



**INSURANCE (PRUDENTIAL STANDARDS) (CLASS 4 SOLVENCY
REQUIREMENT) AMENDMENT ORDER 2009**

BR 79/2009

In exercise of the powers conferred upon the Bermuda Monetary Authority by section 6A of the Insurance Act 1978, the following Order is made:

Citation and commencement

1 This Order may be cited as the Insurance (Prudential Standards) (Class 4 Solvency Requirement) Amendment Order 2009, and shall come into operation on the 31st day of December 2009.

Interpretation

2 In this Order “principal Order” means the Insurance (Prudential Standards) (Class 4 Solvency Requirement) Order 2008.

Paragraph 2 of principal Order amended

3 Paragraph 2 of the principal Order is amended by inserting the following definitions in their alphabetical order—

“business continuity risk” includes a risk of an event that threatens or disrupts an insurer’s continuous operations;

“business processes risk” includes a risk of errors arising from data entry, data processing, or application design;

“compliance risk” includes a risk of legal or regulatory breaches or both;

“distribution channel risk” includes a risk of disruption to an insurer’s distribution channel arising from employment of inexperienced or incapable brokers or agents.

“fraud risk” includes a risk of misappropriation of assets, information theft, forgery or fraudulent claims;

“human resources (‘HR’) risk” includes a risk of employment of unethical staff, inexperienced or incapable staff, failure to train or retain experienced staff, and failure to adequately communicate with staff;

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“information technology (IT) risk” includes a risk of unauthorized access to systems and data, data loss, utility disruptions, software and hardware failures, and inability to access information systems;

“outsourcing risk” includes a risk of mis-communication of responsibilities in relation to outsourcing, breach of outsource service agreements or entering into inappropriate outsource service agreements.

Paragraph 6 of principal Order amended

4 Paragraph 6 of the principal Order is amended—

(a) by deleting subparagraph (2) and substituting the following—

“(2) Every Class 4 insurer shall make a capital and solvency return to the Authority in accordance with Schedules I, II, III, IV, V and VI;”;

(b) by inserting the following subparagraph after paragraph (2)—

“(2A) A capital and solvency return shall comprise the following —

- (a) both an electronic version and a printed version of the BSCR model;
- (b) printed versions of the returns prescribed in Schedules II, III, IV, V and VI; and
- (c) where applicable, a printed copy of an approved internal capital model.”.

Paragraph 6A added

5 The principal Order is amended by adding the following paragraphs after paragraph 6—

“Declaration of capital and solvency returns

6A Every capital and solvency return made by an insurer under paragraph 6 shall be accompanied with a declaration signed by two directors of the insurer and by the insurer’s principal representative declaring that to the best of their knowledge and belief, the return fairly represents the financial condition of the insurer in all material respects.

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Offences

6B Every person who knowingly or recklessly makes a false or misleading statement or return to the Authority shall be guilty of a summary offence and liable on conviction to a fine up to \$50,000.”.

Schedule I amended

6 Schedule I of the principal Order is amended—

- (a) in paragraph 9 by deleting “ ρ = an amount between 1% and 10% as approved or prescribed by the Authority” and substituting “ ρ = an amount between 1% and 10% as determined by the Authority in accordance with Table 7”;
- (b) by adding the following tables after the formula for $ACov_{-}$

**“Table 7
Operational Risk Charge for ρ ”**

Overall Score	Applicable Operational Risk Charge ρ
<=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%

INSTRUCTIONS AFFECTING TABLE 7

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In this table, “overall score” means an amount equal to the sum of the aggregate score derived from each of tables 7A, 7B, 7C, 7D, 7E, and 7F.

**Table 7A
Corporate Governance Score Table**

Criterion	Implemented	Score
Board 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		200
Board monitors adherence to operational risk tolerance limits more regularly than annually		200
Board receives, at least annually, reports on the effectiveness of material operational risk internal controls as well as management’s plans to address related weaknesses		200
Board ensures that systems or procedures, or both, are in place to identify, report and promptly address internal control deficiencies related to operational risks		200
Board promotes full, open and timely disclosure from senior management on all significant issues related to operational risk		200
Board ensures that periodic independent reviews of the risk management function are performed and receives the findings of the review		200
Total		XX
COMMENTS		

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INSTRUCTIONS AFFECTING TABLE 7A

The total score is derived by adding the score for each criterion of an insurer's corporate governance structure that the insurer has implemented.

**Table 7B
Risk Management Function ('RMF') Score Table**

Criterion	Implemented	Score
RMF is independent of other operational units and has direct access to the Board of Directors		150
RMF is entrenched in strategic planning, decision making and the budgeting process		150
RMF ensures that the risk management procedures and policies are well documented and approved by the Board of Directors		150
RMF ensures that the risk management policies and procedures are communicated throughout the organization		150
RMF ensures that operational risk management processes and procedures are reviewed at least annually		150
RMF ensures that loss events arising from operational risks are documented and loss event data is integrated into the risk management strategy		150
RMF ensures that risk management recommendations are documented for operational units, ensures that deficiencies have remedial plans and that progress on the execution of such plans are reported to the Board of Directors at		150

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least annually		
TOTAL		XX
COMMENTS		

INSTRUCTIONS AFFECTING TABLE 7B

The total score is derived by adding the score for each criterion of an insurer’s risk management function that the insurer has implemented.

