Annex

Key Observations from the First ORSA Reports

The Insurance Authority ("IA") issued the Guideline on Enterprise Risk Management ("GL21") which took effect on 1 January 2020. This is the Pillar 2 requirement which is implemented ahead of the statutory capital requirement under the Risk-based Capital ("RBC") Regime which is targeted to be implemented in 2024. We received a total of 120 Own Risk and Solvency Assessment ("ORSA") Reports prepared for the first time under the GL21.

We consider that insurers generally made a good advancement in implementing their risk management governance and ORSA processes. It is vital that insurers should continue to enhance and integrate the enterprise risk management ("ERM") and ORSA framework into their risk culture, instead of a compliance exercise. We recognize ORSA as an ongoing improvement process and would like to share our observations on key areas of ORSA Reports. Our observations are by no means exhaustive but as a reference of best practices for insurers to improve the quality in the ORSA processes and reporting in forthcoming years. Insurers are expected to assess on their own circumstances as appropriate when considering to incorporate certain suggestions into their framework.

1. Board Involvement

- 1.1 Insurers generally provided sign-off evidence from the Board or Risk Committee level. We expect insurers are able to demonstrate that the Board has engaged in steering thorough deliberations of the ORSA outcomes for strategic and other business decision-making. It may include a summary of key conclusions reached and the actions taken or planned that should be provided in the ORSA Report. The IA may also, on a need basis, request for the relevant minutes demonstrating the Board's deliberations on main outcomes of the ORSA as mentioned in paragraph 10.2 of GL21.
- 1.2 It was observed that some general insurers included attestation by an external actuarial consultant, for example, regarding the level of Target Capital. Notwithstanding that external support may be sought on certain technical estimations or projections, insurers are reminded that the ownership of Target Capital setting remains with the Board. The Board should be ultimately responsible for the financial and capital adequacy conditions of the insurer.
- 1.3 A few insurers expressed that they had not yet incorporated the ORSA results for business decision, but planned for this when the RBC requirement comes into force. On this, insurers are reminded to take a forward-looking view on capital management under the ORSA process. Going forward, the IA may engage the Board to understand how the ORSA's results have been taken for the strategic planning and other business decision-making. Ultimately, insurers should be able to demonstrate how the ERM and ORSA framework would be embedded into different business cycles and decisions.

2. Communication with Stakeholders

- 2.1 Insurers generally provided an executive summary in their ORSA Reports which presented summarized outcomes of ORSA, facilitating readers to understand the details in the whole report. The executive summary should be concise and comprehensive for communicating key findings and action plans to the Board and other users of the report. A well-written executive summary should allow readers to become acquainted with information such as risk profile, solvency and perhaps liquidity positions (current and forward-looking) and linkage with business strategy and material actions taken over the period. It should not be too lengthy and should provide focused information for readers. However, it was observed that some insurers provided only statement of compliance with GL21. We suggest improvement should be made to the content of executive summary.
- 2.2 We found some insurers provided good executive summary in their ORSA Reports. The executive summary normally starts with a risk assessment summary of key risks linked with business strategy, followed by a summary on capital adequacy and perhaps liquidity positions, while highlighting key findings to draw the Board's attention. Some insurers also provided key information on any material risk mitigation actions taken over the period which demonstrates how the management has integrated risk management into their day-to-day activities. Taking the opportunity, insurers are reminded to include highlights of the year-on-year key changes in the next ORSA Report. It should include, but not limited to, the changes in the risk profile and risk appetite, key drivers of the change in the financial and capital adequacy positions, etc.

3. Breadth and Depth in Risk Identification and Risk Assessment

- 3.1 Insurers commonly conducted quantitative risk assessment using Pillar 1 risk modules only. Some insurers provided detailed analysis on defined risks, for example, linked with product features, thus giving more in-depth understanding of risk drivers. Meanwhile, some simply repeated Pillar 1 risk modules which did not demonstrate depth of risk consideration.
- 3.2 Some insurers also gave detailed explanations on the methodologies used to identify all reasonably foreseeable and relevant material risks, for example, via tools of risk library, and elaborations on material risks. Some insurers exhibited the risk identification results, for example, in the form of a risk register with elaborations on the risk owners responsible for identifying, assessing, monitoring and reporting the relevant material risks.
- 3.3 It was observed that most insurers did not assess on emerging risks, such as climate risk. We would encourage insurers to start conducting assessment on any potential impact on emerging risks. In respect of climate risk, we plan to provide guidance on climate risk assessment for the industry in 2022.

