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SCOR's established ERM framework and strong solvency position supports the successful execution of "Vision in Action"

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The SCOR Risk Management Way

The Risk Management way	Risk profile optimization	 In line with SCOR's strategic objectives, define and maintain the ERM framework Safeguard strict adherence to SCOR's risk appetite Optimize risk composition to provide superior diversification benefit Constantly refine and expand internal model to fully reflect SCOR's risk profile 	
	Independent advice	 Support decision making by providing analyses and independent opinions on risks and business opportunities Work closely with the business divisions throughout the entire product development cycle 	
	Highest standards	 Work to highest industry standards, following and promoting best practices Define the internal standards and mechanisms used to identify, assess, monitor and respond to SCOR's risks Employ advanced methods and technology, based on latest scientific research 	
	Recognized expertise	 Continuously develop and promote SCOR's leading risk management expertise Maintain regular dialogue with internal and external stakeholders including staff, board, clients, shareholders, regulators, rating agencies, etc. Facilitate cross-divisional analysis and pooling of knowledge from all parts of the organization 	





SCOR confirms a solvency ratio slightly above the optimal range, supported by solid capital generation



SCOR confirms its upper mid-level risk appetite and its robust and efficient Capital Shield strategy



SCOR maintains a well-balanced risk composition that provides superior diversification benefit



SCOR has a long-standing track record on research into emerging risk and is well positioned to leverage its expertise





SCOR's solvency position is slightly above optimal range, supported by solid capital generation, while sensitivities remain stable compared to YE 2016

SCOR's capital generation is sufficient to fund business growth and regular dividends

Solvency ratio remains in the optimal range or above for all sensitivities¹⁾



SCOR The Art & Science of Risl 1) Sensitivities are presented in line with recommendations by the CFO Forum

2) Interest rate sensitivity is performed across SCOR's multi-currency portfolio

3) Based on 2017 planned exposure

SCOR confirms its upper mid-level risk appetite and its robust and efficient Capital Shield strategy

SCOR confirms its upper mid-level risk appetite

- SCOR is maintaining:
 - An upper mid-level risk appetite
 - A high level of risk diversification
 - A robust capital shield strategy



SCOR has a robust and efficient capital shield strategy

- SCOR's robust capital shield ensures that exposures remain within the risk tolerance limits
- SCOR launched a 3-year contingent capital facility¹, providing EUR 300 million coverage in case of extreme natural catastrophe or life events impacting mortality
- SCOR benefits from the current environment of competitive retrocession pricing to protect the Group at a lower cost

of loss

Size

Contingent capital

facility

Solvency buffer

Capital markets solutions

Traditional retrocession

Retention

Solvency buffer

 SCOR has set out a solvency scale with clear and well-defined buffers safeguarding the Group's franchise

Capital markets solutions

- Significant experience in ILS²⁾ over the last 10 years
 - SCOR's outstanding ILS currently provide \$630 million protection

Traditional retrocession

 Wide range of protections including Proportional and Non-Proportional covers (Per event / Aggregate)

Illustrative



SCOR closely monitors risk drivers and extreme scenario exposures against strict risk tolerance limits







SCOR maintains a well-balanced risk composition that provides superior diversification benefit

H1 2017 risk capital breakdown by risk category





- The very strong diversification benefit of 49% reflects the strength of SCOR's business model, based on a well-balanced portfolio between P&C and Life
- There is further substantial diversification within the risk categories shown
- Required capital is mainly driven by underwriting risks
- Market, credit and operational risks make a minor contribution to required capital





SCOR is monitoring signals for potential future increases in inflation

General inflation has been at historically low levels but this may come to an end

- General inflation has been low over the last 30 years and at historically low levels since the financial crisis of 2008
- Recent signals indicate that inflation might potentially increase:
 - Workers in German and US labour markets are in short supply, which could result in wage inflation
 - Political uncertainty remains around US monetary policy
 - Public debt in most advanced countries is at record levels, making inflation an increasingly attractive option to reduce the real debt burden
 - Central banks might be constrained in their capacity to fight inflation (high debt ratios in the Eurozone, huge balance sheet of the FED²)
 - Energy and commodity prices are currently very low

General inflation levels 1950 – present¹⁾



SCOR is monitoring the possibility of a future rise in inflation





The structure of SCOR's portfolio and underwriting strategy makes it less exposed to the risk of increasing inflation



SCOR's Solvency ratio is expected to remain in the upper half of the optimal range in the event of a severe inflation shock



SCOR's Emerging Risk Assessment allows it to explore risks and opportunities arising from a rapidly evolving risk landscape

SCOR's Emerging Risk Assessment is at the core of its ERM and business development

- Expert panels identify, classify and rank emerging risks according to their potential negative impacts on SCOR's business, but <u>also</u> in relation to their potential for providing avenues to explore new reinsurance business solutions
- The business divisions and Risk Management work together closely to develop both mitigation strategies to manage the downsides of new risks, and processes that integrate opportunities from selected emerging risks into underwriting strategy, or into other strategies that increase SCOR's value as a company (e.g. investment choice, market reputation)

The Emerging Risk Assessment is a multi-step process with an established governance





SCOR is leveraging on its Emerging Risks process to identify business opportunities

