ISLAMIC FINANCIAL SERVICES BOARD

EXPOSURE DRAFT

STANDARD ON SOLVENCY REQUIREMENTS FOR *TAKĀFUL* (ISLAMIC INSURANCE) UNDERTAKINGS

Comments on this Exposure Draft should be sent
to the IFSB's Secretary-General not later than 15 05 2010
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ABOUT THE ISLAMIC FINANCIAL SERVICES BOARD (IFSB)

The IFSB is an international standard-setting organisation which was officially inaugurated on 3rd November 2002 and started operations on 10th March 2003. The organisation promotes and enhances the soundness and stability of the Islamic financial services industry by issuing global prudential standards and guiding principles for the industry, broadly defined to include banking, capital markets and insurance sectors. The standards prepared by the IFSB follow a lengthy due process as outlined in its Guidelines and Procedures for the Preparation of Standards/Guidelines, which involves, among others, the issuance of exposure drafts, holding of workshops and where necessary, public hearings. The IFSB also conducts research and coordinates initiatives on industry-related issues, as well as organises roundtables, seminars and conferences for regulators and industry stakeholders. Towards this end, the IFSB works closely with relevant international, regional and national organisations, research/educational institutions and market players.

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ACRONYMS

BOD	Board of directors
IAIS	International Association of Insurance Supervisors
ICP	Insurance Core Principles of the IAIS
IFSB	Islamic Financial Services Board
JWG	Joint Working Group between the IAIS and the IFSB
MCR	Minimum capital requirement
MTC	Minimum target capital
PIF	Participants' Investment Fund
PRF	Participants' Risk Fund
PCR	Prescribed capital requirement
PPR	Prudent Person Rule
PTC	Prescribed target capital
QR	Quantitative Restrictions
TO	*Takāful* operator

Bismillahirrahmanirrahim.

Allahumma salli wasallim 'ala Sayyidina Muhammad wa'ala ālihi wasahbihi

A. INTRODUCTION

Background

1. The Islamic Financial Services Board (IFSB) and the International Association of Insurance Supervisors (IAIS) established a Joint Working Group (JWG) which produced a paper "Issues in Regulation and Supervision of *Takāful* (Islamic Insurance) published in August 2006. The Issues Paper grouped the issues under the following four major themes: a) corporate governance; b) financial and prudential regulation; c) transparency, reporting and market conduct; and d) supervisory review process, with the conclusion that these issues should be addressed in an integrated manner. It also identified corporate governance for *Takāful* as the priority area, as it embraces the industry's fundamental issues such as acceptable *Takāful* models and their essential parameters, the relationship between *Takāful* participants' and shareholders' funds, and *Sharī'ah* governance, among others. In November 2009, the IFSB issued the Guiding Principles on Governance for *Takāful* (Islamic Insurance) Undertakings. This Standard is a successor to, and builds on, that work, in line with the priorities set out by the JWG.

General Principle

2. In view of the on-going development for an international solvency requirement for insurance undertakings, the Standard does not prescribe specified quantitative techniques. Rather, the Standard sets out important key principles for the structure of solvency requirements for a *Takāful* undertaking. The IFSB has taken account of the IAIS's initiatives on solvency standards and assessment, to benefit from and build on the established international frameworks set out by the IAIS. This approach is adopted in order to ensure that the supervision of *Takāful* is established on sound regulatory principles which are consistent with, and no less robust than, those established in conventional insurance. Hence the Standard contained herein is primarily based on the IAIS regulatory capital requirements[1], with the necessary modifications and adaptations to cater for the specificities and characteristics of a *Takāful* undertaking.

3. This Standard should be read together with the Guiding Principles on Governance for *Takāful* (Islamic Insurance) Undertakings[2] that outlined, *inter alia*, key principles on governance structures, key terminologies, concepts and operations of a *Takāful* undertaking. This will facilitate further understanding of this Standard and its recommended solutions.

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[1] The IAIS has issued three standards and associated guidance papers and standards on solvency assessment in October 2007 and October 2008. The papers identify key features which the IAIS encourages supervisors to consider in their particular solvency regimes to assist them in establishing and maintaining well-regulated insurance industries. They encompass quantitative and qualitative aspects of solvency assessment and provide guidance to supervisors in the areas of (a) the structure of regulatory capital requirements; (b) enterprise risk management for capital adequacy and solvency purposes; and (c) the use of internal models for risk and capital management by insurers. Further standards and guidance papers are under development.

[2] IFSB-8, November 2009.

Main Objectives

4. The overall objective of this document is to set forth key principles on the solvency requirements for *Takāful* undertakings. This document is built around the following premises and objectives:
   i. To increase the likelihood that a *Takāful* undertaking would be able to meet all its contractual obligations and commitments;
   ii. To act as an early warning system for regulatory intervention and immediate corrective action, taking into account that the supervisory authority may sometimes have access only to incomplete information, and that even corrective actions may take time to generate the desired impact;
   iii. To provide a buffer so that even if the *Takāful* participants are to suffer a loss in the event of failure of a *Takāful* undertaking, the impact can be limited or reduced especially the systemic effects; and
   iv. To foster confidence amongst the general public, in particular *Takāful* participants, in the financial stability of the *Takāful* sector.

Scope of Application

5. This Standard is applicable to all *Takāful* and *Retakāful*[3] undertakings. However, supervisory authorities may, at their discretion, extend the applicability to *Takāful* "window" operations that fall within their jurisdictions.[4]

6. This Standard is focused on the *Takāful* undertaking as a single entity and the issues of group-wide supervision are not covered in this Standard. The IAIS is actively developing standards and guidance in this area. The IFSB will monitor these developments and may make further proposals in the future.

7. This Standard places particular emphasis on the solvency requirements for *Takāful* Participants' Risk Fund (PRF) which are the underwriting funds – i.e. an element of the business that is inherent in the underwriting activities,, and the contributions to which are made on the basis of a *Tabarru'* commitment. When considering the solvency requirements for those forms of Family *Takāful* business which have a savings element in a segregated fund, called the Participants' Investment Fund (PIF), normally this latter fund is not taken into account in assessing whether the solvency requirements of a *Takāful* undertaking are met as there is typically no recourse to certain surplus amounts in individual PIFs in order to meet a deficiency in a PRF. In addition, a PIF is typically a pure investment fund, and the related investment risks are fully borne by the *Takāful* participants with no need for capital backing from the TO[5] in the form of a *Qarḍ* facility.[6] (If in fact an operation is constituted such that investment profit in PIFs is available to meet deficiencies in a PRF or such that investment risks of PIFs are not fully borne by the participants, a different treatment would be necessary.)

Specificities of Solvency Requirements for *Takāful* (Islamic Insurance) Undertaking

8. Insurance or *Takāful* undertaking is an inherently risky business, because the fund, whether conventional or *Takāful*, is exposed to contingencies whose outcome cannot be known at the beginning of the contract. For example, it cannot be known whether a particular driver will crash his car, or whether a particular house will catch fire. Where a large number of individual risks are involved, the probabilities become more predictable, which is one rationale for a principle of mutual guarantee. However,

[3] In the Standard, any reference to "*Takāful*" is to be taken to include *Retakāful*.
[4] We note that, while the application of this Standard to *Retakāful* is relatively straightforward, its application to a *Takāful* "window" will need to recognise that the TO's funds are directly exposed to substantial insurance risk from the non-*Takāful* participants. There may also be a question whether some of the TO's assets, being non-*Sharī'ah* compliant, can be available for a potential *Qarḍ* to the *PRF*.
[5] For convenience, any reference to "TO" in the rest of this document shall mean "Islamic insurance / *Takāful* operator". Reference to "*Takāful"* shall equally mean Islamic insurance.
[6] Operational risk in relation to managing the assets of a PIF is, however, relevant to the capital requirements of a TO.

adverse deviations may still occur. For example, a storm may cause damage to a large number of houses in a particular area. In addition, because premiums or contributions are invested until the funds are needed to pay claims (which can be an extended period, particularly for classes of insurance related to liability), there are risks on the asset side of the balance sheet. The principal concern of insurance supervisory authorities is that the undertaking should be able to meet its liabilities, especially policyholder claims, as they fall due, and that this should remain true even in adverse circumstances (such as a major storm). Current international thinking[7] is that in modern insurance regimes, it should be made explicit that the undertaking should have a given probability of meeting all its liabilities over a defined period (such as 99.5% over 1 year).

