

# Solvency and Financial Condition Report 2018

MS Amlin Insurance SE

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## Cautionary Statement

This Report includes statements with respect to future events, trends, plans, expectation or objectives relating to MS Amlin Insurance S.E.'s ('MS AISE') future business, financial condition, results of operations, performance and strategy. Forward looking statements are not statements of historical fact and may contain the terms, "may", "will", "should", "continue", "aims", "estimates", "projects", "believes", "intends", "expects", "plans", "seeks" or "anticipates" or words which have a similar meaning. No undue reliance should be placed on such statements because, by their nature, they are subject to unknown risks and uncertainties and can be affected by other factors that could cause actual results and plans of MS AISE to differ materially from those expressed or implied in the forward looking statements (or from past results). Factors such as, but not limited to (i) general economic conditions and competitive factors, particularly in key markets, in each case on a local, regional, national and/or global basis (ii) the risk of a global economic downturn (iii) performance of financial markets (iv) levels of interest rates and currency exchange rates (v) the frequency, severity and development of insured claims events (vi) policy renewal and lapse rates (vii) changes in laws and regulations and in the policies of regulators (viii) increases in loss expenses may all have a direct bearing on the results of operations of MS AISE and on whether any targets may be achieved. Many of these factors may be more likely to occur or be more pronounced as a result of catastrophic events. MS AISE does not undertake or assume any obligation to update or revise any of these forward looking statements, whether to reflect any new information, future events or circumstances or otherwise, except as required by applicable laws and regulations.

## Table of Contents

Executive Summary .....	3
Directors' responsibility statement .....	9
Independent Auditors' report.....	10
A.1 Business .....	16
A.2 Underwriting performance .....	19
A.3 Investment performance.....	22
A.4 Performance of other activities .....	23
A.5 Any other information.....	24
B.1 General information on the system of governance.....	26
B.2 Fit and proper requirements .....	36
B.3 Risk management system including the own risk and solvency assessment .....	37
B.4 Internal Control System .....	43
B.5 Internal Audit function .....	45
B.6 Actuarial function .....	47
B.7 Outsourcing .....	48
B.8 Any other information.....	51
C.1 Insurance risk .....	55
C.2 Market risk .....	60
C.3 Credit risk .....	63
C.4 Liquidity risk.....	67
C.5 Operational risk .....	71
C.6 Other risks .....	72
C.7 Any other information .....	75
D.1 Assets.....	78
D.2 Technical provisions.....	84
D.3 Other liabilities .....	92
D.4 Alternative methods for valuation .....	94
D.5 Any other information .....	94
E.1 Own Funds .....	96
E.2 Minimum Capital Requirement and Solvency Capital Requirement .....	100
E.3 Use of the duration-based equity risk sub-module in the calculation of the Solvency Capital Requirement .....	100
E.4 Differences between the standard formula and any Internal Model used.....	103
E.5 Non-compliance with the Minimum Capital Requirement and non-compliance with the Solvency Capital Requirement.....	103
E.6 Any other information.....	103

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## Executive Summary

This annual Solvency and Financial Condition Report ('SFCR') for the year ended 31 December 2018 has been prepared for MS Amlin Insurance S.E. ('MS AISE' or the 'Company'), previously named Amlin Insurance S.E. ('AISE').

MS Amlin Insurance S.E. is a wholly owned subsidiary of MS Amlin plc, the parent company of the MS Amlin Group (the 'Group' or 'MS Amlin'), one of the foremost specialist insurers and underwriters for Reinsurance, Marine & Aviation and Property & Casualty business internationally. MS&AD Insurance Group Holdings, Inc. is MS AISE's ultimate parent company. The chart presenting the group structure can be found in section A.1.

The name of the Company was changed at 1 January 2019 as part of the re-domicile of the Company to Belgium.

MS AISE is a leading independent provider of corporate insurance in Western Europe. MS AISE's business is organised around two Strategic Business Units ('SBUs'), Marine & Aviation ('M&A'), and Property & Casualty ('P&C'). MS AISE underwrites business in both its domestic as well as foreign markets, with the countries of the European Union forming the most important markets.

In 2017, the UK Government triggered Article 50 of the Treaty of Lisbon, beginning the process of negotiating new trade deals with the European Union ('EU'). The outcome, particularly for the UK is uncertain. In response, MS Amlin announced on 28 June 2017 its intention to re-domicile MS AISE to Belgium, where MS AISE already operates offices in Brussels and Antwerp. This is a strategic move that ensures our European brokers and clients experience no disruption from the UK's exit from the EU, whilst continuing to enjoy the same high-quality service they have come to associate with MS Amlin. On 30 May 2018, the Company obtained the license for all classes of non-life insurance from the National Bank of Belgium. As at 1 January 2019 the Company re-domiciled and transferred its corporate registered office from the United Kingdom to Belgium. The current business underwritten in the UK has been transferred into a branch. As a result, the supervisory authority has changed as well, as from 1 January 2019 the Company has been subject to control by the National Bank of Belgium ('NBB') while it previously was under the supervision of the Prudential Regulation Authority ('PRA'). The regulatory reports related to 2018 will be submitted at the PRA while the regulatory reports for 2019 will be submitted to the NBB.

### **Basis of preparation**

This SFCR has been prepared in line with the requirements as set out in the regulations relating to Solvency II as passed by the European Union, and guidelines issued by the European Insurance and Occupational Pensions Authority and the PRA. This report is to meet the Company's regulatory reporting requirements, and for no other purpose, and should not be relied upon for any other such purpose.

Financial information included in this report is based on the Company's Annual Report and Financial Statements, prepared for the Company's shareholder and in accordance with UK Companies Act requirements. Unless stated otherwise, this report represents the position of the Company as at 31 December 2018 only and will not necessarily reflect all changes in the Company's operations since that date.

The reader is reminded of the cautionary statement on page 1.

## Business and performance

### *Underwriting performance*

MS AISE written premium has decreased in 2018 (€12.0 million), but overall underwriting performance has improved by €81.9 million compared to 2017.

Underwriting result	2018			2017		
	Total €'000	M&A €'000	P&C €'000	Total €'000	M&A €'000	P&C €'000
Gross written premium	600,519	146,665	453,854	612,487	131,732	480,755
Net written premium	529,915	140,545	389,369	552,151	128,847	423,304
Net earned premium	530,913	133,230	397,682	547,559	134,998	412,561
Net claims	(321,879)	(71,702)	(250,176)	(411,504)	(81,841)	(329,663)
Incurred expenses	(215,857)	(56,899)	(158,958)	(224,728)	(51,667)	(173,061)
<b>Underwriting result</b>	<b>(6,823)</b>	<b>4,629</b>	<b>(11,452)</b>	<b>(88,673)</b>	<b>1,490</b>	<b>(90,163)</b>

The marine, aviation and transport insurance business in MS AISE showed an increase in written premium in 2018 over 2017. Result for the period is a profit of €4.6 million.

The decrease in P&C gross written premium is mainly driven by decreased MS AISE Motor business across the Netherlands, Belgium and the UK. This is primarily caused by re-underwriting actions. Furthermore, the German P&C operation has been put into run-off during 2018 which contributed to the decreased gross written premium as well.

Net claims are €321.9 million which is €89.6 million less than 2017 (€411.5 million). This is largely driven by €39.4 million less prior period deteriorations compared to 2017 (€0.1 million vs €39.4 million) as well as an improvement in the underlying claims ratio for current year losses.

An adverse development cover ('ADC') reinsurance contract was purchased in December 2018. This provides whole account protection against future deterioration of the actuarial best estimate of claims as at 31 December 2018 in respect of the 2018 and prior years' earned business, above an excess, up to the limit of the reinsurer's liability. As a management margin is held in excess of the actuarial best estimate, reinsurance recoveries have been recognized for the element of this margin that would be recoverable under the contract. The premium paid for the contract has been expensed in 2018 in relation to the level of cover exhausted. This resulted in a net gain to the income statement of €18 million in 2018.

### *Investment performance*

MS AISE's investment income over 2018 amounted to €1.7 million (2017: €25.3 million income). Overall, the decrease compared to last year is mainly due to poor performance of the stock markets in 2018.

The assets are primarily dominated by shares in MS Amlin Group's investment vehicle, an Irish domiciled UCITS-vehicle which is called the Toro Prism Trust (the 'Trust'). The Trust is structured into 3 sub-funds (a fixed income securities fund, a liquidity fund and an equity securities fund) and a number of currency based share classes.

Please refer to Section A of this report for further details relating to MS AISE's business and performance during the reporting period.

## System of governance

MS AISE has a Board of Directors (the 'Board' or the 'MS AISE Board'), which is constituted to include an appropriate balance of executive and non-executive directors. The Board has authority over the conduct of the whole of the affairs of the Company, while recognising that it is a wholly-owned subsidiary of MS

Amlin plc and therefore needs to operate within a Group framework, strategy and structure set by its immediate parent.

The MS AISE Board has a number of committees, to which it delegates oversight and decision-making in accordance with documented terms of reference.

The parent is represented on the Board, but this does not impair the Board's ability to make decisions which could be contrary to the wishes of its parent, in particular if it does not believe that those wishes are compatible with the Board's obligations to act in the interests of policyholders.

MS AISE must also report to its parent on aspects of its operations in line with Group reporting requirements from time to time.

MS AISE's underwriting operating structure is managed through the M&A and P&C SBUs which are both represented at the Board. After a split during the reporting year in the P&C SBU, the Head of the SBU P&C Europe remained represented at the Board. The representation of the SBUs enables MS AISE's Board and other senior management to exercise strategy and control oversight over MS AISE's (business) affairs.

The Board regards the Company's system of governance as effective, in particular to protect the interests of MS AISE as a regulated entity in the event that these diverge from those of the SBUs or of the Group generally. This is subject to continual refinement and review in line with good governance practice.

No material changes in the system of governance have taken place over the reporting period. The governance structure of the company, however, has changed immediately after the reporting period to comply with the Belgian Company Code and the Solvency II Directive.

Please refer to Section B of this report for further details relating to MS AISE's system of governance.

## **Risk profile**

MS AISE's risk profile is explained using the six categories of the Risk Management Framework. In line with the business model and strategic objectives, insurance risk dominates MS AISE's risk profile.

The impact of strategic developments on MS AISE's risk profile is measured using the Own Risk and Solvency Assessment ('ORSA'). The process takes into account scenario analysis, stress testing and sensitivity analysis to assess both qualitative and quantitative impact. Strategic developments taken into account are:

- achieving profitable growth in a highly competitive market with average combined ratios close to 100%;
- political and economic conditions (e.g. Brexit and regulatory requirements, low interest rate environment); and
- developments within the Group which may impact MS AISE's ability to execute its strategy.

Insurance risk is mainly driven by underwriting activities and reserving from prior underwriting years. Underwriting risk is concentrated around natural perils such as windstorm or fire, events such as terrorism or cyber, and large risks such as shipyards. These risks are mainly managed by assuring that for every class:

- a maximum line size, exposure and monitoring program is available; and
- by assuring adequate pricing models are in place.

