



# OIL DIED TOOK OI

Redefining Risk • Creating Value

15-18 October 2013 • Resorts World Sentosa, Singapore



### **WELCOME MESSAGE**



Welcome to Singapore and the 17th EAAC!

"Redefining Risk, Creating Value", this year's theme of the 17th EAAC couldn't be a more appropriate headline for what is turning out to be very challenging times for the Asian insurance industry.

From a global perspective, the familiar list of economic woes continues to persist with no end in sight. Lingering euro zone issues, low interest rates, and increasingly challenging regulatory compliance environment, suggests the industry must now be ever more vigilant and radical in delivering values to the various key stakeholders. For the past few years, although Asia Pacific continues to be one of the few bright spots for the insurance industry, nobody expects past rates of growth to be sustainable - it will be all the more difficult for insurers to generate profitable growth in the coming years.

Actuaries have and will continue to play a critical role in shaping how to mitigate shrinking profit margins, enhance risk management, and make better strategic decisions through actuarial analytics and business acumen. Actuaries are also progressively expected to be more innovative and to make significant contributions to all areas of organisation.

The 17th EAAC is packed with thought-provoking and insightful discussions, including an engaging CEO panel plenary session on the opening day. This year, there is an inaugural "Best Paper" award, promising an even higher standard of academic excellence and practical applicability.

The Singapore Actuarial Society is proud to be the host organisation of the 17th EAAC. We would like to thank the tireless efforts, late night meetings and hard work done by the EAAC Committee. They have done a wonderful job.

There is more to Singapore than the EAAC. We hope that you will have a chance to explore Singapore and take in some of the sights, attractions, shopping and food deals around the city. If you have any questions about Singapore, don't be shy to ask a friendly SAS member.

My fellow colleagues, I urge you to embark on the path to help redefine our industry risk landscape and I look forward to your active contribution to the 17th EAAC in Singapore!

Respectfully Yours,

Wil Chong, FSA, MAAA, FSAS President (2012-2013) East Asian Actuarial Congress **Jill Hoffman, FSA, FCIA, FSAS**President 2013/2014
Singapore Actuarial Society



TUESDAY, 15 OCTOBER 2013		
2:00pm - 4:00pm	Executive Board Meeting	
100 700	Hall of Fame, Lobby Level, Hard Rock Hotel, Resorts World Sentosa	
4:00pm - 7:30pm	Registration Opens  East Ballroom Foyer, Level B2, Resorts World Convention Centre	
5:00pm - 6:00pm	Meeting of Contributors	
	East Ballroom 1, Level B2, Resorts World Convention Centre	
6:00pm - 8:00pm	Welcome Cocktail	
	Coliseum, Hard Rock Hotel, Resorts World Sentosa	

WEDNESDAY, 16 OCTOBER 2013		
7:30am	Registration Reopens & Exhibition Opens  East Ballroom Foyer	
9:00am - 9:15am	17TH EAAC OPENING CEREMONY East Ballroom	
	Welcome Remarks Mr Wil Chong President, 17th East Asian Actuarial Congress	
9:15am - 9:45am	Opening Address  Mr Lee Boon Ngiap  Assistant Managing Director, Monetary Authority of Singapore	
9:45am - 10:30am	Keynote Address IMPACT OF AGEING POPULATIONS THE SEARCH FOR STABILITY Professor Robert L. Brown President-Elect, International Actuarial Association	
10:30am - 11:00am	Coffee Break East Ballroom Foyer	
11:00am - 11:30am	PLENARY SESSION 1: ACTUARIES ADDING VALUE IN DEALS  Mr Alan Merten, Towers Watson  Mr Mark Saunders, Towers Watson	
11:30am - 12:45pm	PLENARY SESSION 2: CEO PANEL  Mr Karl-Heinz Jung, Allianz SE Reinsurance  Mr David Fried, QBE Insurance  Dr Khoo Kah Siang, Great Eastern Life	
12:45pm - 2:15pm	Lunch Central Ballrooms 1 & 2	