9. Similar to conventional insurance, the goal of a supervisory authority in assessing a *Takāful* undertaking's solvency position is to ensure that the solvency levels of all PRFs are consistent with their overall risk profiles and to enable early intervention if the solvency buffer does not sufficiently cover the risks. However, in a *Takāful* undertaking, a TO is supposed to be the *mudarib* and/or *wakil* (depending on which model is adopted) that administers the PRF, and in return will be remunerated via profit share (in the *Muḍārabah* model) or fees (in the *Wakālah* model) in the PRF.

10. A typical *Takāful* undertaking thus consists of a two-tier structure that is a hybrid of a mutual, and a proprietorship company – which is the TO. In a *Takāful* arrangement, the *Takāful* participants contribute a sum of money as *Tabarru'* commitment into a common fund, which will be used mutually to assist the members against a defined compensation or loss. The distinctive rights and obligations between the TO and *Takāful* participants require a clear segregation of the PRF from the TO's shareholders' funds. The main reason for this is that, in the absence of misconduct or negligence, a TO is not contractually accountable for any deficit or loss arising from a PRF. However, for regulatory solvency purposes a TO may be required to hold adequate capital in order to provide a *Qarḍ* facility to meet any deficiency in the PRF (resulting from a deficit that exceeds the amount of any accumulated reserves in a *PRF*) [8] or to remedy any situation in which *Takāful* cannot meet legitimate claims as they fall due because of liquidity shortage. Such a *Qarḍ* facility will typically be essential to enable a *Takāful* undertaking to meet regulatory solvency requirements, as there will not be sufficient reserves within *PRF*s for this purpose.

11. However, the extent to which a *Qarḍ* facility enables a *Takāful* undertaking to meet regulatory solvency requirements depends, *inter alia*, on the terms on which such *Qarḍ* facilities are made available by TOs in the light of the regulations in a particular jurisdiction, including, in particular, those that determine the status of an outstanding amount of a *Qarḍ* facility (that has already been drawn down as a *Qarḍ*) in the case where a *PRF* enters into an insolvent winding-up. In such a case, there are two possible scenarios (see also paragraph 41 below):

    i. Any outstanding *Qarḍ* would rank *pari passu* with participants' claims, so that the deficiency would be shared *pro rata*;
    ii. Participants' claims would rank above any outstanding *Qarḍ*.

    Only in the second case should the *Qarḍ* facility be considered to be fully part of regulatory capital. In the first case, it might be considered as making some contribution to regulatory capital.

12. The analysis in paragraph 10 above of differing pools of assets within the same legal entity is additionally based on the assumption that the boundaries between them will

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[7] The IAIS Common Structure Paper for Assessment of Insurer Solvency adopted in 2007 says that "Capital requirements should be calibrated such that, in adversity, assets will exceed technical provisions with a specified level of safety over a defined time horizon".

[8] The term 'deficit' refers to the case where claims and other expenses exceed contributions for a financial period, while 'deficiency' refers to the situation where a deficit exceeds any reserves in the fund, so that the fund has a debit balance.

be respected both when the entity is a going concern and in any form of insolvency proceeding. If this assumption is not warranted, supervisory authorities should address these issues with the relevant authorities in their own jurisdictions. This Standard does not deal further with the complex issue of insolvency law.

13. An essential part of good governance by a TO is the existence of an appropriate mechanism for sustaining a *Takāful* undertaking's solvency and adherence to sound risk management. In view of their paramount importance, particularly their effects on systemic stability, TOs should always bear these in mind while planning and mapping their governance strategies. This is necessary whatever the strength of the solvency regime imposed by the supervisory authority. Although, as a matter of principle, *Takāful* participants are expected to bear the risk of insolvency of a *PRF* whenever the contributions they make (together with income from PRF assets and any reserves in the PRF) cannot meet the total amount of claims, it has been well accepted as part of the prudential framework that TOs shall put in place appropriate mechanisms to buffer any deficiencies suffered by *PRF*s. (See, however, paragraph 10 above.)

14. Some TOs may use different operational models or product terms as part of their market differentiation or a commercial expression. While it is not the intention of the IFSB to require TOs to change the way they manage the business and risks, TOs are required to use the substance of the *Sharī'ah* rules and principles governing the contracts to form the basis for an appropriate treatment in deriving their minimum solvency requirements.

15. Apart from that, the solvency requirements for *Takāful* undertakings should take account of the *Sharī'ah*-compliant assets in which the undertakings will invest. Depending on the nature of the solvency regime, risk weightings or quantitative restrictions (QR) may need to be applied to these assets. In some instances, for example cash or equities, the treatment will parallel that for conventional insurers. For other *Sharī'ah*-compliant instruments, the IFSB's Capital Adequacy Standard for Institutions (other than Insurance Institutions) Offering Only Islamic Financial Services (December 2005) provides a helpful analytical background in addressing these questions.

Valuation of Assets and Liabilities

16. The IFSB recognises that it is essential to assess the overall financial position of a *Takāful* undertaking based on consistent measurement of assets and liabilities particularly the identification and measurement of risks and their potential impact on all components of the balance sheet. To a significant extent the detailed requirements in relation to a solvency buffer depend on the valuation of assets and liabilities in the solvency regime. The development of this Standard, and of the IAIS's work on solvency requirements and assessment, has taken place in parallel with that of international financial reporting for insurance. The intention is that all of these should be based on a market consistent approach to the valuation of both assets and liabilities.

17. However, until further progress is made on internationally agreed accounting standards for insurance it is inevitable that solvency requirements in different jurisdictions will be heavily influenced by the accounting and actuarial framework that applies in each jurisdiction (in terms of the valuation basis and assumptions that may be used and their impact on the values of assets and liabilities that underpin the determination of regulatory solvency requirements). In this regard, this Standard is not intended to deal with such issues as restrictions on categories of assets that "count" for solvency purposes, the determination of any risk margin within technical provisions, and the methods to be used for calibrating of solvency requirements. Rather, the Standard outlines the key features of solvency requirements for *Takāful* undertakings and sets out a number of principles to be followed by supervisory authorities in structuring such requirements within their jurisdiction.

18. In considering asset values for the purposes of assessing the financial position of a *Takāful* undertaking, supervisory authorities should take account of the suitability of those assets for the purposes of backing the undertaking's liabilities and absorbing the risks to which it is exposed. This Standard is not intended to determine whether, in addition, there should be any QR on assets which "count" for solvency purposes; or to specify any restriction or risk weighting "haircut" that should be applied. However, where such QR are not applied, TOs, and supervisory authorities should follow a "prudent person"[9] approach.

Valuation of Technical Provisions

19. The valuation of technical provisions in the *PRF* should be undertaken on a market-consistent basis that is consistent with the assessment by market participants of value and risk or the principles, methodologies and parameters that market participants expect to be used. Technical provisions shall comprise two components – the current central best estimate of the *Takāful* underwriting obligations (discounted to the net present value) and a risk margin. The risk reflected in the risk margin in technical provisions relates to all liability cash flows and thus to the full time horizon of the *Takāful* contracts underlying these technical provisions. It should generally not be less than that necessary to bring the technical provisions to an amount, in return for payment of which a willing third party, acting on an arms length basis, would be prepared to accept those liabilities through a (hypothetical) portfolio transfer. Each component of the technical provisions shall generally be explicitly determined in order to support the objectives of transparency and comparability and also to facilitate convergence.