**Table 7C
Risk Identification Processes (‘RIP’) Score Table**

Progression		Criterion	Operational Risk Areas							
Stage	Scoring		Fraud	HR	Outsourcing	Distribution Channel	Business Processes	Business Continuity	IT	Compliance
1	50	RIP are ad hoc								
2	100	RIP have been implemented but not standardized across the organization								
3	150	RIP have been implemented, well documented and understood by relevant staff, and standardized across the entire organization								
4	200	In addition to Stage 3, RIP are reviewed at least annually with a view to assessing effectiveness and introducing improvements								
TOTAL			XX	XX	XX	XX	XX	XX	XX	XX
COMMENTS										

INSTRUCTIONS AFFECTING TABLE 7C

(a) the total score is derived by adding the individual score for each operational risk area corresponding to the stage of the insurer’s implementation in respect of its RIP;

(b) where the insurer’s assessment of the operational risk area is between stages (i.e. exceeds the criterion for given stage, while only partially meeting the criterion of the next stage), the insurer shall be deemed to have met the criterion of the lower stage; and

(c) where an operational risk area is not applicable to the insurer’s operations, the insurer shall record such fact and the reasons for arriving at this conclusion in the comments section and be deemed to have met the criterion of the highest stage.

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**Table 7D
Risk Measurement Processes ('RMP') Score Table**

Progression		Criterion	Operational Risk Areas							
Stage	Scoring		Fraud	HR	Outsourcing	Distribution Channel	Business Processes	Business Continuity	IT	Compliance
1	50	RMP are ad hoc								
2	100	RMP have been implemented but not standardized across the organization								
3	150	RMP have been implemented, well documented and understood by relevant staff, and standardized across the entire organization								
4	200	In addition to Stage 3, RMP are reviewed at least annually with a view to assessing effectiveness and introducing improvements								
TOTAL			XX	XX	XX	XX	XX	XX	XX	XX
COMMENTS										

INSTRUCTIONS AFFECTING TABLE 7D

- (a) the total score is derived by adding the individual score for each operational risk area corresponding to the stage of the insurer's implementation in respect of its RMP;
- (b) where the insurer's assessment of the operational risk area is between stages (i.e. exceeds the criterion for given stage, while only partially meeting the criterion of the next stage), the insurer shall be deemed to have met the criterion of the lower stage; and
- (c) where an operational risk area is not applicable to the insurer's operations, the insurer shall record such fact and the reasons for arriving at this conclusion in the comments section and be deemed to have met the criterion of the highest stage.

**Table 7E
Risk Response Processes ('RRP') Score Table**

Progression		Criterion	Operational Risk Areas							
Stage	Scoring		Fraud	HR	Outsourcing	Distribution Channel	Business Processes	Business Continuity	IT	Compliance
1	50	RRP are ad hoc								
2	100	RRP have been implemented but not standardized across the organization								

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3	150	RRP have been implemented, well documented and understood by relevant staff, and standardized across the entire organization								
4	200	In addition to Stage 3, RRP are reviewed at least annually with a view to assessing effectiveness and introducing improvements								
TOTAL			XX							
COMMENTS										

INSTRUCTIONS AFFECTING TABLE 7E

- (a) the total score is derived by adding the individual score for each operational risk area corresponding to the stage of the insurer's implementation in respect of its RRP;
- (b) where the insurer's assessment of the operational risk area is between stages (i.e. exceeds the criterion for given stage, while only partially meeting the criterion of the next stage), the insurer shall be deemed to have met the criterion of the lower stage; and
- (c) where an operational risk area is not applicable to the insurer's operations, the insurer shall record such fact and the reasons for arriving at this conclusion in the comments section and be deemed to have met the criterion of the highest stage.

**Table 7F
Risk Monitoring and Reporting Processes ('RMRP') Score Table**

Progression		Criterion	Operational Risk Areas							
Stage	Scoring		Fraud	HR	Outsourcing	Distribution Channel	Business Processes	Business Continuity	IT	Compliance
1	50	RMRP are ad hoc								
2	100	RMRP have been implemented but not standardized across the organization								
3	150	RMRP have been implemented, well documented and understood by relevant staff, and standardized across the entire organization								
4	200	In addition to Stage 3, RMRP are reviewed at least annually with a view to assessing effectiveness and introducing improvements								
TOTAL			XX	XX	XX	XX	XX	XX	XX	XX
COMMENTS										

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INSTRUCTIONS AFFECTING TABLE 7F

(a) the total score is derived by adding the individual score for each operational risk area corresponding to the stage of the insurer's implementation in respect of its RMRP;

(b) where the insurer's assessment of the operational risk area is between stages (i.e. exceeds the criterion for given stage, while only partially meeting the criterion of the next stage), the insurer shall be deemed to have met the criterion of the lower stage; and

(c) where an operational risk area is not applicable to the insurer's operations, the insurer shall record such fact and the reasons for arriving at this conclusion in the comments section and be deemed to have met the criterion of the highest stage."

