

6.7 Morbidity/Disability risk

Q111

Q111 Section 6.7.2.1 Is the proposed segmentation for health business appropriate? Please explain.

Organisation	Jurisdiction	Role	Confidential	Answer	Answer Comments
China Insurance Regulatory Commission	China	IAIS Member	No	Yes	
EIOPA	EIOPA	IAIS Member	No	No	<p>In terms of design, EIOPA believes that the proposal for Health Risk under Option 1 will introduce significant problems, as the allocation of liabilities into the four identified buckets will create several practical difficulties.</p> <p>On the one side, it may not be straightforward to which bucket a certain product should be allocated, which will imply substantial work for the unbundling of contracts or potentially the allocation of the full contract to a single bucket (generating capital charges which are not aligned with the underlying risks).</p> <p>Another consequence is that, within each bucket, insurers will group products according to their payment pattern (lump sum, recurring, ...) but these products may potentially exhibit substantially different risk profiles. This will generate distortions when applying the capital charges (see Q.120).</p> <p>We are also concerned that different interpretations on the allocation of contracts among different buckets may lead to different capital charges being applied by</p>

					different insurers. Design of contracts may also change with the objective to fit a target bucket with a more favourable calibration.
BaFin	Germany	IAIS Member	No	No	We think that allocation problems might arise in practice.
Financial Supervisory Service	Korea	IAIS Member	No	No	It is inappropriate because of the following reasons. Insurance product in Korea has many coverages including health-related coverages. If health business is segmented as proposed, then many health-related coverages will be unbundled to health seg. Expense risk will be only calculated in Life seg and expense risk for the health-related coverages will not be calculated. Lapse risk will be calculated in Life seg and Health seg separately and it will be under-estimated because of diversification (correlation) between the two seg. Moreover mass lapse will not be calculated for the health-related coverages. And it does not consider the renewable characteristic of the health-related coverages. Many health-related coverages are renewable in Korea and if morbidity/disability rate increases then the premium level increases, which reduces health risk. Current approach does not reflect the premium level increase and may over-estimate health risk.
National Association of Insurance Commissioners	USA	IAIS Member	No	Yes	<p>We favor the proposed 4 categories, particularly as it separates out long term recurring payments which are significant lines of business in some jurisdictions.</p> <p>Short term products that are more similar to non-life do not fit as easily into this segmentation scheme as they do to the segmentation used for non-life capital requirement. Examples include travel insurance and personal accident/sickness. In the 2016 Tech Specs, these are mostly kept with Non-Life, which is appropriate. For the U.S. and most (if not all) other jurisdictions, worker's compensation does not fit naturally into any of these segments.</p>
Ageas	Belgium	Other	No	No	The proposed segmentation into 4 categories is according to us not sufficient clear to properly allocate health products to one of these 4 categories. E.g. you could have

					medical expenses of long term nature. Hence this could cause cherry picking. We are not in favour of the option 1 (default approach), rather we prefer the alternative approach.
Canadian Institute of Actuaries	Canada	Other	No	Yes	
Ping An Insurance (Group) Company of China Ltd.	China	Other	No	No	The liability valuation method as well as claim management tools for short-term health/accident insurance are the same as those for short-term life insurance. Move these products from non-life segment to health segment leads to difficulties in implementation in practice and is inconsistent with actual risk management approach of the Company. We thus recommend including short-term health/accident insurance business in the non-life segment for risk measurement.
Actuarial Association of Europe	European Union	Other	No	No	Option 1 is a different approach compared to Solvency II. Using Option 1 would significantly increase the complexity for European insurers. Therefore, Option 2 would be our preferred approach.
Institut des Actuaire	France	Other	No	No	Back to the segmentation proposed in 2015 Field Testing with the distinction between “similar to life” and “not similar to life”
GDV - Gesamtverband der Deutschen Versicherungswirtschaft	Germany	Other	No	Yes	
German Association of Actuaries (DAV)	Germany	Other	No	No	Option 1 is a different approach compared to Solvency II. Using option 1 would significantly increase the complexity. Therefore, option 2 is our preferred approach.
Munich Re	Germany	Other	No	Yes	

AIA Group	Hong Kong	Other	No	No	Many health contracts combine different types of benefits, in particular those in the first three segments. We strongly suggest that the IAIS combine these segments unless the IAIS can provide a rationale for the distinctions. We know of no such rationale. The segmentation requires allocating benefits that are often provided within the same contract. This requires unnecessary and potentially arbitrary allocations.
International Actuarial Association	International	Other	No	Yes	
Dai-ichi Life Holdings, Inc.	Japan	Other	No	No	<ul style="list-style-type: none"> • There is a great diversity of Japanese medical insurance products. Calibration level used for each company risk management is generally based on each product / coverage, so the proposed segments might be too rough to capture the risk profile. • As a result, the calibration based on Phase 2+ data might be largely different from each company's calibration for Risk management. Excessive deviation is unacceptable to us. • On the other hand, we understand that there are limitations to the segmentation in the standard model. • Please deliberate by feedback of the Calibration methods and results to the Field Testing volunteer companies not to ensure that the stress level isn't be excess.
General Insurance Association of Japan	Japan	Other	No	No	With regard to products which make payments for multiple categories of health segments, it is not practically feasible for all IAIGs to apply different uplift-factors for each segment of payment. Therefore, the proposed segmentation is not appropriate.
The Life Insurance Association of Japan	Japan	Other	No	No	<ul style="list-style-type: none"> • Japanese insurers provide various health insurance coverages. The calibration of insurance risks related to the health business for each insurer's risk management is typically carried out by each product type or insurance coverage. Therefore, the

					<p>proposed segmentation may be not as precise.</p> <ul style="list-style-type: none"> • This may result in different calibration derived from data obtained from Phase 2 + and each insurer’s risk management. We are not in favor of a significant divergence in results. • We are also fully aware there is a limit on segmentation for health business by using the standard method. • We would like the IAIS to carefully consider not to define overly high stress levels by providing feedback on calibration method and the results of calibration with Volunteers.
Great Eastern Holdings Ltd	Singapore	Other	No	Yes	
Bupa	UK	Other	No	No	<p>We do not have an issue with the four category segmentation proposed in the 2016 Technical Specifications. However, we believe that a distinction should be drawn between short-term contracts (i.e. of one year or less), medium term contracts (more than one year up to five years) and longer term contracts (more than five years). Short term contracts should be subject to a different calculation basis, as explained in our response to question 122 below.</p>
Association of British Insurers	United Kingdom	Other	No	No	<p>(a) The method makes no allowance for the different business types and product features outside of the definitions proposed e.g., products which offer both a lump sum when a defined health event occurs (like the diagnosis of cancer) and medical expenses. It would be complex and maybe impossible to split these accurately into the correct risk categories;</p> <p>(b) The categories could result in some products being in several categories. Allocating the product between several categories could be difficult and would be challenging to separate. There is a likelihood that such changes would present operational changes, including an increased risk of double counting of certain risks;</p> <p>c) There are some products where life and health benefits are sold on a single policy,</p>

					and these benefits cannot be separated by the policyholder. The stress to claims could still be performed without unbundling. As the risk is the same 'before and after' unbundling health benefits, we do not see the value in a separate health module, which increases complexity. More information is required to understand the justifications for the proposed segmentation for health business.
MetLife	United States	Other	No	Yes	Having the 4 different categories is appropriate, but the approach to determining the shock level based on a scaling factor and an uplift factor is inappropriate and too complex for modelling. A modelling approach with these categories, along with a simple shock based on category or by product is more appropriate and reasonable
MassMutual Financial Group	USA	Other	No	Yes	

Q112

Q112 Section 6.7.2.1 Are the stress levels for the health segments appropriate? Please explain. If “no”, please provide supporting evidence and rationale for a different stress level.