4. Risk Appetite Statement and Risk Limits

4.1 It was observed that nearly all insurers made a risk appetite statement ("RAS"), with different designs of RAS and risk limits among the insurers. Some insurers started with a high-level overarching RAS, that encompassed their business strategy and perception of risk. Most insurers defined risk specific RAS for material risks, and translated them into risk limits for operational or monitoring purposes. Some insurers also well documented any breaches of the risk limits during the period, and remedial actions taken thereon. We gather a few examples of designs or approaches commonly observed from the industry below.

RAS and risk limits for capital adequacy and other significant risks

4.2 Some insurers provided RAS and risk limits for various risk types. However, it is not clear from some of the ORSA Reports as to whether the RAS and risk limits have been covered for all significant risks as identified in other parts of the ORSA. In addition, some insurers did not define RAS and limits explicitly in respect of capital adequacy which is an inextricable part of the ORSA. Coincidentally, these insurers generally did not have well-defined Target Capital as elaborated in section 5. As a reminder, insurers should define RAS and risk limits for capital adequacy and for all material risks identified from the risk identification process.

Clarity of RAS and risk limits

4.3 Some insurers provided RAS and risk limits that were found too generic without qualitative or quantitative interpretation. For example, some insurers used phrases such as "maintain sustainable level of capital" and "maintain a sound capital position" for describing RAS and risk limits for capital adequacy. Naturally, these insurers also did not link up the risk appetite to the Target Capital level.

Localization of RAS

- 4.4 Insurers operating in Hong Kong being part of larger multinational groups, whether in the form of local incorporated entities or branches, should implement localized RAS appropriate for the Hong Kong operations. Some insurers adopted the RAS set at group level, which would drive high risk tolerance and thus not effective in identifying and monitoring risk at Hong Kong operations level. While the RAS should be proportionate to the scale and complexity of the insurers, insurers are expected to consider appropriate RAS of material risks for the Hong Kong operations.
- 4.5 Clearly defined RAS and risk limits would enable the Board and Senior Management to monitor and manage various types of risks to which it is exposed within its risk capacity. As part of the ERM framework, insurers should ensure that effective feedback mechanisms are in place for communication of risk matters across different operating units of the

organization. Such communication should enable the Board and the Senior Management to take effective and informed decisions on appropriate risk appetite in response to the changing risk profiles and business environment.

5. Target Capital

- 5.1 It was observed that insurers had different interpretations of Target Capital. Target Capital should be the capital that an insurer intends to maintain, having due considerations outlined in paragraphs 6.2.3 to 6.2.5 of GL21. Firstly, the Target Capital should be clearly linked to the RAS on capital adequacy, for example, ensuring that the likelihood of breaching the regulatory capital requirements is below the tolerance level specified in risk appetite. Secondly, where there are material risks not covered or not adequately covered by regulatory capital requirements, considerations should be taken to quantify those risks in the Target Capital. Thirdly, IA expects insurers to explain how the Target Capital level is determined which should be at a level where they can meet capital needs based on the full range of risks to which it is exposed.
- 5.2 A few insurers did not calibrate their Target Capital, for reason that the RBC capital requirements have not yet come into force. Whilst the RBC framework has not yet come into force, as mentioned in paragraph 1.3, the ORSA should be made in a forward-looking view and therefore insurers are strongly encouraged to form a view on Target Capital under RBC requirements. Below are a few examples of interpretations or approaches commonly adopted by insurers.

Clear linkages between Target Capital and other areas of ORSA

5.3 Some insurers demonstrated clear linkages between Target Capital and other parts of the ORSA, particularly risk appetite, own view of capital adequacy and management actions and capital planning. These insurers generally have well-defined risk appetite as mentioned in section 4 and defined the level or range of Target Capital corresponding to the risk appetite. For example, some insurers derived Target Capital associated with a probability of adequacy that the insurers continued to meet the PCR by stress testing or sensitivity testing, while some associated with a certain defined level above the desired credit rating or other risk measures.

