collect funds from debtors;

“ECR” means the enhanced capital requirement within the meaning of section 1(1) of the Act;

“encumbered assets” means assets held for security or as collateral against a liability or contingent liability of the insurer or other person or any other use restriction, excluding encumbered assets for policyholder obligations of the insurer;

“encumbered assets for policy holder obligations” means the total assets held for security or as collateral or otherwise restricted to meet the liabilities to the policyholders of the insurer in the event of a loss;

“form 1A” means the Statutory Balance Sheet established in the Insurance Accounts Regulations 1980;

“form 2A” means the Statutory Statement of Income (General Business) established in the Insurance Accounts Regulations 1980;

“form 8” means the Statutory Statement of Capital and Surplus established in the Insurance Accounts Regulations 1980;

“group risk” means any risk of any kind, arising from membership of a group;

“insurance underwriting risk” may include all or any of “premium risk”, “reserve risk” and “catastrophe risk”;

“legal risk” means the risk arising from (a) an insurer’s failure to comply with statutory or regulatory obligations; or (b) failure to comply with its bye-laws; or (c) failure to comply with any contractual agreement;

“liquidity risk” means (a) the risk arising from an insurer’s inability to meet its obligations as they fall due or (b) an insurer’s inability to meet such obligations except at excessive cost;

“market risk” means the risk arising from fluctuations in values of, or income from, assets or in interest rates or exchange rates;

“operational risk” means the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events, including legal risk;

“premium risk” means the risk that premium is insufficient to meet future obligations;

“relevant year” in relation to an insurer, means its financial year;

“reputational risk” includes risk of adverse publicity regarding an insurer’s business practices and associations;

“reserve risk” means the risk that an insurer’s reserves would be insufficient to satisfy its obligations;

“strategic risk” means the risk of an insurer’s inability to implement appropriate business plans and strategies, make decisions, allocate resources, or adapt to changes in the business environment; and

“tail value-at-risk” or TVAR means the conditional average potential given that the loss outcome exceeds a given threshold.

ECR

3 (1) An insurer’s ECR shall be calculated at the end of its relevant year by reference to the following—

- (a) the BSCR-SME model; or
- (b) an approved internal capital model, provided that the ECR shall at all times be an amount equal to, or exceeding, the minimum margin of solvency (within the meaning of section 6 of the Act).

(2) The ECR applicable to an insurer shall be the ECR as calculated—

- (a) at the end of its most recent relevant year; or
- (b) where its ECR has been adjusted under section 6D and has not otherwise been suspended under section 44A(4) of the Act, whichever is later.

(3) Every Class 3A insurer shall maintain available statutory capital and surplus to an amount that is equal to or exceeds the value of the ECR.

(4) The ECR shall be phased in over a period of three years according to the following, notwithstanding the requirements of paragraph 3 (3):

- (a) the applicable ECR, for the financial year ending in 2011 shall be 50% of the amount determined by Schedule I.
- (b) the applicable ECR, for the financial year ending in 2012, shall be 75% of the amount determined by Schedule I.

- (c) the applicable ECR, for the financial year ending in 2013 and beyond, shall be the full amount determined by Schedule I.

BSCR-SME model

4 Schedule I (which establishes the BSCR-SME) has effect.

Approved internal capital model

5 (1) A Class 3A insurer may apply to the Authority for approval to use an internal capital model in substitution for the BSCR-SME model ("approved internal capital model").

(2) Where the Authority is satisfied, having regard to subparagraph (3) that it is appropriate to do so, it may approve the internal capital model and may make its approval subject to conditions.

(3) In considering an application for approval of an internal capital model the Authority shall have regard to the following matters—

- (a) the appropriateness of the internal capital model for the determination of the insurer's capital requirement;
- (b) the extent to which the internal capital model has been integrated into the insurer's risk management program; and
- (c) the appropriateness of controls applicable to the creation and maintenance of the insurer's internal capital model.

(4) The Authority shall serve notice on the insurer of the following matters—

- (a) its decision to approve its internal capital model; or
- (b) its decision to not approve its internal capital model and the reason for its decision.

(5) An insurer served with a notice under subparagraph (4)(b) may, within a period of 28 days from the date of the notice, make written representations to the Authority; and where such representations have been made, the Authority shall take them into account in deciding whether to confirm its decision not to approve its internal capital model.

(6) The Authority may revoke the approval given under subparagraph (2) if satisfied that the insurer has breached a condition of the approval or where the approved internal capital model is deemed by the Authority no longer appropriate for the determination of the ECR.

(7) The Authority shall serve notice to the insurer of its proposal to revoke its approval of the insurer's internal capital model and the reasons for its proposal.

(8) An insurer served with a notice under subparagraph (7) may, within a period of 28 days from the date of the notice, make written representations to the Authority; and where such representations have been made, the Authority shall take them into account in deciding whether to revoke its approval.

Capital and solvency return

6 (1) Schedules II, III, IV, V, VI, VII, VIII and X have effect.

(2) Every Class 3A insurer shall make a capital and solvency return to the Authority which shall comprise the following documents—

- (a) both an electronic version and a printed version of the BSCR-SME model and the returns prescribed under Schedules II, III, IV, V, VI, VII, VIII and X; and
- (b) where applicable, a printed copy of an approved internal capital model.

(3) An insurer shall, on or before its filing date, furnish the Authority with its capital and solvency return.

(4) An insurer shall keep a copy of its capital and solvency return at its principal office for a period of five years beginning with its filing date, and shall produce it to the Authority if so directed by it on or before a date specified in the direction.

(5) In this paragraph, “filing date” has the meaning given in section 17(4) of the Act.

SCHEDULE I (Paragraph 4)

Bermuda Solvency Capital Requirement-Small and Medium-sized Entities (BSCR-SME)

1 The BSCR-SME shall be established in accordance with the following formula-

$$BSCR - SME = \sqrt{C_{fi}^2 + C_{eq}^2 + C_{int}^2 + C_{prem}^2 + \left(\frac{1}{2}C_{cred} + C_{rsvs}\right)^2 + \left(\frac{1}{2}C_{cred}\right)^2 + C_{cat}^2},$$

where

C_{fi} = capital charge in respect of fixed income investments risk;

C_{eq} = capital charge in respect of equity investments risk;

C_{int} = capital charge in respect of interest rate / liquidity risk;

C_{prem} = capital charge in respect of premium risk;

C_{rsvs} = capital charge in respect of reserve risk;

C_{cred} = capital charge in respect of credit risk; and

C_{cat} = capital charge in respect of catastrophe risk.

2. The fixed income investment risk charge calculation shall be determined in accordance with the following formula-

$$C_{fi} = \sum_i \chi_i \times FIastclass_i, \text{ where-}$$

χ_i = the capital charge factors prescribed in Table 1 for each type of $FIastclass_i$; and

$FIastclass_i$ = value of investment in corresponding asset Class i .

Table 1 – Capital charge factors for $FIastclass_i$

Type of fixed income investments $FIastclass_i$	Statement Source	Capital Factor χ_i
Government bonds	Schedule II, Line (1)	0.3%
High investment grade bonds (AAA & AA)	Schedule II, Line (2)	0.8%
Medium investment grade bonds (A)	Schedule II, Line (3)	3.2%
Low investment grade bonds (BBB)	Schedule II, Line (4)	5.0%
Non-investment grade bonds	Schedule II, Line (5)	26.3%
Mortgage-backed securities	Schedule II, Line (6)	10.0%
Mutual funds	Schedule II, Line (7)	15.0%
Non-rated bonds	Schedule II, Line (8)	50.0%
Mortgage loans	Form 1A, Line (5c)	5.0%
Other loans	Form 1A, Line (8)	5.0%
Cash and time deposits	Form 1A, Line (1)	0.3%

- (a) all assets comprising bonds and debentures, loans, and other miscellaneous investments that are subject to capital charges within the fixed income investment risk charge shall be included;
- (b) all non-affiliated quoted and unquoted bonds and debentures shall be included in the fixed income investment charge; and
- (c) all bonds and debentures, loans, and other miscellaneous investments shall be reported on a basis consistent with that used for purposes of statutory financial reporting.

3. The equity investment risk charge calculation shall be established in accordance with the following formula-

$$C_{eq} = \sum_i \chi_i \times Eqastclass_i, \quad \text{where-}$$

χ_i = the capital charge factors prescribed in Table 2 for each type of $Eqastclass_i$; and

$Eqastclass_i$ = value of investment in corresponding asset Class i .