Organisation	Jurisdiction	Role	Confidential	Answer	Answer Comments
China Insurance Regulatory Commission	China	IAIS Member	No	No	The risk profile and claim experience can be significantly different between health products in developing countries and those in developed countries, therefore we suggest calibrate the stress based on each market's actual data and experience.
EIOPA	EIOPA	IAIS Member	No		At this stage, we do not have information on the appropriateness of the proposed calibration. We believe the 2016 Field Testing exercise will provide valuable insight on this issue.
Financial Supervisory Service	Korea	IAIS Member	No		It is difficult to assess the appropriateness of the stress level at the moment. Korean FSS plans to calibrate the stress levels based on Korean Insurance market in the near future and the appropriateness of the stress level can be assessed afterwards.
National Association of Insurance Commissioners	USA	IAIS Member	No	No	Although the stressing methodology in option 1 is appropriate, but given the initial experience of field testing volunteers indicate that the overall stress level is still too high. We note that the method includes a scaling factor (f(i) in paragraph 513 of the technical specifications which is a first attempt at calibration) and is still to be determined.
Ageas	Belgium	Other	No	Yes	Conceptually there is no objection to stress levels proposed, however as indicated in the answer to question 111, depending on the product type allocation to categories

					from 1 to 4, there is not sufficient clarity in making the distinction between the 4 proposed categories. Certain health products could belong to 2 categories, and hence cherry picking for a lower capital charge could occur.
Canadian Institute of Actuaries	Canada	Other	No	Yes	The stresses have been studied in Canada, and similar stress levels have been identified.
CLHIA	Canada	Other	No	No	The defined stress levels seem to be too high.
Ping An Insurance (Group) Company of China Ltd.	China	Other	No	No	We suggest calibrating the stress levels with the data from China market. If the data is not sufficient to achieve a reasonable level of calibration, we would accept the current stress levels, however, we recommend updating the experience data regularly and reflecting China experience data gradually into setting the stress levels.
Institut des Actuaire	France	Other	No	No	Cf. Q111
Allianz	Germany	Other	No	Yes	
GDV - Gesamtverband der Deutschen Versicherungswirtschaft	Germany	Other	No	No	The defined stress levels are too high. In addition, the proposed stress calibration is not appropriate for German long-term health insurance business.
Munich Re	Germany	Other	No	No	The defined stress levels seem to be too high. In addition, the proposed stress calibration is not appropriate for German long-term health insurance business.
AIA Group	Hong Kong	Other	No	No	The stress factor can potentially reach 77% (i.e. for long term recurring payment products). Although we do not have good supporting evidence for a different stress level, this sounds intuitively too high. Note that capital requirements which are

					unnecessarily high may discourage IAIGs from writing certain business and this may have a social impact i.e. unavailability of insurance to those who need it.
International Actuarial Association	International	Other	No	No	<p>The defined stress levels (Field Test 2016) seem to be too high. There is one fundamental difference between health indemnity insurance products (medical expense insurance), and other Life and non-Life products, which affects the risks and therefore should affect the stress test calibration. This is the fact that, faced with a claims shock, an insurer can respond within a contract boundary (typically during a year) in additional ways, over and above changes to premium increases for all policies renewing from a particular month onwards. These additional ways involve the application of a range of managed care techniques.</p> <p>The fact that health indemnity premiums are dynamic, and that, in many markets, they can be adjusted fairly freely from one month to the next for all renewing policies, means that the margins on this type of business are tightly managed, and that the loss ratios typically do not move dramatically from year to year. The room for dynamic pricing means that both claims and lapse risks are more manageable within tight ranges, and for this reason typically these types of insurers should not have to require large amounts of capital. It all depends on a health insurer's size, and the variability of its claims, and also whether policies are sold individually or to groups. A 5% increase in medical claim payments without any adjustment in renewal and new business premiums during the year appears extreme.</p> <p>On the claims side, many insurers have a whole range of managed care tools at their disposal, including health provider profiling (which involves outlier doctor management within provider networks), hospital network selection, disease treatment protocol changes, drug and consumable formulary changes, co-ordinated disease management, and so on. The intensity of these measures can be dialed up during a year, within contract terms, and health insurers will therefore avail themselves of these techniques, rather than simply passively accepting adverse claims experience without taking some management action.</p>

				<p>Both of these factors mean that stresses and claims and lapse risks should be evaluated in the context of what can be done about them in a health insurer, and not just relative to other lines of business where insurers may not have the same ability to respond to the environment.</p> <p>Premium flexibility also helps to manage lapse risk, and insurers often have a range of retention strategies at their disposal to influence lapses within a year.</p> <p>Given the above, it appears that the 5% increase in claim payments mentioned in paragraph 366 is high, unless this 5% is measured against a previous year, and unless it includes an element of provider tariff inflation. If it is meant as a 5% variance adjusted for provider tariff inflation, it appears to be too high for all but the smallest health insurers.</p> <p>In addition, it is not clear why an increase in inflation rates would be defined separately for developed and emerging markets. Is there any objective justification for this, or data that would support why there is an expectation that medical inflation volatility would necessarily be higher for emerging markets? There are certainly some countries in developed markets that experience high and even fairly volatile rates of medical inflation.</p> <p>In addition, the proposed calculation is not appropriate for German long term health insurance. Calculations on the suggested basis exceed Solvency II capital requirements by significant margins, especially given German insurers' ability to adjust premiums annually and issues relating to policyholder participation.</p> <p>It is recommended that the ICS use stress levels similar to Solvency II, and, where applicable, allow policyholder participation outcomes to absorb the negative impact on available funds. The absorption should not be maximized by some balance sheet item, because the absorption effect represents the present value of future impacts, which doesn't correlate to the existing 1-year time horizon of the balance sheet.</p>
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Dai-ichi Life Holdings, Inc.	Japan	Other	No	No	<ul style="list-style-type: none"> • The publication of the data and method regarding the calibration of current stress level is essential in order to determine whether it is appropriate. • It is necessary to consider the appropriate stress level by referring to the historical data of the volunteer companies in Phase 2+. • The calibration method should be published to the volunteer companies so that they are able to check the appropriateness of the calibration.
General Insurance Association of Japan	Japan	Other	No	No	<p>With regard to categories 1 and 2, we suppose that the uncertainty of incurred claims and paid claims are different. Therefore, their stress levels should also be distinguished.</p> <p>In addition, imposing floors (20% - 50%) on scale factors would lead to exaggerated valuation of risk especially with regard to long-term contracts such as whole life insurance, and is therefore not appropriate. Such floor should be removed.</p> <p>We cannot comment on the appropriateness of the stress levels as evidence has not been provided. The stress levels should be validated and adjusted based on the 2016 Field Testing and other data. Factor differentiation according to geographical region should also be considered.</p>
The Life Insurance Association of Japan	Japan	Other	No	No	<ul style="list-style-type: none"> • We are afraid the health business, especially with shorter policy periods, would be charged an extremely high stress levels. • Therefore, we would like the IAIS to consider defining appropriate stress levels referring to the historical data of Volunteers, which will be obtained from the results of Phase 2 + of 2016 Field testing. • Additionally, we believe calibration methods should be disclosed to Volunteers so that they will be able to validate the appropriateness of the calibration by referring to the data collected from Volunteers.
Great Eastern Holdings Ltd	Singapore	Other	No	Yes	NA

Bupa	UK	Other	No	Yes	Our calculations suggest that the stress level of 21% produces a reasonable result for a large globally diversified portfolio of short-term medical expenses business. However, as explained in our response to question 122 below, we believe that the structure of the calculation does not fit well with short-term business.
Association of British Insurers	United Kingdom	Other	No	Yes	The overall claims stress levels appear to be appropriate, although it is difficult to state without a detailed qualitative exercise. We welcome the fact the approach to applying shocks under level 1 avoids multiple ambiguous definitions of “incidence rates” with short-term health insurance.
MassMutual Financial Group	USA	Other	No	Yes	

Q113

Q113 Section 6.7.2.1 Is the shock for Health lapse risk appropriate? Please explain.