Cyber $(\cdot$ **Autonomous Machines** Scaling-up in the fast-growing \odot Looking for opportunities to develop cyber reinsurance market, while innovative re-insurance products for maintaining a cautious approach the market and to create Business and controlling exposure operational efficiencies in claims handling, loss adjustment and opportunities disaster relief arise from emerging Artificial Intelligence \odot risks Opportunities will emerge from product development and distribution offerings, **Genetic Testing** (\bullet) new pockets of business created by new underwriting technologies, and more Looking into the potential efficient operations processes opportunities of using genetic testing to encourage the adoption of a healthier lifestyle, with the aim of increasing the value of SCOR's in-force book and developing new

products



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- 1 SCOR Group
- 2 SCOR Global P&C
- 3 SCOR Global Life
- 4 SCOR Global Investments



- 6 Capital management
- 7 Glossary





SCOR's comprehensive ERM framework covers the entire risk spectrum





Risk appetite framework for "Vision in Action" ensures full alignment between growth, profitability and solvency

Risk appetite	Risk preferences	F	Risk tolerances	
 Risk appetite remains stable in relative terms 	 SCOR pursues an approach of thorough risk selection to optimize its risk profile and aims: 	Solvency target	Capitalization level: Solvency target driving a process of gradual escalation and management responses	
 Risk exposure is increasing on an absolute basis consistently with SCOR's increased size and capital base 	 To actively seek risks related to reinsurance and selected 	Exposure limits	Risk drivers : Maximum net 1:200 annual aggregate loss	
	 To assume a moderate level of 		Extreme scenarios: Maximum net 1:200 per-event loss	
 Throughout "Vision in Action", SCOR is maintaining: 	interest rate risk, credit risk, FX and other market risks		Investments: Duration limits and risk exposure limits for overall portfolio and investment categories	
A high level of diversificationAn upper mid-level risk appetite	 To minimise its own operational and reputational risks 			
 A robust Capital Shield Strategy 	 To minimise underwriting of cedants' asset-related risks 	Limits per risk in the underwriting and investment guidelines		
			cenarios <i>(deterministic)</i> t the exposure limits	



Risk appetite framework broadly unchanged and consistent with previous plans





SCOR has a referral process that allows the risk associated with new underwriting business to be efficiently assessed and mitigated

Level 5 - Board Risk Committee	Board		
 For cases seeking the Board's endorsement 	Board Risk Committee		
 Level 4 - Comex Any significant deviations which threaten the Group's risk tolerances must be presented to the Board Risk Committee 	CEO & Comex Group Chief Risk Officer		
 Level 3 - GRM department Assessment of residual risk exposures and capital requirements. Large and/or disputed cases referred to Chief Risk Officer 	GRM		
Level 2 - Central functions of SGL and SGP&C • Review all referral cases	SGL Risk and SGP&C Underwriting Management		
 Refer significant cases to the GRM department 			
 Level 1 - Underwriters in Market Units and Business Segment Work within underwriting guidelines and referral limits 	Underwriters in market units and business		
Refer business propositions per referral guidelines	segments		
	Business propositions		



SCOR is leveraging on its Emerging Risks process to identify business opportunities

Emerging risk example	Opportunities for SCOR	Main challenges	SCOR's current approach
Cyber	• The Cyber risk universe is complex and rapidly evolving and as such provides underwriting opportunities for SCOR	 Pricing is challenging due to the limited claims experience and the difficulty in quantifying exposure Ensuring clear and unambiguous contract wording 	 Exploring state-of-the-art exposure modelling capabilities through partnerships with major Cyber catastrophe modelling providers Developing a new Cyber risk assessment and underwriting platform
Artificial Intelligence	 Nurture product development and distribution offerings based on better understanding of consumer behavior and risks 	 Difficulties could arise in establishing the chain of responsibility, as there are significant liability, legal and regulatory implications of this technology 	 Establishment of partnerships with start- up Managing General Agents that have Artificial Intelligence/Machine Learning facilities to gain a better understanding of a client's ability to price their books Obtain data from a variety of non- traditional sources (e.g. unstructured data) and extract value from it
Genetic Testing	 Information on genetic predisposition to certain conditions could encourage lifestyle changes, thereby reducing morbidity and mortality Looking into the potential opportunities in the development of new products that include genetic testing 	 Risk of anti-selection on new business, as people with a predisposition to certain diseases may seek insurance Risk of anti-selective lapsation of in-force business 	 SCOR has a dedicated internal working group of medical doctors, actuaries and risk managers, to monitor and analyse developments on genetic testing and to provide guidance
Autonomous Machines	 Niches for developing innovative Life and P&C insurance products as new liability frameworks and client needs are established Operational efficiencies in loss adjustment, claims handling and disaster relief Autonomous machines should result in a reduction in accident and claims frequency 	 Newcomers with innovative business models might disrupt the market As for A.I., challenges will lie in establishing fault origin and liability The risks inherent to autonomous machines will be the emergence of new types of accumulations 	 Identification and selection of Ventures Initiatives in Life and P&C to identify innovative new carriers, Managing General Agents or similar companies with whom to form partnerships to provide equity and/or re/insurance capacity