Table 2 – Capital charge factors for $Eqastclass_i$

Type of equity investments $Eqastclass_i$	Statement Source	Capital Factor χ_i
Non-affiliated (quoted) common stocks	Form 1A, Line (2c)(i)	14.4%
Non-affiliated (unquoted) common stocks	Form 1A, Line (3c)(i)	14.4%
Mutual funds included in common stocks portfolio	Form 1A, Lines (2c)(iii) and (3c)(iii)	14.4%
Non-affiliated (quoted) preferred stocks	Form 1A, Line (2c)(ii)	14.4%
Non-affiliated (unquoted) preferred stocks	Form 1A, Line (3c)(ii)	14.4%
Company-occupied real estate less: encumbrances	Form 1A, Line (7a)	10.0%
Real estate investments less: encumbrances	Form 1A, Line (7b)	20.0%
Other equity investments	Form 1A, Lines (2e) & (3e)	20.0%
Other tangible assets	Form 1A, Lines (13e) & (14d)	20.0%

(a) all assets comprising of common stocks, preferred stocks, real estate, and other miscellaneous investments that are subject to capital charges within the equity investment risk charge shall be included;

(b) all non-affiliated quoted and unquoted common and preferred stocks shall be included in the equity investment risk charge; and

(c) all common and preferred stocks, real estate, and other miscellaneous investments shall be reported on a basis consistent with that used for purposes of statutory financial reporting.

4. The interest rate / liquidity risk charge calculation shall be established in accordance with the following formula-

$$C_{\text{int}} = \text{bonds} \times \text{duration} \times \text{marketdecline}, \text{ where-}$$

bonds = quoted and unquoted value of other bonds and debentures, preferred stocks, or mortgage loans; and

duration = the higher of

(a) 1; or

(b) the insurer's effective asset duration less the insurer's effective liability duration; or

(c) the insurer's effective liability duration less the insurer's effective asset duration;

marketdecline = assumed interest rate adjustment prescribed in Table 3.

Table 3 – Interest rate adjustment for *bonds*

Type of investments <i>bonds</i>	Statement Source	Estimated duration <i>duration</i>	200 basis point interest rate increase <i>marketdecline</i>
Other bonds and debentures	Form 1A, Lines (2a)(ii) and (3a)(ii)	[insurer's duration]	2.0%
Preferred stocks	Form 1A, Lines (2c)(ii) and (3c)(ii)	[insurer's duration]	2.0%
Mortgage loans	Form 1A, Line (5c)	[insurer's duration]	2.0%

(a) all assets comprising other bonds and debentures, preferred stocks, and mortgage loans investments that are subject to capital charges within the interest rate / liquidity risk charge shall be included;

(b) all quoted and unquoted non-affiliated other bonds and debentures and preferred stocks shall be included in the interest rate/liquidity risk charge; and

(c) all other bonds and debentures, preferred stocks, and mortgage loans investments shall be reported on a basis consistent with that used for purposes of statutory financial reporting.

5. The premium risk charge calculation shall be established in accordance with the following formula-

$$C_{prem} = \sum [\alpha_i \times lineprem_i] \times Min \left[\sum \left(\frac{lineprem_i}{totalprem} \right)^2 \times \mu + \mathcal{G}, 1 - \varepsilon \times \mu + \mathcal{G} \right] - \left[Min \left[\nu \times \left(\frac{RequiredCapital}{totalprem} \right), \mu \times RequiredCapital \right] \right]$$

where-

α_i = individual $lineprem_i$ risk capital charge factor as prescribed in this Schedule;

$lineprem_i$ = premium measure for line of business i prescribed in Table 4;

$totalprem$ = total premium measure over all lines of business (except Property Catastrophe),
i.e. $\sum_{i>1} lineprem_i$;

μ = additional concentration adjustment factor taking into consideration an insurer's diversified lines of business equal to 40%;

$\mathcal{G}$ = minimum concentration adjustment factor is equal to 60%;

ε = CISSA Concentration Risk; η = CISSA Related Business; and

ν = Funds held under reinsurance contracts.

Table 4 – Capital charge factors for $lineprem_i$

Line of business $lineprem_i$	Statement Source	Capital Factor α_i
Property catastrophe	Schedule IV, Line (1)	0.0%
Property	Schedule IV, Line (2)	49.7%
Property non-proportional	Schedule IV, Line (3)	51.6%
Personal accident	Schedule IV, Line (4)	34.1%
Personal accident non-proportional	Schedule IV, Line (5)	41.2%
Aviation	Schedule IV, Line (6)	48.2%
Aviation non-proportional	Schedule IV, Line (7)	48.2%
Credit / surety	Schedule IV, Line (8)	39.8%
Credit / surety non-proportional	Schedule IV, Line (9)	45.4%
Energy offshore / marine	Schedule IV, Line (10)	42.1%
Energy offshore / marine non-proportional	Schedule IV, Line (11)	47.0%
US casualty	Schedule IV, Line (12)	50.3%
US casualty non-proportional	Schedule IV, Line (13)	55.6%
US professional	Schedule IV, Line (14)	51.2%
US professional non-proportional	Schedule IV, Line (15)	53.8%

US specialty	Schedule IV, Line (16)	51.4%
US specialty non-proportional	Schedule IV, Line (17)	52.7%
International motor	Schedule IV, Line (18)	42.2%
International motor non-proportional	Schedule IV, Line (19)	48.2%
International casualty non-motor	Schedule IV, Line (20)	50.0%
International casualty non-motor non-proportional	Schedule IV, Line (21)	53.6%
Retro property	Schedule IV, Line (22)	50.8%
Structured / finite reinsurance	Schedule IV, Line (23)	27.2%
Health	Schedule IV, Line (24)	15.0%

(a) all reported net premiums written for the relevant year by statutory line of business as prescribed in this Schedule that are subject to capital charges within the premium risk charge shall be included; and

(b) all net premiums written by statutory line of business shall be reported on a basis consistent with that used for purposes of statutory financial reporting.

6. The reserve risk charge calculation shall be established in accordance with the following formula-

$$C_{rsvs} = \sum [\beta_i \times linersvs_i] \times \text{Min} \left[\sum \left(\frac{linersvs_i}{totalrsvs} \right)^2 \times \mu + \vartheta, 1 - \varepsilon \times \mu + \vartheta \right] - \left[\text{Min} \left[\varpi \times \frac{RequiredCapital}{totalrsvs}, \mu \times RequiredCapital \right] \right]$$

where-

β_i = individual $linersvs_i$ risk capital charge factor as prescribed in Table 5;

$totalrsvs$ = total reserves over all lines of business, i.e. $\sum_i linersvs_i$;

$linersvs_i$ = reserves for individual line of business i ;

RequiredCapital = aggregate net loss and loss expense provisions for each statutory line item after the individual capital factors are applied

μ = additional concentration adjustment factor taking into consideration an insurer's diversified lines of business equal to 40%;

$\mathcal{G}$ = minimum concentration adjustment factor is equal to 60%;

$\mathcal{E}$ = CISSA concentration risk and related business credit; and

ϖ = Collateral supporting insurance contracts.

Table 5 – Capital charge factors for $linersvs_i$

Line of business $linersvs_i$	Statement Source	Capital Factor β_i
Property catastrophe	Schedule III, Line (1)	46.2%
Property	Schedule III, Line (2)	43.8%
Property non-proportional	Schedule III, Line (3)	49.7%
Personal accident	Schedule III, Line (4)	29.7%
Personal accident non-proportional	Schedule III, Line (5)	34.9%
Aviation	Schedule III, Line (6)	46.0%
Aviation non-proportional	Schedule III, Line (7)	48.3%
Credit / surety	Schedule III, Line (8)	38.4%
Credit / surety non-proportional	Schedule III, Line (9)	43.5%
Energy offshore / marine	Schedule III, Line (10)	39.5%

Energy offshore / marine non-proportional	Schedule III, Line (11)	43.9%
US casualty	Schedule III, Line (12)	43.0%
US casualty non-proportional	Schedule III, Line (13)	48.8%
US professional	Schedule III, Line (14)	46.3%
US professional non-proportional	Schedule III, Line (15)	51.5%
US specialty	Schedule III, Line (16)	46.5%
US specialty non-proportional	Schedule III, Line (17)	48.3%
International motor	Schedule III, Line (18)	37.1%
International motor non-proportional	Schedule III, Line (19)	43.5%
International casualty non-motor	Schedule III, Line (20)	43.7%
International casualty non-motor non-proportional	Schedule III, Line (21)	49.4%
Retro property	Schedule III, Line (22)	47.8%
Structured / finite reinsurance	Schedule III, Line (23)	24.1%

Health	Schedule III, Line (24)	15.0%
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(a) all reported net loss and loss expense provisions for the relevant year by statutory line of business as prescribed in this Schedule are subject to capital charges within the reserve risk charge shall be included; and

(b) all reported net loss and loss expense provisions by statutory line of business shall be reported on a basis consistent with that used for purposes of statutory financial reporting.

7. The credit risk charge calculation shall be established in accordance with the following formula-

$$C_{cred} = \sum_i \delta_i \times creditor_i, \quad \text{where-}$$

δ_i = the credit risk capital charge factor for type of $creditor_i$ as prescribed in Table 6; and

$creditor_i$ = receivable amount from creditor i .