Organisation	Jurisdiction	Role	Confidential	Answer	Answer Comments
China Insurance Regulatory Commission	China	IAIS Member	No	No	We agree to apply the same lapse risk stress between the life risk and health risk modules, however the lapse risk stress for China is high and we suggest calibrate that lapse stress based on each market's actual data and experience.
EIOPA	EIOPA	IAIS Member	No	No	In terms of design, we believe that certain features of the Life Lapse risk may also be relevant for Health business, in particular for SLT contracts. It is not clear why features such as the bi-directional nature of the shock or the inclusion of a Mass Lapse charge have been disregarded (these features were part of the 2015 approach). In terms of level, the current calibration may be low for some jurisdictions and types of business, but this needs to be confirmed with the analysis of the data being collected as part of the 2016 Field Testing exercise.
BaFin	Germany	IAIS Member	No	No	
Financial Supervisory Service	Korea	IAIS Member	No		It is difficult to assess the appropriateness of the stress level at the moment. Korean FSS plans to calibrate the stress levels based on Korean Insurance market in the near future and the appropriateness of the stress level can be assessed afterwards.

National Association of Insurance Commissioners	USA	IAIS Member	No	Yes	Current presumption is that the lapse stresses are not inappropriate.
Canadian Institute of Actuaries	Canada	Other	No	Yes	The shock appropriately captures the main types of health risk insurance products that are generally observed in the marketplace.
CLHIA	Canada	Other	No	No	The defined stress levels seem to be too high.
Ping An Insurance (Group) Company of China Ltd.	China	Other	No	No	<p>We suggest calibrating the stress levels with the data from China market. If the data is not sufficient to achieve a reasonable level of calibration, we would accept the current stress levels, however, we recommend updating the experience data regularly and reflecting China experience data gradually into setting the stress levels.</p> <p>Additionally, health products focus more on protection whose cash values are relatively low. As surrender penalty is higher, the uncertainty of surrender is relatively low and therefore a lower shock factor could be used.</p> <p>Moreover, there is no difference between lapse risks of short-term accident /health insurance and those of non-life insurance, and mass lapse will not have adverse impacts on the balance sheets, so it does not make sense to include the lapse risk of short-term accident /health insurance here.</p>
Institut des Actuaire	France	Other	No	Yes	n/c
Allianz	Germany	Other	No	No	The lapse shock seems very high and was not supported by evidence. Furthermore it should be clarified what is understood by “surrender” as for some health systems a surrender may increase available resources.

GDV - Gesamtverband der Deutschen Versicherungswirtschaft	Germany	Other	No	No	The defined stress levels are too high.
Munich Re	Germany	Other	No	No	
AIA Group	Hong Kong	Other	No	Yes	
International Actuarial Association	International	Other	No	No	<p>The defined stress levels (Field Test 2016) seem to be too high for the reasons outlined above.</p> <p>In addition, the proposed calculation is not appropriate for German long term health insurance: A one year stress as proposed is not appropriate, because in a long term contract this stress does not reflect the nature of the business.</p> <p>There are several instruments like special policyholder reserves and surplus participating mechanisms where it is totally unclear how to handle these instruments in case of the proposed stress levels.</p> <p>In addition, the right to adjust the premiums in case of higher claims as assumed in the calculation is a long term mechanism which is highly correlated with the policyholder option to change tariffs. That is, policyholder behavior aspects are not well addressed under the Option 1 proposal.</p> <p>It is recommended that the ICS use stress levels similar to Solvency II, and, where applicable, allow policyholder participation outcomes to absorb the negative impact on available funds. The absorption should not be maximized by some balance sheet item, because the absorption effect represents the present value of future impacts, which doesn't correlate to the existing 1-year time horizon of the balance sheet.</p>

Dai-ichi Life Holdings, Inc.	Japan	Other	No	No	<ul style="list-style-type: none"> • The publication of the data and method regarding the calibration of current stress level is essential in order to determine whether it is appropriate. • Since sales method (retail non-retail, sales channel, etc.) and product characteristic of medical insurance varies greatly from country to country, policyholder behavior is different for each country. In Japan, policyholder behavior that people frequently change the insurance company is not observed.
General Insurance Association of Japan	Japan	Other	No	No	<p>Since the scenario envisaged for mass lapse risk is not clear, we cannot comment on this issue. However, depending on the assumed scenario, the conclusion could change, as per our comment on Q129. If external factors such as a rise in interest rates or tax reforms are assumed as the mass lapse scenario, a large number of lapses may not always occur for health insurance policies whose purpose is to offer protection. In such a case, it could be more appropriate to assess level trend risk. Additionally, verification and adjustments should be made by referencing data gathered during the 2016 ICS Field Testing exercise.</p>
The Life Insurance Association of Japan	Japan	Other	No	No	<ul style="list-style-type: none"> • We believe the shock for Health lapse risk needs to be carefully considered as the distribution system (e.g. in group/personal, or the distribution channel) for Health insurance and/or its product feature may vary in each jurisdiction. Thus, it may lead to significant differences across jurisdictions. Please note policyholders in Japan rarely take consumer actions such as the frequent change of their contracting insurers. • Additionally, in Japan, one of the main business lines of many insurers is the product, which contains health and death components as part of the package. • As for mass lapse risk of the abovementioned product, our best estimate would be the calculation of risks related to policyholder behavior to surrender the product as a package. In this case, an approach which calculates lapse risks separately between life and health components would not present an economic reality of life insurers.

					Therefore, we believe lapse risks of life and health components should be calculated without unbundling those components.
Great Eastern Holdings Ltd	Singapore	Other	No	Yes	NA
Association of British Insurers	United Kingdom	Other	No	No	More justification is required on how the level of the stress was determined in order to accurately assess the appropriateness of the level of the stress. Without this justification, firms are only able to determine whether the level of the stress is higher or lower than those applied by their local regimes under Solvency II which is not particularly helpful to answering the question.
Prudential Financial, Inc.	United States of America	Other	No	No	The shock for Health lapse risk should be the same as that used within the Life module for Mass Lapse. Please see Question 124 for our thoughts on the appropriateness of the lapse shock.
MassMutual Financial Group	USA	Other	No	Yes	

Q114

Q114 Section 6.7.2.2 Are the two product segments as defined appropriate? Please explain.

Organisation	Jurisdiction	Role	Confidential	Answer	Answer Comments
EIOPA	EIOPA	IAIS Member	No	Yes	We believe it is appropriate to identify the two product segments. Stresses on the financial compensation incidence rates and recovery rates should be dealt separately from stresses on the medical treatment costs as the two product segments are exposed to different types of risk.
BaFin	Germany	IAIS Member	No	Yes	
Financial Supervisory Service	Korea	IAIS Member	No	No	In Korea there are many different coverages including health-related coverages in a liability product and some health-related coverages do not belong to the two segments. For example, law suit coverage due to car-hit-a-person accident is exposed to Morbidity/Disability risk but do not belong to the two segments. So other product segment is required for those coverages.
National Association of Insurance Commissioners	USA	IAIS Member	No	No	We note the differing segmentations for options 1 and 2. Because there is a significant difference between short term and long term contracts the segmentation of option 1 is preferred.
Ageas	Belgium	Other	No	Yes	

Canadian Institute of Actuaries	Canada	Other	No	Yes	
Ping An Insurance (Group) Company of China Ltd.	China	Other	No	Yes	We have no disagreement with this.
Actuarial Association of Europe	European Union	Other	No	Yes	See answer to Q111
Institut des Actuaire	France	Other	No	Yes	n/c
GDV - Gesamtverband der Deutschen Versicherungswirtschaft	Germany	Other	No	Yes	
Munich Re	Germany	Other	No	Yes	The segmentation is similar to the Solvency II standard formula approach.
AIA Group	Hong Kong	Other	No	No	This product segmentation is not necessarily problematic, but we think that not all IAIGs will use assumption such as inception rates and recovery rates to compute the reserves. For instance, some companies may use inception rates not recovery rates, and some companies may simply adopt a loss ratio approach. We think it will be much more straightforward if companies are required to shock the claims costs as this information must be an output from the actuarial model.
International Actuarial Association	International	Other	No	Yes	
Dai-ichi Life Holdings, Inc.	Japan	Other	No	No	Please refer to the answer for Q111.