Target Capital defined without proper justification

5.4 Several insurers set a Target Capital based on an arbitrary amount or percentage above the regulatory capital requirements with no explanations provided on the derivation of such amount or percentage. There should be adequate justification of the Target Capital in light of the risks the insurer is exposed to and the risk appetite. We expect the Board of these insurers should consider the risk appetite on capital adequacy, and then translate this to an

appropriate Target Capital with due regard to the aforementioned considerations with the rationale explained in the ORSA Report.

Appropriateness of Target Capital

- 5.5 Some insurers set their Target Capital equal to or only marginally above the regulatory capital level, so it implies the capital adequacy positions of these insurers should be more susceptible to falling below regulatory capital, which would result in strong supervisory intervention actions. Insurers should consider their risk appetite taking into account the likelihood of breach of the regulatory capital requirements.
- 5.6 Some insurers defined a risk appetite in relation to capital adequacy on the one hand but on the other hand set a Target Capital which was inconsistent to it. For example, an insurer defined its risk appetite as "a prudent approach to capital" or "No appetite for breaches" but set the Target Capital to be only marginally above the regulatory capital requirements. Insurers should ensure consistency between risk appetite on solvency, Target Capital, and the capital level maintained.

Capital planning and management actions

- 5.7 Some insurers expressed Target Capital in a range of amounts or solvency ratios to assist management in capital planning. These insurers set three to five capital bandings ranging from regulatory capital requirements to above Target Capital, where different possible management actions were laid out for each capital banding. In particular, management actions had been clearly defined for any breaches, demonstrating thorough consideration had been taken to ensure maintaining capital at the target level. The insurers also defined the escalation level for each capital banding (e.g. Executive Committee or Board).
- 5.8 Some insurers did not define management actions where capital fell below the Target Capital, and in some cases set the threshold at which they would implement management actions to be lower than the Target Capital. Insurers should align the Target Capital with the level they intend to maintain, utilising management actions to return capital to target level.

6 Stress and Scenario Testing ("SST")

6.1 Most of the insurers carried out the IA's Prescribed Scenarios and insurer's own scenarios. These SST would allow the IA to have an overview of insurers' capital adequacy positions and thus understand the resilience on an industry-wide basis under the Prescribed Scenarios. Moreover, it would allow the IA to understand the management actions that the insurers plan to take under plausible severe scenarios which would help the insurers and IA get prepared before such scenarios happen. Meanwhile, own scenarios designed by individual insurers would provide views to the insurers and IA of scenarios that should be reflective

to the characteristics of the insurers' risk profiles. We highlight a few examples of the approaches or results commonly observed from the SST exercise below.

Prescribed Scenarios

- 6.2 For long term business, we noted that a few insurers did not perform certain Prescribed Scenarios on the reason that those scenarios did not represent significant risks to them. It is advised that all Prescribed Scenarios serve for IA's understanding on the resilience of the industry at the Prescribed Scenarios. It is expected that insurers should conduct these stress testing unless they can justify that the impact under such scenario is close to nil.¹
- 6.3 For general business, GI Prescribed Scenarios 1 and 3 were generally carried out by those insurers as required. Many insurers did not recalculate the regulatory capital requirements after the market risk shock, which would generally be considered acceptable as it was a conservative simplification. Nonetheless, insurers should make it clear in the ORSA Reports that simplifications have been taken, and to comment on why it is not considered material.
- 6.4 For GI Prescribed Scenario 2, many general insurers only considered events with associated scenarios in the prescribed capital requirements. The most common event assumed under GI Prescribed Scenario 2 was a natural catastrophe event. Whilst a natural catastrophe may be appropriate for GI Prescribed Scenario 2 if it has the largest financial impact, it is important for insurers to demonstrate that they had considered all insurance risk exposures (e.g. across lines of business and those risks listed in the Annex of the scenario specifications²). Further, where natural catastrophe is a key risk, insurers are expected to consider a range of natural catastrophe scenarios. A good example was where the insurer explored events that impact each line of business or multiple lines of business, covering a wide range of events and selected the event with the largest financial impact for GI Prescribed Scenario 2. Our observations on justification of Own Scenarios included in the next subsection are also applicable to GI Prescribed Scenario 2.