Table 6 – Capital charge factors for $creditor_i$

Type of creditor $creditor_i$	Statement Source	Capital Factor δ_i
<i>Accounts and Premiums Receivable</i>		
In course of collection	Form 1A, Line (10a)	5.0%
Deferred – not yet due	Form 1A, Line (10b)	5.0%
Receivables from retrocessional contracts less: collateralized balances	Form 1A, Line (10c) and (c) below	10.0%
<i>Reinsurance Balances Receivable</i>		
Foreign affiliates	Form 1A, Line (11a)	10.0%
Domestic affiliates	Form 1A, Line (11b)	0.0%

Pools & associations	Form 1A, Line (11c)	10.0%
All other insurers	Form 1A, Line (11d)	9.4%
Less: letters of credit	See (d) below	9.0%
Less: funds held by company	Form 1A, Line (34c)	9.7%
<i>All Other Receivables</i>		
Funds held by ceding reinsurers	Form 1A, Line (12c)	5.0%
Accrued investment income	Form 1A, Line (9)	2.5%
Investments in and advances to affiliates	Form 1A, Line (4c)	5.0%
<i>Reinsurance Recoverable Balance</i>		
Foreign affiliates	Form 1A, Line (17b)(i)	10.0%
Domestic affiliates	Form 1A, Line (17b)(ii)	0.0%
Pools & associations	Form 1A, Line (17b)(iii)	10.0%
All other insurers	Form 1A, Line (17b)(iv)	9.4%

(a) all accounts and premiums receivable, reinsurance balances receivable, all other receivables, and reinsurance recoverable balances that are subject to capital charges within the credit risk charge shall be included;

(b) all accounts and premiums receivable, reinsurance balances receivables, all other receivables, and reinsurance recoverable balances shall be reported on a basis consistent with that used for purposes of statutory financial reporting;

(c) collateralized balances are all collaterals issued in favour of the insurer relating to accounts and premiums receivable;

(d) assets accounted in Form 1A, Line 34 shall not be included in (c);

(e) letters of credit are the amount of the letters of credit issued in favour of the insurer relating to reinsurance receivable; and

(f) assets accounted for in Form 1A, Line 14 shall not be included in (e).

8. The catastrophe risk charge calculation shall be established in accordance with the following formula-

$$C_{cat} = NetPML - Netcatprem + CR_{PML}, \quad \text{where-}$$

NetPML = net probable maximum loss as prescribed in Schedule V;

Netcatprem = {average annual loss as prescribed in Schedule V / (estimated industry catastrophe loss ratio as prescribed in this Schedule)} + property catastrophe premium as included in Schedule IV, Line (1); and

CR_{PML} = {(gross probable maximum loss as prescribed in Schedule V – net probable maximum loss) x (Credit risk charge, equal to 12.2%, associated with reinsurance recoveries of ceded catastrophe losses)}.

(a) all reported net probable maximum loss, gross probable maximum loss, average annual loss, property catastrophe premium as prescribed in Schedule V that are subject to capital charges within the catastrophe risk charge shall be included.

SCHEDULE II (Paragraph 6)
Schedule of fixed income investment by rating categories

[blank] name of Company As at [blank] (day/month/year) [All amounts are expressed in
 _____ (currency used)]

Schedule	QUOTED INVESTMENTS		UNQUOTED INVESTMENTS		TOTAL	
Line No.	Bonds and debentures		Bonds and debentures		Form 1A Lines 2(b) & 3(b)	
	Form 1A Line 2(b)		Form 1A Line 3(b)		Form 1A Lines 2(b) & 3(b)	
	20XX	20XX	20XX	20XX	20XX	20XX
1. Government	XXX	XXX	XXX	XXX	XXX	XXX
2. High Investment Grade (AAA & AA)	XXX	XXX	XXX	XXX	XXX	XXX
3. Medium Investment Grade (A)	XXX	XXX	XXX	XXX	XXX	XXX
4. Low Investment Grade (BBB)	XXX	XXX	XXX	XXX	XXX	XXX
5. Non-Investment Grade	XXX	XXX	XXX	XXX	XXX	XXX
6. Mortgage-backed securities	XXX	XXX	XXX	XXX	XXX	XXX
7. Mutual Funds	XXX	XXX	XXX	XXX	XXX	XXX
8. Non-Rated	XXX	XXX	XXX	XXX	XXX	XXX
9. Total	XXX	XXX	XXX	XXX	XXX	XXX

INSTRUCTIONS AFFECTING SCHEDULE II

- (a) quoted and unquoted issues shall be combined;
- (b) all non-government bonds shall be segregated according to the latest available AM Best, S&P, Moody's, or Fitch ratings of the issues with unrated bonds assigned to Non-Rated;
- (c) where the ratings differ between agencies, insurers shall segregate according to the most conservative rating;
- (d) the "Government" line includes all bonds and mortgage-backed securities issued by any government authority (including non-US jurisdictions, government agencies, and government-sponsored enterprises); and
- (e) all other types of bonds and debentures not included in Lines 6 or 7 may be segregated in Lines 1 to 5 or 8 as appropriate.

Line Item		Description
1	Government	All quoted and unquoted bonds and mortgage-backed securities issued by any government authority (including non-US jurisdiction).
2	High Investment Grade (AAA & AA)	High Investment Grade (AAA & AA) — All quoted and unquoted non-government bonds rated AAA & AA by any of the rating agencies mentioned above or equivalent.
3	Medium Investment Grade (A)	All quoted and unquoted non-government bonds rated A by rating agencies mentioned above or equivalent.
4	Low Investment Grade (BBB)	All quoted and unquoted non-government bonds rated BBB by rating agencies mentioned above or equivalent.
5	Non-Investment Grade	All quoted and unquoted non-government bonds rated as non-investment grade by rating agencies mentioned above or equivalent.
6	Mortgage-backed securities	All quoted and unquoted mortgage-backed securities not issued by any government authority.
7	Mutual Funds	All quoted and unquoted mutual funds.
8	Non-Rated	All quoted and unquoted non-government bonds non-rated by rating agencies mentioned above or equivalent.

SCHEDULE III (Paragraph 6)
SCHEDULE OF NET LOSS AND LOSS EXPENSE PROVISIONS BY LINE OF
BUSINESS

All amounts expressed in(currency used)

Schedule	General	Business Reserves
Line No.	20XX	20XX
1. Property Catastrophe	XXX	XXX
2. Property	XXX	XXX
3. Property Non-Proportional	XXX	XXX
4. Personal Accident	XXX	XXX
5. Personal Accident Non Proportional	XXX	XXX
6. Aviation	XXX	XXX
7. Aviation Non-Proportional	XXX	XXX
8. Credit / Surety	XXX	XXX
9. Credit / Surety Non- Proportional	XXX	XXX
10. Energy Offshore / Marine	XXX	XXX
11. Energy Offshore / Marine Non-Proportional	XXX	XXX
12. US Casualty	XXX	XXX
13. US Casualty Non- Proportional	XXX	XXX
14. US Professional	XXX	XXX
15. US Professional Non- Proportional	XXX	XXX
16. US Specialty	XXX	XXX
17. US Specialty Non- Proportional	XXX	XXX
18. International Motor	XXX	XXX
19. International Motor Non- Proportional	XXX	XXX
20. International Casualty Non-Motor	XXX	XXX
21. International Casualty Non Motor		
Non-Proportional	XXX	XXX
22. Retro Property	XXX	XXX
23. Structured / Finite Reinsurance	XXX	XXX
24. Health	XXX	XXX
25. Total [Form 1A Line 17 (d)]	XXX	XXX

INSTRUCTIONS AFFECTING SCHEDULE III

The statutory lines of business shall be defined as follows:

- (a) the same definition shall be used for both proportional and non-proportional statutory lines of business below;
- (b) where the BSCR-SME risk factor charges differ in (a), insurers shall make a distinction when completing the statutory filing and using the BSCR-SME model;
- (c) statutory lines of business shall be mutually exclusive (e.g. “Retro casualty” is only to be placed into “Retro property” as prescribed, and not any of the other “casualty” related statutory lines, etc.);
- (d) insurers may in good faith determine the allocation of the statutory lines;
- (e) where an insurance contract involves multiple lines, the insurer shall assign to the various lines in accordance with the proportions written;
- (f) where an insurer is unable to make this determination in (e), the business shall be allocated to the line with the highest proportion;
- (g) where the insurer is unable to make the determination in (f), then the business shall be assigned to the line with the highest capital risk charge; and
- (h) support and assumptions used by management shall be available for review by the Authority.

Statutory Lines of Business (Proportional and Non-Proportional)	Line of Business Mappings & Definitions
Property catastrophe	Property catastrophe – coverage of damage arising from a peril that triggers an event(s) that causes \$25 million or more in direct insured industry losses to property (or a loss value in accordance with the coverage provider’s stated policies) and that may affect a significant number of policyholders and insurers – peril could be hurricane, earthquake, tsunami, tornado, etc.

