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## **Solvency II - Groupe Consultatif response to MARKT/2543/03**

The Groupe Consultatif is pleased to submit its comments on MARKT/2543/03. The current version of the paper is of high quality and comprehensive in nature. The purpose of the discussion paper is to clarify organisational aspects, to elaborate on certain general issues, to initiate discussion of Pillar I technical issues, and to suggest areas of some Pillar II issues on which CEIOPS and our Solvency II project working groups could start. The members of these working groups appreciate the opportunity to contribute with their actuarial expertise in establishing new European Solvency standards, and to take the issues raised in MARKT/2543/03 as a starting point for their future work.

Before commenting on individual issues, it should be emphasised here that the Groupe's comments are tentative, and more work is necessary to elaborate the complex nature of the issues. We also suggest subjecting the proposed measures to quantitative impact assessments.

As an actuarial institution, the Groupe Consultatif sees itself as a source of technical help to CEIOPS and the Commission, and wants to contribute its actuarial skills in relation to adequate provisioning, calculation of target capital and other issues. Moreover, we believe that, as well as standard approaches, there is a need for internal models that measure the impact of the risks insurance companies face. We recognise that the implementation of these sophisticated model approaches might not be feasible for small or medium insurance companies due to a lack of resources (manpower, actuarial know-how, financial means). Therefore, we concur with the suggestion that both standardised approaches and internal models might be used to evaluate an insurer's risk situation. Internal models, however, should be an option and an incentive to insurers to improve their risk-awareness and risk management. In some cases, an additional incentive may be the potential to reduce their required target capital given the models are sound and accepted by the national supervisory organisations.

It would be helpful to the entire Solvency II process if a high level description of the aims and objectives of each of the three Pillars could be scoped out and agreed in advance. We suggest this be included as one of the overarching issues.

We also note that Pillar I is generally considered to consist of quantitative requirements, while Pillar II is considered more qualitative in nature. While we concur with this view, we would add that Pillar II (which involves non-public information) is an ideal home for various quantitative analyses which may not result directly in additional capital requirements but which are of great value to the supervisor in understanding the nature of an insurer's risks and the manner in which they are managed.

## **Comments on specific points on the new committee architecture and organisation of work**

### **Introduction**

**Question §6 and §7 – Do you agree that the lists above in points 6 and 7 contain all the work areas or should others be added?**

We agree with this list, which includes important areas of work requiring further study.

## **General overarching issues**

### **Issue 1: What are your views on the proposed way of integrating IASB insurance phase 2 accounting into the Solvency II project?**

We agree with the suggestion that the Solvency II project should anticipate likely Phase II IASB developments, and that it should aim to adopt IFRS resulting from Phase II once they are finished. Although the Solvency II project depends on the time schedule of IFRS implementation, it should not be delayed because of this. Moreover, potential incompleteness and uncertainties of the IFRS must be considered, i.e. the new standards must not be adopted without thorough and sound examination.

When developing the new solvency regime, it should be taken into account that probably not all insurance undertakings will have to apply the IASB standards.

An important area where Solvency II working groups could start their work would be to

1. analyse what IASB topics mean from a solvency point of view; and
2. outline a division of labour between IASB and the Solvency II project in this area to help the IASB forward and to avoid double work.

### **Issue 2: What are your views on the integration of IAIS principles, standards and guidance papers into the Solvency II project?**

The Groupe Consultatif has a positive attitude regarding the consideration and integration of sound and important key IAIS concepts. IAIS core principles, which represent a worldwide framework for the regulation and supervision of the insurance sector, might be a potential basis for new European solvency standards. The integration, however, always depends on a thorough examination of the IAIS principles, especially because there do not exist comprehensive legal procedures and controls for the improvement of IAIS concepts.

### **Issue 3: What are your views on the choice of two elements, technical provisions and target capital requirement, concerned by a prudence level?**

The Groupe emphasises the introduction of an overall prudence level for both elements – technical provisions (calculation based on a best estimate to settle claims in the future) and target capital. The target capital is interpreted as a measure for the volatility of results.