Primary classes driving reserving risk are: Property, Marine, Medical, Casualty, Motor and Professional Indemnity.

Market and liquidity risk is being managed in line with the Prudent Person Principle which requires MS AISE to only conduct investment management activities as long as we can reasonably demonstrate an

appropriate level of understanding of the underlying investment. Exposure to market risk is limited to the extent that investments are balanced to:

- optimise investment income whilst focusing on ensuring MS AISE maintains sufficient capital to meet solvency requirements; and
- maintain sufficient liquid funds to meet liabilities when they fall due.

Credit risk is mainly driven by exposures to reinsurers and to a lesser extent by exposures to brokers and cover holders. This risk is related to creditworthiness of counterparties and therefore has an impact on MS AISE's ability to meet its claims obligations. Credit risk is managed by having an on-boarding process for both reinsurers and brokers and by managing exposures and outstanding balances to these counterparties.

MS AISE operates a diverse business across a number of offices and jurisdictions and is expected to comply with legal, regulatory and best-practice standards in each. The potential exists for a failure of critical business processes, people or systems resulting in an interruption to normal operations. MS AISE has a risk averse attitude to operational risk. MS AISE does not wish to have any operational failures which may hinder trading or result in financial loss, or any regulatory sanction for inadequate compliance.

**No significant changes in MS AISE's risk profile have been identified over the reporting period.**

Please refer to Section C of this report for further details relating to MS AISE's risk profile.

#### Valuation for solvency purposes

The Company has excess assets over liabilities under Solvency II of €501.5 million (2017: €433.5 million), compared to €525.1 million (2017: €458.4 million) of net assets under IFRS. The adjustments made to move from IFRS balance sheet to Solvency II balance sheet are set out below:

	2018	2017
	€'000	€'000
<b>IFRS net asset value</b>	<b>525,084</b>	<b>458,361</b>
Disallow items – Goodwill, Intangible assets, Prepayments and Deferred Acquisition Costs	(76,588)	(91,128)
Solvency II Technical Provision adjustment	150,349	160,493
Future premiums and claims adjustments	(96,444)	(94,137)
Deferred tax on adjustment items	(921)	(131)
<b>Excess of assets over liabilities – Solvency II</b>	<b>501,480</b>	<b>433,458</b>

Please refer to Section D of this report for further details relating to MS AISE's valuation for solvency purposes.

#### Own funds

	2018	2017
	€'000	€'000
<b>Excess of assets over liabilities</b>	<b>501,480</b>	<b>433,458</b>
Subordinated liabilities	2,398	2,385
<b>Total Available own funds</b>	<b>503,878</b>	<b>435,843</b>
Solvency Capital Requirement ('SCR')	368,154	362,311
<b>Ratio of Eligible own funds to SCR ('Solvency Ratio')</b>	<b>136.9%</b>	<b>120.3%</b>

MS AISE's policy is to actively manage capital so as to meet regulatory requirements. MS AISE wants to contribute to the Group target to deliver a cross-cycle return on equity in excess of 12%. This return on equity target will be reviewed periodically to ensure that it remains appropriate. MS AISE's internal target Solvency Ratio is 125% (based on the Standard Formula) with the purpose to be able to absorb, among other reasons, adverse claim development. As at 31 December 2018 MS AISE's Solvency Ratio was

136.9% (2017: 120.3 %). This increase is mainly driven by the received capital contribution in 2018 from the parent company, MS Amlin plc, which ensures that the Company is appropriately funded for the coming years. This capital contribution is further explained in section E.1 of this report.

The below table analyses the movement in the Solvency Ratio:

	€'000	%
<b>Total Available own funds over SCR at 1 January 2018</b>	<b>73,532</b>	<b>120.3%</b>
Change in IFRS net assets	66,723	18.0%
Change in Solvency II valuation adjustments	1,299	0.3%
Change in subordinated liabilities value	13	0.0%
Change in SCR	(5,843)	-1.7%
<b>Available own funds over SCR at 31 December 2018</b>	<b>135,724</b>	<b>136.9%</b>

The change in IFRS net assets, which includes the €70m capital contribution and impact of a loss after tax of €4.4 million, is explained in more detail in the Strategic Report of the Company's annual report.

The change in Solvency II valuation adjustments reflects those movements in sections D.1 to D.3 of this report.

The change in Solvency Capital Requirement ('SCR') as well as the Minimum Capital Requirement ('MCR') is explained in section E.2 of this report.

#### *Capital structure and arrangements*

As per the above, the Company has own funds of €503.9 million. Per the requirements for Solvency II, this is split into tiers as below:

	2018	2017
	€'000	€'000
Tier 1	497,711	417,136
Tier 2	2,398	2,385
Tier 3	3,769	16,322
<b>Total Available Own Funds</b>	<b>503,878</b>	<b>435,843</b>

Tier 1 own funds are made up of the Company's entire share capital along with its share premium and reconciliation reserve. There is no restriction on tier 1 own funds. See section E.1 on page 95 for more information on this tier.

Tier 2 own funds relate to the subordinated debt the Company has issued, which is classified within this tier as per Solvency II transitional arrangements.

Tier 3 relates to the net deferred tax asset position of the Company, as this is required to be classified as tier 3. See section D.1 on page 77 for more information on the net deferred tax asset.

#### *Use of Standard Formula*

The Company uses the standard formula rules prescribed in the Solvency II directive, in the calculation of its SCR. There have been specific simplifications utilised in certain risk modules and sub modules of the standard formula. The standard formula calculations also uses specific information held within the Group's Internal Model. Please see section E.2 page 99 for more information on the application of the standard formula calculation.

MS AISE is currently applying for the approval of its Internal Model to be used for Solvency II reporting. The approval by the National Bank of Belgium is expected over the course of 2019. However, the Group still uses an Internal Model for internal capital setting processes and in support of various strategic and tactical initiatives, as well as supporting MS AISE's standard formula calculations.



Please refer to Section E of this report for further details relating to MS AISE's own funds.

## Directors' responsibility statement

We acknowledge our responsibility for preparing the MS Amlin Insurance S.E. Solvency and Financial Condition Report ('SFCR') in all material respects in accordance with the PRA Rules and the Solvency II Regulations.

We are satisfied that:

- throughout the financial year in question, MS Amlin Insurance S.E. has complied in all material respects with the requirements of the PRA Rules (the 'Rules') and the Solvency II Regulations (the 'Regulations') which are applicable to MS Amlin Insurance S.E. and all necessary reporting adjustments arising from the application of these Rules and Regulations to our processes have been made; and
- in respect of the period from 31 December 2018 to the date of the publication of the SFCR, MS Amlin Insurance S.E. has continued so to comply and will continue so to comply with the Solvency II regulations under supervision of the National Bank of Belgium for the remainder of the financial year to 31 December 2019.

For and on behalf of the Board of MS Amlin Insurance S.E.

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**Rudy Benmeridja**  
Chief Executive Officer

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**Reijer Groenveld**  
Chief Financial Officer

17 April 2019

## Independent Auditors' report

Report of the external independent auditor to the Directors of MS Amlin Insurance S.E. ('the Company') pursuant to Rule 4.1 (2) of the External Audit Part of the PRA Rulebook applicable to Solvency II firms

### Report on the Audit of the Relevant Elements of the Solvency and Financial Condition Report

#### Opinion

Except as stated below, we have audited the following documents prepared by the Company as at 31 December 2018:

- The 'Valuation for solvency purposes' and 'Capital Management' sections of the Solvency and Financial Condition Report of the Company as at 31 December 2018, (**the Narrative Disclosures subject to audit**); and
- Company templates S02.01.02, S17.01.02, S23.01.01, S25.01.21, S28.01.01 (**the Templates subject to audit**).

The Narrative Disclosures subject to audit and the Templates subject to audit are collectively referred to as the '**Relevant Elements of the Solvency and Financial Condition Report**'.

We are not required to audit, nor have we audited, and as a consequence do not express an opinion on the Other Information which comprises:

- The 'Business and performance', 'System of governance' and 'Risk profile' sections of the Solvency and Financial Condition Report;
- Company templates S05.01.02, S05.02.01, S19.01.21;
- The written acknowledgement by the Directors of their responsibilities, including for the preparation of the Solvency and Financial Condition Report (**the Responsibility Statement**).

To the extent the information subject to audit in the relevant elements of the Solvency and Financial Condition Report includes amounts that are totals, sub-totals or calculations derived from the Other Information, we have relied without verification on the Other Information.

In our opinion, the information subject to audit in the Relevant Elements of the Solvency and Financial Condition Report of the Company as at 31 December 2018 is prepared, in all material respects, in accordance with the financial reporting provisions of the PRA Rules and Solvency II regulations on which they are based, as modified by relevant supervisory modifications, and as supplemented by supervisory approvals and determinations.

#### Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (UK) (ISAs (UK)), including ISA (UK) 800 and ISA (UK) 805, and applicable law. Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Relevant Elements of the Solvency and Financial Condition Report* section of our report. We are independent of the Company in accordance with the ethical requirements that are relevant to our audit of the Solvency and Financial Condition Report in the UK, including the FRC's Ethical Standard as applied to public interest entities, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

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### **Emphasis of Matter – special purpose basis of accounting**

We draw attention to the 'Valuation for solvency purposes' and 'Capital Management' and other relevant disclosures sections of the Solvency and Financial Condition Report, which describe the basis of accounting. The Solvency and Financial Condition Report is prepared in compliance with the financial reporting provisions of the PRA Rules and Solvency II regulations, and therefore in accordance with a special purpose financial reporting framework. The Solvency and Financial Condition Report is required to be published, and intended users include but are not limited to the Prudential Regulation Authority. As a result, the Solvency and Financial Condition Report may not be suitable for another purpose. Our opinion is not modified in respect of this matter.

### **Conclusions relating to going concern**

We have nothing to report in respect of the following matters in relation to which the ISAs (UK) require us to report to you if:

- the directors' use of the going concern basis of accounting in the preparation of the SFCR is not appropriate; or
- the directors have not disclosed in the SFCR any identified material uncertainties that may cast significant doubt about the company's ability to continue to adopt the going concern basis of accounting for a period of at least twelve months from the date when the SFCR is authorised for issue.

### **Other Information**

The Directors are responsible for the Other Information.

Our opinion on the Relevant Elements of the Solvency and Financial Condition Report does not cover the Other Information and, accordingly, we do not express an audit opinion or any form of assurance conclusion thereon.

In connection with our audit of the Solvency and Financial Condition Report, our responsibility is to read the Other Information and, in doing so, consider whether the Other Information is materially inconsistent with the Relevant Elements of the Solvency and Financial Condition Report, or our knowledge obtained in the audit, or otherwise appears to be materially misstated. If we identify such material inconsistencies or apparent material misstatements, we are required to determine whether there is a material misstatement in the Relevant Elements of the Solvency and Financial Condition Report or a material misstatement of the Other Information. If, based on the work we have performed, we conclude that there is a material misstatement of this Other Information, we are required to report that fact. We have nothing to report in this regard.