Property	US property – coverage US risks including buildings, structures, equipment, business interruption, contents and All Risk (not included in other categories) related losses. Crop / agriculture – coverage of risks including on-shore/off-shore farms, livestock, agriculture and other food production related losses. International property – coverage of non-US risks including buildings, structures, equipment, business interruption, contents and All Risk (not included in other categories) related losses.
Personal accident	Personal accident – coverage of risks arising from an accident that causes loss of sight, loss of limb, other permanent disablement or death, including associated medical expenses, etc., and workers compensation.
Aviation	Aviation – coverage of risks arising from airport, fleet, or satellite property and operations related losses.
Credit / surety	Credit / surety – coverage of risks arising from various types of guarantees, commercial surety bonds, contractor bonds and various credit related losses.
Energy offshore / marine	Energy offshore / marine – coverage of risks arising from offshore exploration and production, refining, power generation and/or cargo, hull and other marine related losses.
US casualty	US casualty motor – coverage of US risks arising from injuries to persons or damage of the property of others and/or legal liability imposed upon the insured for motor related activities/actions, including auto liability. US casualty – general – coverage of US risks arising from injuries to persons or damage of the property of others and/or legal liability imposed upon the insured for non-motor related activities including theft, fraud, negligence, etc.

	Terrorism – coverage of risks arising from acts of both certified and uncertified acts of terrorism (e.g. the calculated use or threat of violence against civilians to achieve an objective(s)). Other – business that does not fit in any other category.
US professional	US casualty – professional - coverage of US risks arising from injuries to persons or and/or legal liability imposed upon the insured as a professional (e.g. director of a board, etc.) for negligent or fraudulent activities, etc.
US specialty	US casualty – medical malpractice - coverage of US risks arising from injuries to persons or and/or legal liability imposed upon the insured as a medical professional for negligent (or other) medical related activities, etc.
International motor	International casualty – motor - coverage of non-US risks arising from injuries to persons or damage of the property of others and/or legal liability imposed upon the insured for motor related activities/actions, including auto liability.
International non-motor	International casualty – non-motor - coverage of non-US risks arising from injuries to persons or damage of the property of others and/or legal liability imposed upon the insured for non-motor related activities/actions, including professional and medical.
Retro property	Retro property – retrocession cover for non-US risks including buildings, structures, equipment, business interruption, contents and All Risk (not included in other categories) related losses. Retro casualty – retrocession cover for risks arising from injuries to persons or damage of the property of others and/or legal liability imposed upon the insured for motor and non-motor related activities including theft, fraud, negligence, etc.
Structured / finite reinsurance	Structured / finite reinsurance – limited

	risk transfer contract comprising reinsurance cover where there is not both significant relative timing AND significant relative underwriting risk transfer – there may be either significant timing OR significant underwriting risk transfer – OR a significant relative economic loss may be possible but not probable (extremely remote) - not including certain catastrophe covers, like earthquake, where the probability of loss event is also remote.
Health	Health – Coverage of care, curative, or preventive medical treatment (or financial compensation) arising from illness, accident, disability, or frailty, including hospital, physician, dental, vision and extended benefits

SCHEDULE IV**(Paragraph 6)****SCHEDULE OF PREMIUMS WRITTEN BY LINE OF BUSINESS****All amounts expressed in (currency used)**

Schedule	Gross Premiums Written				Net Premiums Written			
Line No.	Unrelated		Related		Total			
	Form 2A, Line (1) (c)				Form 2A, Line (3)			
	20XX	20XX	20XX	20XX	20XX	20XX	20XX	20XX
1.Property Catastrophe	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
2.Property	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
3. Property Non-Proportional	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
4. Personal Accident	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
5. Personal Accident Non-Proportional	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
6. Aviation	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
7. Aviation Non-Proportional	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
8. Credit / Surety	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
9. Credit / Surety Non-Proportional	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
10. Energy Offshore / Marine	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
11. Energy Offshore / Marine Non-Proportional	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
12. US Casualty	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
13. US Casualty Non-Proportional	XX	XX	XX	XX	XX	XX	XX	XX
14. US Professional	XX	XX	XX	XX	XX	XX	XX	XX
15. US Professional Non-Proportional	XX	XX	XX	XX	XX	XX	XX	XX
16. US Specialty	XX	XX	XX	XX	XX	XX	XX	XX
17. US Specialty Non-								

Proportional	XX	XX	XX	XX	XX	XX	XX	XX
18. International Motor	XX	XX	XX	XX	XX	XX	XX	XX
19. International Motor Non-Proportional	XX	XX	XX	XX	XX	XX	XX	XX
20. International Casualty Non-Motor	XX	XX	XX	XX	XX	XX	XX	XX
21. International Casualty Non Motor Non-Proportional	XX	XX	XX	XX	XX	XX	XX	XX
22. Retro Property	XX	XX	XX	XX	XX	XX	XX	XX
23. Structured / Finite Reinsurance	XX	XX	XX	XX	XX	XX	XX	XX
24. Health	XX	XX	XX	XX	XX	XX	XX	XX
25. Total	XX	XX	XX	XX	XX	XX	XX	XX

INSTRUCTIONS AFFECTING SCHEDULE IV

(a) “gross premiums written” and “net premiums written” are defined in The Insurance Accounts Regulations 1980;

(b) “group” means any two or more bodies, whether corporate or unincorporated, that are in association, and two bodies are deemed to be in association if one of them has control of the other or both are under the control of the same person or persons;

(c) “related”, in relation to the insurer, means a body forming part of a group with that insurer; and

d) “unrelated”, in relation to the insurer, means any party that is not related.

SCHEDULE V (Paragraph 6)

SCHEDULE OF RISK MANAGEMENT

1. The schedule of risk management shall disclose the Class 3A insurer's risk management program as follows—

- (a) governance structure;
- (b) ten largest exposures to counterparties and any other counterparty exposures exceeding 10% of the insurer's statutory capital and surplus;
- (c) effective duration of assets;
- (d) effective duration of liabilities;
- (e) gross probable maximum loss (if property catastrophe writer);
- (f) net probable maximum loss (if property catastrophe writer);
- (g) average annual loss (if property catastrophe writer);
- (h) list of statutory lines and statutory territories that have catastrophe Exposures as set out under paragraph (l) of the Instructions;
- (i) projected net premiums written, projected underwriting profit / loss, and projected net income / loss;
- (j) actual attritional losses and large claims losses – relevant year; and
- (l) and
- (k) funds held by ceding reinsurers – AAA & AA rating, funds held by ceding reinsurers – A rating, and funds held by ceding reinsurers – below A rating.

INSTRUCTIONS AFFECTING SCHEDULE V

- (a) "governance structure" must disclose-
 - (i) the structure of the board of directors and executive management, including roles and work experience of officers; and
 - (ii) terms of reference of the board of directors and its sub-committees.
 - (iii) Name of the jurisdiction(s) where the group's board of directors primarily deliberates on matters including:
 - (a) setting strategic decision;
 - (b) determining the (re)insurer's risk appetite;
 - (c) choosing of corporate structure, including amalgamations, acquisitions and strategic alliances;
 - (d) choosing of new lines of business, new products, marketplace positioning; and
 - (e) assessing solvency needs.
 - (iv) Name of the jurisdiction where the group's board of directors and executive management primarily reside;

-
- (v) Name of the jurisdiction where the group's control functions reside;
- (vi) Group's financial position based on its most recent audited general purpose financial statement fiscal year-end regarding its:
- (a) Total assets;
 - (b) Total reserves; and
 - (c) Capital and surplus.
- (vii) Name of insurers within the group that have the three highest (a) total asset value (b) total insurance reserve value and (c) total capital and surplus based on the group's most recent audited general purpose financial statements; and provide the total values for items (a), (b) and (c); and confirm the jurisdiction of incorporation of each insurer.
- (viii) Have any events occurred or decisions made subsequent to the relevant year-end that would, or have, materially changed the information above (e.g., amalgamation or acquisition or restructuring, etc.). If yes, explain.
- (b) "ten largest exposures to counterparties and any other counterparty exposures exceeding 10% of the insurer's statutory capital and surplus" including :
- (i) name of counterparty
 - (ii) exposure values (face value or market value)
 - (iii) transaction type
- (c) "effective duration of assets" calculation must be determined using the aggregate of the bonds and debentures (Form 1A, Lines (2a)(ii) and (3a)(ii)), preferred stocks (Form 1A, Lines (2c)(ii) and (3c)(ii)), and mortgage loans portfolios (Form 1A, Line (5c)) as a basis.
- (d) "effective duration of liabilities" calculation must be determined using the reserves (Form 1A, Lines 17 and 18) as a basis.
- (e) "gross probable maximum loss" means the gross probable maximum loss for natural catastrophe losses (prior to reinsurance) at the 99.0% Tail Value-at-Risk level for annual aggregate exposure to all property related risks and all perils (for the property cat line only), including reinstatement premiums for the year following the relevant year based upon the insurer's catastrophe model. The support documentation must be retained at the insurer's offices to be made available to the Authority upon request.
- (f) "net probable maximum loss" means the net probable maximum loss for natural catastrophe losses (after reinsurance) at the 99.0% Tail Value-at-Risk level for annual aggregate exposure to all property related risks and all perils (for the property cat line only), including reinstatement premiums for the year following the relevant year based on the insurer's catastrophe model. The support documentation must be retained at the insurer's offices to be made available to the Authority upon request.
- (g) "average annual loss for property catastrophe" means-
- (i) the expected net natural catastrophe loss (after reinsurance), including reinstatement
-

premiums, for annual aggregate exposure to all property related risks and all perils (for the property cat line only) for the year following the relevant year based on the insurer's catastrophe model; and

- (ii) the calculation should be from the same underlying loss distribution used to determine the gross probable maximum loss and the net probable maximum loss.