In principle there are two ways to progress further on this issue:

1. From the policy holder's perspective technical provisions must be based on a prudence level as high as possible to guarantee maximum safety. This would imply that the prudence level for the target capital can be chosen on a lower level so that the overall prudence level is satisfied.
2. If, for technical provisions only, the best estimate plus possibly a small margin is taken as the prudence level, the supervisors will demand a higher prudence level for the target capital in order to keep the overall probability of default to the pre-defined level.

It will be important that any prudence in technical and accounting provisions is identifiable so as to avoid double counting when considering the target capital.

### **Issue 4: What are your views on maximum harmonization?**

We favour the idea of maximum harmonisation concerning sound comprehensive principles. Standard formulas may differ in order to take into account national differences in tax legislation, product specifications, legal requirements, etc.

## Life

### **Issue 5: How should the explicit level of prudence in life technical provisions be addressed?**

We believe that the Commission's preference for the first alternative (best estimate of future cash flows + explicit risk margin) is a reasonable one. However, the level of prudence for technical provisions should be appropriately set at an aggregate level, that is per book of contracts or per line of business. It might be a useful overall goal for technical provisions to be described additionally in terms of a level of prudence. It is worth pointing out that there is a kind of maximum aggregation that can be used in life risk. This aggregation separates positive mortality risk (like term insurance and endowment) and negative mortality risk (like pure endowment and annuities). The risk profile of these two categories is different, so the prudence should be set for both categories in a separate way, even if they are within one book of contracts.

#### **Additional questions:**

Investment related parts of life technical provisions need to be modelled in a different way; this should be an issue in a further paper addressing investment risks explicitly. The notion of the "book of contracts" depends on the homogeneity of the modelled business. The method of calculating risk margins can, in principle, be similar for technical provisions and for target capital. In order to decide on the specific parameters utilised in this method, it has to be decided first, however, if and to what extent the different elements of risk (uncertainty, volatility and catastrophe elements) are to be represented in the respective margin.

### **Issue 6: Should risk margins be taken into account in cash-flows or in the discount rate? How should they be determined concretely?**

Amongst the three alternatives in the paper we prefer the adjustment of cash flows. However, it is possible that other aggregate stochastic modelling techniques will become more generally accepted and preferred as the means for allowing for risk. The second alternative (adjusting the discount rate) is the least desirable technique. The practicality of its implementation is offset by the difficulty in assessing the appropriateness of the margins provided by the calculation.

#### **Additional questions:**

Additional risk factors can, in general, be introduced similarly. Lapse risk, however, has to be investigated more thoroughly, since it may have a positive or a negative effect for the insurance company. We prefer probability distribution approaches, although we recognise that, at some stages, scenario-based analyses might provide useful (first) insight for less statistically tractable risks – but this should not be taken as a basis for the calculation of solvency capital.

### **Issue 7: What level of prudence should be set for technical provisions?**

To answer this question, it is most important to ascertain a similar and consistent level of prudence for all parts of the formulas and models. This concerns technical provisions and target capital as well as life and non-life business. We prefer the second alternative (best estimate plus market value margin approach of the IASB) Because of the considerations above, the chosen margin has to be compatible with the chosen level of prudence, and it has to be closely calibrated to the time horizon that will be finally chosen.

#### **Additional questions:**

We see no reason at the present time to vary the confidence level for technical provisions between life and non-life.

**Issue 8: How should the technical interest rate for future commitments be defined?  
How should financial guarantees and options embedded in policies be valued?**

In the light of modern ideas on the valuing of financial risks as well as our comments on Issue 7 above, we believe that the first alternative provided in the paper (risk-free market rate, financial guarantees and embedded options taken into account explicitly) is the only reasonable choice.

We believe that issues related to proper provisioning for bonuses can and will be dealt with.