### **Responsibilities of Directors for the Solvency and Financial Condition Report**

The Directors are responsible for the preparation of the Solvency and Financial Condition Report in accordance with the financial reporting provisions of the PRA rules and Solvency II regulations.

The Directors are also responsible for such internal control as they determine is necessary to enable the preparation of a Solvency and Financial Condition Report that is free from material misstatement, whether due to fraud or error; assessing the company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern; and using the going concern basis of accounting unless they either intend to liquidate the company or to cease operations, or have no realistic alternative but to do so.

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## **Auditor's Responsibilities for the Audit of the Relevant Elements of the Solvency and Financial Condition Report**

It is our responsibility to form an independent opinion as to whether the Relevant Elements of the Solvency and Financial Condition Report are prepared, in all material respects, with financial reporting provisions of the PRA Rules and Solvency II regulations on which they are based.

Our objectives are to obtain reasonable assurance about whether the Relevant Elements of the Solvency and Financial Condition Report are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but it is not a guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the decision making or the judgement of the users taken on the basis of the Relevant Elements of the Solvency and Financial Condition Report.

A further description of our responsibilities for the audit of the financial statements is located on the Financial Reporting Council's website at: [www.frc.org.uk/auditorsresponsibilities](http://www.frc.org.uk/auditorsresponsibilities).

### **Report on Other Legal and Regulatory Requirements**

In accordance with Rule 4.1 (3) of the External Audit Part of the PRA Rulebook for Solvency II firms we are required to consider whether the Other Information is materially inconsistent with our knowledge obtained in the audit of the Company's statutory financial statements. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

### **The purpose of our audit work and to whom we owe our responsibilities**

This report of the external auditor is made solely to the company's directors, as its governing body, in accordance with the requirement in Rule 4.1 (2) of the External Audit Part of the PRA Rulebook for Solvency II firms and the terms of our engagement. We acknowledge that the directors are required to submit the report to the PRA, to enable the PRA to verify that an auditor's report has been commissioned by the company's directors and issued in accordance with the requirement set out in Rule 4.1 (2) of the External Audit Part of the PRA Rulebook for Solvency II firms and to facilitate the discharge by the PRA of its regulatory functions in respect of the company, conferred on the PRA by or under the Financial Services and Markets Act 2000.

Our audit has been undertaken so that we might state to the company's directors those matters we are required to state to them in an auditor's report issued pursuant to Rule 4.1 (2) and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the company through its governing body, for our audit, for this report, or for the opinions we have formed.

Timothy Butchart for and on behalf of KPMG LLP

KPMG LLP  
15 Canada Square  
London  
E14 5GL

17 April 2019

- The maintenance and integrity of MS Amlin Insurance Societas Europaea's website is the responsibility of the directors; the work carried out by the auditors does not involve consideration of these matters and, accordingly, the auditors accept no responsibility for any changes that may

have occurred to the Solvency and Financial Condition Report since it was initially presented on the website.

- Legislation in the United Kingdom governing the preparation and dissemination of Solvency and Financial Condition Reports may differ from legislation in other jurisdictions.

**Appendix – relevant elements of the Solvency and Financial Condition Report that are not subject to audit**

**Solo standard formula**

The Relevant Elements of the Solvency and Financial Condition Report that are not subject to audit comprise:

- The following elements of template S.17.01.02
  - Rows R0290 to R0310 – Amount of transitional measure on technical provisions
- Elements of the Narrative Disclosures subject to audit identified as 'unaudited'.

## Section A - Business and Performance (unaudited)



## A.1 Business

### Legal form

The name of the Company to 31 December 2018 was Amlin Insurance S.E. ('AISE' or 'the Company'). The name of the Company from 1 January 2019 is MS Amlin Insurance S.E. ('MS AISE' or 'the Company'). The legal form of the undertaking is a "Societas Europaea" or "S.E.".

To 31 December 2018 the Company was domiciled in the United Kingdom. The address of its registered office was:

The Leadenhall Building  
122 Leadenhall Street  
London, EC3V 4AG  
United Kingdom

From 1 January 2019 the Company is domiciled in Belgium. The address of its registered office is:

Koning Albert II Laan 37  
1030 Brussels  
Belgium

### Group structure

MS AISE is a wholly owned subsidiary of MS Amlin plc, a public limited company incorporated in England and Wales. For the reporting year 2018, MS AISE was subject to supervision by the UK's Prudential Regulation Authority (PRA) and conduct regulation by the UK's Financial Conduct Authority (FCA) as well as its branch country regulators.

MS Amlin plc is a wholly owned subsidiary of Mitsui Sumitomo Insurance Company, Limited ('MSI'), which itself is a wholly owned subsidiary of MS&AD Insurance Group Holdings, Inc. ('MS&AD'). Both MSI and MS&AD are registered in Japan.

The registered address of MSI is 3-9, Kanda Surugadai, Chiyoda-ku, Tokyo, Japan.

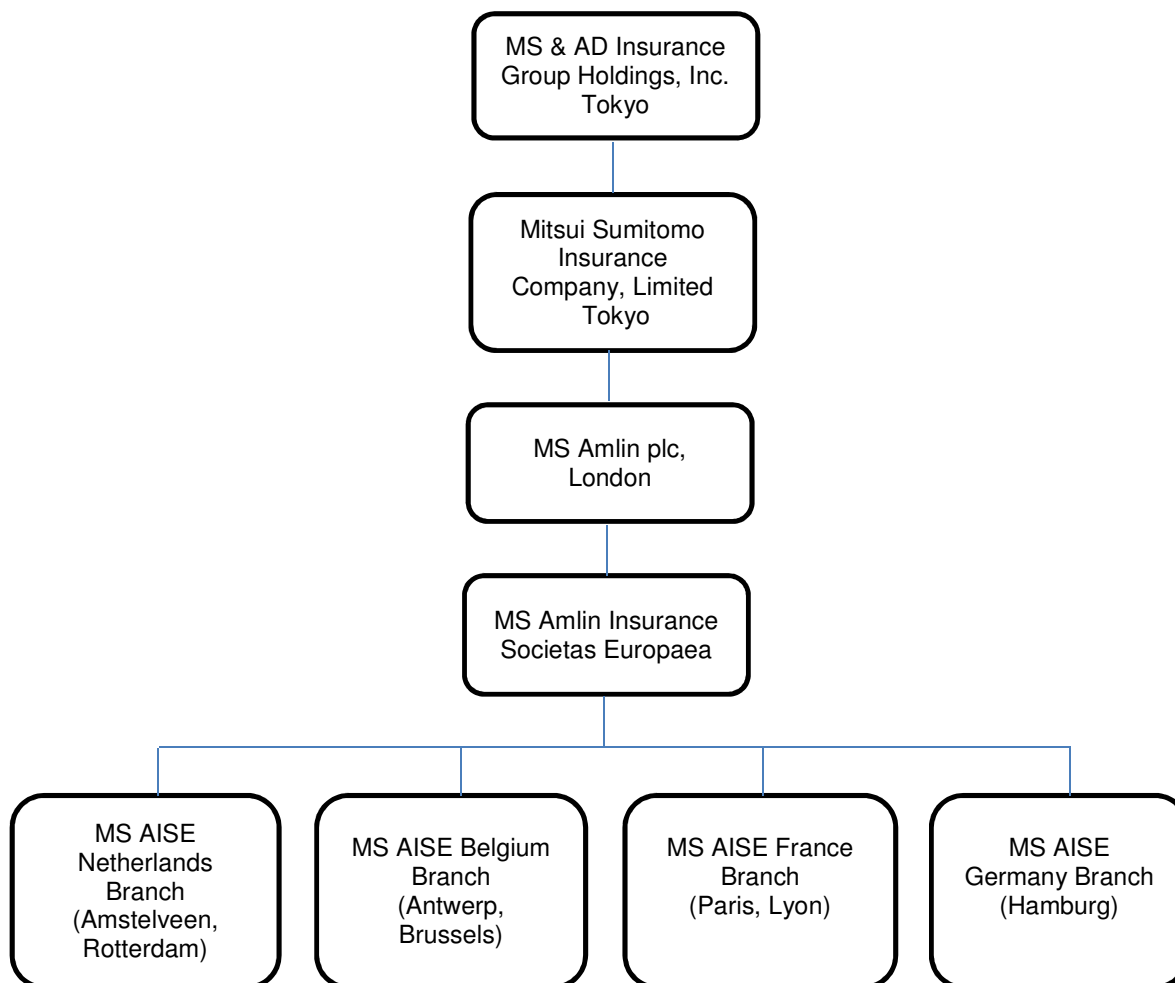
The registered address of MS&AD is Tokyo Sumitomo Twin Building (West Tower), 27-2, Shinkawa 2-chome, Chuo-ku, Tokyo, Japan.

MS&AD is the ultimate parent of MS AISE, and the consolidated accounts of MS&AD represent the largest group in which the results of the Company are consolidated.

MS AISE operates in five countries, and is organised and managed through two distinct operating segments, referred to as Strategic Business Units (SBUs). Segments are as follows:

- **Marine & Aviation** – Primarily focusing on cargo, energy, hull, liability and aviation portfolios, and other specialist areas such as specie and fine art risks. Operates through offices (branches) in Antwerp (Belgium), London (United Kingdom), Paris (France) and Rotterdam (The Netherlands);
- **Property & Casualty** – Providing insurance coverage in three main areas – property, casualty, and motor. Operates through offices (branches) in Amstelveen (The Netherlands), Brussels (Belgium), Hamburg (Germany), London (United Kingdom) and Paris (France).

The simplified structure chart below explains the relationships between MS AISE and its parent companies during the reporting period. MS AISE does not have material related undertakings where a proportion of ownership is held.



### Significant events during the period

MS Amlin announced on 28 June 2017, its intention to re-domicile MS AISE to Belgium in response to Brexit, where MS AISE already operated offices in Brussels and Antwerp. Brexit is the common name given to the result of the referendum on European Union ('EU') membership held in the UK in June 2016, where the UK elected to leave the EU. This was a strategic move that ensured our European brokers and clients experience no disruption from the UK's exit from the EU, whilst continuing to enjoy the same high-quality service they have come to associate with MS Amlin. As at 1 January 2019 the Company re-domiciled and transferred its registered office from the United Kingdom to Belgium. As a result, the supervisory authority has changed as well, as from 1 January 2019 the Company has been subject to control by the National Bank of Belgium while it previously was under the supervision of the Prudential Regulation Authority. The regulatory reports related to 2018 will be submitted at the PRA while the regulatory reports for 2019 will be submitted to the NBB.