General Insurance Association of Japan	Japan	Other	No	Yes	While the segmentation may be reasonable, segmentation by the nature of benefits instead of product may not be acceptable to all IAIGs in practice. Therefore, valuation by an appropriate simplified approach should be allowed.
The Life Insurance Association of Japan	Japan	Other	No	No	<ul style="list-style-type: none"> • Japanese insurers provide various health insurance coverages. The calibration of insurance risks related to the health business for each insurer's risk management is typically carried out by each product type or insurance coverage. Therefore, the proposed segmentation may be not as precise. • This may result in different calibration derived from data obtained from Phase 2 + and each insurer's risk management. We are not in favor of a significant divergence in results. • We are also fully aware there is a limit on segmentation for health business by using the standard method. • We would like the IAIS to carefully consider not to define overly high stress levels by providing feedback on calibration method and the results of calibration with Volunteers.
Great Eastern Holdings Ltd	Singapore	Other	No	Yes	NA
Association of British Insurers	United Kingdom	Other	No	No	<p>(a) Although this method does allow for different business types, the method does not distinguish the differences in the inherent risks within products e.g., short/long-term product features. The risks would not be sufficiently homogeneous due to not splitting long and short-term product features which could lead to mis-estimation of the risk profile;</p> <p>(b) The basis of the proposed inflation rate is unclear and would require further justification to allow firms to determine its appropriateness.</p>
MassMutual Financial Group	USA	Other	No	Yes	

German Association of Actuaries (DAV)	Germany	Other	No	Yes	See answer Q111.
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Q115

Q115 Section 6.7.2.2 Are the stress levels appropriate? Please explain. If “no”, please provide supporting evidence and rationale for a different stress level.

Organisation	Jurisdiction	Role	Confidential	Answer	Answer Comments
China Insurance Regulatory Commission	China	IAIS Member	No	No	We view that the current stress level is not too unreasonable for China, however, from a long term prospective, as the risk profile and claim experience could vary significantly across markets, we suggest calibrate the stress based on each market's actual data and experience.
EIOPA	EIOPA	IAIS Member	No	Yes	Regarding inception rates for Financial Compensation products, EIOPA supports that a distinction is made in the shock between the first 12 months and all the months following the first 12 months. This is because the risk is much different (after a longer period, the state is “consolidated”). We believe that the level of shocks should be, on average, appropriate to reflect a level of 99,5% VaR over a 1 year time horizon. However, in light of the feedback received in previous Field Testing exercises, the IAIS should explore whether there is a need (justified with evidence) to differentiate the stress levels across geographical regions.
BaFin	Germany	IAIS Member	No	Yes	

Financial Supervisory Service	Korea	IAIS Member	No		It is difficult to assess the appropriateness of the stress level at the moment. Korean FSS plans to calibrate the stress levels based on Korean Insurance market in the near future and the appropriateness of the stress level can be assessed afterwards.
National Association of Insurance Commissioners	USA	IAIS Member	No	No	Stresses for financial compensation insurance postulate an increase of 25% in year 1 and 15% for each subsequent year. That effectively means a permanent change (significant increase) in sickness levels (with an alternative of a 20% decrease in recovery). That appears initially to be much too stressful given the current trend towards improvement in health (barring the last 6 months of life).
Ageas	Belgium	Other	No	Yes	
Canadian Institute of Actuaries	Canada	Other	No	Yes	
Ping An Insurance (Group) Company of China Ltd.	China	Other	No	No	We suggest calibrating the stress levels with the data from China market. If the data is not sufficient to achieve a reasonable level of calibration, we would accept the current stress levels, however, we recommend updating the experience data regularly and reflecting China experience data gradually into setting the stress levels.
GDV - Gesamtverband der Deutschen Versicherungswirtschaft	Germany	Other	No	No	The recovery risk should be differentiated between short-term financial compensation products with very high recovery rates on the one hand and long-term financial compensation products with only low recovery rates on the other hand. For short-term financial compensation products the proposed risk factor for recovery risk seems to be too high. For these products it would be more appropriate to apply a risk factor to persistency rates instead of recovery rates.
Munich Re	Germany	Other	No	Yes	The stress levels are similar to the Solvency II standard formula approach.

Global Federation of Insurance Associations	Global	Other	No	No	We are concerned that the stress levels are overly high in some jurisdictions. We would like the IAIS to consider defining appropriate stress levels, with reference to the input from stakeholders including historical data of Volunteer IAIGs obtained from the results of Phase 2 + of 2016 Field testing.
AIA Group	Hong Kong	Other	No	Yes	
International Actuarial Association	International	Other	No	No	The stress levels are similar to the Solvency II approach. However, the distinction between developed and emerging markets' medical inflation rates appear arbitrary and unjustifiable.
Dai-ichi Life Holdings, Inc.	Japan	Other	No	No	<ul style="list-style-type: none"> • The publication of the data and method regarding the calibration of current stress level is essential in order to determine whether it is appropriate. It is necessary to consider the appropriate stress level by referring to the historical data of the volunteer companies in Phase 2+. • A comparison of the risk factors held by Financial Compensation and Medical Treatment shows that Medical Treatment has a wider risk (incident rate and payment amount per incidence). Therefore, stress level of the Financial Compensation should be smaller than the Medical Treatment. • The calibration method should be published to the volunteer companies so that they are able to check the appropriateness of the calibration.
General Insurance Association of Japan	Japan	Other	No	No	We have concerns over the consistency of this approach with the approach for the health underwriting risk under the default approach. The uplift-factors for categories 1 - 3 of the default approach are set at 10 - 13%, which is lower than this approach. The incidence rate stress and recovery rate stress of financial compensation should be consistent with the approach for the health underwriting risk under the default approach.

The Life Insurance Association of Japan	Japan	Other	No	No	<ul style="list-style-type: none"> • We are afraid the stress levels as a whole are overly high. • Comparing the incidence rate stress on the financial compensation insurance and the stress on the medical treatment insurance, stress on the former should be lower than the latter provided that the latter has both the incidence rate stress risk and the change in asset value risk. • Therefore, we would like the IAIS to consider defining appropriate stress levels by referencing the historical data of Volunteers, which will be obtained from the results of Phase 2 + of 2016 Field testing. • Additionally, we believe calibration methods should be disclosed to Volunteers so that they will be able to validate the appropriateness of the calibration by referring to the data collected from Volunteers.
Great Eastern Holdings Ltd	Singapore	Other	No	Yes	NA
Association of British Insurers	United Kingdom	Other	No	No	More justification is required on how the level of the stress was determined in order to accurately assess the appropriateness of the level of the stress. Without this justification, firms are only able to determine whether the level of the stress is higher or lower than those applied by their local regimes under Solvency II which is not particularly helpful to answering the question.
Prudential Financial, Inc.	United States of America	Other	No	No	<p>Ignoring structure, we believe that the morbidity incidence stress is reasonable. We do not, however, believe that the structure of the stress is appropriate. As with mortality/longevity, a large and continued deviation from the best estimate morbidity is not plausible. A lower inception level stress in conjunction with a trend stress would more accurately reflect the nature of the risk.</p> <p>We believe the morbidity recovery stress remains excessive relative to a “notional 99.5 VaR” concept.</p> <p>Please see Question 105 for our thoughts on an appropriate approach to base risk.</p>

MassMutual Financial Group	USA	Other	No	Yes	
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Q116

Q116 Section 6.7.3.1 Is there evidence that the volatility of health claims (Option 1) varies by geographical region, thereby justifying a more refined granularity? Please explain.

Organisation	Jurisdiction	Role	Confidential	Answer	Answer Comments
China Insurance Regulatory Commission	China	IAIS Member	No	Yes	The health insurance products may not be comparable between the developing and developed countries, the risks embedded therefore are varied and we suggest a separate calibration by region. Chinese insurers sell more straightforward and simplified health insurance products, mainly in forms of a lump-sum payment on critical illness or a one year lump-sum or medical expense reimbursement insurance, with no long term medical or long term care products.
EIOPA	EIOPA	IAIS Member	No	No	EIOPA does not possess evidence to justify geographical differentiation. However, as stated in other responses, the IAIS should use the data collected through the 2016 Field Testing exercise support an informed decision on this matter.
BaFin	Germany	IAIS Member	No	No	
Financial Supervisory Service	Korea	IAIS Member	No	No	
Ageas	Belgium	Other	No	Yes	It varies not only by geographical region, but also by portfolio composition due to specific product characteristics and underwriting rules.