**Additional questions:**

In response to the first question different situations can arise. On the one hand, an insurer can have ALM risks that arise from those liability cash flows whose duration is short enough that they lie within a replicating portfolio horizon. Presumably this insurer (or buyer of that book of business) could rebalance this portion of their portfolio on short notice. Perhaps this ALM risk needs only to be subject to capital requirements. Of course embedded options in the assets or liabilities need to be properly provisioned in the assets or technical provisions. On the other hand, many life insurers have liability cash flows which extend well beyond a replicating portfolio horizon. In these situations the insurer assumes substantial interest rate risk that long term interest rates will be low/lower in comparison with current levels. We presume that it will be judged prudent for insurers to maintain a portion of this significant uncertainty risk within the technical provisions themselves. Depending on the level of this provisioning, an additional capital requirement may be needed to provide the degree of protection desired by supervisors.

In response to the second question (ease of use of whole interest curve), we believe that the use of the whole interest rate curve rather than just a single rate should not be a challenge for modern insurers. From a market-wide point of view, there may be some concern about small size companies that might need some time to change over from single points to interest rate curves.

**Issue 9: How to define and value bonuses more explicitly while taking into account different bonus policies in national and company levels?**

Until now, bonus provisioning has not been harmonised in the EU. The Groupe could help to analyse the different participation mechanisms and bonus systems in the member countries.

Because of this important variety, which is also highlighted in the Commission's discussion paper, we believe that the answer relies heavily on the respective bonus system being applied. Although maximum harmonisation is intended, standard formulas may well differ in this respect. A solution to this problem might be the use of ALM simulations relying on a maximum harmonisation of ALM-related principles.

In any case, it would seem reasonable that the technical provisions provide for policyholders' reasonable expectations (i.e. guaranteed payments and non-guaranteed or bonus elements) that they might expect to be paid based on past experience with the insurer and current investment performance of the assets supporting this business. With the expected policyholder payments provided for, the capital required for such business need only reflect the value of guarantees at a high level of confidence and the risk that the insurer will be forced by business conditions to pay out more to the policyholders via the bonus than would be commercially justified.

**Additional questions:**

The very detailed questions should be discussed in the first CEIOPS meetings, and they will certainly be a topic of discussion for our appropriate Solvency II subgroup.

**Issue 10: Profits may be recognized at the inception of the policy in IASB.  
Should this recognition be limited? If so, how?**

We consider that further analysis of this issue is necessary, and suggest that the Groupe can give advice in these investigations. The answer depends on the final decision which will be made by IASB on this issue as well as on its definition of Technical Provisions for Life Insurance.

**Issue 11: Do we need actuarial standards recognized internationally in order to reach the goals relating to issues above?**

As already mentioned, the Groupe together with IAA will be pleased to give assistance on the further development of Solvency II. The IAA is participating actively with the IASB on new accounting standards for insurance. This IAA work includes the drafting of new actuarial guidance which would accompany the IASB insurance accounting standards at such time as they are ready for use. In accordance with the principle of subsidiarity among IAA members it is a traditional responsibility for each actuarial association to develop appropriate actuarial guidance for their members.

Remark : All of this concerns, of course, both life insurance and non-life business.

## **Non-Life**

### **Issue 12: How should the explicit level of prudence in provisions for claims outstanding be measured?**

We favour the first alternative, i.e. measuring the explicit level of prudence by expected values (as a realisation of best estimates) and margins added. This measure should be given on an aggregate level, for example on the book of contracts.

We believe that the measurement of provisions for outstanding claims should be capable of comparison between companies and types of business. The means of calculating the level of prudence should be both consistent and as transparent as possible. Therefore actuarial guidance is required on how the risk margins should be set (subject to further analysis), and if these differ from the market value margins under IFRS the differences should be identified.

#### **Additional questions:**

In order for different books of contracts to be comparable, the method is suitable for most of the relevant risk factors but needs detailed actuarial guidance.

### **Issue 13: At what level should the level of prudence in technical provisions be set?**

This question has to be answered in a manner consistent with life business (see our response to Issue 7). Thus, we opt for accepting the third alternative. However, we would stress the fact that this should be one of the first and most important issues to be addressed in the CEIOPS and the Groupe's Solvency II working groups. As already mentioned in our response to Issue 7, the means of calculating the level of prudence in technical provisions should be as transparent as possible and in particular consistent with the method for determining the target capital and the overall solvency margin.