[9] There are essentially two types of regulations which are applied across the world. They are QR, which impose explicit limits on holdings in risky asset classes, and the Prudent Person Rule (PPR), which requires firms to invest prudently and follow broad principles of portfolio diversification and asset-liability matching. Where undertakings exceed QR then the value of assets held in excess of these restrictions are not taken into account for solvency purposes. Where QR do not apply and the PPR approach is followed, then the supervisor should take account of the extent to which assets (a) are not adequately diversified; (b) are inappropriately illiquid; (c) are not readily marketable; or (d) do not reasonably match liabilities in duration and currency, in determining the undertaking's solvency requirements

B. KEY FEATURES FOR MINIMUM SOLVENCY REQUIREMENTS

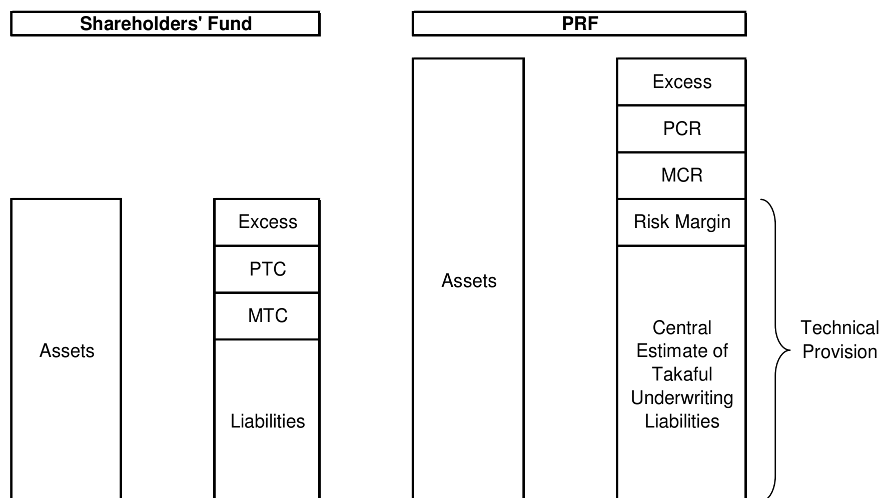
20. As mentioned in paragraph 2, the Standard is intended to complement the existing work of the IAIS on putting in place a sound solvency regime for insurance. While generally *Takāful* undertakings share some similarities with conventional insurers in attempting to serve certain economic objectives, it should be noted that structurally *Takāful* undertakings can be distinguished from conventional insurers. These differences are the key conceptual factors for developing the solvency requirements for a *Takāful* undertaking.[10]

Key Feature 1: The solvency requirements for *Takāful* undertakings must adopt a total balance sheet approach[11] to ensure that risks are appropriately recognised and consistently valued and to identify the interdependence between assets, liabilities, regulatory solvency requirements for *PRF* and the shareholders' funds of the TO. However, the total balance sheet approach must address the clear separation of *PRF* and the shareholders' funds of the TO.

21. Given that one of the key specificities of a *Takāful* undertaking is a distinct separation between the *Takāful* and TO's shareholders' funds, the solvency requirements for *Takāful* undertakings should be set separately as illustrated in Figure 1. The first level of solvency requirements is to ensure adequate solvency resources in the *PRF* to provide assurance (on a defined probabilistic basis, and taking account of the possibility of adverse developments in all the areas of risk to which the fund is exposed) that the *PRF* can meet claims from *Takāful* participants. The second level of solvency requirements is to ensure adequate capital resources of the TO to meet its own financial and legal obligations, including the possible need to provide capital backing in a way of a *Qarḍ* facility to the *PRF*.

Figure 1: General approach to the solvency and capital requirements for a *Takāful* Undertaking[12]

Panel A: Takāful Undertaking where the PRF is self-sufficient

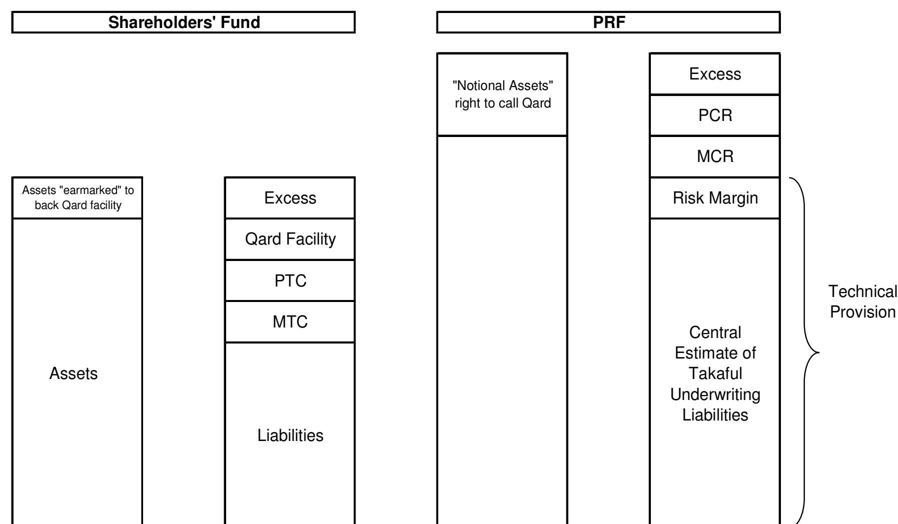


[10] Refer to Paragraph 18 in the Guiding Principles on Governance for Islamic Insurance (*Takāful*) Operations.

[11] The term 'total balance sheet approach' needs to be understood subject to the distinction between the shareholders' funds and the funds of *Takāful* participants (*PRF*s and investment accounts). Of the shareholders' funds, only the amount of the *Qarḍ* facility may be counted as capital in assessing the solvency of a *PRF*.

[12] Refer to paragraph 34 for further explanation of the abbreviations used.

Panel B: Takāful Undertaking where the PRF relies on a Qarḍ Facility to meet Solvency Requirements



Where a *Qarḍ* facility is required to enable a *PRF* to meet its solvency requirement, it should generally be set up at a value which will provide some buffer over and above the minimum solvency requirement. This is to allow the *PRF* to meet its requirements on a continuous basis notwithstanding reasonably foreseeable fluctuations in asset and liability valuations. The assets backing a *Qarḍ* facility should be `earmarked' for this purpose. That is, they should be specifically identified and held in a discrete account separately from other assets in the shareholders' fund. In assessing the adequacy of a *Qarḍ* facility for solvency purposes, the supervisory authority should look through to the earmarked assets in the same way as provided in paragraph 18.

22. To determine the basic structure of solvency requirements for *PRF*s and the TO's funds respectively, the obligations of the whole undertaking need to be identified. Here are the main obligations (financial and legal) of the *Takāful* undertaking in the context of solvency requirements:

A. PRFs

i. The objective of solvency requirements at *PRF* level is to provide a high degree of confidence that the *PRF* can withstand adverse conditions over the expected term of its assets and liabilities. Therefore, the *PRF* should hold assets equal to the technical provisions of that *PRF* (valued in the manner described in paragraph 16) plus additional solvency resources (sometimes referred to as solvency margin reserves). The additional solvency resources are the amount of additional assets a *PRF* must hold to cover (1) possible underestimation of the technical provisions and (2) the risk of measurement error inherent in determining the economic values of assets, namely that their realisable values may be less than their carrying amounts[13]. Subject to paragraph 10 above, the additional solvency resources may include a standby back-up facility provided by the TO on a *Qarḍ* basis (see B.ii below). Where such a facility does not fully meet the requirements for inclusion in regulatory capital, but the regulator nonetheless allows some credit to be taken for it for solvency purposes (see paragraph 11.ii), the amount of the solvency margin reserve in the relevant *PRF* will need to be correspondingly greater.

[13] The IAIS Draft *Guidance Paper on the Structure of Capital Resources for Solvency Purposes* (January 2009) suggests that for solvency purposes adjustments to the carrying values of assets may be made either by making a

ii. The additional solvency resources will be calculated for all risks that could have a negative financial impact on a *PRF*. They will be calculated to cover risks over the expected term of the assets and liabilities. The framework should identify the main categories of risks such as credit, market, underwriting, liquidity and operational. With regard to the treatment of assets, their carrying values would normally be fair values in accordance with international financial reporting standards, but the solvency margin reserve would include an amount to cover the risk of the realisable value being less than the carrying amounts (if the carrying value is not in fact fair value, appropriate adjustments may be required to the solvency margin reserves). In the case of conventional insurance contracts involving significant acquisition costs, for solvency purposes exit or similar values would be used (rather than deferring and amortising acquisition costs), but the intangible nature of such assets would require the inclusion of an appropriate amount in the solvency margin reserve.

B. Shareholders' Funds

i. The TO needs to have sufficient capital resources to be able to withstand unexpected increases in management expenses or reductions in income which could cause operating losses to the TO leading to financial distress if it were undercapitalised.

ii. In addition, subject to the applicable regulations, the TO's capital resources may need to be sufficient to allow it to provide additional capital (as a *Qarḍ* facility available to be drawn down) to the *PRF* should this be necessary to cover a shortfall in that fund's capital resources or a short-term liquidity need.

iii. The assessment of the amount of the capital resource requirements for the TO should be generally based on the potential volatility of expenses, and most importantly, the level, volatility and flexibility of the TO's income, after taking account of the amount needed for the *Qarḍ* facility (that is, on the potential call on the TO to provide additional capital in the form of *Qarḍ* if required).