The support documentation must be retained at the insurer's offices to be made available to the Authority upon request.

- (h) list of statutory lines and statutory territories that have catastrophe exposures as set out under paragraph (o);

(i) "projected net premiums written, projected underwriting profit / loss, and projected net income / loss" means the insurer's latest estimate of annual net premiums written, underwriting profit / loss, and net income / loss for the year following the relevant year either on an individual basis or on a group basis with disclosure of estimated percentage of the insurer relative to the group.

- (j) "actual attritional losses and large claim losses – relevant year" means the actual aggregate losses experienced by the insurer in the relevant year less than \$25,000,000 per occurrence (not including prior year reserve releases or adverse development)

(k) "funds held by ceding reinsurers – AAA & AA rating, funds held by ceding reinsurers – A rating, and funds held by ceding reinsurers – below A rating" means the amounts included in Form 1A, Lines 12(a) and (b).

- (l) Exposure territories –

Zone	Territories
1	Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New York, New Jersey, Pennsylvania, Rhode Island, Vermont, Virginia, West Virginia, the District of Columbia, Alabama, Arkansas, Louisiana, Mississippi, Texas, Florida, Georgia, North Carolina, and South Carolina
2	Caribbean
3	Arizona, Colorado, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Michigan, Montana, Minnesota, Missouri, Nebraska, Nevada, New Mexico, North Dakota, Ohio, Oklahoma, South Dakota, Tennessee, Utah, Wisconsin, and Wyoming
4	California

5	Oregon, Washington
6	Hawaii
7	Canada, Alaska
8	United Kingdom, Continental Europe
9	Australia/New Zealand
10	Japan
11	Nationwide Covers
12	Worldwide Covers
13	All exposures not included in Zone 1 to 12

SCHEDULE VI (Paragraph 6)

SCHEDULE OF FIXED INCOME SECURITIES

The schedule of fixed income securities shall–

- (a) represent the amounts stated in the Form 1A - Statutory Balance Sheet (general business – Class 3A) Lines 2(b) and 3(b);
- (b) include the following information according to security type–
 - (i) security type;
 - (ii) amount contributing to (reflected in) the Statutory Balance Sheet balance on Lines 2(b) or 3(b);
 - (iii) face value;
 - (iv) fair value;
 - (v) average effective yield to maturity;
 - (vi) average rating of the security type (if applicable);
 - (vii) average duration and convexity; and
- (c) include the effective duration and the convexity of the portfolio.

SCHEDULE VII (Paragraph 6)

SCHEDULE OF COMMERCIAL INSURER'S SOLVENCY SELF ASSESSMENT (CISSA)

The Schedule of CISSA shall provide particulars of the following matters:

- a) Table 7A: CISSA capital summary disclosing the insurer's own capital computations, insurer's plans for raising additional capital and contingency arrangements impacting the available capital.
- b) Table 7B: CISSA general questions relating to an insurer's risk management and governance program, the review and approval of CISSA, integration of CISSA into the strategic decision making process.
- c) Table 7C: CISSA assessment of material risks of the insurer, determining both the quality and quantity of capital required to cover its risks, the forward looking analysis and its ability to manage its capital needs, the review and approval of CISSA and the governance and controls surrounding model(s)/tool(s) used to compute the CISSA capital.

INSTRUCTIONS AFFECTING SCHEDULE VII**Table 7A:****CISSA Capital Summary**

Risk categories	(a) CISSA capital	(b) Regulatory Capital
Underwriting risk		
Market risk		
Credit risk		
Liquidity risk		
Operational risk		
Group, Concentration, Reputational and Strategic risk		
Other (specify)		
Total capital pre-diversification between risk categories		
Diversification credit between risk categories		
Total capital after diversification between risk categories		

Where:

- a) CISSA capital is the amount of capital the insurer has determined that it requires to achieve its strategic goals upon undertaking an assessment of all material (reasonably foreseeable) risks arising from its operations or operating environment; and
- b) Regulatory capital is determined by the BSCR-SME or an approved internal capital model at 99.0% Tail Value-at-Risk ("TVaR") over a one year time horizon.

Table 7A, continued**ADDITIONAL INFORMATION**

1. What is the primary reason(s) (select multiple responses where applicable) for aiming at the disclosed CISSA capital amount? (select all that apply):

-
- ☐ target agency rating (e.g. "A-", "AA", etc);
 - ☐ market share;
 - ☐ business expansion;
 - ☐ nature of product(s) (e.g. risk characteristics);
 - ☐ manage downgrade risk; and
 - ☐ others: _____(Please provide a description)
2. What methodology is used to aggregate the risk categories in deriving the CISSA capital?
3. What contingency plans are in place for raising additional capital under stress situations? (select all that apply)
- ☐ 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); and/or
 - ☐ Others
4. Does the insurer 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.
5. Has the insurer down streamed debt to establish equity positions (participations) or, engaged in double or multiple gearing?
- If yes, provide details and amount of capital.
6. Has debt been down streamed to establish equity positions in the insurer, or is the insurer using capital that is double or multiple geared?
- If yes, provide details and amount of capital.

Instructions affecting Table 7A

-
- o Total capital pre-diversification between risk categories shall be derived by aggregating all the risk categories prior to recognition of diversification between the risk categories (i.e. prior to “top of the house” diversification).
 - o Total capital after diversification between risk categories shall be derived by deducting the diversification benefit (calculated by an insurer) from the “Total capital pre-diversification between risk categories”.
 - o The insurer shall select the appropriate response. Where an optional attachment is provided to disclose additional information, an insurer shall include references (e.g. page number, paragraph number) of where the information can be located within the attachment.

Table 7B

CISSA General Questions

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

If yes, how is CISSA and its underlying information used? (select all that apply)

- o strategic planning;
- o annual business planning;
- o setting risk limits;
- o defining risk appetite;

-
- o evaluation of capital adequacy;
 - o allocation of capital to business segments and lines of business;
 - o capital management;
 - o determination of rates of return for pricing and underwriting guidelines;
 - o reinsurance purchase;
 - o determination of investment policies and strategies;
 - o meeting regulatory requirements;
 - o improving credit rating;
 - o improving investor relations;
 - o assessing risk adjusted product profitability;
 - o performance measurement and assessment;
 - o improving amalgamations and acquisition decisions; and
 - o others (list)

Table 7B, cont'd

2. Concentration Risk:

This section will automatically score and aggregate the results

- | |
|---|
| <ul style="list-style-type: none">o Is there a potential for the insurer to have an accumulation of losses to material lines of business outside of the property catastrophe line that will threaten the solvency of the insurer? If yes, what are the potential cause(s) of the accumulation of losses - list below? (Egs. a severe event; a series of many small events or individual claims; over concentration of exposure to one product, one source of business, to one line; or a common cause across many underwriting years (e.g. asbestos, pollution, silicon, etc.)) Does the insurer have absolute limitations set on individual policies or groups of policies to avoid threatening its solvency (such as limitations on a geographical basis, product basis, line of business basis, source of business basis, etc.)?o If yes to the above, are the limitations assessed for reasonableness and effectiveness in reducing the threat to solvency?o Does the insurer have procedures in place to assess the adequacy of the reinsurance purchased both from a severity and frequency perspective for solvency purposes, and ensure that there are no significant mismatches between the policies issued by the insurer and the reinsurance programme (e.g. that basis risk does not exist, etc.)?o Does the insurer have access to additional capital and surplus to cover loss and loss adjustment expenses (eg. letters of credit, parental guarantees, other contingent capital sources, etc.)?o Are policies, processes and procedures in place that employ benchmarking and stress and scenario testing to assess, review, and approve underwriting strategies and tolerance limits?o Are policies, processes and procedures in place to ensure that underwriting strategies are effectively aligned with risk tolerance levels?o Are policies, processes and procedures in place to identify, evaluate, and monitor risks arising from insurance policies, and ensure compliance with risk tolerance levels?o Are systems in place to capture, maintain, and analyse underwriting data; and ensure that relevant and accurate data is used to price underwriting contracts, establish adequate reserves, and appropriately settle claims? |
|---|

3. Business Written:

- | |
|--|
| <ul style="list-style-type: none">o What percentage of the gross premiums written cover an ultimate related policyholder?o Comments (optionally, the insurer may provide comments in the box below to support its responses above): |
|--|

-
4. Has the insurer applied reverse stress testing to both identify the scenarios that could cause business failure and the required actions to manage such situations?
 5. Is the CISSA process clearly documented and regularly amended for changes in strategic direction, risk management framework, and market developments?
 6. How often is the information underlying CISSA discussed and reviewed by the Board of directors and chief and senior executives?
 7. Have 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 insurer may provide brief comments.