### **Issue 14: If technical provisions are discounted, how should the discount rate be defined?**

We believe that the second alternative should be chosen since the discount rate used in the calculation of technical provisions needs to be consistent with the return expected on assets held by a prudent insurer to support the claim liabilities. So we would suggest a risk-free rate of return consistent with the duration of the liabilities.

### **Issue 15: Definition of book of contracts.**

We believe that the book of contracts should be defined on a European level based on the class of business which relies mostly on the homogeneity of claim type: From a prudential point of view and for modelling reasons, low frequency, high severity risks should be treated separately.

### **Issue 16: Harmonization of technical provisions implies claims management rules are explicit and harmonized. How detailed should claims management rules be?**

The term "claims management" needs some clarification in this context. In any case we concur with the statement that any harmonisation of technical provisions also involves harmonisation of claims management. As a first pragmatic step we propose a principles-based harmonisation, which allows a non-binding supervisory guidance on a national level.

### **Issue 17: Treatment of equalization provisions?**

We would stress the necessity to build up untaxed reserves, in order to balance out volatility of results over several years. The reason for these provisions is to provide a buffer for high volatility business with low frequency and high severity claims like windstorm or earthquake.

The Groupe opts for these tax-free equalisation provisions knowing that there is no legal obligation for a company to continue the business after the current year has finished, even if there have been no claims and therefore no liabilities for future years. But the market reality shows that in fact a book of liabilities cannot be built up quickly and remains therefore within one company over a long period of time. Of course these equalisation provisions have to be set up under close specifications due to prudential considerations and cannot be left at the discretion of the company.

#### **Issue 18: Treatment of the provision for unexpired risks?**

The underwriting risk for unexpired risks should be taken into account in technical provisions. For doing this technically, it should be added to the provisions for outstanding claims for similar risks (e.g. risks belonging to the same type of book of contracts). Further discussion is however needed in respect of the treatment of deferred acquisition costs.

## **Target Capital**

### **Issue 19: Do you agree with the structure of a spectrum of approaches, from a standard European model approach to an internal model?**

We favour the third approach with the following amendments and comments. In order to have maximum harmonisation for principles in Europe, we propose a European standard formula with certain parameters. For the European standard formula a common risk measure should be chosen and the risk level should be the same for all countries. This risk level should also apply to internal models. We support national calibration of models and this will be necessary to reflect the different markets in each member state. In order to harmonise the national formulas it would be desirable to define certain acceptable ranges for some (or all) of the parameters in the European standard formula.

We suggest that partial implementation of internal models should not be allowed, in order to avoid difficulties by the aggregation of parts of the internal models and parts of the standard formula. If this were allowed, constraints would have to be obeyed when establishing the standard formula on the one side and the design of the internal model on the other.

### **Issue 20: Which is the most suitable risk measure for the target capital?**

From a theoretical point of view TailVaR is the more prudent choice for a risk measure since it reflects tails of distributions more exactly than VaR, provided that the extreme tails of the distribution are known.

For regulatory purposes, not only the probability of default is of importance but also how bad the loss is in case of default. VaR is the appropriate risk measure for a shareholder who has no further obligation in case of default (limited liability). A policy-holder, however, is concerned with how badly his insurer failed as this will determine how much can be recovered. As the protection of the policyholder is paramount for supervisors, TailVaR could therefore be more appropriate. In simple terms:  $\text{TailVaR} = \text{VaR} + \text{Expected Shortfall}$ .

However three drawbacks concerning the practical application of TailVaR have to be recognised. Firstly TailVaR turns out to be more sensitive than VaR if relatively high confidence levels (e.g. 99.5%) are chosen. Secondly evaluation of market risks in the banking sector is currently based on VaR. Thirdly; extreme tail distributions may not always be known.