	WEDNESDAY, 16 OCTOBER 2013		
2:15pm - 3:00pm	Parallel Session 1: Life Insurance (East Ballroom 2)  VARIABLE ANNUITIES: RISK MANAGEMENT IN EMERGING MARKETS  Mr Peter Sun, Milliman		
	Parallel Session 2: General Insurance (East Ballroom 1)  EMPOWERING NON-LIFE ACTUARIES IN ASIA  Mr Ron Kozlowski, Casualty Actuarial Society  Mr Wayne Fisher, Casualty Actuarial Society		
	Parallel Session 3: Risk Management (East Ballroom 3)  RISK MANAGEMENT: A CULTURAL CHALLENGE  Mr Anton Kapel, Towers Watson  Ms Marieke van Raaij, Towers Watson		
3:00pm - 3:45pm	Parallel Session 4: Life Insurance/General Topic (East Ballroom 2)  RESOURCES & ENVIRONMENT: A NEW CHALLENGE FOR ACTUARIES  Mr Yves Guerard, Magma		
	Parallel Session 5: General Insurance (East Ballroom 1)  THE SCIENCE AND ART OF CAT MODELING - A CASE STUDY OF THAILAND FLOOD  Mr Adityam Krovvidi, Aon Benfield		
	Parallel Session 6: Risk Management (East Ballroom 3)  RECENT DEVELOPMENT IN SOLVENCY REGULATION IN ASIA  Mr Russel Lok, Ernst & Young  Mr William Liang, Ernst & Young		
3:45pm - 4:15pm	Coffee Break East Ballroom Foyer		
4:15pm - 5:00pm	Parallel Session 7: Life Insurance (East Ballroom 2)  DYNAMIC ASSET LIABILITY MANAGEMENT IN TODAY'S COMPLEX  ECONOMIC DEVELOPMENT  Mr Keith Walter, Towers Watson  Mr Peter Ryan-Kane, Towers Watson		
	Parallel Session 8: General Insurance (East Ballroom 1)  RATIOS: ARE STANDARD COMPARISONS APPROPRIATE?  Mr Matthew Maguire, NMG Consulting  Mr Roshan Parera, NMG Consulting		
	Parallel Session 9: Risk Management (East Ballroom 3)  YARDSTICK FOR ERM: RISK APPETITE  Mr Alvin Soh, Independent		
5:00pm - 5:45pm	Parallel Session 10: Life Insurance (East Ballroom 2)  CATASTROPHIC MORTALITY BONDS - AN EFFECTIVE HEDGE?  Ms Bridget Browne, Australian National University		
	Parallel Session 11: Housing Valuation (East Ballroom 1)  ACTUARIAL VALUES OF HOUSING MARKETS  Dr Shaun Wang, The Geneva Association		
	Parallel Session 12: Risk Management (East Ballroom 3) <b>THE ORSA PROCESS IN ACTION</b> Mr Klaus Krøier, Nordisk Aktuarservice		



	THURSDAY, 17 OCTOBER 2013	
8:00am	Registration & Exhibition Reopen  East Ballroom Foyer	
9:00am - 9:10am	Institute and Faculty of Actuaries Introduction  Ms Wen Li, Institute and Faculty of Actuaries	
9:10am - 9:20am	China Delegate Address Mr John Zhang Yuan Han, China Association of Actuaries	
9:20am - 9:30am	ICA 2014  Mr Bob Conger, ICA 2014 Organising Committee	
9:30am - 10:00am	SOA Mortality Studies	
10:00am - 10:30am	Coffee Break East Ballroom Foyer	
	Diversification Benefit Working Party  Mr Jim Qin, Diversification Benefit Working Party  Mr Zhu Yan, Diversification Benefit Working Party  Managing & Measuring Operational Risk for Insurance Companies in Asia  Mr Julien Parasie, Operational Risk Working Party	
11:50am - 12:30pm	PLENARY SESSION 4: ORSA  ORSA Requirements and its Key Building Blocks  Mr Raymond Cheung, ORSA Working Party  Mr Anthony Atkins, ORSA Working Party  ORSA - Modelling, Scenarios & Embedding  Mr Elliot Varnell, Milliman	
12:30pm - 2:00pm	Lunch Central Ballrooms 1 & 2	
1:30pm - 2:00pm	Collection of Half-Day Tour Tickets  Registration Counter, East Ballroom Foyer	
2:00pm - 7:00pm	Half-Day Tour	