Furthermore, in April 2018 the MS AISE and MS Amlin plc boards decided to put the German P&C operation into run-off and no new business has been underwritten from May 2018. The office and branch is expected to close in December 2019. Oversight of the remaining policies will then be transferred to other parts of the MS Amlin Group and administered separately.

**Significant events after the reporting period**

On 3 April 2019, by special resolution the Board approved an increase to the share capital of the Company by an amount of € 28.7 million to increase from € 1.3 million to € 30.0 million without the issuance of new shares and by incorporation of retained earnings. MS AISE's parent, MS Amlin plc, also approved the increase by special resolution. Thus, at the date these financial statements were approved, the subscribed shared capital of MS AISE is represented by 1,164,000 shares at a nominal value of € 25.77 each.

**Supervisor information**

For reporting year 2018, MS AISE's supervisor is the Prudential Regulation Authority ('PRA'), Bank of England, 20 Moorgate, London EC2R 6DA, United Kingdom.

As from reporting year 2019, MS AISE's supervisor is the National Bank of Belgium ('NBB'), de Berlaimontlaan 14, 1000 Brussels, Belgium.

**External auditor information**

The Company's appointed external auditors are KPMG LLP, Chartered Accountants, 15 Canada Square, London, E14 5GL, United Kingdom.

For the reporting year 2019 the appointed external auditor will be KPMG Bedrijfsrevisoren CVBA, Luchthaven Brussel Nationaal 1K, 1930 Zaventem, Belgium.

## A.2 Underwriting performance

The values in this section are consistent with the values included in the following Quantitative Reporting Templates ('QRTs'), as included in the Annex to this report,

- S.05.01 'Premiums, claims and expenses by line of business', and
- S.05.02 'Premiums, claims and expenses by country'

There are some classification differences in the preparation of these QRTs, when compared to the calculation of underwriting performance on an IFRS basis as per the Company's financial statements,

- Underwriting foreign exchange gains or losses are excluded
- Claims management expenses are presented as part of incurred expenses in the QRTs, whereas they would be reported as part of Net claims under IFRS

In all other respects, the accounting for underwriting performance on both Solvency II and IFRS bases is the same, being prepared in accordance with IFRS accounting standards.

### Underwriting performance by material line of business

	Motor vehicle liability and other motor insurance €'000	Marine, aviation and transport insurance €'000	Fire and other damage to property insurance €'000	General liability insurance €'000	Other non-material lines of business €'000	Total €'000
<b>2018</b>						
Gross written premium	104,341	146,665	178,528	123,492	47,494	600,519
Net written premium	102,903	140,545	149,797	113,021	23,648	529,915
Net earned premium	108,334	133,230	146,717	118,515	24,116	530,913
Net claims	(87,220)	(71,702)	(121,720)	(34,933)	(6,303)	(321,879)
Incurred expenses	(43,855)	(56,899)	(59,272)	(47,920)	(7,910)	(215,857)
<b>Underwriting result</b>	<b>(22,741)</b>	<b>4,629</b>	<b>(34,275)</b>	<b>35,661</b>	<b>9,903</b>	<b>(6,823)</b>
Claims ratio	80.5%	53.8%	83.0%	29.5%	26.1%	60.6%
Expenses ratio	40.5%	42.7%	40.4%	40.4%	32.8%	40.7%
Combined ratio	121.0%	96.5%	123.4%	69.9%	58.9%	101.3%

	Motor vehicle liability and other motor insurance €'000	Marine, aviation and transport insurance €'000	Fire and other damage to property insurance €'000	General liability insurance €'000	Other non-material lines of business €'000	Total €'000
<b>2017</b>						
Gross written premium	126,361	131,732	175,908	128,922	49,564	612,487
Net written premium	125,015	128,847	156,133	121,074	21,082	552,151
Net earned premium	128,447	134,998	152,247	108,640	23,277	547,559
Net claims	(118,646)	(81,842)	(123,877)	(79,326)	(7,813)	(411,504)
Incurred expenses	(58,893)	(51,667)	(59,573)	(45,459)	(9,136)	(224,728)
<b>Underwriting result</b>	<b>(49,092)</b>	<b>1,489</b>	<b>(31,203)</b>	<b>(16,145)</b>	<b>6,278</b>	<b>(88,673)</b>
Claims ratio	92.4%	60.6%	81.4%	73.0%	33.6%	75.2%
Expenses ratio	45.9%	38.3%	39.1%	41.8%	39.3%	41.0%
Combined ratio	138.3%	98.9%	120.5%	114.8%	72.9%	116.2%

### Overview

MS AISE written premium has decreased in 2018 (€12.0 million), but overall underwriting performance has improved by €81.9 million compared to 2017.

Gross written premium (GWP) decreased by 2.0% in 2018 compared to 2017 and the full year underwriting result was a €6.8 million loss compared to a €88.7 million loss in 2017. The retention rate for the year was 86% (2017: 90%). Also new business was lower compared to 2017 (€69.4 million vs €77.2 million). The renewal rate was positive at 2.9%, mainly driven by Motor and M&A SBU.

Net claims are €321.9 million which is €89.6 million less than 2017 (€411.5 million) or a decrease of 14.6% from 75.2% in 2017 to 60.6% in 2018. This is largely driven by €39.4 million less prior period deteriorations compared to 2017 (€0.1 million vs €39.4 million) as well as an improvement in the underlying claims ratio for losses with current accident year.

The net gain of the ADC reinsurance contract is a €18 million benefit in 2018.

#### *Motor vehicle liability and other motor insurance*

The MS AISE Motor business written premium decreased significantly in 2018 from €126.4 million to €104.3 million (€22.1 million or 17.4% decrease) across the Netherlands, Belgium and the UK. This is primarily caused by re-underwriting actions.

The underwriting result in 2018 was a €22.7 million loss compared to a €49.1 million loss in 2017. This is mainly explained by unfavourable loss development in Belgium and UK offset by a favourable performance in the Netherlands.

#### *Marine, aviation and transport insurance*

The marine, aviation and transport insurance business in MS AISE showed an increase in written premium in 2018 over 2017, as an improvement of 11.3%. The increase is reflected in a high retention rate of 92.2%, mainly impacted by a strong retention rate of the Hull, Cargo and Liability book. Furthermore, a positive rate increase is realised in most classes, which combined is a 2.5% increase overall. Like prior year, strong competition on the international Hull and Fixed Premium P&I book continues to exist.

Result for the period is an underwriting profit of €4.6 million.

#### *Fire and other damage to property insurance*

The property business in MS AISE showed a small increase in premium in 2018. Gross written premium grew by €2.6 million (1.5%) in 2018, mainly driven by France and Belgium offset by the Netherlands (lower renewed business). The overall retention for the year was strong at 88.1%, reflecting a broader market trend across Europe.

The underwriting result in 2018 worsened compared to 2017 on the back of continued large loss activity (from €31.2 million loss to €34.3 million loss). Net earned premium in 2018 is €146.7 million which is €6.0 million lower than 2017 due to the reinstatement premiums which have been paid for reinsurance treaties in order to cover 2018 claims.

Net claims are €121.7 million, which is €12.2 million less than 2017. Adverse performance development in the Netherlands and Belgium was offset with a favourable performance in France.

#### *General liability insurance*

In 2018 the Casualty portfolio decreased by 4.2% (or €5.4 million). Gross written premium over 2018 amounted to €123.5 million compared to €129.0 million in 2017. This is primarily due to long-term contracts incepting in 2017. On a normalised one-year basis, income is in line with 2017 (€123.7 million).

The underwriting result in 2018 improved significantly with €51.8 million from €16.1 million loss in 2017 to a profit of €35.7 million. Net claims are €34.9 million which is €44.4 million less than 2017. This is driven by a positive prior and current year claims development across all countries.

### Underwriting performance by material geographical area

2018	UK €'000	Netherlands €'000	Belgium €'000	France €'000	Germany €'000	Other €'000	Total €'000
Gross written premium	10,519	318,671	146,143	93,376	27,747	4,064	600,519
Net written premium	9,664	302,808	108,865	78,110	26,403	4,064	529,915
Net earned premium	10,594	301,492	109,497	78,847	26,913	3,570	530,913
Net claims	(11,921)	(159,390)	(80,524)	(48,194)	(21,192)	(658)	(321,879)
Incurred expenses	(5,102)	(116,903)	(46,744)	(33,729)	(11,916)	(1,462)	(215,857)
<b>Underwriting result</b>	<b>(6,429)</b>	<b>25,199</b>	<b>(17,772)</b>	<b>(3,077)</b>	<b>(6,195)</b>	<b>1,451</b>	<b>(6,823)</b>
Claims ratio	112.5%	52.9%	73.5%	61.1%	78.7%	18.4%	60.6%
Expenses ratio	48.2%	38.8%	42.7%	42.8%	44.3%	40.9%	40.7%
Combined ratio	160.7%	91.6%	116.2%	103.9%	123.0%	59.4%	101.3%

2017	UK €'000	Netherlands €'000	Belgium €'000	France €'000	Germany €'000	Other €'000	Total €'000
Gross written premium	6,864	311,705	162,554	100,160	26,359	4,845	612,487
Net written premium	6,789	303,471	123,788	89,240	23,980	4,883	552,151
Net earned premium	13,297	308,739	111,591	88,049	21,650	4,233	547,559
Net claims	(13,482)	(238,156)	(79,699)	(40,652)	(38,450)	(1,065)	(411,504)
Incurred expenses	(2,787)	(127,465)	(49,748)	(32,826)	(10,168)	(1,734)	(224,728)
<b>Underwriting result</b>	<b>(266)</b>	<b>(61,760)</b>	<b>(18,333)</b>	<b>15,938</b>	<b>(25,724)</b>	<b>1,472</b>	<b>(88,673)</b>
Claims ratio	81.0%	78.7%	71.8%	44.6%	171.9%	24.3%	75.2%
Expenses ratio	21.0%	41.3%	44.6%	37.3%	47.0%	41.0%	41.0%
Combined ratio	102.0%	120.0%	116.4%	81.9%	218.9%	65.3%	116.2%

Movements from a geographical perspective have been covered by the line of business commentary above.

## A.3 Investment performance

### Investment performance by asset class

Below is an analysis of MS AISE's investment income and (expenses) by relevant asset class.

	2018	2017
	€'000	€'000
Bonds	-	869
Equities	(959)	12,922
Collective Investment Undertakings	2,632	11,344
Cash and deposits	62	135
<b>Total</b>	<b>1,734</b>	<b>25,270</b>

The year 2018 presented challenging market conditions in which the majority of assets produced very low or negative returns as market volatility increased in light of escalating trade tensions, central banks reducing monetary stimulus and Chinese economic growth slowing down. This background led to a full-year return of €1.7 million.

For the Collective Investments Undertakings, a negative return of €7.4 million was contributed by the futures, bonds, equities and liquidity funds, with continued negative interest rates in the Eurozone, allocations to cash detracted from return as did allocations to debt securities and equities. However, this was compensated by the standout positive performer, the property allocation within Collective Investment Undertakings line, which contributed a positive €10.1 million return.