We favour the application of one unique risk measure for evaluating the overall risk situation. An exception from this rule might be to allow firms in their internal models to choose different risk measures, i.e. the application of TailVaR for risks with a low frequency but high severity and VaR for all remaining risk categories.

### **Issue 21: Which is the most suitable time horizon for the target capital definition?**

We prefer a time horizon of one year for the target capital definition. By doing this, risks of current year's new business (premium risks) are included as well as risks originating from preceding business years (risks resulting from possibly inadequate provisions). We are aware that there are risk classes with shorter (market risks) and longer durations (life and non-life long tail business) and that for a sound consideration the special features of these business classes have to be taken into account.

### **Issue 22: Which is the most suitable confidence level assumption if a) ruin probability (VaR) is chosen or b) if TailVaR is chosen?**

We would recommend a 99.5% confidence level for VaR risk measure.

It is essential to calibrate all approaches to the same risk level. Therefore, since TailVaR is a more prudent risk measure than VaR, we propose a 99% confidence level for TailVaR

We agree with the Commission that the confidence level assumption will need persistent consideration as the project progresses.

**Issue 23: Should target capital measurement be done on a going-concern assumption or on a run-off or a winding-up basis?**

From a supervisory point of view (consumer protection), the run-off basis should be considered. In any case for future years adequate risk capital for the volatility of reserves must be available. We note that internal models can be used by firms to analyse what the most costly circumstances are for their business, whether it is when allowance is made for the new business or not.

**Issue 24: How to address operational risks?**

Much of the operational risk in insurance undertakings is incorporated into the observed insurance experience (i.e. underwriting and claim management issues) that is used when establishing reserves and pricing bases. Also the work on operational risk should focus on the entity's control environment and how supervisors will get assurance on this rather than the quantification of capital for this aspect of risk. It can be extremely difficult to measure and quantify operational risks, e.g. reputation or management risk.

Thus, the consideration of this risk category in Pillar I would most likely be based on a capital add-on. We support the development of alternative approaches to include this risk type adequately under Pillar I. However, operational risk should also be considered under Pillar II.

**Issue 25: a) What classification of risk factors should be adopted? b) Which risk factors should necessarily be included in the standard and the internal models?**

- a) The IAA classification (and also the comprehensive classification of sub-categories) should be adopted.
- b) Underwriting, credit and market risk should be considered in Pillar I while liquidity and other risks should be dealt with in Pillar II. Operational risk can be considered in Pillar I and/or Pillar II (see our response to Issue 24).

**Issue 26: How should the structure of the standard model be formed? Should life and non-life insurance have a different approach?**

The Groupe Consultatif concurs with the conclusions of the IAA that all the approaches must be based on probability distributions.

Models based on probability distributions require either

- a) extensive insurer experience of frequency and severity for the risk in question (i.e. so that statistically credible loss distributions can be developed); or
- b) sufficient industry experience so that the shape of the distribution can be estimated in advance (insurer expected experience can be combined with the distribution shape data to produce a capital requirement).

While Life and Non-Life will be building on common principles there is no doubt that Life and Non-Life should have different approaches in the standard formulas.

**Issue 27: How should risk dependencies and correlations be taken into account?**

Diversification effects should be taken into account when calibrating the standard model and calculating the standard formula since this reflects the fundamental nature of insurance business. It will be a key issue when looking at the group level. However, the simple square root formula (assumption of total independence) or its enhanced variants are not necessarily the result of this consideration.

For the standard formula, certain ranges for correlation coefficients should be available for application on national levels.

Since we will be dealing with non-normal distributions, we anticipate the need, as work develops further on Solvency II, to incorporate adjusted tail-correlations in order to account adequately for tail dependencies. In internal models this might be considered in an even more elaborate way, e.g. by copulas.

## **Section 7**

### **§ 108**

Question 1: yes.

Question 2: in the proposed N1, it should be “prudential supervision” rather than “financial supervision” since Pillar 2 extends supervision beyond financial matters.

### **§ 111**

It is useful to have two articles N2 and N3 although it is not easy to determine which matters fall within the scope of N2 or of N3. Therefore we would suggest changing the titles and the wording of these articles:

Article N2: "Internal Control" containing only the first of the two proposed paragraphs (i.e. ICP10).

