

**Members and Observers Comments on IAIS Draft Paper
The Use of Internal Models by Insurers**

Name	Paragraph reference	Comment ¹	Resolution
GNAIE	General	<p>GNAIE agrees in principle that the use of internal models should form an important part of the development of a common framework for insurance supervision and that guidance for supervisors in conducting assessments of such models is critical part of that framework. However, aspects of this paper refer to and use as a foundation principles articulated in previous IAIS papers such as the “Structure Paper” and “Liabilities Papers” with which we do not agree or have previously articulated concerns.</p> <p>As noted in previous comments to the IAIS we believe the total balance sheet approach (Para 4.2), in a solvency context, should focus on ensuring the assets are sufficient to cover the risk exposures of the insurer’s portfolio and meet policy holder obligations. Regardless of how the definition of technical provisions and capital, the solvency regime should be able to arrive at the same conclusions about the financial health of an insurer. In addition we are not clear that a common reference framework (Para 3.7) for the determination of insurance liabilities either can be reliably determined that will achieve the necessary comparability and consistency. In particular in this paper the IAIS indicates (Para 5.8) that the calibration test should involve the "valuation of assets and liabilities to a market consistent basis, which should allow a degree of consistency and comparison". We do not believe that the current proposed accounting standards or those indicated in certain other proposed solvency regimes which attempt to address the issue of market consistency will achieve either of the objectives of comparability or consistency.</p>	

GNAIE	General	There are numerous references throughout this paper to a standard regulatory model with the implication that such a model can be usefully compared to the internal models under discussion. We recommend that these discussions be deleted until there is a useful discussion of the requirements for such a “standard regulatory model”. The current assumption of comparability of the “standard model” with all varieties of internal models is not sustainable and leads to unusable regulatory standards.	
GNAIE	General	As with the ERM paper, this paper mingles descriptive and educational materials with prescriptive regulatory materials. Again, we recommend that the descriptive material be separated into an appendix so that it does not inadvertently become prescriptive, and so that the prescriptive material can be understood more clearly and is less likely to become outmoded as the state of the art for internal models advances.	
GNAIE	1.8	We recommend deletion of “all risks” as no actual model can consider all risks. Substitute “various risks”.	
GNAIE	1.10	We recommend deletion of the requirement to “submit” their internal models for regulatory approval. If regulatory approval is required, it will be largely “on premises”. The models being discussed will often use proprietary software tools and as well as incorporate extremely valuable proprietary and trade secret insurer information. Requiring such models to leave the premises can only be done if the regulators (1) can actually make use of the model on their premises and (2) can provide assurance of their intent and ability to protect the insurer’s proprietary and trade secret confidential information.	
GNAIE	2.5	We disagree that supervisors should have the ability to insist on the use of internal models in cases where they consider that the insurers risk profile differs considerably from the standard approach (Para 2.5). While we agree that an environment that allows for the “cherry picking” of regulatory capital requirements is not optimal. This concept would appear to be contrary to the principles laid out in the remainder of the document indicating that any approved internal model would necessarily be used (“use test”) by an insurer for purposes of risk management and capital allocation.	
GNAIE	3.3	As discussed for the ERM paper, please delete the incorrect use of the term “replicating portfolio”.	
GNAIE	3.7	We suggest deletion of the discussion of a “common reference framework” for valuing insurance liabilities. Valuing insurance liabilities is an accounting issue while this paper is focused on ERM models. In addition, “common reference framework” suggests a “mark to model” approach that will not be appropriate for evaluating a specific insurer’s obligations. Finally, the paragraph suggests that the framework would be developed by insurers, and then that it would be developed by the IAIS.	
GNAIE	3.8	We suggest deletion of the requirement that supervisors be able to use insurers’ internal models. Internal models as described in this paper will be integrated into the daily operations of insurers at very granular levels of product design and underwriting evaluation. It is appropriate that supervisors be able to understand how an insurer thinks about and deals with risk, but that does not require regulators to be using all insurer systems that affect the internal modelling effort.	
GNAIE	4.11	We suggest that this paragraph exceeds the scope of the paper as defined, since the ERM paper only deals with individual insurers.	

		The issues of diversification and capital fungibility are important issues, but their discussion does not belong in an “internal models” paper.	
GNAIE	4.14-4.16	The paper makes reference to specific confidence levels and time horizons (Para 4.14 - 4.16) which we believe is unnecessary.	
GNAIE	Key Feature 6	We believe that Key Feature 6 is appropriately inconclusive and allows for supervisory judgement within the framework.	
GNAIE	4.18	We recommend deletion of this paragraph as it recommends an inappropriate mixing of solvency and competitive concerns. Solvency models are used to understand the risks an insurer takes on, not to allow the regulator to handicap competitors in the marketplace.	
GNAIE	5.5 – 5.8	We recommend additional discussion and specification of the “statistical quality test” and the “calibration test”. In particular, it is not clear what is to be compared to what in these tests as applied to insurance liabilities. Insurers may make reasonable approximations of various probability distributions used to determine estimates of the risks they are taking on, but there are inherent limits on the ability to test these assumed distributions that are not recognized in this discussion.	
GNAIE	5.8	The last sentence of paragraph 5.8 implies that the any capital requirement determined through the use of an internal model would be subject to comparison to the results of the standard model as an indication of prudence. This statement appears to contradict the basic principle that an internal model that is validated by a supervisor under this framework is a better indicator of risk exposure and more useful in determining appropriate levels of statutory capital. We believe that it should be made clear that an appropriate internal model would replace the standard model and not simply enhance it.	

GNAIE	Section 6	We recommend reconsideration of the requirement of prior supervisory approval of internal models. The requirement is contradictory to the “use test” enumerated in Section 5. A useful management tool must be upgraded and improved on a real-time basis, and there will be no time available for waiting for prior supervisory approval. If supervisors wish to review models being actually used by management, it will be necessary for them to jump on the running horse in the middle of the race. Note that this concept is recognized to some extent in Section 6.3. The terms review or period approval might be more appropriate than prior approval.	
GNAIE	6.12	We recommend this section be revised to recognize insurers’ justified need to protect proprietary and trade secret information from inappropriately mandated disclosure.	

GNAIE	6.17	While “partial models” and “transitional periods” both are important issues, the discussion here of both is in the context of the undefined “standard model” as discussed above. Rigorous discussion of these issues requires an ability to know what the internal model is being compared to. Substantial approval requirements are being placed on “partial models” when it is unclear that any reasonable “standard model” exists at all. Regulation should not prevent “something” from being used when the alternative is “nothing”.	
GNAIE	6.20	This and the following sections are beyond the scope of an “Internal Models” paper. The important issues of Group Supervision and diversification benefits should be treated as framework issues, and then any issues arising from those discussions that affect internal modelling should be discussed in this paper. No reasonable person would expect they had to read an “internal models” paper to find out the IAIS’s thoughts on Group Supervision.	