23. The TO is expected, through licensing and regulatory requirements, to offer a *Qarḍ* facility out of its shareholders' funds where this is necessary to meet the required solvency level of the *PRF*s, with repayment of any *Qarḍ* drawn down to be made from future participants' surpluses arising from the *PRF*s. The right to receive repayment in respect of a *Qarḍ* already provided should not be counted as an asset for the purpose of assessing the TO's ability to meet its own solvency resource requirements as set out in paragraph 22.B above. Similarly, any assets representing a standby facility (see A.i above) that has been accepted by the regulator as regulatory capital for the purposes of a *PRF* cannot also be counted as assets supporting the solvency of the shareholders' fund (see paragraphs 26 and 27 below)

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deduction from their values or by making a capital charge of the same amount (or by a combination of both methods). The wording adopted here assumes that the capital charge approach is used.

Key Feature 2: The solvency requirements should be established at a level such that the respective amounts of solvency resources in the *Takāful* and shareholders' funds are adequate to meet their respective financial obligations as they fall due, bearing in mind that part of the shareholders' funds may be 'earmarked' to cover a *Qarḍ* facility.

24. In assessing the solvency requirements of a *Takāful* undertaking, it is essential to ensure that there are adequate and appropriate solvency resources in the *PRF*s and shareholders' funds to support the respective financial obligations of each of the funds as they fall due, with the TO's capital resources being sufficient to cover its own business risks. In this connection, without prejudice to the operation of any *Qarḍ* facility, it is crucial that there be a clear separation between *Takāful* and shareholders' funds so that there is no possibility of contagion between them.

25. In addition to ensuring that the solvency requirements of all funds under its control are met, a TO should manage these funds in a sound and prudent manner, In particular, the TO should endeavour, over time to bring the reserves in a *PRF* to a level at which the fund becomes self-sustaining with sufficient resources to meet solvency requirements without the need to rely on a *Qarḍ*.

Earmarked amount

26. Where a TO provides capital backing in the way of a *Qarḍ* facility, the undrawn *Qarḍ* facility should be considered as being 'earmarked' within the shareholders' funds to meet the solvency requirements of the *PRF*. (See Figure 1 panel B above.) This amount should be distinct from the amount of the TO's capital required to meet its own solvency requirements. Capital available for solvency purposes for the *PRF* would therefore consist of (i) reserves in *PRF*s (retained underwriting surplus or investment profit) i.e. *Takāful* participants' equity, plus any amount of drawn-down *Qarḍ*, and (ii) undrawn *Qarḍ* facility (an earmarked amount within the shareholders' equity)[14]. Any amount drawn down from the Shareholders' Fund as *Qarḍ* facility is part of the assets of the recipient PRF. Correspondingly, this drawn down amount will be part of the Shareholders' equity and is represented by a *Qarḍ* repayable by the PRF. As noted in paragraph 24 above, it is expected that the *Takāful* participants' equity would gradually become sufficient to meet the solvency requirements, thus making the *Qarḍ* facility superfluous.

27. Where there are ring-fenced *PRF*s, any such earmarked *Qarḍ* amount held in respect of an individual *PRF* must not be double counted for solvency calculation purposes.

28. To ensure the adequacy of a *Qarḍ* facility, a TO should carry out regular actuarial appraisals of the solvency of the relevant *PRF*, so as to determine the amount of any shortfall with respect to the solvency requirement which would need to be covered by the *Qarḍ* facility. Moreover, the assets represented by a *Qarḍ* facility should be kept in a suitable form to serve for draw-down of the *Qarḍ* facility into the *PRF*.

[14] This is dependent on the *Qarḍ* facility meeting the conditions to count as capital as discussed in paragraphs 11 and 41.

Transferability between the PRFs

29. The solvency requirements for a *Takāful* undertaking should reflect and take account of any limitations on the transferability of funds within the undertaking. Such limitations may arise from the contractual terms or the legal framework that governs the undertaking's operations. Some *Takāful* products may be written in so-called ring-fenced funds[15], where part of the business is clearly segregated from the rest. In such cases the assets or retained underwriting surplus of the fund may be strictly isolated from the other lines of business so that they can only be used to meet the *Takāful* and *Retakāful* obligations with respect to which the ring-fenced fund has been established.

30. For this reason, when assessing the solvency of the *PRF*s, the amount of solvency resources eligible to cover the solvency level must be adjusted to take account of the "non-transferability" of solvency resources between ring-fenced funds. Depending on the nature of the restrictions on transferability, it will generally be appropriate for each ring-fenced fund to be subject to its own specific solvency requirements. In such circumstances, the technical provisions should be calculated and reported separately for each *PRF* and these technical provisions together with appropriate solvency requirements should be covered by assets of appropriate value and quality in accordance with the applicable QR or PPR.

31. It is important that the supervisory authority be fully aware of any restrictions on the transferability of assets between lines of business. *Takāful* participants should also be informed of this, so that they understand the risks (if any) to which they may, indirectly, be exposed through lines of business other than those in which they directly participate, and understand too any limitations on the extent to which losses arising in "their" business may be absorbed by surplus funds in another. Accordingly the regulatory or supervisory regime should ensure that, wherever possible, there is a clear contractual term or legal framework. Should this be absent, the default assumption must be that there is no transferability, and this will generally imply a higher total capital requirement in the undertaking.

32. To the extent that either integrated or separate *Takāful* PRFs or line-of-business classes are supported by the shareholders' funds through a *Qarḍ* facility, the amount of shareholders' funds that has been earmarked for the *Qarḍ* facility (but not any other part of shareholders' funds) should in principle count fully for the purpose of determining the solvency of the *PRF*s. But such shareholders' funds should not be capable of being "double counted" (for example, in determining the solvency of the TO itself as a business undertaking). In practice, this might be best achieved by requiring that:
    i. Individual PRFs, non-transferable between lines of business, should each meet the solvency requirement;
    ii. Where the assets of a group of *PRF*s are fully transferable between those funds, the solvency requirements should be applied to the totality of those funds;
    iii. In both cases, for the purpose of complying with the solvency requirement, *PRF*s should be able fully to count earmarked funds available from a *Qarḍ* facility as well as those actually drawn down under a *Qarḍ* facility[16].

[15] This is sometimes done in conventional insurance for with-profits or investment linked policies.
[16] This is dependent on the *Qarḍ* facility meeting the conditions to count as capital as discussed in paragraph 11.

Key Feature 3: The solvency requirements should establish solvency control levels at the respective *Takāful* and shareholders' funds, that trigger proper interventions by TO and the supervisory authority when the available solvency is less than the solvency control level.

33. The solvency requirements for *Takāful* undertakings should emphasise the importance of setting up the solvency control at two levels, in both shareholders' fund and the *PRF*. By setting up the solvency control at two levels, a set of prompt actions could be taken by the TO and the supervisory authority to avert possible loss to participants arising from an insolvency position. These control levels should be set such that intervention actions may be taken at a suitably early stage in a *Takāful* undertaking's difficulties. In this context, any adverse condition could be addressed in a realistic timeframe, and the appropriateness of the control levels should be examined in relation to the nature of the intervention actions..

34. The solvency requirements should be based on the following four concepts: minimum capital requirement (MCR) and prescribed capital requirement (PCR) for the *PRF*s, and minimum target capital (MTC) and prescribed target capital (PTC) for the shareholders' funds. Any amounts earmarked as a *Qarḍ* facility are part of the shareholders' funds but would for solvency purposes be treated as part of the *PRF*s for which they were earmarked. [17]

35. The PCR/PTC signifies the highest solvency level that enables the funds to absorb significant unexpected losses while MCR/MTC signifies a solvency level of which a breach will invoke the strongest regulatory actions. Any breach of MCR/PCR/MTC/PTC at the level of either the *PRF* or shareholders' funds should trigger immediate attention from the TO and the supervisory authority. In any case where a TO is unable to restore the required solvency control level applicable to any *PRF*, or its own shareholders' funds, or the whole undertaking, the TO should put forward a plan acceptable to the supervisory authority to meet the solvency requirement within a short period. Where no acceptable plan is put forward and implemented within a reasonable time specified by the supervisory authorities or laid down in law, the undertaking should be prohibited from continuing to write further business.