Canadian Institute of Actuaries	Canada	Other	No	No	While health claims are influenced by socio-economic factors as well as availability of healthcare, it is difficult to see how a capital framework could become so complicated as to differentiate by geographical region unless that differentiation was no more granular than country.
Ping An Insurance (Group) Company of China Ltd.	China	Other	No	Yes	<p>In terms of the product types, health products in China market are mostly in a similar single type, which provide a lump-sum for illness and often sold as riders attached to life insurance products. The underwriting rules and product features of health products are also restricted by the relevant regulation rules. Thus, health insurance products in China are quite different from those in developed countries, a separate calibration should be performed and a separate parameter should be set for China.</p> <p>In addition, there are rarely long-term expense-type health products covering medical expenses or long term care etc. in China market, there is no supporting data for this type of products. We would accept the current stress levels, however, we recommend updating the experience data when there is sufficient data in China market in the future and reflecting the experience data gradually into setting the stress levels.</p>
Institut des Actuaire	France	Other	No	No	Cf. Q108
GDV - Gesamtverband der Deutschen Versicherungswirtschaft	Germany	Other	No	Yes	
Munich Re	Germany	Other	No	Yes	
AIA Group	Hong Kong	Other	No	Yes	Similar to our response on mortality, there may be a basis to distinguish between countries. However, broad categories such as “emerging markets” are not appropriate. Any distinctions, especially those that discriminate against emerging

					markets where there is a large insurance gap, should be based on scientifically verifiable data.
International Actuarial Association	International	Other	No	Yes	The extent of variation depends on a wide variety of factors. It is best to collect data on this, and then evaluate how geographic differentiation should be calibrated. However, it is unlikely that blunt rules such as “1% medical inflation for developed markets and 3% for emerging markets” would be supported by the evidence.
Dai-ichi Life Holdings, Inc.	Japan	Other	No	Yes	<ul style="list-style-type: none"> • Especially medical insurance products is widely various by each jurisdiction because of dependence on the characteristics of each jurisdiction, such as Health system, Welfare program, Nationality. In that case, the volatility might also be different from each jurisdiction. • Please refer to the historical data submitted by volunteer companies in the field testing phase 2+. • The calibration methods and result should be published to the volunteers participating companies to verify that proper calibration with reference to the volunteers’ data.
The Life Insurance Association of Japan	Japan	Other	No	Yes	<ul style="list-style-type: none"> • There are wide varieties of insurance coverages, especially as for the health business in each jurisdiction. Such coverages tend to vary depending on the medical welfare regime as well as nationality in each jurisdiction. So, the volatility of health claims may differ in each jurisdiction. • Therefore, we would like the IAIS to refer to the historical data of Volunteers, which will be obtained from the results of Phase 2 + of 2016 Field testing. • Additionally, we believe that calibration methods should be disclosed to Volunteers so that they will be able to validate the appropriateness of the calibration by referring to the data collected from Volunteers.

Great Eastern Holdings Ltd	Singapore	Other	No	No	NA
Association of British Insurers	United Kingdom	Other	No	Yes	The ABI's initial thinking is that the volatility of health claims will vary geographically due to a variety of factors. Chief of these, will be the different levels of government programmes to subsidise health costs and regulatory intervention with health insurance policies. This will have varying impacts on volatility of claims depending on the level of subsidy, legislation and local attitudes towards insurance products.
Prudential Financial, Inc.	United States of America	Other	No	No	Prudential does not believe the geographical segmentation is relevant when determining a Health risk amount. The stresses and methods should be consistent across all geographical areas; regional differences, if any, should be captured in best estimate assumptions.
MassMutual Financial Group	USA	Other	No	No	While we are responding no, the IAIS should consider where geographical regions are today – e.g. a country with low mortality or morbidity has less room for improvement than a country with high mortality or morbidity. A comparison of general population data might indicate where there material enough differences in the starting point. For health – the situation is further affected by different health coverage. E.g. countries with socialized medicine might be less stressed than those without?

Q117

Q117 Section 6.7.3.1 Is there a specific methodology and reference data that the IAIS should use to determine appropriate Health stress levels by geographic region? Please explain.

Organisation	Jurisdiction	Role	Confidential	Answer	Answer Comments
China Insurance Regulatory Commission	China	IAIS Member	No	Yes	If possible, we suggest to calibrate the stresses based on IAIG's own experience
EIOPA	EIOPA	IAIS Member	No	No	We do not have specific suggestions at this stage. In general, we believe that the methodologies used should be consistent with the risks underlying insurance liabilities. We support a distinction between Health SLT and NSLT insurance liabilities, for which calibration methodologies traditionally applied in the Life and Non-Life segments, respectively, should be used. At this point in time, EIOPA does not have available data which can support the calibration exercise according to the methodology proposed for Option 1.
BaFin	Germany	IAIS Member	No	No	
Financial Supervisory Service	Korea	IAIS Member	No	No	
Ageas	Belgium	Other	No	No	

Canadian Institute of Actuaries	Canada	Other	No	No	
Ping An Insurance (Group) Company of China Ltd.	China	Other	No	Yes	Please refer to Q116. We agree with the current calibration method. However, in principle we recommend doing the calibration for each country separately based on actual data of that country due to the differences among countries.
GDV - Gesamtverband der Deutschen Versicherungswirtschaft	Germany	Other	No	No	
Munich Re	Germany	Other	No	No	
AIA Group	Hong Kong	Other	No	No	“Region” is far too broad a categorization.
International Actuarial Association	International	Other	No	Yes	Yes, specific data should be collected to determine the appropriate stress levels for different geographic regions, if at all possible. This is a big exercise, and will require extensive work to define the right approach and collect the correct data across different markets. It is therefore hard to recommend a specific methodology or reference specific data. However, if such an extensive exercise is not possible, a single view should be adopted, rather than imposing arbitrary differentiation on emerging markets without supporting evidence.
Dai-ichi Life Holdings, Inc.	Japan	Other	No	Yes	• Please refer to the answer for Q116.
The Life Insurance Association of Japan	Japan	Other	No	Yes	• Same as the comment(s) on Question 116 above.
Great Eastern Holdings Ltd	Singapore	Other	No	No	NA

MassMutual Financial Group	USA	Other	No	No	
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Q118

Q118 Section 6.7.3.1 Is there evidence to support the use of stresses for Morbidity/Disability risk (Option 2) that vary by geographical region? Please explain and provide supporting evidence.

Organisation	Jurisdiction	Role	Confidential	Answer	Answer Comments
China Insurance Regulatory Commission	China	IAIS Member	No	Yes	The health insurance products may not be comparable between the developing and developed countries, the risks embedded therefore are varied and we suggest a separate calibration by region. Chinese insurers sell more straightforward and simplified health insurance products, mainly in forms of a lump-sum payment on critical illness or a one year lump-sum or medical expense reimbursement insurance, with no long term medical or long term care products.
EIOPA	EIOPA	IAIS Member	No	No	EIOPA does not have evidence supporting a differentiation by geographical region but acknowledges that this was not the focus of the analyses performed in the context of Solvency II development. Therefore, this issue may need to be explored on the basis of the data collected during the 2016 Field Testing exercise.
BaFin	Germany	IAIS Member	No	No	
Financial Supervisory Service	Korea	IAIS Member	No	No	
Ageas	Belgium	Other	No	No	

Canadian Institute of Actuaries	Canada	Other	No	No	
CLHIA	Canada	Other	No	Yes	This simplified model however cannot properly reflect the complex profile of a world-wide operating insurer/reinsurer. This is especially the case for insurance modules due to improper modelling of global diversification, or strong simplifications.
Ping An Insurance (Group) Company of China Ltd.	China	Other	No	Yes	Please refer to Q116. As there are significant differences in terms of health product mix and level of medical treatment across countries, there should be differences in stresses.
GDV - Gesamtverband der Deutschen Versicherungswirtschaft	Germany	Other	No	Yes	The stress levels can be considered appropriately calibrated to capture the characteristics of an average primary insurer in Europe. This simplified model however cannot properly reflect the complex profile of a world-wide operating reinsurer. This is especially the case for insurance modules due to improper modelling of global diversification, or strong simplifications.
Munich Re	Germany	Other	No	Yes	The stress levels are similar to the Solvency II standard formula approach and can be considered appropriately calibrated to capture the characteristics of an average primary insurer in Europe. This simplified model however cannot properly reflect the complex profile of a world-wide operating reinsurer. This is especially the case for insurance modules due to improper modelling of global diversification, or strong simplifications.
AIA Group	Hong Kong	Other	No	No	"Region" is far too broad a categorization.
International Actuarial Association	International	Other	No	No	The proposed stress levels are similar to Solvency II. We think they are an appropriate starting point for other regions. We recommend that any differentiation should only be implemented on the basis of actual data and evidence