Own Scenarios

Justification of scenarios

6.5 Both long term and general insurers are required to give thorough consideration of their own scenarios. Most insurers included some high-level reasoning for their choice of own scenarios, for example, to test certain risk factors that have not been included in the Prescribed Scenarios or to consider a scenario relating to their largest risk exposure.

¹ Please also note that IA has revisited the Prescribed Scenarios for long term business in 2021. Details of LT Prescribed Scenario can be referred to https://www.ia.org.hk/en/legislative_framework/files/GL21_LT_SST_20211224.pdf

² Details of GI Prescribed Scenarios can be referred to

https://ia.org.hk/en/legislative framework/files/GL21 GI SST 20200113.pdf

However, only some of them demonstrated a detailed thoughtful process for the selection of scenarios.

- A good example was taken from an insurer which selected a range of scenarios covering all risk exposures identified in the ORSA, followed by explaining the final scenarios selected and determination of their severity level. Insurers are reminded that the whole process including the design of the own scenarios should be consistent with the material risks as identified in the risk identification process.
- 6.7 Some insurers carried out own scenarios at group level and/or on a different basis (e.g. economic capital). If an insurer would like to utilize such results for own scenarios SST for its Hong Kong operations under RBC basis, justification on the appropriateness should be provided.

Number of scenarios

- 6.8 Most insurers carried out own scenarios but, many carried out only one scenario. We also observed a few insurers missed out their own scenarios without providing sound justification.
- One of the key objectives for own scenarios is to allow insurers to think through the stresses or scenarios that are not covered by Prescribed Scenarios and perhaps risks that are not covered under the structure of regulatory capital requirements. The number of own scenarios tested is not expected to be the same for all insurers. When considering the number of own scenarios, insurers may consider the scale and complexity of its business, for example, the potential for accumulation of risks or exposure to volatile lines of business or regions. Nevertheless, it is expected that insurers should have awareness of all risk exposures and, over time, assess the areas of greatest sensitivity. For insurers that only carried out Prescribed Scenarios, they should assess the suitability of the Prescribed Scenarios for their risk profiles, with proper thought process documented in the ORSA Report (as explained in above subsection).

Severity of scenarios

- 6.10 Most insurers did not explicitly state the severity level of their own scenarios. For those scenarios with severity description, some of them would refer to historical experience or the regulatory capital requirements (e.g. a 1-in-30 market shock calibrated based on historical data).
- 6.11 Insurers could provide more clarity by describing the level of severity of their own scenarios and methodology for setting the stress parameters. The scenarios should be sufficiently severe but plausible to provide a meaningful stressed outcome for management to understand the insurer's resilience under stressed conditions. The level of severity set

should be proportionate with the purpose of the stress scenario, such as, high severity would be expected for business failure analysis purposes.

Selection of own scenarios for general business

6.12 Besides the Prescribed Scenarios, insurers reported other insurance loss events as additional scenarios, for example, relating to the largest risk exposure which helped to demonstrate assessment of a wider range of risks. Examples included a fire or accident impacting the largest risk exposure, reinsurer default, pandemic or cyber event. Some insurers also performed SST on the overall loss ratio or explored additional market risk scenarios.

Selection of own scenarios for long term business

- 6.13 Long term insurers were commonly found to apply the Prescribed Scenarios or Actuarial Guidance Note 7 ("AGN7") compound scenarios G to K for their choice of own scenarios.
- 6.14 It is important for insurers to acknowledge that Prescribed Scenarios set by IA are not necessarily designed to fit for their specific risk profiles, particularly for insurance risks which are highly insurer-specific.
- 6.15 Market risk factors were commonly selected for own scenarios. The majority of the long term insurers selected at least one market risk factor in their own scenarios. A number of insurers conducted their own scenarios that separately covered both interest rate up scenario and interest rate down scenario, making reference to AGN7 scenarios H and I. It was also observed that insurers commonly constructed combined market risk scenarios covering credit spread risk and other market risk factors. Other deployed adverse market scenarios included flat economic, prolonged stress on growth asset, credit crunch, bond default, etc.
- 6.16 For non-market risk factors, in view of the current COVID-19 situation, insurers commonly included a pandemic scenario with reference to AGN7 scenario G. Sensitivity of new business sales was also commonly tested. A few insurers tested sales mix different from those assumed in business plan. Other deployed adverse non-market scenarios included anti-selective lapse, default of reinsurer, operational risk event, cyber event, etc.
- 6.17 It was observed that a few insurers did not perform stress tests on certain key risks identified in the risk identification process. It is expected that, during the own scenario selection process, insurers should consider risks which are specific to their own business profiles and are not adequately covered by the Prescribed Scenarios. Significant risks identified in the risk identification process should be covered in the stress scenarios, unless with proper justification.