Following moves to a more flexible policy stance, we now see that the Federal Reserve has put on hold its interest policy until around the second half of the year, and subsequently expect fewer interest rate hikes. We expect that equities will provide a positive return over the coming year due to the backdrop of a more supportive US central bank, equities valuating at average/below-average levels and the expectation of continued earnings expansion. However, the path is unlikely to be smooth and we expect continued pockets of volatility.

Investments are run on a multi-asset, multi-manager basis. Exposure to the asset classes is achieved using physical holdings of the asset class or derivative instruments. The assets are primarily dominated by shares in MS Amlin's UCITS umbrella, which provides sub-funds by asset class and unit classes by currency. Assets may also be managed by MS Amlin Investment Management Limited directly or by outsourced managers, on a segregated, pooled or commingled basis. Manager selection is based on a range of criteria that leads to the expectation that they will add value to the funds over the medium to long-term. The managers have discretion to manage the funds on a day-to-day basis within investment guidelines or prospectuses applicable to their funds that ensure that they comply with the investment frameworks. The managers' performance, compliance and risk are monitored on an ongoing basis.

### Gains and losses directly recognised in equity

Gains and losses directly recognised in equity relate to the valuation result on certain immaterial investments classifying as alternative valuation methods under Solvency II.

### Investments in securitisation

The Company has a small amount of investments in securitised assets, these total 7% of Company investment assets; this reduces to 3% if we exclude assets with the US government as ultimate parent.

## A.4 Performance of other activities

### Other material income and expenses

MS AISE has no other material income and expenses in the statement of profit or loss not included in sections A.2 or A.3 of this report.

### Leasing arrangements

MS AISE entered into several non-cancellable rental and operating lease arrangements. The table below shows future commitments in respect of non-cancellable operating lease and rental agreements at year end.

	2018	2017
	€'000	€'000
Not later than 1 year	4,045	4,318
Later than 1 year and not later than 5 years	10,591	11,476
More than 5 years	2,185	4,037
<b>Total</b>	<b>16,821</b>	<b>19,831</b>

The rent of the office space in:

- Amstelveen is amended as per 1 July 2017 to an office space rent of € 0.7 million annually and now ends on 31 December 2022. The rent is yearly adjusted for inflation. MS AISE has an early termination option per 31 December 2020 (termination costs of € 0.3 million).
- Antwerp is € 0.1 million annually and is yearly adjusted for inflation. The contract ends 30 September 2024. MS AISE has an early termination option per 30 September 2021 (no termination costs).
- Brussels is € 0.5 million annually and is yearly adjusted for inflation. The contract ends 31 July 2024. MS AISE has an early termination option per 31 July 2021 (no termination costs).
- Hamburg is € 0.2 million annually and is yearly adjusted for inflation. The contract ends 31 March 2020 but is early terminated at 31 March 2019 of which MS AISE paid a fee of €0.1m. To handle the run-off of the German portfolio MS AISE will lease temporary office space as per 1 March 2019. This contract will end 1 March 2020 and is €0.0 annually.
- MS AISE Paris is € 1.4 million annually and is yearly adjusted for inflation. The contract ends 28 February 2025. MS AISE has an early termination option per 28 February 2019 (termination costs of € 0.7 million) and per 28 February 2022 (no termination costs).
- The rental agreement for Rotterdam is transferred to the sister company MS Amlin Marine N.V. Consequently, MS AISE has no future commitments in respect of this agreement.

MS AISE has no purchase options on the above mentioned office buildings.

MS AISE leases various cars under operating lease agreement. The remaining lease terms are between 0 and 5 years. Total future lease commitments per 31 December 2018 are € 2.4 million (2017: € 3.0 million).

During the year MS AISE incurred € 4.5 million for lease and rental expenses (2017: € 4.6 million). MS AISE has no sub-leases.



## A.5 Any other information

All material information relating to the Company's business and performance has been disclosed in subsections A.1 to A.4 above.

## Section B - System of Governance (unaudited)

## B.1 General information on the system of governance

### B.1.1 Structure of the Board and management

MS AISE has a Board of Directors (the 'Board'), which is constituted to include an appropriate balance of Executive and Non-Executive directors. The Board has authority over the conduct of the entire affairs of the Company, while recognising that it is a wholly-owned subsidiary of MS Amlin plc and therefore needs to operate within a framework, strategy and structure set by its immediate parent. The parent is represented on the Board, but this does not impair the Board's ability to make decisions which could be contrary to the wishes of its parent, in particular if it does not believe that those wishes are compatible with the Board's obligations to act in the interests of policyholders.

MS AISE must also report to its parent on aspects of its operations in line with reporting requirements set by MS Amlin plc from time to time.

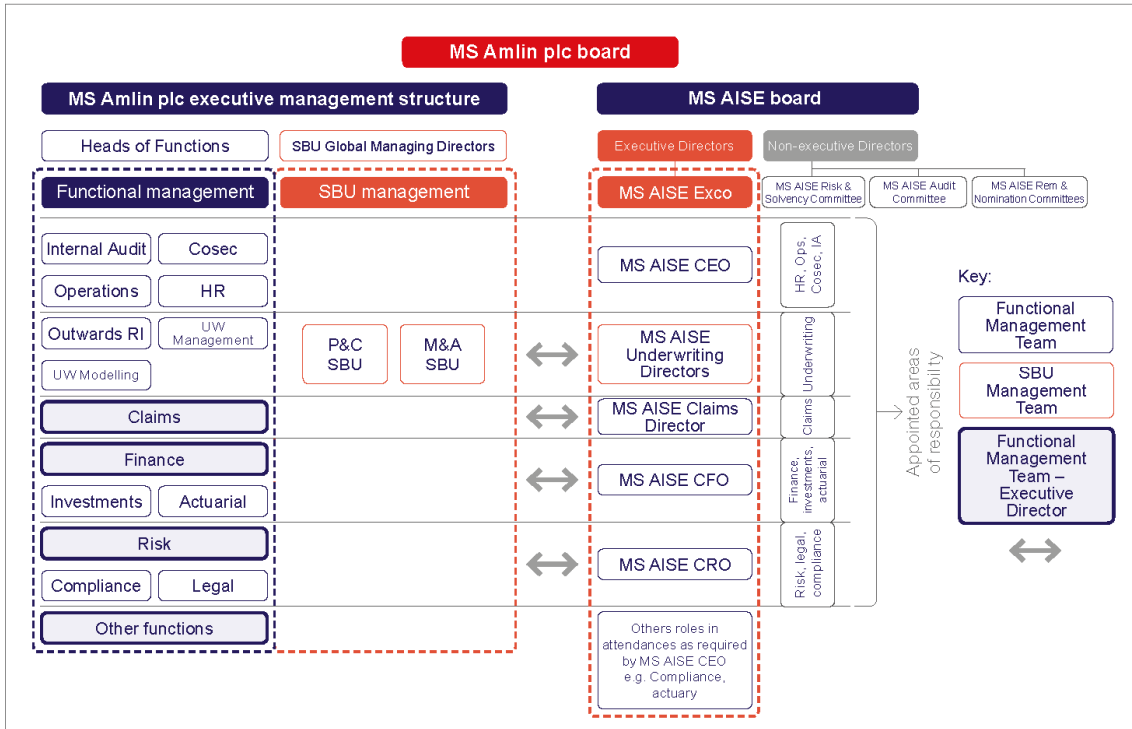
The Board sets the strategic direction of the Company and provides leadership within the risk appetite and framework of systems and controls. The Board ensures MS AISE has the right balance of skills, experience, independence, knowledge and diversity for an evolving business. The Board achieves this by:

- An on-going programme of Board effectiveness evaluation;
- A Group training and development programme for all directors, including MS AISE directors;
- Continued rigorous analysis by the Remuneration Committee and Nomination Committee of the balance of skills, experience and diversity when appointing new MS AISE directors;
- Continued focus on the development of potential employees with Board readiness specifically in mind, as well as corresponding succession planning and talent development.

The responsibilities of the individual Executive and Non-Executive directors during the reporting period are described later in this section.

The Board has a number of committees, to which it delegates oversight and decision-making powers in accordance with documented Terms of Reference. These are described in more detail later in this section.

The diagram below sets out the MS AISE legal entity governance framework during the reporting period, as well as the linkage with the MS Amlin plc governance framework for completeness. In the diagram below, the term SBU refers to Strategic Business Units which are virtual organisations operating as profit centres with management teams, but that have no legal personality. SBUs are customer focused units established around classes of underwriting, being reinsurance ('RI'), Property & Casualty ('P&C') and Marine & Aviation ('M&A'). MS AISE relevant SBUs are P&C and M&A.

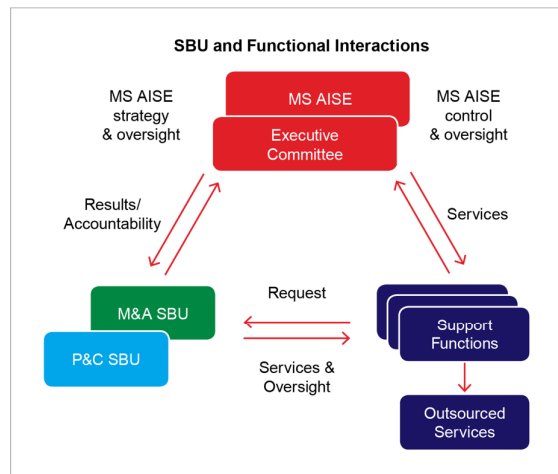


**MS AISE’s operating structure**

The principles underpinning MS AISE’s operating structure through the SBUs P&C and M&A are to:

- Facilitate client intimacy as a source of competitive differentiation and enable profitable growth;
- Enable greater efficiency and minimal duplication of effort; and
- Ensure strong management control and oversight and more consistent application of service and oversight process.

MS AISE’s directors and other members of senior management operate a “commissioning” model across a matrix structure with MS Amlin plc. The below diagram sets out how MS AISE is governed within this structure and how MS AISE’s Board and executive directors have exercised strategy and control oversight over their affairs during the reporting period.



The support functions servicing MS AISE include Actuarial, Business Change, Claims, Company Secretarial, Compliance, Facilities, Finance, Human Resources, Internal Audit, Investment Management, IT, Legal, Marketing, Risk, Strategy and Underwriting Operations.

All Support Functions have clearly defined roles, responsibilities, budgets and service delivery objectives that are documented and monitored. Internal Service Catalogues document functional services provided to each SBU and legal entity, including MS AISE. These are subject to agreement by the Group Operations Committee and the CEO of MS AISE. The Group Operations Committee proposes the overall functional budgets and allocations to SBUs and MS AISE. The cost allocation is agreed by the Board as part of the business planning processes. Variances are subject to an equivalent approval processes depending on materiality. Performance monitoring occurs at various levels across the structure. It is underpinned by a suite of key performance indicators, satisfaction surveys and review mechanisms to highlight underperformance and drive improvement. The output of these processes is summarised each quarter in functional scorecards for SBU and MS AISE management. The Board receives a report from the CEO each quarter on service performance. Actions to address any service issues are agreed with the heads of functions and where necessary escalated.

