The Actuarial Profession	
making financial sense of the future	
Actuarial Aspects of Internal Models under	
Solvency II	
Internal Models Working Group February 2009 Sessional Paper	
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Agenda	
Introduction	
- Introduction	
 Actuarial Issues 	
 Next Steps 	
 Discussion (That is your responsibility) 	
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Focus of this Working Party	
 Implications for actuaries preparing internal models related to UK business 	
What are the issues - what is needed? - What is	
available? - What research is underway? - What are the barriers to best possible practices?	
■ Big Issues	
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Sources of Internal Model Advice	
- Ell Directive	
 EU Directive Insurance SupervisorsIAIS, CEIOPS, FSA, other national supervisors 	
ActuariesIAA, Groupe Consultatif, national actuarial organisations	
IndustryCFO and CRO Forums	
 OthersWorking parties, consultants, companies, 	
individuals,	
4 The Actuarial Profession making financial error of the future	
Big Issue - Co-dependency/Correlation	
Good practice	
Build co-dependencies from mid range events.	
Investigate causal drivers as well as statistics.Validate new risks by mapping to similar risks	
 Ensure consistency of use – RBS, ICA, ECA 	
Stress test co-dependency part of model	
Research	
Theoretical approaches to diversificationInteraction with fungibility and liquidity	
5 The Actuarial Profession milety forecal some of the future	
Big Issue - Time Horizon	
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Good practice Run off and terminal value approaches possible.	
Terminal values recognise sentiment at settlement	
Option to use differing accounting recognition of liabilities	
 New business standard part of model. Projecting capital standard by using proxies 	
Research Terminal provisions; hedgeable and non hedgeable risks	
 Policyholder and management behaviour over run off 	
Reconciliation of terminal value and run off measures	
6 The Actuarial Profession making francial errar of the future	

Big Issue - Data for internal models Good practice - Solid systems for data capture and validation - All dan - internal, external, third party - validated as far as possible - Solid of system opinion valued, but documented and subject to Research - Possibilities of industry distalases - Analysis of drivers rather than just statistics of the data T Big Issue - Extreme Events Good practice - More structured use of: - Expert opinion - Expert opinion - Expert opinion - Expert opinion - Solid systems and the structured use of: - Expert opinion - Expert opinion - Solid systems and the structured use of: - Expert opinion - Expert opinion - Solid systems and the structured use of: - Expert opinion - Solid systems and the structured use of: - Expert opinion - Solid systems and the structured use of: - Expert opinion - Solid systems and the structured use of: - Expert opinion - Solid systems and the structured use of: - Expert opinion - Solid systems and the structured use of: - Expert opinion - Solid systems and the structured use of: - Expert opinion - Solid systems and the structured use of: - Solid systems and the s		
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Next Steps	
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 The Practice Executive Committees' Research Committees will take forward the areas identified for further research 	
This working group will close	
 New cross-practice internal models working group for further report card in 2010/2011? 	
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