36. Possible intervention actions that could be taken by a supervisory authority include[18]:
    - i. measures to address solvency levels such as the draw-down of the *Qarḍ* facility from the shareholders' fund to the PRF, requesting capital and business plans for restoration of solvency resources to required levels, limitations on redemption or repurchase of equity or other instruments and/or dividend payments etc;
    - ii. measures intended to protect *Takāful* participants pending the restoration of the solvency levels, such as restrictions on undertaking new business, investments, *Retakāful*/reinsurance arrangements etc;
    - iii. measures that are intended to enable the supervisory authority to better assess and/or control the situation, either formally or informally, such as increased supervision activity or reporting, or requiring external auditors or actuaries to undertake an independent review or extend the scope of their examinations; and
    - iv. measures that strengthen or replace the TO's management and/or risk management framework and overall governance processes in the *Takāful* undertaking.

    Illustrations of types of intervention actions are provided in the Appendix.

[17] Refer to paragraph 26.

[18] These are based on the actions described in the IAIS Guidance paper on the structure of regulatory capital requirements, dated October 2008.

37. With regard to the draw-down of a *Qarḍ* facility to a PRF, the regulatory framework should either define, or allow discretion to supervisory authorities to determine, the control level[19] applicable to the PRF. The supervisory authorities would then be able to request the TO to draw down the *Qarḍ* facility to the PRF immediately once the control level is breached in order to expedite the restoration of the required solvency control level.

[19] While it will be for the relevant authorities in individual jurisdictions to specify the control level, breach of which would trigger an immediate requirement to draw down *Qarḍ*, this should never below the level of the technical provisions (ie the best estimate of the insurance liabilities plus the required margin), and should normally not be less than the level of the minimum capital requirement.

Key Feature 4: The solvency requirements should establish criteria for assessing the quality and suitability of solvency resources in the *Takāful* and shareholders' funds to absorb losses in different financial stages of the respective funds.

38. The solvency requirements for *Takāful* undertakings should take into account the quality of solvency resources to absorb losses in different financial stages of a *Takāful* undertaking, namely as a going concern, in run-off, winding up and insolvency.[20] This is because the extent of its loss absorption depends on the type of capital, e.g. equity or other capital such as the *Qarḍ* facility. A holistic approach needs to be taken in order to evaluate the extent of loss absorbency overall, and should establish criteria that should be applied to evaluate capital elements in this regard.

39. Given that there is a clear separation between the shareholders and the *PRF*s in *Takāful* undertakings, the quality of solvency resources should be assessed separately to meet the respective solvency requirement. For the shareholders' funds, the assessment of the quality of solvency resources is relatively straightforward as the solvency resources should be fully available to meet any financial distress affecting the shareholders' funds. However, in assessing the ability of solvency resources to absorb losses in the *PRF*s, the following characteristics are usually considered (see paragraph 11 above and paragraphs 41-43 below): [21]
    i. *Availability* - the extent to which the capital element is fully paid and can be called up on demand to absorb losses as well as upon winding up;
    ii. *Permanency* - the extent to which the available capital element cannot be withdrawn; and
    iii. *Absence of encumbrances and mandatory servicing costs* - the extent to which the capital element is free from mandatory payments or encumbrances.

40. The supervisory authority may apply potential limits for the solvency resources to be qualified to cover different levels of the solvency requirements of the shareholders' and *PRF*s. In determining the amount of a *Takāful* undertaking's solvency resources to meet different solvency levels, the supervisory authority may choose a variety of approaches: [22]
    i. approaches which categorise solvency resources into different quality classes ("tiers") and apply certain limits/restrictions with respect to these tiers, (within which individual tiers may be further subdivided) (tiering approaches);
    ii. approaches which rank capital elements on the basis of the identified quality characteristics (continuum approaches);
    iii. approaches which do not attempt to categorise or rank capital elements, but apply individual restrictions or charges where necessary.

    To accommodate the quality of capital elements, combinations of the above approaches have been widely used. It is likely that, in relation to *Takāful*, an approach with a high degree of granularity – whether within a tiered approach within which individual tiers are further divided, or through a less formulaic continuum approach – will be appropriate.

Treatment of the Qarḍ facility for solvency requirements

41. In order for a *Qarḍ* facility or *Qarḍ* to be accepted for solvency purposes, supervisory authorities should satisfy themselves that the following conditions are met:
    (i) the *Qarḍ* facility provided to a *PRF* cannot be withdrawn by the TO before the *PRF* is considered to meet solvency requirements independently of any *Qarḍ* facility;

[20] The determination of suitable capital within a solvency regime is critically dependent upon the legal environment of the relevant jurisdiction particularly in recognising a clear separation of *Takāful* and shareholders' funds.
[21] Adopted from the IAIS Draft Guidance Paper on the structure of capital resources for solvency purposes.
[22] Adopted from the IAIS Draft Guidance Paper on the structure of capital resources for solvency purposes.

(ii) the TO has given its consent to the supervisory authority that, in a winding-up situation, it will treat any part of the *Qarḍ* facility that has been drawn down as a *Qarḍ* as being donated to the *PRF* to the extent that is necessary in order for participants' claims to be met in accordance with regulatory obligations (or some other arrangement to the same effect).

42. The treatment of the *Qarḍ* facility is a fundamental issue. Any draw-down of a *Qarḍ* facility into a *PRF* should in principle be repaid from future surpluses of the *PRF*. A particular issue arises in relation to a run-off process, particularly regarding the status of claims from *Takāful* participants on the *PRF*. It is likely that prior to the run-off of a particular *PRF*, the draw-down of the *Qarḍ* facility will have been initiated with the intent of enabling the *PRF* to meet its regulatory obligations. Indeed, the supervisory authority should not allow a *PRF* to be run off without a sufficient draw-down of a *Qarḍ* facility to provide reasonable assurance that adequate resources will be available within the *PRF* to meet any obligations arising in the process of run-off. In this connection, a voluntary winding-up (as an alternative to run-off) would require the supervisor's authorisation, in which case the supervisor might require that a draw-down of a *Qarḍ* facility had been made prior to the initiation of the voluntary winding-up.

43. The legal and regulatory framework should provide for the determination of the point at which it is no longer permissible for a *Takāful* undertaking to continue its business[23]. The procedures for dealing with insolvent winding-up of a *Takāful* undertaking should be clearly set forth in the law. Due consideration must be given by the supervisory authorities to analysing the quality of capital that the *Qarḍ* facility represents when it is drawn down into the *PRF* particularly in the context of the payment priority of a drawn-down *Qarḍ* in a wind-up situation. The payment priority of a drawn-down *Qarḍ* in a winding-up situation should be clearly stated in the law regarding insolvency and winding up and should be disclosed by the TO to the policyholders.

[23] The IAIS Insurance Core Principle (ICP) 16 on "Winding-up and exit from the market".

Key Feature 5: The solvency requirements for *Takāful* undertakings must have separate risk adjusted computation and assessment. The risk management framework must be comprehensive and cover all risks to which the *PRF*s and the shareholders' funds are exposed.

44. *Takāful* undertakings are in a similar position to conventional insurance undertakings with regard to the management of risk. They face similar risk exposures in the management of underwriting funds. In this respect, the solvency regime for a *Takāful* undertaking must place emphasis on the undertaking's risk management framework and on ensuring that it is appropriate to the complexity, size and mix of the *Takāful* undertaking's operations. At the same time, the risk management framework has to be supported by thorough monitoring and internal control systems.

45. In the management of risks, a TO faces challenges in adequately defining, identifying, measuring, selecting, pricing and mitigating risks across business lines and asset classes in the *PRF*s as well as its own risk exposures with respect to the shareholders' funds. The management of these risk exposures is a continuous process that should be carried out in the implementation of the strategy of the undertaking and which should allow an appropriate understanding of not only the nature and significance of the risks to which the undertaking is exposed but also the *Sharī'ah* rules and principles to which the TO and the *Takāful* participants are contractually bound. Thus, TOs must adopt a sound risk management framework for *PRF*s and the shareholders' fund.

46. In this respect, TOs might be seen as managing two distinct sets of risks. The first set relates to the TO's fiduciary responsibility to manage the *PRF*s under its management so as to protect the interests of the *Takāful* participants. This set of risk components is related to the management of *PRF*s so that they can meet their financial obligations as they fall due. The second set of risks relates to the TO itself in the process of meeting its financial obligations. It is important that a TO should have adequate capital to back the risks arising from its business operations in addition to any capital backing provided in the form of a *Qarḍ* facility to meet possible deficiencies of the *PRF*s. These two sets of risks are the crucial risk components that need to be considered in order to determine the solvency control levels for a *Takāful* undertaking as a whole.