FRIDAY, 18 OCTOBER 2013		
8:00am	Registration & Exhibition Reopen East Ballroom Foyer	
9:00am - 9:45am	Parallel Session 13: Life Insurance (East Ballroom 2)  DANGERS OF REVIEWABLE PRODUCTS  Mr Alex King, Pacific Life Re  Mr Darshan Singh, Pacific Life Re	
	Parallel Session 14: Health Insurance (East Ballroom 1)  USING RI AS AN ALTERNATIVE CAPITAL MARKET FUNDING SOLUTION IN  HEALTH INSURANCE SECURITIZATIONS  Mr Steve Najjar, Hannover Life Re	
	Parallel Session 15: Risk Modelling (East Ballroom 3) QUANTITATIVE TOOLS FOR RISK MANAGEMENT - STRESS TESTING AND BEYOND Mr Eric Yau, Barrie & Hibbert	
9:45am - 10:30am	Parallel Session 16: Life Insurance (East Ballroom 2)  BEHAVIOURAL ECONOMICS  Mr Lawrence Tsui, Swiss Re  Ms Na Jia, ReMark International	
	Parallel Session 17: Health Insurance (East Ballroom 1)  MITIGATING THE VOLATILITY OF THE HEALTH PORTFOLIO  Mr Herbert Meister, Munich Re	
	Parallel Session 18: Risk Modelling (East Ballroom 3)  OPERATIONAL RISK MODELING: CURRENT APPROACHES AND NEW FRONTIERS  Mr Joshua Corrigan, Milliman Ms Caroline Wang, Milliman	
10:30am - 11:00am	Coffee Break East Ballroom Foyer	
11:00am - 11:45am	Parallel Session 19: Life Insurance (East Ballroom 2)  NUMERICAL IMPACT STUDY OF BONUS DISTRIBUTION ON DEFAULT  Ms Zhang Yanwen, Independent  Mr Yilu Zhang, Independent  Parallel Session 20: Health Insurance (East Ballroom 1)  CANCER: CHANGING LANDSCAPE IN ASIA  Mr Paul Murray, Swiss Re	
	Parallel Session 21: Risk Modelling (East Ballroom 3)  ECONOMIC CAPITAL ("EC") - FRAMEWORK AND IMPLEMENTATION  CHALLENGES  Mr Bonny Fu, Ernst & Young	
11:45am - 12:30pm	Parallel Session 22: Life Insurance (East Ballroom 2)  KEY GLOBAL PROTECTION PRODUCT TRENDS  Mr Jerome Matrundola, RGA Reinsurance Company	
	Parallel Session 23: Health Insurance (East Ballroom 1)  AN ACTUARIAL MODEL FOR HOSPITALIZATION INSURANCE WITH LIMITED BENEFIT: CANCER IMPAIRED RISK  Dr Shing-Her Juang, Soochow University	



FRIDAY, 18 OCTOBER 2013		
11:45am - 12:30pm	Parallel Session 24: Risk Modelling (East Ballroom 3)  STOCHASTIC LOSS RESERVING FOR CAPITAL MANAGEMENT OF GENERAL INSURANCE: A GAUSSIAN APPROACH  Mr Bouke Posthuma, Posthuma Partners	
12:30pm - 2:00pm	Lunch Central Ballrooms 1 & 2	
2:00pm - 2:45pm	Parallel Session 25: Life Insurance/M&A (East Ballroom 3)  ART OF INTEGRATION  Ms Anusha Thavarajah, AIA  Mr Chai Tze Siang, AIA	
	Parallel Session 26: Health Insurance (East Ballroom 1)  STRATEGIES FOR THE MANAGEMENT OF THE MONTHLY MEDICAL INSURANCE  VALUATION PROCESS  Mr Jed Linfield, TriNet	
2:45pm - 3:30pm	Parallel Session 27: Family Takaful (East Ballroom 3)  ACTUARIAL MODELS FOR TAKAFUL  Mr Ching Ing Chian, Hong Leong Assurance  Parallel Session 28: General Insurance (East Ballroom 1)  LESSONS LEARNED FROM THE CROP INSURANCE PROGRAM IN KOREA	
3:30pm - 4:00pm	Mr Ung Min "Robert" Kim, Samsung F&M Insurance  Coffee Break	
3.30pm 4.00pm	East Ballroom Foyer	
4:00pm - 4:45pm	Parallel Session 29: Life Insurance (East Ballroom 3)  COPING WITH LONGEVITY RISK WITHIN RETIREMENT PROVISION IN  SINGAPORE  Ms Yan Sun, SAS Retirement Committee  Parallel Session 30: General Insurance (East Ballroom 1)	
	PROFESSIONAL & MANAGEMENT LIABILITY IN ASIA  Ms Jean DeSantis, AIG	
4:45pm - 5:30pm	Parallel Session 31: Life Insurance (East Ballroom 3)  PARTICIPATING INSURANCE IN CHINA  Ms Sharon Huang, Milliman  Mr Alex Bryant, Milliman	
	Parallel Session 32: General Insurance (East Ballroom 1)  SUCCEEDING IN THE RAPIDLY CHANGING PERSONAL LINES ASIAN MARKETS  Mr Gautam Mazumdar, Towers Watson  Mr Roberto Malattia, Towers Watson  Mr Yao Wang, Towers Watson	
5:30pm - 6:30pm	Closing Ceremony East Ballroom 2	
6:30pm - 9:00pm	17th EAAC Farewell Gala Dinner East Ballroom 2	

Note: Information is correct as at 1 October 2013. The Organiser reserves the right to make necessary changes should circumstances so require.

## **OUR SPONSORS**



#### **PLATINUM SPONSOR**



**GOLD SPONSORS** 













**Swiss Re**  $\overline{\mathbf{m}}$ 



#### SILVER SPONSORS





#### OTHER SPONSORS

CONFERENCE BAGS

CONFERENCE PENS

**EXHIBITION** 











EXHIBITION

EXHIBITION

**EXHIBITION** 

EXHIBITION

**EXHIBITION** 







**SOCIETY OF ACTUARIES** 

TOWERS WATSON 🚺

**SUPPORTER** 



**MEDIA PARTNER** 