Dai-ichi Life Holdings, Inc.	Japan	Other	No	Yes	• Please refer to the answer for Q116.
The Life Insurance Association of Japan	Japan	Other	No	Yes	<ul style="list-style-type: none"> • There are wide varieties of insurance coverages, especially as for the health business in each jurisdiction. Such coverages tend to vary depending on the medical welfare regime as well as nationality in each jurisdiction. So the volatility of health claims may differ in each jurisdiction. • Therefore, we would like the IAIS to refer to the historical data of Volunteers, which will be obtained from the results of Phase 2 + of 2016 Field testing. • Additionally, we believe calibration methods should be disclosed to Volunteers so that they will be able to validate the appropriateness of the calibration by referring to the data collected from Volunteers.
Great Eastern Holdings Ltd	Singapore	Other	No	No	NA
Swiss Re	Switzerland	Other	No	Yes	Stresses may indeed vary by region. The severity of a given stress and its impact will depend on the characteristics of local population. However, the increased complexity associated with taking this into account may not be justified by the benefits in precision. Ideally, for groups for whom this effect is material, the IAIS should allow for the use of regulatory approved internal models.
Prudential Financial, Inc.	United States of America	Other	No	No	Prudential does not believe the geographical segmentation is relevant when determining a Morbidity/Disability risk amount. The stresses and methods should be consistent across all geographical areas; regional differences, if any, should be captured in best estimate assumptions.
MassMutual Financial Group	USA	Other	No	No	

Q119

Q119 Section 6.7.3.1 Is there a specific methodology and reference data that the IAIS should use to determine appropriate Morbidity/Disability stress levels by geographic region? Please explain.

Organisation	Jurisdiction	Role	Confidential	Answer	Answer Comments
China Insurance Regulatory Commission	China	IAIS Member	No	Yes	If possible, we suggest to calibrate the stresses based on IAIG's own experience.
EIOPA	EIOPA	IAIS Member	No	Yes	Several calibration exercises performed in Europe, during the development of Solvency II, support a level of calibration close (higher in some instances) to that proposed for Option 2. A summary of the analysis performed is available on EIOPA website: (https://eiopa.europa.eu/Publications/Standards/EIOPA-14-322_Underlying_Assumptions.pdf).
Financial Supervisory Service	Korea	IAIS Member	No	No	
Ageas	Belgium	Other	No	No	
Canadian Institute of Actuaries	Canada	Other	No	No	
Ping An Insurance (Group) Company of China Ltd.	China	Other	No	Yes	Please refer to Q116. We recommend doing the calibration for each country separately based on actual data of each country.

Allianz	Germany	Other	No	No	
GDV - Gesamtverband der Deutschen Versicherungswirtschaft	Germany	Other	No	No	
Munich Re	Germany	Other	No	No	
AIA Group	Hong Kong	Other	No	No	We are not aware of any such data, but any such data needs to be at the country, not the region, level.
International Actuarial Association	International	Other	No	Yes	Same comments as for Q117 above.
Dai-ichi Life Holdings, Inc.	Japan	Other	No	Yes	• Please refer to the answer for Q116.
The Life Insurance Association of Japan	Japan	Other	No	Yes	• Same as the comment(s) on Question 118 above.
Great Eastern Holdings Ltd	Singapore	Other	No	No	NA
Swiss Re	Switzerland	Other	No	No	See the response to question 118 above.
MassMutual Financial Group	USA	Other	No	No	

Q120

Q120 Section 6.7.3.2 Is Option 1 (Health risk) or Option 2 (Morbidity/Disability risk) the most appropriate to adopt within ICS Version 1.0? Please explain.

Organisation	Jurisdiction	Role	Confidential	Answer
Bermuda Monetary Authority (BMA)	Bermuda	IAIS Member	No	The BMA supports Options 2 where there is distinction between those products that are considered "similar to life" and "not similar to life".
China Insurance Regulatory Commission	China	IAIS Member	No	<p>Option 2 is much more appropriate for China market.</p> <p>There are currently three types of products included in the health module for Chinese insurers, they are whole life lump-sum critical illness products, one year health insurance and one year accidental insurance.</p> <p>For the whole life products, it pays a fixed lump-sum benefit for critical illness, for which the valuation is very similar to a whole life death coverage. The risks are more appropriate to be evaluated by looking at the morbidity rates and recovery rate, rather than using a more non-life approach as in Option 1.</p> <p>For short term products, they are treated as non-life in both product management and regulations in China. By moving them from non-life to the health module, we cannot see benefits in risk evaluation, but rather, it creates more implementation difficulties as it is inconsistent with companies' current practice.</p>
EIOPA	EIOPA	IAIS Member	No	<p>EIOPA believes Option 2 is more appropriate, taking into account the specificities of Health business and the objectives set by the IAIS for ICS 1.0.</p> <p>EIOPA is of the opinion that the application of a single shock to Claims payments, as proposed under Option 1, will result in a framework which is less risk sensitive, reducing the incentives for sound risk management by insurers.</p> <p>Stressing the risk drivers to which insurance liabilities are exposed should produce</p>

				<p>more appropriate risk charges. The aggregation of all risks (except lapse) into a single capital charge, as proposed, will mean that calibration will not reflect the true risk profile of insurance liabilities in a greater number of cases, as similar Claims patterns (lump sum, recurring, ...) may be driven by very different exposures to risk drivers (but that will not be acknowledged according to this methodology as all products within a given bucket are subject to the same Claims shock). For example, two products with similar Claims patterns, but exhibiting very different compositions of total payments (Claims + Expenses), will anyway receive a similar capital charge.</p> <p>Option 2 would give more recognition to this diversity by applying shocks to the risk drivers underlying the claims and expense payments, not driven by the periodicity of such payments. This means that similar products exhibiting different risk profiles (e.g. higher/lower inception rates, recovery rates or expense levels as considered in the calculation of the Current Estimate) would be subject to different magnitudes of shock. The alignment between the capital charges and the risks actually incurred by the insurers would increase, promoting sound risk management practices.</p> <p>Also, we consider that the split between "similar to life" and "not similar to life" products should be maintained. In a risk based framework, as stated in ICS Principle 1, this distinction is needed to ensure the amount of capital required to be held is based on the characteristics of the risks held by IAIG, which are significantly different between the two categories of products.</p> <p>In summary, in terms of design, we believe Option 2 is superior to Option 1 and would deliver an ICS Standard Method which is more appropriately risk sensitive, in line with the ICS Principles agreed by the IAIS. In the particular case of Health business, we believe that the path of over-simplification of capital calculation is not the right way for to cater for the big diversity of products across jurisdictions that the IAIS has already identified in previous Field Testing exercises.</p>
BaFin	Germany	IAIS Member	No	Option 2 is more appropriate from a risk perspective taking the specificities of the health risk better into account.