47. The asset-liability matching policies for the *PRF*s and shareholders' funds may be significantly different. The asset strategies adopted by a TO for the *PRF*s and the shareholders' funds will be based on their respective financial liabilities profiles, and the need to ensure that the undertaking holds sufficient assets of appropriate nature, term and liquidity to enable it to meet the respective funds' liabilities as they become due. In addition, part of the shareholders' funds will normally be earmarked as a *Qarḍ* facility, and the assets financed by this part of the shareholders' funds are to be counted for the purposes of meeting the capital requirements of the *PRF*s. An earmarked *Qarḍ* facility should generally be held in a form in which it may quickly be drawn down in the form of assets appropriate to the PRF they are to back up[24]. The analysis of types of risks for the shareholders' funds and *Takāful* PRFs can be summarised as in Figure 2.

48. As indicated in Paragraph 21 above, the basic objectives of solvency requirements are to provide assurance that:
    i. On a probabilistic basis and taking account of the possibility of adverse developments in all areas of risk to which the fund is exposed the *PRF* can meet claims from *Takāful* participants; and
    ii. The TO can meet its own financial and legal obligations, including the possible need to provide capital by way of a *Qarḍ* facility to the *PRF*.

[24] The capital requirement will include an amount that reflects the riskiness of the assets held to support the underwriting funds, including the assets of the underwriting funds and those financed by the *Qarḍ* facility.

49. The approach adopted is to:
    i. Determine the economic value of the assets and liabilities; and to
    ii. Calculate the additional capital required to offset the potential impact of each of the identified components of risk.

50. The assessment of the quantum of additional capital required for each risk component, and of the overall capital requirement should be through a modelling approach (whether using a standard model prescribed by the supervisory authority, or through the use of internal models approved by the supervisor). In either case, the model should test the ability of the fund, or of the operation as a whole, to meet its obligations with a defined level of probability (e.g. 99.5%) over a specified period (e.g. 1 year)[25].

51. The following table sets out the main risks to which the *PRF* and the *Takāful* operator are potentially subject. With the exception of liquidity risk, (for which a quantifiable and effective capital requirement is generally not an effective risk mitigant) these should be taken into account in determining the capital requirements for each of the funds. In the case of liquidity risk, the supervisor might impose a capital requirement depending on the extent to which the risk was considered to be effectively mitigated by asset-liability management.

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[25] See Footnote 7 above. The The IAIS Common Structure Paper for Assessment of Insurer Solvency referred to in "Structure Element 3" provides that: *A solvency regime should address all relevant potentially material risks, including underwriting risk, credit risk, market risk, operational risk and liquidity risk. All risks should, as a minimum, be addressed by the insurer in its own risk and capital assessment.*

- *Risks that are generally readily quantifiable should be reflected in sufficientlyrisk sensitive regulatory financial requirements.*
- *For risks that are less readily quantifiable, regulatory financial requirements may need to be set in broad terms and complemented with qualitative requirements.*

Figure 2: Risks faced by the respective funds in a *Takāful* undertaking

Categories of risks	***PRF*s**	**Shareholders' funds**
Provisioning and Reserving Risks The risks of under-estimation of the underwriting liabilities and adverse claims experiences	General *Takāful* is exposed to losses due to random events such as natural perils, fire, pollution, crime, war, terrorism, and others. Family *Takāful* is exposed to losses arising from severity and frequency of claims due to changes in anticipated mortality, morbidity and longevity as well as catastrophic events such as epidemic, major accident or terrorist attack.	
Underwriting Management Risks The risks of poor management of accepting risk and claim payouts	Family *Takāful* and General *Takāful* are exposed to losses arising from poor selection, pricing and acceptance of risks and inappropriate product design.	
Credit Risks The risk of a counterparty failing to meet its obligations in accordance with agreed terms	Exposed to profit and capital receivables from invested assets, *Takāful* contributions receivable and *Retakāful* recoveries.	Exposed to risk of non receipts of profit and capital receivables from invested assets, Wakalah fee (due to contributions receivable) and other trade debtors[26]
Market Risks The risk of losses arising from movements in market prices i.e. fluctuations in values in tradable, marketable or leaseable assets (including *Sukūk*) and a deviation of the actual rate of return from the expected rate of return	The risks relate to the current and future volatility of market values of specific assets (for example, the commodity price of a *Salam* asset, the market value of a *Sukūk*, the market value of assets purchased to be delivered to a *Murābahah* customer over a specific period, the market value of *Ijarah* assets) and of foreign exchange rates.	The risks relate to the current and future volatility of market values of specific assets (for example, the commodity price of a *Salam* asset, the market value of a *Sukūk*, the market value of assets purchased to be delivered to a *Murabahah* customer over a specific period, the market value of *Ijarah* assets) and of foreign exchange rates.

[26] The risk of non-recovery of a *Qarḍ* which has been drawn down is a credit risk, but falls on the 'earmarked' portion of the TO's shareholders' funds, which are not included in the TO's capital for regulatory purposes.

Categories of risks	*PRF*s	Shareholders' funds
Operational Risks The risk of loss resulting from inadequate or failed internal processes, people and systems or from external events. *Sharī'ah* non-compliance risk should also incorporate possible causes of loss resulting from non-compliance and failure in the TO's fiduciary responsibilities	Loss of income from the purification of tainted income due to *Sharī'ah* rulings. Losses due to claims fraud. Losses due to legal risk (e.g. in court interpretations of policy terms).	Administration and acquisition expenses for developing and maintaining the *Takāful* contracts. This relates to the business risks whereby the fund will not have adequate cash flow to meet the operating expenses. Also liable for losses arising from its negligence, misconduct or breach of fiduciary duties in the management of *PRF*s (fiduciary risk).
Liquidity risk The potential loss to a *Takāful* undertaking arising from its inability either to meet its obligations or to fund increases in assets as they fall due without incurring unacceptable costs or losses	Additional costs through raising additional funds at a premium on the market or through the sale of assets which simultaneously affect the overall appropriate provisioning and reserving methodologies of *PRF*s.	Additional costs through raising additional funds at a premium on the market or through the sale of assets which simultaneously affect the overall appropriate capitalisation and reserving.

52. Hence, the general formulae for the solvency requirements for a *Takāful* undertaking could be as follows:

For *PRF*:

SR = $RC_{PR} + RC_{UR} + RC_{CR} + RC_{MR} + RC_{OR}$ where

SR	=	Solvency requirement
RC_{PR}	=	Risk component for provisioning and reserving risk
RC_{UR}	=	Risk component for underwriting risk
RC_{CR}	=	Risk component for credit risk
RC_{MR}	=	Risk component for market risk
RC_{OR}	=	Risk component for operational risk

For *Takāful* operator

CR = $RC_{CR} + RC_{MR} + RC_{OR}$ where

CR	=	Capital requirement
CR_{CR}	=	Risk component for credit risk
CR_{MR}	=	Risk component for market risk
CR_{OR}	=	Risk component for operational risk

In assessing the overall solvency requirement, due allowance may be made for the degree of correlation or diversification between the individual risk components.

53. With regard to the choice of the risk measure and confidence level to which solvency requirements for *Takāful* undertakings are calibrated, the supervisory authorities may set a confidence level for regulatory purposes.

54. Where the supervisory regime may allow the use of approved more tailored approaches such as internal models for the purpose of determining solvency requirements, the target criteria should also be used by those approaches for that purpose to ensure broad consistency within the solvency requirements as compared to those entities using a standard approach.[27] The appropriate parameters and target criteria for these elements in the solvency framework should be outlined to provide clearer guidance to determine regulatory solvency requirements. Importantly, the use of these internal models must have prior approval from the supervisory authorities to ensure that the internal models are appropriately adjusted to the standard solvency requirements.

55. The determinants of the risk exposures of the *Takāful* and the shareholders' funds will reflect and may depend on the *Takāful* product structure and specification. For instance, in a single contribution mortgage reducing term Family *Takāful*, *Wakālah* fees are received mainly at the inception of the cover, whereas the administration expenses are expected to be incurred throughout the duration of the contract. In conventional insurance, the provisioning for conventional single premium of life insurance mortgage term assurance includes a provision for expense. Nevertheless, taking into account the conservative mortality assumption used, the actuary, who is responsible for advising on the valuation of the insurance liabilities, is likely to keep this expense provision minimal.[28] However, for Family *Takāful*, the mortality and expenses provisions would need to be made in separate funds i.e. the mortality provisions are held within the Family *PRF* and its expenses provisions could be held against the shareholders' fund. In this circumstance, the shareholders' fund may need to hold adequate expenses provisions to cover the long term maintenance of the product.