Liquidity Stress Scenarios

- 6.18 For the assessment of liquidity positions and liquidity risk management purposes, long term insurers were commonly observed to have devised their own liquidity measures and to be tested under various liquidity stress scenarios. Only a few general insurers considered liquidity impact in their stress scenarios.
- 6.19 Given that liquidity risk is not covered under regulatory capital requirement, insurers are recommended to assess their liquidity risk, set quantitative targets or limits, and consider liquidity stress scenarios or include liquidity considerations within the Prescribed Scenarios where appropriate in their ORSA unless suitable justification is provided. Liquidity stress events could be happened under various market or insurance stress events, combinations of both, or some other qualitative factors. Insurers should identify the situations that would adversely affect their cash inflows, cash outflows and hence the overall liquidity positions over different time horizons (e.g. one month, three months, one year, etc.), based on an insurer's specifics such as product mix and investment profiles.

Reverse Stress Testing

- 6.20 Reverse stress testing could be used as one of the means for the identification of scenarios for business failure analysis purposes. To serve this purpose, the scenarios should be severe enough such that the business reaches the point of non-viability (including but not limited to the circumstance that insurer's solvency ratio under such scenarios would fall below regulatory capital requirement) before the application of remedial actions.
- 6.21 The Prescribed Scenarios may be used for this purpose where they cause breaches of the regulatory capital. However, in cases where the solvency ratio is still well-above the regulatory capital requirement under the prescribed stresses, additional scenarios may be required to support business failure analysis and determine management actions.

Management Actions under SST

6.22 Most insurers described management actions that would be taken under stressed scenarios, to manage or mitigate its risks. However, the descriptions of management actions were found to be very brief and often a generic list of actions, rather than a specific list of planned actions for the specific stress scenario. Insurers should also assess and elaborate if the proposed management actions are objective, realistic, achievable, adequate and legal. Detailed elaborations on the management actions should be provided, such as the impact of each individual action, the order the actions would be taken and the necessary timing required of execution, and any other factors that would affect the viability of the actions. A good example was where the insurer provided detailed information to justify if the amount of expected capital injection would be achievable, and the sources of the capital.

Methodology and Assumptions for Capital Projection under SST <u>Methodology</u>

- 6.23 It was observed that most insurers had described the RBC methodology. However, such may not be necessary or informative enough if it is solely describing RBC technical specifications. Instead, it is expected that insurers could provide more disclosures on material deviations (if any) from the standard requirements or any selection of approaches where applicable. For long term insurers, this may include matching adjustment simplification approach. For general insurers, this may include natural catastrophe method selection or assumptions used for the application of reinsurance.
- 6.24 In most ORSA Reports, a description of the capital projection methodology was not included. It is expected sufficient description to be included for reader's understanding. It was observed that most insurers did not document clearly whether any simplifications were adopted in the ORSA projection.

Assumptions

- 6.25 Most insurers did not disclose assumptions adopted under SST scenarios, apart from the parameters specified in the Prescribed Scenarios. Only a few insurers clearly described the assumptions under stress such as assumption change due to management actions and ripple effects caused by the prescribed shocks.
- 6.26 A brief disclosure and justification for reasonableness of assumptions for base projection and any changes under stressed scenarios, including sales plan, planned capital movements, key economic/non-economic assumptions, would be useful for readers to obtain a complete picture of the scenarios tested. In addition, most insurers disclosed only their sales plan but not, for instance, dividend or capital injection plans. On a related note, for ongoing annual ORSA, it is encouraged that insurers assess whether actual experience has deviated significantly from prior years' assumptions and consider reassessing and updating SST scenarios as part of their on-going review process.