Financial Supervisory Service	Korea	IAIS Member	No	Option 2 is more appropriate.
National Association of Insurance Commissioners	USA	IAIS Member	No	While option 2 is consistent with the approach taken for the life risks, we believe that Option 1 is appropriate because it has a more granular risk partition and can be more easily calibrated to actual experience exhibited by industry.
Ageas	Belgium	Other	No	Option 2 is preferred as there is a distinction between similar to Life and non-similar to Life, and where the stress levels are performed on the incidence, recovery and payment levels.
Canadian Institute of Actuaries	Canada	Other	No	Option 1 is simpler in principle.
CLHIA	Canada	Other	No	A combination of Option 1 and Option 2 appears to be more appropriate. Whereas the creation of a separate health module as currently designed in Option 1 appears reasonable, the stress definition and calibration of the stress levels for long-term business from Option 2 seems to fit better. For short term business a simple premium and reserve risk approach should be adequate. Two additional risk sub modules for lapse and catastrophe (terror & pandemic) risks should be added to complete the design.
Ping An Insurance (Group) Company of China Ltd.	China	Other	No	<p>We prefer the Option 2 as it is easy to implement in practice and enables the company to manage risks more effectively.</p> <p>Option 2 is more in line with the method of life risk, which better reflecting the consistency of assumption setting methods and management approach for the long term health products. For short term health products, we view that it is more appropriate to be assessed in the non-life risk module. In addition, we have a large amount of products that combine health and death coverage as a package. It is difficult to split the risks according to option 1 method and such split is inconsistent</p>

				<p>with the company's management approach.</p> <p>Moreover, referring to Q111 and Q113, we suggest including short-term accident/health insurance products in non-life type risk for measurement.</p>
Institut des Actuaire	France	Other	No	Option 2 because the source of the risk is clearly given which give less space for interpretation (easier modelling).
Allianz	Germany	Other	No	Option 2 is closer to how we look at the risks in health insurance so would in our view be the appropriate option.
GDV - Gesamtverband der Deutschen Versicherungswirtschaft	Germany	Other	No	Option 2 is more appropriate than Option 1. SLT health products should be subject to life risk inclusive of morbidity/disability risk, while NSLT health products should be subject to non-life risk. The risk factors of Option 1, which are applied at the level of current value, are not reasonable. Option 2 allows for a more detailed risk modelling at the level of cash flows. Moreover, Option 2 avoids segmentation problems between life business and SLT health business.
Munich Re	Germany	Other	No	A combination of Option 1 and Option 2 appears to be more appropriate. Whereas the creation of a separate health module as currently designed in Option 1 appears reasonable, the stress definition and calibration of the stress levels for long-term business from Option 2 seems to fit better. For short term business a simple premium and reserve risk approach should be adequate. Two additional risk submodules for lapse and catastrophe (terror & pandemic) risks should be added to complete the design (cf. also the Solvency II standard formula approach).
AIA Group	Hong Kong	Other	No	We do not support either approach as formulated. As stated above, we think the segmentation in Option 1 is inappropriate, although we agree with the approach of shocking claim costs rather than inception and recovery rates. We suggest taking the

				parts of each approach that are viable, namely the segmentation from Option 2 and the approach to shocks from Option 1.
International Actuarial Association	International	Other	No	<p>A mix of Option 1 and Option 2 seems to be appropriate.</p> <p>? - Take the definition of a separate Health Module from Option 1 and apply to short term business, subject to the comments made above</p> <p>? - Use the segmentation and stress levels for long term business from Option 2 - subject to the comments made above</p> <p>? - Add the short term business with a simple premium & reserve risk approach</p> <p>? - Add a lapse risk sub module</p> <p>? - Add a catastrophic sub module (Terror & Pandemic Risk) cf. Solvency II approach</p>
Dai-ichi Life Holdings, Inc.	Japan	Other	No	<p>·Option 1 is the most appropriate because we can evaluate the risks of life type medical products and non-life type medical products consistently.</p> <p>·In case that it is not feasible to unbundle between the life insurance risk and health insurance risk, a simplified method that does not require unbundling should be allowed.</p> <p>·In addition, Segmentation and stress levels in Option 1 are necessary to be further consideration (Please refer to Q111 and Q112).</p>
General Insurance Association of Japan	Japan	Other	No	<p>We support Option 2 because Option 1 has the following problematic issues:</p> <ul style="list-style-type: none"> - Option 1 fails to appropriately capture the components of the health risk such as level, trend, volatility included in health policy similar to life. - Non-life products such as workers compensation, accident insurance are written by non-life insurers, and their premiums are calculated and results and risks managed as in the same way as other non-life products. However, under Option 1, such products are treated differently from other non-life products. Option 1 would lead to inconsistency among non-life products and complexity in design. - Option 1 requires an independent category for health policies with regard to lapse

				risks, operational risks and CoC-MOCE calculation, which lead to complexity in design.
The Life Insurance Association of Japan	Japan	Other	No	<p>·We believe the IAIGs will be able to consistently capture all insurance risks related to the health business from both of life and non-life insurance using newly defined health module.</p> <p>·However, as for Option 1, many insurance products in Japan deemed to have health risk sold as a package as riders for death policies and annuities. Considering such product features, we believe risks related to mass lapse or expense ratio should be calculated in packaged policy form. We believe it is not appropriate to unbundle life risk component and health risk components included in the life insurance policy (please refer to the comment(s) on Question 113 above).</p> <p>·Additionally, an option not to unbundle those components should be allowed for IAIGs , if calculating health risk without unbundling the components of health risk and life risk included in life insurance policy would result in an appropriate measurement of risk.</p> <p>·As for Option 2, we are of the view that the product segments and the stress levels are not appropriate to adopt (please refer to the comment(s) on Questions 114 and 115 above).</p>
Great Eastern Holdings Ltd	Singapore	Other	No	Option 2. More aligned to existing capital methodologies, hence less onerous.
Swiss Re	Switzerland	Other	No	Swiss Re choose Option 2 due to its relative simplicity. However, ideally, IAIS would allow the use of regulatory approved internal models.
American Council of Life Insurers	United States	Other	No	<p>ACLI believes that an approach to morbidity/disability risk to adopt with ICS Version 1.0 and any future reiterations must be consistent with the following principles:</p> <p>- The design and calibration of the approach must reflect the appropriate risk profile of a wide range of diverse health products, business segments and companies that exist in the global insurance market, rather than a one-size-fit all approach based on one</p>

				<p>type of health product.</p> <p>- The design and calibration should be derived from, and reflect, historical data and real world experience rather than hypothetical scenarios.</p> <p>Option 1 and Option 2 could meet the above principles but need additional refinements to their current designs and calibrations. For a given IAIG, one option may be more appropriate than the other for practical reasons, which should be considered in future refinements in their designs and calibrations.</p>
Prudential Financial, Inc.	United States of America	Other	No	<p>Prudential strongly believes Option 2 (Morbidity/Disability) is superior to Option 1 (Health) and is the correct approach for assessing this risk type.</p> <p>We disagree with Option 1 which separates morbidity/disability risk from the other life risks (for life-type products). We believe such an approach is flawed in that it is dissociated from the risk. It has moved away from the actual way morbidity risk manifests itself, namely deviations in incidence and termination, to a factor based approach, which is subject to all the limitations of that type of approach. The result is arguably less risk sensitive and, especially with the multitude of factors, far less intuitive.</p> <p>Additionally, because the Health and Life modules are distinct, some Life risks are not captured for some products in the Health category. For example, LTC has meaningful levels of longevity and lapse level and trend risk, neither of which are accounted for under this approach.</p> <p>Finally, for risks that are captured within both the Health and Life modules, they are treated differently without justification. For example, expenses are not subject to the same stress across the two frameworks.</p>

MassMutual Financial Group	USA	Other	No	Changes introduced this year for Health Risks seem overly complex and we would prefer Option 2.
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Q121

Q121 Section 6.7.3.2 Should any revisions or modifications be made to the approach selected in Q120 to make it more appropriate for ICS Version 1.0? Please explain.