56. Another instance is the split of expenses between acquisition and maintenance. In conventional insurance, this split is typically based on the insurer's judgement. If too many expenses are allocated to the acquisition category, then a forward looking view of the insurer's on-going maintenance expenses will be understated. This may result in the under-provisioning of such expenses in the liabilities and an overly optimistic view of the insurer's future financial condition.[29] However, in a *Takāful* undertaking, especially Family *Takāful*, it is dependent on the product specification of the *Takāful* products. The identification of the split of expenses between acquisition and maintenance cost is essential to determine the computation of the solvency requirements for a *Takāful* undertaking i.e. whether the risk component for the expenses provisions of the acquisition and maintenance cost lies in the *PRF*s or the shareholders' fund.

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[27] Refer to the IAIS's Guidance paper on use of internal models for risk and capital management purposes by insurers.

[28] Refer to A Global Framework for Insurer Solvency Assessment A Report by the Insurer Solvency Assessment Working Party of the International Actuarial Association

[29] Refer to A Global Framework for Insurer Solvency Assessment A Report by the Insurer Solvency Assessment Working Party of the International Actuarial Association

57. Each class of asset needs to be assessed in terms of its contribution to the risk profile of the undertaking. For example, supervisory authorities in a number of jurisdictions permit *Takāful* undertakings to invest in real estate. Real estate is widely regarded as a permissible asset class under *Sharī'ah* rules and principles. However, investments in real estate can be generally characterised as risky in terms of both potential market volatility and lack of liquidity, and this may pose significant risks to the *PRF*s in terms of meeting financial obligations or the ability of the TO to provide an effective *Qarḍ* facility. Hence, the supervisory authority may, in defining its solvency resources regime, impose restrictions on the type, level and concentration of real estate investment by the *Takāful* undertaking. These limits may be different for different types of *Takāful*, reflecting the fact that investment in real estate is likely to be less problematic in relation to long-term savings products in Family *Takāful* than in General *Takāful*. Alternatively, the supervisory authority may set capital charges in relation to real estate investment which recognises its risky nature through the capital requirements.

Key Feature 6: The adequacy of regulatory solvency requirements for a *Takāful* undertaking depends on the maintenance of a sound risk management framework. An essential part of the supervisory review process is to assess for each undertaking that adequate risk management arrangements are in place through which the TO can, and does, monitor, measure, report and control the management of the assets and liabilities in a coherent and integrated manner.

58. *Takāful* undertakings, and through them participants, can be exposed to the risk of financial loss, not only through underwriting and investment failures but through lack of liquidity, particularly in the event of unexpected volumes of claims or of withdrawals from, or surrenders of, family *Takāful* schemes. Moreover *Takāful* operations are also at risk from litigation, fraud, theft, lost business, and wasted capital from failed strategic initiatives. Losses from *Takāful* activities typically result from or are exacerbated by inadequate internal controls, weak risk management systems, inadequate training, or deficient board and management oversight. Maintaining a good reputation and positive public image is also vital to a successful *Takāful* business.

59. While regulatory capital provides a buffer to absorb loss it is not a sufficient risk mitigant on its own.[30] Accordingly a TO should have in place a comprehensive risk management framework and its reporting process, including appropriate board and senior management oversight, to identify, measure, monitor, report and control relevant categories of risks and, where appropriate, to hold adequate capital against material risks. The framework should allow appropriate steps to comply with *Sharī`ah* rules and principles and to ensure the adequacy of relevant risk reporting to the supervisory authority. In the context of its overall enterprise risk management framework, a TO should perform its own risk and solvency assessment (ORSA) and have risk and capital management processes in place to monitor and manage the level of its financial resources relative to its economic capital and the regulatory capital requirements set by the solvency regime.[31] This is to mitigate the consequences of adverse events that may occur by taking early corrective measures intervention so that the solvency control level can be restored or an orderly exit can be arranged. The ORSA will help the TO and the supervisory authority in assessing the need for any additional capital or draw-down of the *Qarḍ* facility to the *PRF*s.[32] It should be undertaken at each level to which a solvency requirement applies. In particular, it should be undertaken for the *PRF*(s) and shareholders' fund separately.

60. As noted in paragraph 7 a PIF operated by a family *Takāful* undertaking is normally a pure investment fund in which the investment risks are borne fully by the participants. Accordingly it will not be exposed to risks arising in the PRF. Accordingly a PIF will not need to meet the capital requirements appropriate to a PRF, and no capital will need to be held, within either the PIF or an earmarked *Qarḍ* facility, for credit or market risk arising in relation to the assets held by the fund. But the TO's risk management framework should nonetheless extend to ensuring the sound operation of the PIF. In particular assets should be held which are appropriate to the purpose for participants contributed to the PIF, and should be sufficiently liquid to allow for withdrawals and surrenders. In the event that the assets are not sufficiently liquid to meet demand for withdrawals and surrenders it is possible that a *Qarḍ* will need to be provided to allow the PIF to meet its liabilities as they fall due.

[30] Failure to put in place, operate and maintain an adequate risk management framework should result in a higher capital requirement for both *PRA* and *Takāful* Operator through an increase in the operational risk component.
[31] Adopted from IAIS Guidance paper on the structure of regulatory capital requirements (October 2008).
[32] Refer to section 4 in the IAIS Guidance paper on enterprise risk management for capital adequacy and solvency purposes (Oct 2008).

61. Since the TO acts in a fiduciary capacity on behalf of the *Takāful* participants in performing underwriting and managing the *PRF*s as well as ensuring an adequate level of solvency in the both *Takāful* and the shareholders' funds, it is the role of the board of directors of a TO and its senior management to provide reasonable assurance of effectiveness and efficiency of operations, reliability of financial and non-financial information, an adequate control of risks, a prudent approach to business and compliance with laws and regulations, and internal policies and procedures. In addition, the solvency requirements regime should place emphasis on the TO having appropriate controls in place and taking great care to ensure that all persons or entities with operational and oversight responsibilities act in the best interests of *Takāful* participants and beneficiaries.

Key Feature 7: Information regarding the solvency requirements for a *Takāful* undertaking that is material and relevant to the market participants should be publicly disclosed to enhance market discipline and the accountability of the TO.

62. The existence of such an environment, where material and relevant information on solvency requirements for a *Takāful* undertaking is readily accessible, works as a strong incentive to TOs to conduct their business in a sound and efficient manner, including an incentive to maintain an adequate solvency position that can act as a cushion against potential losses arising from risk exposures. This will lead to more effective accountability and thus helps to safeguard the integrity of *Takāful* undertakings, as well as guiding potential *Takāful* participants in their decisions on whether or not to participate in a *Takāful* scheme. Adequate disclosure assists potential and existing *Takāful* participants, as well as other market participants, to evaluate the financial standing of *Takāful* undertakings and the risks to which they are exposed.

63. Thus, disclosures regarding the solvency requirements should be subject to a requirement for public disclosure of adequate qualitative and quantitative solvency information, excluding commercially proprietary information and other information subject to confidentiality considerations to the *Takāful* undertaking. (These types of information, however, should be disclosed to the supervisory authority.) For public disclosure, a TO should describe the overview of the risk management framework for identifying, measuring, monitoring and controlling relevant risks in maintaining the solvency control level in its annual report.

DEFINITIONS

The following definitions are a general understanding of the terms used in this document. It is by no means an exhaustive list.