Instructions affecting Table 7B

- o The insurer shall select the appropriate yes or no response. Where an optional attachment is provided to disclose additional information, an insurer shall include references (e.g. page number, paragraph number) of where the information can be located within the attachment.
- o Independent verification shall be conducted by an internal or external auditor or any other appropriately skilled internal or external function; as long as they have not been responsible for the part of the CISSA process they review, and are therefore deemed to be independent in their assessment.

Table 7C

CISSA Assessment of material risks of the insurer

The insurer shall undertake and file with the Authority an assessment of its material risks and the determination of both the quality (types of capital) and quantity of CISSA capital required to cover these risks, while remaining solvent and achieving its business goals.

Minimally the assessment should include:

1. Date the assessment was completed.
2. The identification and assessment of all reasonably foreseeable material risks, including those specified in the Insurance Code of Conduct (i.e. insurance underwriting risk; investment, liquidity, and concentration risk; market risk; credit risk; operational risk; group risk; strategic risk; reputational risk; and legal risk).
3. The identification of all material risks, their relationship with one another, the quantity and type of capital (quality) required to cover the risks.
4. A description of the insurer's risk appetite, including limits imposed and how they are enforced.
5. Assumptions and methodology used to assess and aggregate risks.
6. A forward looking analysis of the risks faced by the insurer over its planning horizon and an analysis demonstrating the ability to manage its business and capital needs in adverse circumstances and still meet regulatory capital requirements.
7. An evaluation of whether the insurer has sufficient capital and liquidity available to achieve its strategic goals over its planning horizon and any potential adverse consequences if insufficient.
8. A description of business continuity and disaster plans.
9. A description of how the results of the self assessment are integrated into the management and strategic decision making process.
10. Approval and signed declaration of the CISSA assessment by two members of the Board of directors.

Schedule VIII (Paragraph 6)

CATASTROPHE RISK RETURN (to be completed by insurers writing property catastrophe line of business)

The schedule of catastrophe risk return shall provide particulars of the following matters:

(a) Total Exceedance probability ("EP") curves (Table 8A): This represents an insurer's exposure to loss arising from natural catastrophe from all insurance and reinsurance operations including the impact of any insurance linked securities for all perils combined for the year following the relevant year based upon the insurer's catastrophe model.

(b) EP curve for Insurance (Table 8B): This EP curve shall be required only when the percentage of net insurance premiums written to total net premiums written is greater than 10%.

(c) EP curves for region-perils (Table 8C): Insurers shall provide information on EP curves for the following region-perils

- o Atlantic basin hurricane;
- o North American earthquake;
- o European windstorm;
- o Japanese earthquake; and
- o Japanese typhoon.
- o All other perils

(d) Statutory lines of Business and Zones Exposure per region-perils (Table 8D): Insurers shall disclose the statutory zones and the statutory lines of business to which it is exposed.

(e) Accumulations overview (Table 8E) shall provide details of the features of accumulation methodologies, the catastrophe models used and the frequency of conducting accumulations.

(f) Data analysis (Table 8F) shall consist of information on modeled verses non modeled catastrophe risk, the quality and comprehensiveness of data and how data is considered in accumulations and pricing.

(g) Reinsurance disclosures (Table 8G) seeks to obtain information on the type of protection (reinsurance or retro) purchased against natural catastrophe losses.

(h) Insurance terror exposure (Table 8H): For insurance business that has terrorism exposure, insurers shall disclose their exposure to conventional terrorism exposure and on Nuclear, Biological, Chemical, or Radiological (NBCR) terrorism exposure separately at different levels of geographical resolution.

o Conventional terrorism: the insurers shall disclose information on the ten largest 150 metre accumulations of exposure to conventional terrorism losses on a gross basis.

NBCR insurance terrorism exposure: insurers shall disclose terrorism exposure information on the ten largest US states or countries outside of the USA for accumulations of exposure to NBCR terrorism losses. The exposure calculation should include all exposures within and outside the US and assume a total loss to insurance commitments within the area.(i)

Reinsurance terrorism limits (Table 8I): Insurers shall disclose the ten largest reinsurance limits exposed within or outside the US for conventional and NBCR acts of terrorism.

(j) Assumed exchange rates (Table 8J): Contains information on all exchange rates used in compiling the EP curve information.

INSTRUCTIONS AFFECTING SCHEDULE VIII

Table 8A

EP Curve Total

1. Exceedance probability information

	Gross loss		Pre-tax net loss	
Loss return period (years)	Gross per occurrence loss	Gross aggregate TVaR	Net per occurrence loss	Net aggregate TVaR
	(\$M)	(\$M)	(\$M)	(\$M)
50				
100				
250				
500				
1000				

Gross loss (\$M)	Net loss (\$M)
Annual average aggregate gross loss	Annual average aggregate net loss (net of reinstatements terms)
Standard deviation of annual aggregate gross loss	Standard deviation of annual aggregate net loss (net of reinstatements terms)
Total gross statutory property catastrophe premium modeled	Total net statutory property catastrophe premium modeled (net of upfront reinsurance premiums paid)
Total gross all other premium modeled	Total net all other premium modeled (net of proportional reinsurance only)
Total gross statutory property catastrophe limits exposed – modeled	Total net statutory property catastrophe limits exposed – modeled (net of proportional reinsurance only)
Total gross statutory property catastrophe limits exposed - not modeled	Total net statutory property catastrophe limits exposed- not modeled (net of proportional reinsurance only)
Total gross all other lines limits exposed - modeled	Total net all other lines limits exposed – modeled (net of proportional reinsurance only)
Total gross all other lines limits exposed - not modeled	Total net all other lines limits exposed - not modeled (net of proportional reinsurance

**Total gross premium
without an
occurrence or
aggregate limit**

**Total gross premium
with non
determinable Total
Insured Value ("TIV")**

only)

**Total net premium
without an occurrence
or aggregate limit**

**Total net premium with
non determinable TIV**

**2. Significant sources of catastrophe risk and associated loss included in the EP
Curves:**

	Select	If no, briefly explain
Allocated loss adjustment expense		
Property - buildings		
Property - contents		
Additional living expenses		
Business interruption		
Auto physical damage		
Worker's compensation		
Personal accident		
Life insurance		
Onshore energy		
Offshore energy		
Ocean marine		
Inland marine		
Flood		
Crop		
Other primary insurance		

3. Assumed reinsurance information

Select

If no, briefly
explain

Proportional - quota share

Proportional - surplus share

Non-proportional - catastrophe

Non-proportional - per risk

Other reinsurance assumed

4. Pools and assessments information

Select

If no, briefly
explain

Voluntary pools and/or assessments

Involuntary pools and/or
assessments

5. Supplemental perils and model options

Select

If no, briefly
explain

Fire following

Sprinkler leakage

Storm surge

Demand surge

Secondary uncertainty

Atlantic multi-decadal oscillation
selection

6. Other adjustments information

	Select	If no, briefly explain
Adjustments for exposure data quality		
Adjustments for insurance to value		
Adjustments for exposure growth		
Supplemental losses for non-modeled line of business		
Adjustments for model deficiencies – severity		
Adjustments for model deficiencies - frequency		
Additional demand surge loadings		
Other factors for prudence		
Average loading factor applied to ground up loss for all adjustments applied:		
Is this average loading factor determined analytically or estimated?		
Which vendor catastrophe models (“cat model”) do you include in this modeling:		
Which version of the model or version of the region-peril models are used for each cat model as appropriate:		

Instructions affecting Table 8A

o The responses for the “Exceedance probability information” section shall consist of amounts in United States Dollars (USD) \$millions.

o Except for the cat model and average loading factor questions in the section “Other adjustments information”, where the response shall include amounts, responses to sections 2 through 6 shall include selecting the appropriate response that best reflects the insurer’s position. Where the response is “no” the insurer shall provide a brief description.

Table 8B

EP Curve Insurance

The EP curve for insurance will be required only when the percentage of net insurance premiums written is greater than 10% of total net premiums written.