Organisation	Jurisdiction	Role	Confidential	Answer	Answer Comments
China Insurance Regulatory Commission	China	IAIS Member	No	No	
EIOPA	EIOPA	IAIS Member	No	Yes	Given the feedback received in previous Field Testing exercises, we anticipate that it may be necessary to differentiate the level of shocks across jurisdictions (for Option 2). However, this will need to be validated through the analysis of data which is being collected as part of the 2016 Field Testing exercise.
Financial Supervisory Service	Korea	IAIS Member	No	Yes	Yes, please refer to Q114.
National Association of Insurance Commissioners	USA	IAIS Member	No	Yes	Please see our response to Q112. The scaling factor could be refined based on stakeholder input and field-testing data.
Canadian Institute of Actuaries	Canada	Other	No	No	
CLHIA	Canada	Other	No	Yes	

Ping An Insurance (Group) Company of China Ltd.	China	Other	No	No	
Allianz	Germany	Other	No	No	
GDV - Gesamtverband der Deutschen Versicherungswirtschaft	Germany	Other	No	Yes	The recovery risk should be differentiated between short-term financial compensation products with very high recovery rates on the one hand and long-term financial compensation products with only low recovery rates on the other hand. For short-term financial compensation products the proposed risk factor for recovery risk seems to be too high. For these products it would be more appropriate to apply a risk factor to persistency rates instead of recovery rates.
Munich Re	Germany	Other	No	Yes	Cf. explanations for Q120.
AIA Group	Hong Kong	Other	No	Yes	See our response to Q112 and Q114
International Actuarial Association	International	Other	No	Yes	Explanations are given under Q120
Dai-ichi Life Holdings, Inc.	Japan	Other	No	Yes	<ul style="list-style-type: none"> In case that it is not feasible to unbundle between the life insurance risk and health insurance risk, a simplified method that does not require unbundling should be allowed.
General Insurance Association of Japan	Japan	Other	No	No	The approach should be validated and adjusted based on 2016 Field Testing data.
The Life Insurance Association of Japan	Japan	Other	No	Yes	<ul style="list-style-type: none"> We believe an option not to unbundle those components should be allowed for IAIGs if calculating health risk without unbundling components of health risk and life

					risk included in life insurance policy would result in an appropriate measurement of risk.
Great Eastern Holdings Ltd	Singapore	Other	No	No	NA
Association of British Insurers	United Kingdom	Other	No	Yes	Both options have material flaws and should be more risk-oriented, rather than product-oriented, whilst fully recognising diversification.
MassMutual Financial Group	USA	Other	No	No	

Q122

Q122 Section 6.7.4 Are there any further comments on Health or Morbidity/Disability risk that the IAIS should consider in the development of ICS Version 1.0? If “yes”, please explain with sufficient detail and rationale.

Organisation	Jurisdiction	Role	Confidential	Answer	Answer Comments
China Insurance Regulatory Commission	China	IAIS Member	No	No	
Financial Supervisory Service	Korea	IAIS Member	No	Yes	In Korea, most of the products are either not or limitedly applicable for the recovery rate. Hence, it would be better explaining which types of products should be incorporated with recovery rate assumption.
National Association of Insurance Commissioners	USA	IAIS Member	No	Yes	The IAIS approach should be stakeholder input and field-testing data dependent. This will help refine the scaling factor in Option 1 and confirm that it is the approach to be employed for Health /Disability risk.
Ageas	Belgium	Other	No	Yes	The inflation risk is not explicitly reflected in the health risk module for which we believe there might be an underestimation of the capital charge.
Canadian Institute of Actuaries	Canada	Other	No	No	
Ping An Insurance (Group) Company of China Ltd.	China	Other	No	No	

Insurance Europe	Europe	Other	No	Yes	The calibration of the non-life underwriting risk section should be based on an appropriate dataset and not merely on the data gathered by the field tests. In recent years the IAIS has gathered data by means of a “data collection” but that was very limited and not related to the objective of calibration of for example non-life underwriting risk. Also the correlation suggested with other risk types should be revisited, in order to reflect the typical characteristics of the various lines of business.
Allianz	Germany	Other	No	No	
GDV - Gesamtverband der Deutschen Versicherungswirtschaft	Germany	Other	No	Yes	The proposed ICS methodology is not appropriate for German long-term health insurance business. The risk charges based on the pure amount of future expected claims and expenses are utterly high. In addition, it is questionable whether the proposed risk charge can at all be considered consistent with the desired target risk calibration of the ICS standard - e.g. VaR 99.5% over one year period. In order to limit the extremely high risk charges for the German long-term health business and hence arrive at a more realistic net risk charge, appropriate future management actions need to be considered resp. allowed for.
Munich Re	Germany	Other	No	Yes	The proposed ICS methodology is not appropriate for German long-term health insurance business. The risk charges based on the pure amount of future expected claims and expenses are utterly high. In addition, it is questionable whether the proposed risk charge can at all be considered consistent with the desired target risk calibration of the ICS standard - e.g. VaR 99.5% over one year period. In order to limit the extremely high risk charges for the German long-term health business and hence arrive at a more realistic net risk charge, appropriate future management actions need to be considered resp. allowed for.
AIA Group	Hong Kong	Other	No	No	

International Actuarial Association	International	Other	No	No	
General Insurance Association of Japan	Japan	Other	No	Yes	Diversification between jurisdictions should be considered in addition to stress levels.
Great Eastern Holdings Ltd	Singapore	Other	No	No	
Swiss Re	Switzerland	Other	No	No	
Bupa	UK	Other	No	Yes	As we have stated in our response to question 112, the basis tested in the 2016 Field Testing produces a reasonable result. However, this is fortuitous. By focusing on future claims on in-force contracts, the basis effectively ignores the risk associated with incurred claims. We believe that, for short term business, the structure used in the 2015 Field Testing which based the calculation on premiums and reserves was more appropriate. However, it should be calibrated to recognise the significant amounts of diversification that large global insurers will enjoy and produce a result similar to that of the 21% stress in the 2016 Field Testing rather than the calibration used in the 2015 Field Testing.
Association of British Insurers	United Kingdom	Other	No	Yes	<p>A single standardised approach is unlikely to be flexible enough to bring sufficient sophistication and flexibility to cover the spectrum of risk profiles of IAIGs, and could result in inaccurate capital requirements compared to companies' true risk profiles. We propose that the IAIS consider allowing for use of firms' own internal models as long as the underlying principles are in line with IAIS proposals.</p> <p>The proposed segmentation under each of the options one and two both have material flaws. The chief of these is that the segmentation is not sufficiently risk-oriented, choosing rather to be product-oriented and ignoring diversification. Although most products sold by insurers are covered under the current definitions, there are concerns</p>

				<p>over the robustness of these definitions, i.e. as product innovation continues to advance, there is a risk that new products will fall out of these standard definitions, making it increasingly difficult reconcile innovative products with ICS prescriptions.</p> <p>The proposed health segmentation under option 1 is inappropriate for the following reasons:</p> <p>(a) The method makes no allowance for the different business types and product features outside of the definitions proposed e.g., products which offer both a lump sum when a defined health event occurs (like the diagnosis of cancer) and medical expenses. It would be complex and maybe impossible to split these accurately into the correct risk categories;</p> <p>(b) The categories could result in some products falling into several categories. Allocating a product between several categories could be difficult and would be challenging to separate. There is a likelihood that such changes would present operational changes, including an increased risk of double counting of certain risks.</p> <p>The proposed health segmentation under option 2 is inappropriate for the following additional reasons:</p> <p>(a) Although this method does allow for different business types, the method does not distinguish the differences in the inherent risks within products e.g., short/long-term product features. The risks would not be sufficiently homogeneous due to not splitting long and short-term product features, which could lead to a mis-estimation of the risk profile;</p> <p>(b) The basis of the proposed inflation rate is unclear and would require further justification to allow firms to determine its appropriateness.</p> <p>In relation to volatility of health claims varying by geographical location, the ABI's initial thinking is that this would vary geographically due to a variety of factors. Chief of these, there are different levels of government programmes to subsidise health costs, and regulatory intervention with health insurance policies. This will have varying</p>
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					impacts on volatility of claims, depending on the level of subsidy, legislation and local attitudes towards insurance products.
MetLife	United States	Other	No	Yes	<p>The default (Option 1 – Health Risk) approach for calculating Health Risk is inappropriately complex. The Alternative Approach is more reasonable for future testing and development.</p> <p>Applying the Health Risk shock, currently called the alternative approach, with an incidence and recovery rate stresses, is more in line and a more appropriate modelling technique than the 2016 Field Testing default approach to be used going forward in the IAIS calculations. We recommend using this Health risk alternative approach going forward in IAIS testing, while providing specific shock levels that vary based on product category.</p>
MassMutual Financial Group	USA	Other	No	No	

End of Section 6.7