Acquisition cost	Upfront costs incurred by a *Takāful* undertaking at the issuance of new business such as commissions to sales agents, underwriting and other acquisition expenses.
Asset-Liability Matching	The on-going process of formulating, implementing, monitoring and revising strategies related to assets and liabilities to achieve the financial objectives, given the risk tolerances and other constraints.
Current central best estimate	The present value of probability-weighted cash flows expected to arise from *PRF*s' portfolio of *Takāful* contracts considering all currently available information.
Exit value	The net realisable value of an asset, i.e. its market price at the date of a balance sheet less the selling expenses, or in the case of a liability the amount for which it could be settled or transferred at that date plus the costs of doing so..
Going Concern	The expectation that the *Takāful* undertaking will continue its operations and take on new risks.
Internal Model	A risk measurement system developed by a TO to analyse its overall risk position, to quantify risks and to determine the economic capital required to meet those risks.
Liabilities	The financial obligations of both the shareholders' and the *PRF*s. Detailed descriptions are set out below. i. Liabilities of the shareholders' funds are all financial obligations of those funds, and do not include technical provisions which are liabilities of the *PRF*s ii. Liabilities for *PRF*s include financial obligations owed by the funds particularly amounts payable to participants in respect of valid expected benefits. In addition, *PRF*s' liabilities include technical provisions in respect of potential liabilities from business already written.
Market consistent valuation	A valuation of the *PRF*s' assets and liabilities that is consistent with either the assessment of their risk and value by market participants ("mark-to market" valuation) or, in the absence of a direct market evaluation, the valuation principles, methodologies and risk parameters that market participants would expect to be used ("mark-to-model" valuation).
Minimum Capital Requirements (MCR)	The minimum solvency control level set for the *PRF* at which the supervisory authority would invoke its strongest actions, if corrective actions are not implemented.
Minimum Target Capital (MTC)	The minimum solvency control level set for the shareholders' fund at which the supervisory authority would invoke its strongest actions, if corrective actions are not implemented.
Muḍārabah	A contract between the capital provider and a skilled entrepreneur whereby the capital provider would contribute capital to an enterprise or activity that is to be managed by the entrepreneur as the *Muḍārib* (or labour provider). Profits generated by that enterprise or activity are shared in accordance with the terms of the *Muḍārabah* agreement, while losses are to be borne solely by the capital provider unless they are due to the *Muḍārib*'s misconduct, negligence or breach of contracted terms.

Own risk and solvency assessment (ORSA)	A *Takāful* undertaking's assessment of the adequacy of its risk management and current, and likely future, solvency position. Such an assessment should encompass all reasonably foreseeable and relevant material risks, should identify the relationship between risk management and the level and quality of financial resources needed and available and should determine the overall financial resources the *Takāful* undertaking needs to manage its business given its own risk tolerance, business plans, and supervisory requirements.
Participants' Investment Fund (PIF)	A fund to which a portion of contributions paid by *Takāful* participants is allocated for the purpose of investment and/or savings.
Participants' Risk Fund (PRF)	A fund to which a portion of contributions paid by *Takāful* participants is allocated for the purpose of meeting claims by *Takāful* participants on the basis of mutual assistance or protection.
Provisions	The amounts set aside on the balance sheet to meet liabilities arising out of *Takāful* contracts, including provision for claims (whether reported or not), provision for unearned contribution, provision for unexpired risks, *Takāful* provision, and other liabilities related to *Takāful* contracts (e.g. contributions, deposits, savings accumulated over the term of *Takāful* contract).
Prescribed Capital Requirements (PCR)	The solvency control level set for the *PRF*s which, if breached, would require action by the TO to increase its solvency resources or reduce the risks undertaken by the *PRF*s.
Prescribed Target Capital (PTC)	The solvency control level set for the shareholders' fund which, if breached, would require action by the TO to increase its capital resources to meet its financial obligation.
Prudent person Rule (PPR)	The 'prudent person' approach requires the TO to act in the way that a prudent person would, e.g. by considering the risks involved, obtaining and acting upon appropriate professional advice and suitably diversifying the investments.
Qarḍ	A non-interest-bearing loan intended to allow the borrower to use the funds for a period with the understanding that this would be repaid at the end of the period.
Quantitative Restrictions	Specific limits on holdings in risky asset classes imposed by the supervisory authority.
Reserves	Amounts set aside to meet unforeseeable liabilities or statutory requirements and stemming either from shareholders' capital or from accumulated surplus.
Risk weightings	The assigning of greater importance to particular assets or liabilities based on the risk profiles.
Risk management	The process whereby the Takaful undertaking's management takes action to assess and control the impact of past and potential future events that could be detrimental to the undertaking. These events can impact both the asset and liability sides of the undertaking's balance sheet, and its cash flow.
Risk Margin	The component of the *PRF*'s technical provisions that reflects the level of risk and uncertainty in the determination of the current estimate and produces a technical provision that reflects the value that another TO would be expected to require in order to take over (hypothetically) the portfolio of obligations.
Run-off	The situation where a TO no longer undertakes new business for a *PRF* but continues to meet the fund's obligations in respect of in-force *Takāful* contracts until the end of their terms, including benefits arising from those contracts.
Solvency Control levels	Levels of regulatory solvency requirements which, if breached, trigger restrictions on the TO or interventions by the supervisory authority.

Solvency Requirements	The financial requirements that are set as part of the solvency regime and relate to the determination of amounts of solvency resources that a *Takāful* undertaking must have in addition to the assets covering its technical provisions and other liabilities.
Solvency Resources	The surplus of assets in excess of liabilities that is regarded as available for solvency requirements, in accordance with domestic law or supervisory regulations.
Tabarru' Commitment	The amount of contribution to be relinquished by a *Takāful* participant as a donation for fulfilling the obligation of mutual help and to be used to pay claims submitted by eligible claimants.
Takāful	*Takāful* is derived from an Arabic word which means solidarity, whereby a group of participants agree among themselves to support one another jointly for the losses arising from specified risks. In a *Takāful* arrangement, the participants contribute a sum of money as *Tabarru'* commitment into a common fund, which will be used for mutual assistance of the members against specified loss or damage.
Takāful participant	A party that participates in the *Takāful* product with the TO and has the right to benefit under a *Takāful* contract (similar to a "policyholder" in conventional insurance).
Takāful operator (TO)	Any establishment or entity that manages a *Takāful* business.
Takāful undertakings	A hybrid structure comprising a *Takāful* Operator (TO) and one or more underwriting funds (*PRF*s) that are attributable to the *Takāful* participants.
Time horizon	The period of time over which the adequacy of solvency resources is measured. For solvency purposes this is often set to approximate the length of time that a *Takāful* undertaking or a supervisory authority would reasonably need in order to take effective action after the revelation of an adverse event in a *Takāful* undertaking's internal or regulatory reporting. The time horizon is part of the target criteria in the calibration of regulatory solvency requirements.
Technical Provisions	The value set aside to cover expected obligations arising on *Takāful* contracts. For solvency purposes, technical provisions comprise two components, namely the current central best estimate of the costs of meeting the *Takāful* underwriting obligations, discounted to the net present value (current estimate), and a margin for risk over the current estimate.
Total balance sheet approach	An approach to assessing the overall financial position of a *Takāful* undertaking that recognizes the interdependence between the risks associated with a *Takāful* undertaking's assets, liabilities, regulatory solvency requirements and solvency resources and the potential impact of those risks upon the *Takāful* undertaking's balance sheet.
Underwriting	The process of evaluating new applications, carried out by a TO on behalf of the *Takāful* participants based on an established set of guidelines to determine the risk associated with an applicant. The TO could accept the application or assign the appropriate rating class or decline the application for a *Takāful* contract.
Underwriting surplus or deficit	The *PRF*'s financial outturn from the risk elements of its business, being the balance after deducting expenses and claims (including any movement in provisions for outstanding claims) from the contribution income and adding the investment returns (income and gains on investment assets).
Wakālah	An agency contract where the *Takāful* participants (as principal) appoint the *Takāful* operator (as agent) to carry out the underwriting and investment activities of the *PRF* on their behalf.

APPENDIX

INTERVENTION CONTROLS

	Breaches the PTC/PCR but above MTC/MCR level	Between the PTC /PCR and MTC/MCR level	Below the MTC/MCR
Supervisory authority	• Request for a restoration plan from TO • Continuous discussion with the TO as to the reason for the breach and the potential for corrective measures	• Closely monitors the implementation by the TO including requisition of evidence that actions have been implemented	• Take actions to protect the interest of the *Takāful* participants
Takāful operator	• Formulation of a restoration plan • Continuous dialogue the supervisory authority to justify the breach and the potential for corrective measures	• Implement the agreed corrective measure and closely monitor for adjustment	• Take actions to protect the interest of the *Takāful* participants
Possible Intervention actions	• Restoration plan which include: ► Reason of the breach ► Potential corrective measures ► a proposed timeline for improving the solvency level with and without the draw-down of the *Qarḍ* facility.	**Between the PCR and MCR level**	**For breach of MCR**
		• Restoration plan which includes a proposed timeline for improving the solvency level with and without the draw-down of the *Qarḍ* facility. • Draw down of the *Qarḍ* facility to the *PRF* in order to expedite the restoration of the PCR level • TO may not be allowed to undertake new business for *PRF*	• further draw-down of the *Qarḍ* facility to the *PRF*; or • Plan for run off of the *PRF*, or transfer to viable third party
		Between the PTC and MTC	**For breach of MTC**
		• initial capital injection could be required	• further capital injection into the shareholders' fund or transfer to viable third party