1. Exceedance probability information

Loss return period (years)	Gross loss		Pre-tax net loss	
	Gross per occurrence loss	Gross aggregate TVaR	Net per occurrence loss	Net aggregate TVaR
	(\$M)	(\$M)	(\$M)	(\$M)
50				
100				
250				
500				
1000				

Table 8B, cont’d

1. Exceedance probability information, cont’d

	Gross Loss (\$M)		Net Loss (\$ M)
Annual average aggregate gross loss		Annual average aggregate net loss (net of reinstatements terms)	
Standard deviation of annual aggregate gross loss		Standard deviation of annual aggregate net loss (net of reinstatements terms)	
Total gross statutory property catastrophe premium modeled		Total net statutory property catastrophe premium modeled (net of upfront reinsurance premiums paid)	
Total gross all other premium modeled		Total net all other premium modeled (net of proportional reinsurance only)	
Total gross statutory property catastrophe limits exposed - modeled		Total net statutory property catastrophe limits exposed - modeled (net of proportional reinsurance only)	
Total gross statutory property catastrophe limits exposed - not modeled		Total net statutory property catastrophe limits exposed - not modeled (net of proportional reinsurance only)	
Total gross all other lines limits exposed - modeled		Total net all other lines limits exposed - modeled (net of proportional reinsurance only)	
Total gross all other lines limits exposed - not modeled		Total net all other lines limits exposed - not modeled (net of proportional reinsurance only)	
Total gross premium without an occurrence or aggregate limit		Total net premium without an occurrence or aggregate limit	
Total gross premium with non determinable Total Insured Value ("TIV")		Total net premium with non determinable TIV	

Table 8B. cont'd

2. Significant sources of catastrophe risk and associated loss included in the EP Curves:		
	Select	If no, briefly explain
Allocated loss adjustment expense		
Property - buildings		
Property - contents		
Additional living expenses		
Business interruption		
Auto physical damage		
Worker's compensation		
Personal accident		
Life insurance		
Onshore energy		
Offshore energy		
Ocean marine		
Inland marine		
Flood		
Crop		
Other primary insurance		
3. Assumed reinsurance information		
	Select	If no, briefly explain
Proportional - quota share		
Proportional - surplus share		
Non-proportional - catastrophe		
Non-proportional - per risk		

Other reinsurance assumed		
4. Pools and assessments information		
	Select	If no, briefly explain
Voluntary pools and/or assessments		
Involuntary pools and/or assessments		
5. Supplemental perils and model options		
	Select	If no, briefly explain
Fire following		
Sprinkler leakage		
Storm surge		
Demand surge		
Secondary uncertainty		
Atlantic multi-decadal oscillation selection		
6. Other adjustments information		
	Select	If no, briefly explain
Adjustments for exposure data quality		
Adjustments for insurance to value		
Adjustments for exposure growth		
Supplemental losses for non-modeled line of business		
Adjustments for model deficiencies - severity		
Adjustments for model deficiencies - frequency		
Additional demand surge loadings		
Other factors for prudence		
Average loading factor applied to ground up		

loss for all adjustments applied:

Is this average loading factor determined analytically or estimated?

Which vendor catastrophe models (“cat model”) do you include in this modeling:

Which version of the model or version of the region-peril models are used for each vendor cat model as appropriate:

Instructions affecting Table 8B

o The responses for the “Exceedance probability information” section shall consist of amounts in USD \$millions.

o Except for the question on cat model and average loading factor questions in the section “Other adjustments information”, where the response shall include amounts, responses to sections 2 through 6 shall include selecting the appropriate response that best reflects the insurer’s position. Where the response is “no” the insurer shall provide a brief description.

Table 8C

EP Curves for region-perils

The insurer shall complete the table below for each of the following region-perils:

- o Atlantic basin hurricane
- o North American earthquake
- o European windstorm
- o Japanese earthquake
- o Japanese typhoon
- o All other perils

Exceedance probability information

Which model(s) is used for EP Curve?

Loss return period (years)	Gross loss		Pre-tax net loss	
	Gross per occurrence loss	Gross aggregate TVaR	Net per occurrence loss	Net aggregate TVaR
	(\$M)	(\$M)	(\$M)	(\$M)
50				
100				
250				
500				
1000				

Instructions affecting Tables 8C

- o The responses for the “Exceedance probability information” section shall consist of amounts in USD \$millions.

Table 8D

Statutory Lines of Business and Zones Exposure per region-perils

The insurer shall select the statutory zones (Schedule V (o) and statutory lines of business (Schedule III) that it is exposed to with regards to the following region-perils.

a) Exposure to statutory zones (Schedule V (o))

	EP Curve Atlantic Hurricane	EP Curve North American Earthquake	EP Curve European Windstorm	EP Curve Japanese Earthquake	EP Curve Japanese Typhoon	EP Curve All Other Perils
Zone 1						
Zone 2						
Zone 3						
Zone 4						
Zone 5						
Zone 6						
Zone 7						
Zone 8						
Zone 9						
Zone 10						
Zone 11						
Zone 12						
Zone 13						

b) Exposure to statutory lines of business (Schedule III)

	EP Curve Atlantic Hurricane	EP Curve North American Earthquake	EP Curve European Windstorm	EP Curve Japanese Earthquake	EP Curve Japanese Typhoon	EP Curve All Other Perils
Line 1						
Line 2						
Line 3						
Line 4						
Line 5						
Line 6						
Line 7						
Line 8						
Line 9						
Line 10						
Line 11						
Line 12						
Line 13						
Line 14						
Line 15						
Line 16						
Line 17						
Line 18						
Line 19						
Line 20						
Line 21						
Line 22						
Line 23						
Line 24						

Instructions affecting Tables 8D

- o “All Other Perils” shall consist of the residual natural catastrophe exposure retained by the company for all other region-perils except Atlantic basin hurricane, North American earthquake, European windstorm, Japanese earthquake, and Japanese typhoon.

Table 8E

Accumulations Overview

1. What frequency best describes the update process of accumulations?
2. Are there differences in the frequency of accumulations for various business units? If yes, briefly describe.
3. Which vendor catastrophe models does the insurer license?
4. Does the insurer incorporate internally developed stochastic catastrophe models within the accumulations that capture correlation across contracts or lines of business?
5. Which methodology best describes an insurer's accumulation methodology?
6. Where more than one catastrophe model is used in the accumulations, which methodology best describes how multiple models are considered?
7. Is the insurer's pricing and accumulations fully consistent?
8. What percentage of the total premium (other than insurance business) is written without occurrence limits?
9. Does the insurer provide reinsurance to both affiliated companies and unaffiliated companies?
10. If there is more than 2.5% of premium written without occurrence limits (other than insurance business) briefly describe this business, including information on territorial exposure, potential for correlation of losses across contracts/policies and the assessment of maximum loss potential for these exposures.
11. How are outwards reinsurance protections considered in accumulation calculations?

Instructions affecting Table 8E

o Item '7' requires insurers to provide a response on whether the annual expected loss implied in the accumulations is equal to the annual expected at the time of underwriting.

Table 8F

Data analysis

1. For all contracts written by the insurer, provide splits of those that are:

	US specific contracts - all exposures		All other contracts – all exposures		Total	
	Contract count	Limit provided (\$M)	Contract count	Limit provided (\$M)	Contract count	Limit provided (\$M)
Modeled						
Not modeled						
Total						

2. For those contracts that are written by the insurer that may be modeled, provide splits of those that are:

	US specific contracts - all exposures		All other contracts - all exposures		Total	
	Contract count	Limit provided (\$M)	Contract count	Limit provided (\$M)	Contract count	Limit provided (\$M)
Modeled						
Not modeled						
Total						

Table 8F, cont'd

3. For those contracts that are written by the insurer that are modeled, provide splits of those that are:

	US specific contracts - all exposures		All other contracts – all exposures		Total	
	Contract count	Limit provided (\$M)	Contract count	Limit provided (\$M)	Contract count	Limit provided (\$M)
Detailed exposure data						
Aggregate exposure data						
A proxy peer insurer is selected and losses are derived from this insurer						
Derived from an industry loss curve utilizing market share						
Other						
Total						

If other is selected, describe the methodology as appropriate:

Table 8F, cont'd

4. For those contracts that are written by the insurer that may be modeled (but are not), provide splits of those that are:

	US specific contracts - all exposures		All other contracts – all exposures		Total	
	Contract count	Limit provided (\$M)	Contract count	Limit provided (\$M)	Contract count	Limit provided (\$M)
Data deficient						
Model deficient						
Other						
Total						

If other is selected, describe the reasons for not modeling the contract(s).

5. For contracts that are written by the insurer that may be modeled, but are not modeled, describe what the insurer does from an accumulation perspective:

Table 8F, cont'

6. For contracts that are written by the insurer that are unable to be modeled, provide splits of those that are:

	US specific contracts - all exposures		All other contracts - all exposures		Total	
	Contract count	Limit provided (\$M)	Contract count	Limit provided (\$M)	Contract count	Limit provided (\$M)
Data deficient						
No catastrophe model exists						
Model deficient						
Other						
Total						

If other is selected, describe the reasons that the contract(s) is unable to be modeled:

7. What percentage of total net premiums written represents contracts with no limits.

8. For contracts that are written by the insurer that are not modeled, describe what the insurer does from an accumulation perspective:

9. If there are contracts that are written by the insurer that have no occurrence limits or where TIV has not been included in the exposure in the above exhibits describe how this exposure is included in the above data:

Instructions affecting Table 8F

o In this Table, where applicable, the responses shall include: inputting the amount (in USD \$millions)/number and/or providing a brief description in the comment fields.