Schedule V repealed and substituted

7 Schedule V of the principal Order is repealed and the following is substituted—

“SCHEDULE V

(Paragraph 6)

SCHEDULE OF RISK MANAGEMENT

The schedule of risk management of a Class 4 general business insurer shall provide particulars of the following matters—

- (a) governance structure;
- (b) intra-group exposures;
- (c) effective duration of assets calculation;
- (d) effective duration of liabilities calculation;
- (e) description of the effective duration of assets and liabilities calculations and key assumptions;
- (f) investment policy;
- (g) gross probable maximum loss;
- (h) net probable maximum loss;
- (i) average annual loss excluding property catastrophe;
- (j) catastrophe exposure limits, gross probable maximum loss and net probable maximum loss by territories and by statutory lines of business separated by insurance and reinsurance;

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- (k) projected net premiums written, underwriting profit or loss, and net income or loss;
- (l) actual attritional losses and large claims losses in the relevant year;
- (m) financial impact and description of stress and scenario tests; and
- (n) description of the insurer's risk management program.

INSTRUCTIONS AFFECTING SCHEDULE V

- (a) the 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.
- (b) the intra-group exposures must disclose material transactions between the insurer and other members of the group to which it belongs.
- (c) the 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) the effective duration of liabilities calculation must be determined using the reserves (Form 1A, Lines 17 and 18) as a basis;
- (e) a description of the process used for determining the effective duration of assets calculation and effective duration of liabilities calculation, and key assumptions for these calculations;
- (f) the investment policy must disclose a description of the insurer's investment strategy governing investment selection and composition of the insurer's investment portfolio;
- (g) the gross probable maximum loss for natural catastrophe losses (prior to reinsurance) must be

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calculated at the 99.0% Tail Value-at-Risk level for annual aggregate exposure to all risks and all perils, including reinstatement premiums, for the year following the relevant year based upon the insurer's catastrophe model;

- (h) the net probable maximum loss for natural catastrophe losses (after reinsurance) must be calculated at the 99.0% Tail Value-at-Risk level for annual aggregate exposure to all risks and all perils, including reinstatement premiums, for the year following the relevant year based on the insurer's catastrophe model;
- (i) the average annual loss excluding property catastrophe must be calculated as follows-
 - (i) the expected net natural catastrophe loss (after reinsurance), including reinstatement premiums, for annual aggregate exposure to all risks and all perils other than those relating to the property catastrophe statutory line of business (as described under the Instructions Affecting Schedule III) 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 (excluding the property catastrophe component);
- (j) the catastrophe exposure limits, gross probable maximum loss and net probable maximum loss by territories and by statutory lines of business separated by insurance and reinsurance shall disclose separately the catastrophe exposure limits, gross probable maximum loss and net probable maximum loss in accordance with—
 - (i) the exposure territories as defined in paragraph (o) below, or
 - (ii) other such territories as the Authority shall approve,and based on the statutory lines of business (as described under the Instructions Affecting Schedule III)

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separated into insurance and reinsurance related, respectively; and catastrophe exposure limits must disclose the limits underlying the exposures used to derive the gross probable maximum loss and net probable maximum loss calculations above;

- (k) the projected net premiums written, underwriting profit or loss, and net income or loss shall disclose the insurer's latest estimate of annual net premiums written, underwriting profit or loss, and net income or loss for the year following the relevant year either for the insurer or on a group basis with disclosure of the estimated percentage of the insurer's contribution relative to the group;
- (l) the actual attritional losses and large claims losses in the relevant year shall disclose the actual aggregate losses (classified by the insurer as attritional and large claims losses in accordance with its own policy) experienced by the insurer in the relevant year (not including prior year reserve releases or adverse development);
- (m) the financial impact and description of stress and scenario tests shall disclose the results from the stress and scenario tests prescribed by the Authority annually and published in such manner as the Authority directs;
- (n) the description of the insurer's risk management program shall disclose-
 - (i) a description of the risk management process, including how the risk management program is used for strategic management decision-making, capital allocation and capital adequacy;
 - (ii) a description of 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;
 - (iii) a description of the risk appetite including the process for setting and embedding risk limits, and the identification of the types of stress testing carried out to ascertain the suitability of the risk appetite; and

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(iv) a description of the process undertaken to monitor material risk concentration;

(o) 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 Zones 1 to 12

Made this 18th day of December, 2009

Deputy Chairman
Bermuda Monetary Authority