### Main roles and responsibilities of the Board

The Board is responsible for the leadership, direction and control of MS AISE, and for ensuring that the Company complies with all of its legal and regulatory obligations. The Board supports the Company's strategy for its primary purpose as an insurer, and has resolved a set of matters reserved to the Board. These matters reserved are reviewed periodically by the Board to ensure that they remain appropriate.

The Board meets at least four times per year, with regular contact between Executive and Non-Executive Directors throughout the year. All directors have access to the advice of the Company Secretary, and all directors, committees, and the Board itself may procure professional advice at MS AISE's expense in the furtherance of their duties.

Within the MS AISE Board of Directors the following roles existed during the reporting period:

Executive / Non-Executive Director	Role
Executive	Chief Executive Officer
Executive	Chief Finance Officer
Executive	Chief Risk Officer
Executive	Chief Underwriting Officer: Property & Casualty
Executive	Chief Underwriting Officer: Marine & Aviation
Executive	Claims Director
Non-Executive	Chairman of the Board and Chairman of the Nomination Committee
Non-Executive	Group Chief Underwriting Officer (parent representative)
Non-Executive	Chairman of the Audit Committee
Non-Executive	Chairman of the Risk & Solvency Committee

### Segregation of responsibilities within the MS AISE Board

The table below sets out how key Board level responsibilities under both the Senior Insurance Managers Regime ('SIMR') and, from 10 December 2018, the Senior Managers & Certification Regime ('SM&CR') have been allocated to Senior Insurance Managers, all of whom are duly approved by either the PRA or the FCA. The allocation of these responsibilities is reviewed and approved by the Board periodically, as part of the process of reviewing the SIMR Governance Map (and SM&CR Responsibilities Map) more broadly.

MS AISE Board Member	Executive / Non-Executive	Responsibilities
Chief Executive Officer	Executive	<ul style="list-style-type: none"> <li>Responsibility for ensuring that MS AISE has complied with the obligation in Insurance – Fitness and Propriety 2.1 to ensure that every person who performs a key function, including every person in respect of whom an application under section 59 of FSMA is made, is a fit and proper person.</li> <li>Responsibility for overseeing the adoption of MS AISE's culture in the day-to-day management of the Company.</li> <li>Responsibility for the development and maintenance of MS AISE's business model by the governing body.</li> <li>Responsibility for monitoring effective implementation of policies and procedures for the induction, training and professional development of all of MS AISE's Key Function Holders (other than members of the Company's governing body).</li> </ul>
Chief Finance Officer	Executive	<ul style="list-style-type: none"> <li>Responsibility for the production and integrity of MS AISE's financial information and its regulatory reporting.</li> <li>Responsibility for management of the allocation and maintenance of MS AISE's capital and liquidity.</li> </ul>
Chief Risk Officer	Executive	<ul style="list-style-type: none"> <li>Responsibility for performance of MS AISE's Own Risk &amp; Solvency Assessment (ORSA).</li> </ul>
Chairman of the Board	Non-Executive	<ul style="list-style-type: none"> <li>Responsibility for leading the development of MS AISE's culture by the governing body as a whole.</li> <li>Responsibility for leading the development, and monitoring effective implementation of policies and procedures for the induction, training and professional development of all members of the Company's governing body.</li> </ul>
Chairman of the Audit Committee	Non-Executive	<ul style="list-style-type: none"> <li>Responsibility for oversight of the independence, autonomy and effectiveness of MS AISE's policies and procedures on whistleblowing, including the procedures for protection of staff that raises concerns from detrimental treatment as captured in the Speak Up Policy.</li> </ul>

The Governance and Risk Management Frameworks clearly articulate the procedures for decision making. These are documented within the terms of reference for the Board Committees, Management Committees, and in matters reserved to the MS AISE Board. The frameworks include both corporate and regulatory requirements, such as strategic matters and Solvency II requirements. The Governance Framework also details explicit procedures for key activities such as financial reporting disclosures and contingent future management actions in the event of certain matters arising.

Key MS AISE Board Committees are:

#### *The Audit Committee*

The MS AISE Audit Committee meets at least quarterly. Its membership is composed of Non-Executive Directors only. Its remit is determined by its Terms of Reference and includes financial reporting and Solvency II reporting matters, as well as issues pertaining to regulatory compliance, internal controls, internal audit and external audit.

#### *The Risk & Solvency Committee*

The MS AISE Risk & Solvency Committee meets at least quarterly. Its membership is composed of Non-Executive Directors only. Its remit is determined by its Terms of Reference and includes risk management issues and solvency capital requirements.

*The Remuneration Committee*

During 2018, the Group Remuneration Committee acted as the Remuneration Committee for the Company. The Remuneration Committee meets at least three times a year. Its membership is composed of independent non-executive directors of the regulated entities within MS Amlin, of which two members are independent non-executive directors of the MS AISE Board. Its remit is determined by its Terms of Reference. The Committee sets out the framework and broad policy for the remuneration of senior executive and other Solvency II staff. With derogation from the National Bank of Belgium, the Group Remuneration Committee will continue to act as the Remuneration Committee for the Company going forward. For more information regarding the Remuneration policy refer to section B.1.2 of this report.

*The Nomination Committee*

The MS AISE Nomination Committee meets at least annually. Its membership is composed of Non-Executive Directors only. Its remit is determined by its Terms of Reference and leads the process for appointments to the MS AISE Board.

*The Underwriting Oversight Committee*

In November 2018 the Group Underwriting Oversight Committee ('UOC') was established. The UOC meets at least four times a year. Its membership is composed of at least two Board members from each Legal Entity, including MS AISE. The predominant Committee membership is independent non-executive directors. Its remit is determined by its Terms of Reference. The remit of this Committee is to oversee the performance, strategy and control framework around underwriting activity of the Company and make recommendations, as appropriate. The Committee has no underwriting, decision or management authority or responsibility over the Company.

**Reporting to the MS AISE Board and its Committees**

Monthly and quarterly management information reports are prepared and tabled for discussion, review, consideration and challenge at the Board and its Committees' meetings, including Executive Committee meetings. The reporting covers various business areas including, but not limited to, Underwriting, Reinsurance, Claims, Actuarial and Reserving, Finance, Investments, Human Resources, Compliance, Legal, Internal Audit, External Audit, Risk, Internal Control and Strategy. The reporting facilitates informed decision making.

The Company's Own Risk and Solvency Assessment ('ORSA') reporting process supports risk management and capital related decisions. The Standard Formula and Internal Model output are key data sources for the ORSA. For regulatory capital, MS AISE calculates capital using the Standard Formula. MS AISE also operates an Internal Model (as part of the MS Amlin Group Internal Model) that captures key economic and risk factors that could impact the Company's performance. It is used in such decisions as business planning and performance management. The methods, assumptions and calibrations associated with the Internal Model are documented and validated annually as part of the Group process.

**Roles and Responsibilities of Key Functions**

The MS AISE management structure aligns to the requirements of SIMR and SM&CR from 10 December 2018, with all Key Function Holders within MS AISE identified and empowered. All staff, including Key Function Holders, have clearly defined roles and responsibilities detailed in their job specifications. Performance appraisals take place where staff is assessed against their performance objectives and the requirements of their roles.

The table below comprises the functional areas identified by MS AISE as Key Functions in accordance with the Solvency II Directive, along with the individuals identified as Key Function Holders, and their management reporting lines.

Key Function	Main Responsibilities	Key Function Holder	Reports To	MS AISE Board Responsibility
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Risk Management function	Responsibility for the performance of MS AISE's ORSA. For further information on the ORSA, please refer to section B.3.2 page 40.	Chief Risk Officer <sup>1</sup>	Group Chief Executive Officer	Chief Risk Officer
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1. The Chief Risk Officer for MS AISE is also the Chief Risk Officer for MS Amlin plc, hence the reporting line is to the Group Chief Executive Officer.

Key Function	Main Responsibilities	Key Function Holder	Reports To	MS AISE Board Responsibility
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Internal Audit Function	To assist the MS AISE Board to meet the agreed strategic and operational objectives of the Company, through the provision of an independent appraisal of the adequacy and effectiveness of the internal control framework in operation. For further information on the Internal Audit function, please refer to section B.5.	Chief Internal Auditor	Non-Executive Director (Audit Committee Chairman) Group Chief Executive Officer (administratively)	Non-Executive Director (Audit Committee Chairman)
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Actuarial Function	To provide capital modelling and reserving services to MS AISE. For further information on the Actuarial function, please refer to section B.6.	Group Actuary	Group Chief Finance Officer	Chief Financial Officer
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Compliance Function	To provide an appropriate degree of assurance to the MS AISE Board that the Company is operating in a way which is compliant with relevant rules and regulations.	Group Head of Compliance	Group Director of Legal & Corporate Affairs	Chief Risk Officer
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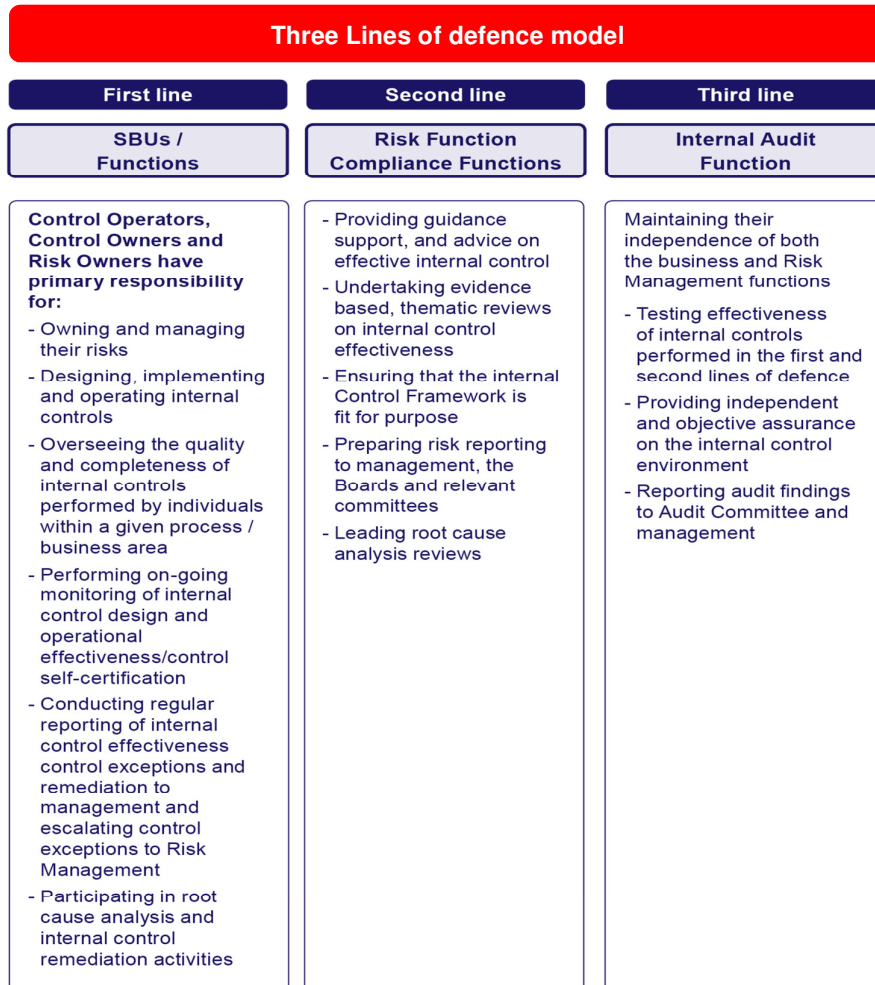
The assurance functions are adequately resourced and are staffed by appropriately qualified, skilled and experienced individuals. The assurance functions are authorised and empowered to operate within their agreed terms of reference/charters. The Chief Internal Auditor reports functionally to the Audit Committee Chair, an Independent Non-Executive Director.