Table 8G

Reinsurance disclosures

Reinsurance or Retro information:

	US specific contracts		Worldwide contracts		All other contracts	
	Premium	Occurrence Limit provided	Premium	Occurrence Limit provided	Premium	Occurrence Limit provided
	(\$M)	(\$M)	(\$M)	(\$M)	(\$M)s	(\$M)
Insurance Linked Securities protection						
Industry Loss Warranties contracts						
Other contracts and non-traditional methods of risk mitigation/assumption						
Property catastrophe contracts						
Catastrophe swaps						
Property per risk contracts						
Property retro contracts						
Quota share contracts						
Surplus share contracts						
Total						
If there are reinsurance or retro contracts that are purchased by the insurer that have no occurrence or aggregate limits provide details below for the total premium ceded, description of the underlying lines of business covered, territorial coverage limitations and details of the natural, man-made and pandemic perils covered on aggregate basis.						

Instructions affecting Table 8G

In this Table, the amounts shall be in USD \$millions.

Table 8H

Insurance terror exposure

Conventional Insurance Terrorism Exposure - 150m Defined Geographical Radius

Conventional terrorism exposure		Latitude of accumulation centroid	Longitude of accumulation centroid	Zip code/Postcode	State / Province	Country	Direct terrorism property exposure (\$M)	Total gross exposure (\$M)	TRIP or other terrorism pool recoverables if any (\$M)	Reinsurance recoveries if any (\$M)	Total net exposure (\$M)	Target location (if known)
	1											
	2											
	3											
	4											
	5											
	6											
	7											
	8											
	9											
	10											

Table 8H, cont'd

NBCR Insurance Terrorism Exposure-State/Country

		U.S. State	Coun try	Direct terrorism property exposure (\$M)	Total gross exposure (\$M)	TRIP or other sovereign terror pool recovera bles if any (\$M)	Reinsuran ce recoverabl e limits if any (\$M)	Total net net exposure (\$M)
NBCR terrorism exposure	1							
	2							
	3							
	4							
	5							
	6							
	7							
	8							
	9							
	10							

Instructions affecting Table 8H

Total gross exposure is the sum of (in USD \$millions):

- o Direct terrorism property exposure
- o Indirect terrorism property exposure
- o Value of lives exposed
- o Other insured exposures

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Table 8I

Reinsurance terrorism limits

		U.S. State/Country	Direct reinsurance limits exposed to terrorism (\$M)	Total gross reinsurance limits exposed to terrorism (\$M)	TRIP or other terror pool recoverables if any (\$M)	Reinsurance or retro recoveries if any (\$M)	Total net reinsurance limits exposed to terrorism (\$M)
Conventional terrorism exposure	1						
	2						
	3						
	4						
	5						
	6						
	7						
	8						
	9						
	10						

Table 8I, Cont'd

		U.S. State/Country	Direct reinsurance limits exposed to terrorism (\$M)	Total gross reinsurance limits exposed to terrorism (\$M)	TRIP or other terrorism pool recoverables if any (\$M)	Reinsurance or retro recoveries if any (\$M)	Total net reinsurance limits exposed to terrorism (\$M)
NBCR terrorism exposure	1						
	2						
	3						
	4						
	5						
	6						
	7						
	8						
	9						
	10						

Instructions affecting Table 8I

- o The total gross exposure is derived by the sum of all reinsurance limits exposed to terrorism.

o Total net reinsurance limits exposed to terrorism is derived by subtracting the TRIP or other terror pool recoverables and reinsurance recoveries from the total gross reinsurance limits exposed to terrorism.

o Amounts shall be in USD \$millions.

Table 8J

Assumed exchange rates

Currency	EP Curve Total all perils combined
USD	1.00
USD:EUR	
USD:GBP	
USD:Yen	
USD:CHF	
USD:Other(s)	

Instructions affecting Table 8J

o In this Table the insurer shall input the exchange rates used to translate the EP curves.

SCHEDULE X (Paragraph 6)

SCHEDULE OF ELIGIBLE CAPITAL

The schedule of eligible capital shall provide particulars of the following matters:

- a) Tier 1, Tier 2 and Tier 3 eligible capital (Table 9); and
- b) particulars of each capital instrument approved by the Authority as “Any other fixed capital” (in accordance with Form 8, Line 1(c) under the Insurance Accounts Regulations 1980).

Table 9

Total statutory capital and surplus (Form 8, Line 3)	XXX
Less: Encumbered assets (not securing policyholder obligations)	XXX
Subtotal:	<u>XXX</u>
 Tier 1 – basic capital	
(a) Fully paid shares (Form 8, Line 1(a))	XXX
(b) Contributed surplus or share premium (Form 8, Line 1(b))	XXX
(c) Statutory surplus- End of Year (Form 8, Line 2(h) (deficit) or retained earnings)	XXX
(d) Capital adjustments	XXX
(e) Hybrid capital instruments:	
Non-cumulative, perpetual or fixed term preference shares	XXX
(f) Other:	XXX
(g) Less: Difference between encumbered assets for policyholder obligations and policyholder obligations (Form 1A, Lines 16 and 17(a))	-
Encumbered assets for policyholder obligations	XXX
Less: Policyholders’ obligations (Form 1, Line 17(a))	XXX XXX
(h) Less: Encumbered assets (not securing policyholder obligations)	XXX
 Tier 1 – ancillary capital	
(a) Perpetual or fixed term subordinated debt (Form 8 Line 1(c))	<u>XXX</u>
<u>Total Tier 1 available capital</u>	<u>XXX</u>

Tier 2 -basic capital

(a) Hybrid capital instruments:	
Cumulative preference shares	XXX
(b) Other:	XXX
(c) Add: Difference between encumbered assets for policyholder obligations and policyholder obligations (Form 1A, Lines 16 and 17(a)) deducted from Tier 1 (if it qualifies)	XXX

Tier 2 -ancillary capital

(a) Unpaid and callable common shares (Form 8 Line 1(c))	XXX
(b) Qualifying unpaid and callable hybrid capital (Form 8 Line 1(c))	XXX
(c) Qualifying unpaid and callable non-cumulative, perpetual preference shares (Form 8 Line 1(c))	XXX
(d) Perpetual or fixed term subordinated debt (Form 8 Line 1(c))	XXX
(e) Approved letters of credit (Form 8, Line 1(c))	XXX
(f) Approved guarantees (Form 8, Line 1(c))	XXX
<u>Total Tier 2 available capital</u>	XXX

Tier 3 -basic capital

(a) Short-term hybrid capital instruments	
Cumulative preference shares	XXX
(b) Short-term subordinated debt	XXX

Tier 3- ancillary capital

(a) Short-term subordinated debt (Form 8, Line 1(c))	XXX
(b) Approved letters of credit (Form 8, Line 1(c))	XXX
(c) Approved guarantees (Form 8, Line 1(c))	XXX
<u>Total Tier 3 available capital</u>	XXX
Total available capital and surplus	XXX

Regulatory Capital Level

Minimum Margin of Solvency XXX

Enhance Capital Requirement XXX

Instructions affecting Table 9

Table 9 inputs are subject to Eligible Capital Rules made under Section 6A of the Act.

The insurer shall include all components of total statutory capital and surplus (Form 8 Line 3 of the Insurance Accounts Regulations 1980) subject to adjustments made under Section 6D of the Act in Table 10 in accordance with the provisions of Eligible Capital Rules.

For the Tier 1 capital, to calculate the “Difference between encumbered assets for policyholder obligations and policyholder obligations”, the insurer shall determine the difference between the encumbered assets for the policyholder obligations and the higher of i) the policyholder obligations of the insurer for which assets have been held and calculated in accordance with Form 1A, Lines 16 and 17(a) and ii) the capital requirement applicable to the encumbered assets for policyholder obligations where the encumbered assets for policyholder obligations exceeds both policyholder obligations and the capital requirement applicable to the encumbered assets for policyholder obligations.

For Tier 2-basic capital, to calculate the “Difference between encumbered assets for policyholder obligations and policyholder obligations”, the insurer shall determine the difference between the encumbered assets for the policyholder obligations and the higher of i) the policyholder obligations of the insurer for which assets have been held and calculated in accordance with Form 1A, Lines 16 and 17(a) and ii) the capital requirement applicable to the encumbered assets for policyholder obligations where the encumbered assets for policyholder obligations exceeds both policyholder obligations and the capital requirement applicable to the encumbered assets for policyholder obligations.

Table 9A

For the year ending _____, 20XX
expressed in _____ (currency)

Description of capital instrument	Date of issue	Maturity date (as applicable)	Date approved by the Authority	Value of the capital instrument	Eligible capital Tier
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Total available capital and surplus XXX

Instructions affecting Table 9A

The insurer to include every capital instrument contributing to the amount reported in Form 8 Line 1(c) of the Insurance Accounts Regulations 1980 in Table 9A in accordance with the provisions of Eligible Capital Rules.

Made this day of 2011

Alan Cossar Chairman

Bermuda Monetary Authority