Results Disclosure

- 6.27 Results on regulatory capital requirements, eligible capital and solvency ratio (including target solvency ratio as appropriate) at valuation date and over projection period had been provided by most insurers. Certain insurers did not provide the instantaneous impact as at the valuation date under stressed scenarios. Insurers are reminded to assess the instantaneous impact given that some shocks under Prescribed Scenarios are applied instantaneously.
- 6.28 Certain insurers provided commentary explaining the impact for each stress scenario. A few insurers also included further breakdown by asset and liability type or breakdown by risk type in their ORSA Reports. It is expected that commentary on results should be

provided for each scenario to facilitate the reader's understanding on the impacts, whereas further breakdown may be provided if considered to be helpful for illustration purposes.

Sign-off of SST (applicable to long term and composite insurers only)

6.29 Insurers are reminded to include the opinion and sign-off of appointed actuary ("AA") on SST. Also, different from the current Dynamic Solvency Testing ("DST") requirement where the AA is required to attest the "satisfactory financial condition" of the insurer throughout the projection period, the purpose of the SST sign-off is to have the AA's attestation on the appropriateness of assumptions and methodology used (including any proxy approach taken), reasonableness of results and viability of management actions identified. For the avoidance of doubt, the AA's sign-off does not affect the Board's ultimate responsibility on the entire ORSA Report. The Board should be ultimately responsible for the financial and capital adequacy conditions of the insurer.

7 Recovery Plan

- 7.1 Some insurers provided the recovery plan and the assessments of the recovery options in the ORSA Reports. For some of the recovery plans provided, the assessments appeared to be primitive and without a menu of recovery options. We also found certain good recovery plan having regard to the assessments on feasibility and credibility including timeliness of the recovery options, as well as the personnel responsible for maintaining and execution of the recovery options.
- 7.2 For the purpose of paragraph 9.5(n) of GL21, instead of interpreting as optional requirement, the IA expects insurers to assess the appropriateness in developing and maintaining a recovery plan having regard to the nature, scale and complexity of risks associated with the operations. A credible and effective recovery plan is particularly important for insurers which are prone to solvency and liquidity distress. Having said that, a smaller insurer with relatively fewer business lines and relatively less complex operations may wish to adopt a simpler recovery plan. The IA may request insurers to provide recovery plans for restoring financial strength and thus for ultimate going concern viability in the course of ongoing supervision.

8 Independent Review of the effectiveness of ORSA

8.1 It is naturally that some of the insurers have not yet started the independent review of the effectiveness of the ORSA, whereas some of the insurers stated that they have conducted independent review without detailing the review results. We understand that it may not be efficient to have the independent review in the first year of ORSA Reports submission since insurers have been still working on and improving the new ERM and ORSA processes.

8.2 As stipulated in paragraph 8.2.1 of GL21, the IA would expect insurers to establish policy on the independent review of the effectiveness of ORSA, for example, covering the frequency and scope. In establishing the independent review policy, the insurers should consider the required knowledge and experience as suitable to carry out the independent review, regardless of whether the independent review is carried out by internal or external party, in order to achieve the objectives of independent review. Insurers are reminded that the review results should be incorporated in the ORSA Report with details on the necessary and timely remedial actions or improvements, if any.

9 Scope of entities

- 9.1 As stipulated in paragraphs 9.1.1 and 9.1.2 of GL21, insurers, including *de facto* Hong Kong insurers³, should submit ORSA Reports which cover the entire company with separate specifics to cover the Hong Kong operations (e.g. Hong Kong branch).
- 9.2 It was observed that, a few insurers missed out certain operations of the company from the scope of the ORSA Reports. Certain insurers also did not explicitly describe whether the specifics for the Hong Kong operations have included or excluded other jurisdictions' business with materiality consideration. As a reminder, GL21 also states that the ORSA Reports should cover material risk, if any, arising from non-insurance entities (regulated or unregulated) and partly-owned entities controlled by the insurer. IA would expect insurers to justify the rationale for entities or operations which are excluded from the ORSA assessment.

³ It refers to insurers incorporated or formed outside Hong Kong with majority of their business carried on in or from Hong Kong.