Assurance reports are also made available to Executive Management for their review and consideration, but are not subject to Executive approval.



### The three lines of defence model

The MS AISE three lines of defence model mirrors the MS Amlin Group’s three lines of defence model. The model explicitly defines the roles and responsibilities of all staff across MS AISE on the basis of their remit and authority. The three lines of defence model can be explained as follows:



MS AISE’s first line of defence is supported by the Risk function, through its Risk Assurance team, which acts as a catalyst for effective assurance in MS AISE. As an embedded pre-emptive support function it enables and helps the first line of defence to implement and operate their controls. The Risk Assurance team promotes individual accountability by encouraging excellence through an effective and efficient control environment.

The third line of defence operates with complete independence from both the first and second lines to enable them to provide objective and independent assurance to the MS AISE Audit Committee and Board.

Segregation of duties is a key control within MS AISE that supports transparent governance and culture, and promotes clear accountability for activities. It is built into the Corporate Governance Framework, Organisational Structure, Key Persons Framework Design, Risk Management Framework and Internal Control Framework.

## Information systems

MS AISE operates within the Group Management Information ('MI') reporting framework, under which monthly and quarterly MI reports are received by the MS Amlin plc Board and senior management, containing Underwriting, Finance, Risk, Human Resources, Investments, Actuarial and Internal control MI. Copies of the reporting are also available to the MS AISE Executive Committee, giving them oversight of the MI and any issues arising. This reporting forms part of the Company's ORSA process with information contributing to both risk management and capital related decisions.

## Segregation of duties

Segregation of duties is a key control within MS AISE that supports transparent governance and culture, and promotes clear accountability for activities. It is built into the Group Corporate Governance Framework, organisational structure, Key Persons Framework design, Risk Management Framework and Internal Control Framework. MS AISE operates within these MS Amlin Group frameworks and structures.

## Risk Management Framework

MS AISE has a Risk Management Framework that seeks to support the fulfilment of its long term strategic objectives, whilst protecting the interests of all third parties, including its policyholders.

The framework complements the systems of governance, ensuring risk management is inherent in the day to day activities of the Company and in the key decisions made by the MS AISE Board and its committees.

A fully resourced Risk function ensures that there are adequate mechanisms in place to identify, measure and monitor all material risks faced by MS AISE, including exposures to intra-group transactions and aggregate risk concentrations. The framework ensures that information on both qualitative and quantitative aspects of MS AISE's material risks is made available to the Board and its Committees, including the Executive Committee, and that decisions take account of Available own funds to support the mitigation of risks.

Further details on MS AISE's key risk management activities are detailed in section B.3 of this report.

## Internal Control Framework

MS AISE operated a system of internal controls for the full year ended 31 December 2018. MS AISE's Internal Control Framework is derived from the MS Amlin Group Internal Control Framework and was adopted by MS AISE after formal approval by the MS AISE Audit Committee. The framework was developed in consultation with the Internal Audit, Compliance and Risk functions, is based on a set of core principles (control environment, risk assessment, control activities, information and communication and monitoring and testing), references the MS AISE three lines of defence model and sets out roles and responsibilities for MS AISE staff of all levels as it relates to matters of internal control.

Further details on MS AISE's internal control framework are provided in section B.4 of this report.

## Policies and Standards Framework

MS AISE is supported by a group-wide Policies and Standards Framework that articulates the roles, responsibilities and activities that staff must fulfil in relation to these policies and standards. This framework also covers MS AISE, and key policies and standards are translated for non-English speaking staff. All MS AISE staff are required to attest that they have read each of the policies and standards that are relevant to their role. Through the respective assurance programmes of the Risk, Compliance and Internal Audit functions, compliance with policies and standards is monitored, reviewed and challenged.

The framework also includes governing mechanisms, such as:

- Explicit ownership by named heads of functions or executives;

- Monitoring by the Compliance function to ensure policies and standards are kept up to date and that staff have read them;
- Escalation of breaches to relevant committees and governance forums.

## B.1.2 Remuneration policy and practices

### Remuneration Strategy

The aim of the MS Amlin Remuneration Standard is to ensure that the way MS Amlin's people are rewarded is in accordance with and supportive of the Group's vision, objectives and strategy – including the Group's risk profile and risk management practices. The MS Amlin Remuneration Standard was set in the MS Amlin plc Remuneration Committee. The standard is adopted and followed by MS AISE.

By achieving this aim, the maximum possible alignment between the interest and long-term career development of employees is secured, alongside the ambitions of the Company and the creation of long term shareholder value (in accordance, at all times, with agreed levels of ambition and risk appetite).

The MS Amlin Remuneration Committee (the 'Committee'), subject to Solvency II and relevant remuneration regulatory principles, develops, implements and monitors the remuneration policy and practices designed to attract, retain and motivate employees to add value to MS Amlin plc and its subsidiaries (including MS AISE) but prevents having to remunerate at levels which are not merited.

There is a formal and transparent procedure for developing policy on remuneration and for setting the remuneration packages of employees. The individual entity boards delegate remuneration matters to the joint MS Amlin Remuneration Committee. Two non-executive directors of MS AISE are members of this committee. The Board of MS AISE, through its Nomination Committee, will be kept updated on the work of the Committee on an annual basis. The Committee also has the discretion to reduce all components of the calculated bonuses to zero if MS Amlin were to make a loss over the reporting year.

No individual is involved in deciding their own remuneration. MS Amlin supports and adheres to regulatory and other appropriate remuneration guidelines unless there is clear rationale to justify departure or alternative arrangements.

Without prejudice to the foregoing, reward arrangements and practices are designed, implemented and maintained:

Taking into account best practice where appropriate;

- With an understanding of the external pay environment;
- With the necessary level of transparency to ensure that MS AISE's shareholder may see the link between remuneration paid to directors and senior executives, and corporate performance (taking into account the cost of capital incurred in delivering such performance where appropriate);
- Ensuring that the financial position and financial soundness of the organisation is taken into account at the time such remuneration is paid;
- Incorporating appropriate safeguards to avoid conflicts of interest;
- Ensuring that an ethical, high-performance culture exists within MS AISE, which is aligned to MS AISE's values; and
- Rewarding staff differentially related to performance (MS AISE does not reward for failure).

MS Amlin supports the principles of equal opportunities and the management of diversity in employment. Remuneration structures are fair and equitable and are free from bias on grounds of gender, ethnic origin, nationality, religious beliefs, disability or any other legally protected characteristic.

## Remuneration structure

The remuneration structure for administrative, management or supervisory body employees (excluding Non-Executive Directors) reflects the potential impact on our risk exposure arising from the actions and decisions of these categories of staff. This is achieved by having remuneration arrangements which contain the following characteristics whilst being compliant with local laws and regulations:

- The fixed component of remuneration represents a sufficiently high proportion of the total remuneration (in accordance with the MS Amlin target fixed–variable remuneration ratio);
- The variable component of remuneration is based on a combination of MS Amlin, business unit / function (as appropriate) and personal performance (using both financial and non-financial measures), as described by the plan rules and/or accompanying guidelines or individual participant communications, designed with the intent that top quartile performance is rewarded with top quartile total remuneration and the intent of paying no variable component where a minimum performance threshold is not reached. The non-financial measures referenced in remuneration setting include the degree of employee alignment with role specific competencies, group cultural statement and agreed risk appetite;
- A proportion of the variable remuneration is subject to deferral over a period of not less than three years, in accordance with the deferral target ratio and is also subject to appropriate malus and clawback requirements. Non-financial risk factors which might result in ex-post risk adjustment would include risk failings considered to be material such as adverse audit findings (internal and external), adverse special investigation findings, failure of internal control, risk appetite breaches, regulatory considerations (including conduct risk) and certain types of misconduct cases;
- The calculation of the aggregate non-discretionary annual variable and non-discretionary individual awards cost is subject to suitable adjustment for factors (both financial and non-financial) of current and future risk;
- Termination and/or redundancy payments are linked to the performance of the individual to ensure failure is not rewarded;
- There is a prohibition from using any personal hedging strategies or remuneration and liability-related insurance related to their remuneration arrangements.

MS AISE has pension plan arrangements but does not have any active supplementary pension plans. Early retirement terms from MS AISE sponsored pension plans are pre-determined in the plan rules. MS AISE does not make discretionary enhancements to these terms.

### B.1.3 Material changes over the reporting period

No material changes in the system of governance have taken place over the reporting period.

### B.1.4 Material transactions

The material transaction that occurred with MS AISE's principal shareholder, MS Amlin plc is a capital contribution received during the reporting period. For further explanation refer to section E.1 of this report.

There have been no other material transactions during the reporting period with shareholders, persons who exercise a significant influence on MS AISE, and with members of the MS AISE Board.

### B.1.5 Assessment of the adequacy of the system of governance

The Board of MS AISE regards MS AISE's system of governance as effective though the system of governance continues to be refined, in particular to protect the interests of MS AISE as a regulated entity in the event that these diverge from those of the SBUs or of the Group generally.

The system of governance has been further adjusted per 1 January 2019 to meet the Belgian legal and regulatory requirements now the Company has re-domiciled to Belgium.

## B.2 Fit and proper requirements

MS AISE seeks to ensure that its management body and its Board contain the appropriate balance of skills and experience to ensure that the Company can be appropriately managed and controlled. MS AISE's expectations in relation to fitness and propriety are set out in its Fit & Proper Standard. The Fit & Proper Standard was set at the Group level. As a MS Amlin plc subsidiary, MS AISE follows this standard. The standard sets out requirements for:

- Fitness – including proper professional qualifications, required knowledge and experience, and the required balance of skills across the management body to ensure sound and prudent management of the Company and the performance of an individual's role; and
- Propriety – individuals should be of good repute and have integrity.