Article N3: "Risk assessment and risk management" beginning with the second proposed paragraph of Article N2 (ICP18) and ending with the following paragraph : The supervisory authority requires insurers to employ sound risk management practices throughout their operations. Risk management includes the identification, assessment, management and monitoring of risks. Appropriate oversight, reporting and control systems for risk management need to be in place throughout the management and board structure of the business.”

We have the following additional comments:

- The remark “in particular through reinsurance “ that was part of the initial final paragraph (i.e. ICP19), has been deleted because reinsurance is a tool amongst others for managing insurance risks, and there is no reason for the supervisor to pre-empt on the tools the insurers will use to manage their risks.
- The remark “tools to establish adequate level of premiums” has been deleted because it might lead to requirements impossible to meet, as nobody knows in advance which is the adequate level of premium.

### **§ 112**

In line with our comments on § 111, we would prefer that the first set of bullets in § 112 focus simply on ‘internal controls’ (i.e. leave risk identification and assessment to the later set of bullets under ‘risk management’).

We have the following additional comments :

- the management and the assessment of risks should not be restricted to the risks incurred; they should include a prospective view on risks which might possibly occur by the final closure of the run-off of the past and current business of the insurer;
- the list of major risks is not complete: at least the risk of inadequate provisioning is missing (e.g. as a result of legal risks). It is of utmost importance to recognise provisioning as a specific risk which needs to be assessed and managed; it is not sufficient to set out prudential margins in Pillar 2, because, if not appropriately managed, there is a risk that these margins are added on flawed, or incorrect expected values.
- as part of the management of this risk (see (b)), insurers could be required to produce annually two documents:

a document setting out the methodology and the procedures for establishing technical provisions ;

a report on the provisions carried in the balance sheet with comments on the application of the methodology, on the procedure and on the prudential soundness of the provisions.

Both documents should be established by different qualified actuaries, since the first document is under the responsibility of the operational management, while the second document should be established by an independent actuary reporting directly to the Board.

#### **§ 115**

The information requested by the supervisory authority should be the same across the EU, but national amendments could be needed to adjust to specific national circumstances and/or needs

According to the proposed wording of the last paragraph, the supervisory authority could take measures and sanctions without prior consultation of the company. It would be desirable that the Directive sets out the principle of a formal consultation before taking measures or sanctions and the principle of an appeal procedure against the measures or sanctions taken.

#### **§ 116**

The terms of reference of the preparatory work should include the confidentiality obligations of the supervisory authority and its representatives.

We would also prefer to see a description of the intended relationship between the insurer and the supervisor. For example,

*“The supervisor expects the insurer to have the following business practices (list required) in place. Where these business practices can be demonstrated to be in place and effective, the supervisor can assume more of a monitoring role. Where these business practices do not exist or appear weak then the supervisor will assume a more active role until such time as these practices are made satisfactory.”*

We would also hope to see reference to periodic reports which would be provided on a routine basis to the supervisor for their information. Such reports could help minimize too heavy a focus on on-site visits. Key summaries of information on internal controls, risk management and the results of stress testing, such as might be provided to senior management or the board, might be examples of such materials.

#### **§ 119**

It might be somewhat premature to elaborate on quantitative tools at a moment when Pillar I is not yet defined and therefore the tools to be used are not yet determined. We would propose to postpone this preparatory work; however we would be keen to exchange ideas with CEIOPS in respect of such tools.

#### **§ 122**

The proposed wording of N5 does not reflect the necessary diversity of the concept of transparency according to the audience : the confidentiality of information relating to individual companies is as strong a principle as transparency and should be set out at the same level in the Directive.

It should also be clear whether “accountable” includes responsibility and/or liability.

#### **§ 123**

The preparatory work should also address areas such as confidentiality of the evaluation process, contradictory procedure all along the valuation process, consultation of independent experts whether they are external or internal (actuary, internal auditor, etc.)