Checks on fitness and propriety operate at two stages.

### On recruitment

MS AISE operates procedures at the time of recruitment to ensure that individuals demonstrate appropriate levels of fitness and propriety. Precise requirements vary, depending on the role the individual is undertaking, and the location of their work, but for senior roles pre-employment checks will generally include:

- Criminal record checks;
- Credit checks;
- The taking up of regulatory and employment references; and
- Obtaining proof of professional and other qualifications.

Individuals employed to undertake roles which are Senior Insurance Management Functions are not allowed to take those roles up until they are approved by the relevant regulator.

### On an ongoing basis

MS AISE's processes for ensuring ongoing fitness and propriety include the following:

- Training and development requirements for employees based on their role and responsibilities;
- Performance management processes, including at least an annual formal performance appraisal;
- Regular reviews of remuneration practices, to ensure that incentives are appropriate;
- A duty on employees to disclose any form of dishonest conduct or change in their fit and proper status;
- An obligation to disclose conflicts of interest; and
- An annual attestation of fitness and propriety by certain individuals.

## B.3 Risk management system including the own risk and solvency assessment

This section provides an overview of MS AISE's risk management system including its Own Risk and Solvency Assessment ('ORSA').

### B.3.1 Risk Management System

The risk management system is explained by elaborating on MS AISE's risk management strategy, framework and underlying processes and reporting procedures. MS AISE's risk management system is aligned with the system implemented at Group. This section concludes with a description of how the system has been integrated in the organisational structure and decision making processes.

#### Risk Management Strategy

MS Amlin has a top down approach to risk management whereby the MS Amlin plc Board has developed a high level risk and capital management statement and mandated its adoption through its Risk Management Policy that is applicable to all subsidiaries of the MS Amlin Group. To fulfil the needs of MS Amlin's Risk Management Policy, a Risk Management Framework has been developed.

MS Amlin's vision and core values provide the strategic focus for the risk management system to deliver "an effective Risk Management Framework which optimises return for the risks we take" with the objective to deliver long-term value to its stakeholders (i.e. shareholders, policyholders, staff and other interested parties). This is achieved by actively seeking and accepting risks while managing the risks within acceptable bands.

MS Amlin's risk management strategy has four key elements:

- Clearly defining ownership and responsibilities for managing, identifying and assessing risks across the organisation;
- Ensuring that there is a clear understanding of appetite for key risks and that there are agreed maximum risk limits or tolerances in place which link closely to the return objectives set by the Board;
- Establishing and maintaining a sustainable enterprise risk management process as an integral part of its business model supporting business planning and capital management; and
- Creating a risk aware culture across the organisation by informing, training and motivating staff to consider risk within their day-to-day decision making.

The implementation of the Risk Management Policy and Framework ensures the analysis of risk on an ongoing basis where assessments consider current risk exposures, as well as forward looking exposures. The analysis considers future plans as well as emerging trends, potential scenarios and capital management.

#### *Linkage to capital management*

MS AISE's Capital Management Policy seeks to actively manage capital in alignment to the size of its aggregated risk profile, taking account of its regulatory obligations, requirements to hold contingent capital to support growth and a desire to deliver a cross-cycle return on capital as set by the Board. As a result the capital management policy plays an integral role within the ORSA process informing risk appetite and concurrently being used as a benchmark of own solvency needs versus aggregated risk profile.

Capital is a key consideration in setting business plans and strategies. MS AISE has a target economic capital level based on the MS Amlin Group mechanism for the calculation of 'economic capital'. In order

to assess whether returns are sufficient to compensate for the risks taken, MS AISE allocates virtual risk assessed capital as a consistent measurement tool to each business unit and class.

MS AISE calculates capital requirements using both the Standard Formula as set in Solvency II legislation and a stochastic Internal Model. The Standard Formula is used for calculating and reporting regulatory Solvency II capital requirements to regulators.

The Internal Model was previously approved by the PRA for MS Amlin Group for solvency capital requirement purposes. The approval was withdrawn as a consequence of the change in regulatory status of MS Amlin plc in December 2017 from an insurance holding company to a mixed activity insurance holding company, but continues to be used for internal purposes. The model is used within MS AISE for aggregation of its risk profile (exposures and concentration) and calculation of internal capital requirements. The Risk function is the owner of the Internal Model and is responsible for ensuring the model is appropriately governed, and utilised. The Actuarial capital modelling team are responsible for the day to day management of the model including the calculation kernel, model parameterisation, Economic Simulator generator, Catastrophe Models and operational risk input.

The next table presents the use of the Standard Formula and Internal Model both within the MS Amlin Group and within MS AISE during 2018. MS AISE's capital management strategy is further explained in section E.1 of this report.

Process	MS Amlin Group	MS AISE
Communicate SCR to regulator	Not applicable	Standard Formula
Internal capital requirement	Internal Model	Standard Formula, Internal Model
Decision making	Internal Model	Standard Formula, Internal Model
Risk assessment	Internal Model	Standard Formula, Internal Model

### Risk Management Framework

MS Amlin's Risk Management Framework consists of a suite of standards, governance processes and procedures that put risk management in practice. It is built into the core operating model of the Company and forms part of the overall approach to internal control. It provides the infrastructure within risk governance and also sets out the processes required to sustain risk management within MS AISE.

The scope of the Risk Management Framework is entity wide and applies to all business activities, countries, functions, systems and employees. It covers day to day activities, acquisitions, disposals, outsourcing arrangements, joint ventures, new products and strategic projects.

#### *Risk appetite and tolerances*

A Group Risk Appetite Statement is agreed at the MS Amlin plc Board that is aligned with the overall MS Amlin Group Strategy. MS AISE articulates its own risk appetite and associated tolerances within the context of the overall MS Amlin Group appetite. Management is accountable for managing levels of risk within the allocated tolerances. Exposure versus tolerance is reported quarterly to MS AISE Risk & Solvency Committee and Board.

#### *Risk categorisation*

MS Amlin groups its risks into six key categories as specified in the table below. Accordingly, the Risk Management Framework has been designed to take account of these risk categories and seeks to ensure ownership, accountability and consistency in processes and approach where possible.

Each of these categories of risk is owned by either a Board member or a Senior Management Team member with appropriate expertise and authority to manage the risk on a day to day basis.

Risk category / owner	Definition	Scope	Paragraph in section C
<b>Insurance risk / CUOs</b>	Risk of loss arising from the inherent uncertainties in the occurrence, amount and timing of insurance liabilities and premiums. This includes reserving risk or claims arising on business written prior to the year in question.	Underwriting, catastrophe, reserving, claims, reinsurance (excluding reinsurance credit risk)	C.1
<b>Market risk / CFO</b>	Risk arising from fluctuations in values of, or income from, assets, interest & currency rates and investment returns.	Investment market volatility, investment counterparty risk, currency fluctuation	C.2
<b>Credit risk / CFO</b>	Risk of loss if counterparty fails to perform its obligations or fails to perform in a timely fashion.	Reinsurers, brokers, cover holders, (re-)insureds, banks	C.3
<b>Liquidity Risk / CFO</b>	Risk arising from insufficient financial resources being available to meet liabilities as they fall due.	All assets and potential liabilities	C.4
<b>Operational &amp; Group risk / CFO &amp; COO</b>	Risk from inadequate or failed internal processes, people and systems, or from external events. Risks faced by Amlin entities that may arise as a result of Group structure.	Systems and technology, processes, people, legal and regulatory, group structure related	C.5
<b>Strategic risk / CEO</b>	Risk of the current and prospective impact on earnings or capital arising from adverse business decisions, improper implementation of decisions or lack of responsiveness to industry changes.	Group, political & economic, conduct, capital management, merger & acquisition	C.6

The above material risks (with the exception of strategic risks) are all included in the calculation of MS AISE's Solvency Capital Requirement as set out in Article 101(4) of Directive 2009/138/EC.

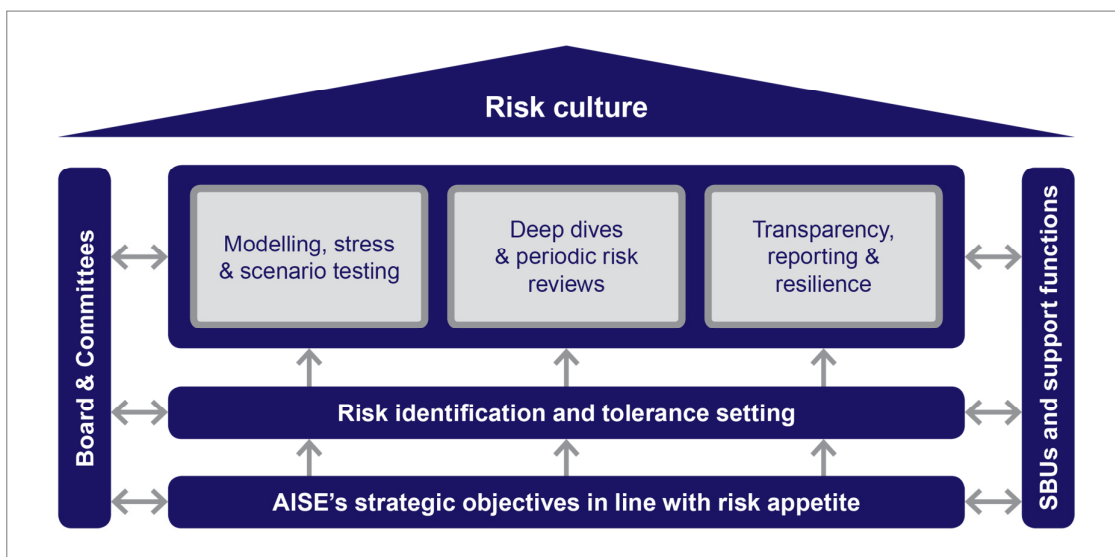
The risks within each of the above categories are captured in an entity specific risk register that support assessment, monitoring and reporting of the risks. The key processes of the Risk Management Framework are discussed in more detail below. The associated exposures, concentrations, mitigating strategies and reporting procedures for each category of risk are described in more detail in section C.



## Risk Management Process

MS AISE uses a holistic view (also referred to as Enterprise Risk Management) in managing the risks in the framework. Risks are not managed in silos of single risk categories, but are managed via an integrated system at the enterprise level. Risks are associated with one or more portfolios of principal risks, which results in an aggregated impact on the organisation as a whole.

The process (as presented below) assures portfolios of principal risks are managed effectively, measured and monitored on a continuous basis, both on an individual as well as at an aggregated level. It is an iterative process with high involvement of MS AISE's Board and functions and SBUs (first line of defence).



This risk management process can be summarised via the below activities.

- The Board is responsible for aligning MS AISE's strategy with its risk appetite and tolerances. The outcome of this process is a risk appetite statement per risk category.
- The risk appetite statement per risk category is translated into measurable tolerances which need to be managed by the appointed risk owner. MS AISE's SBUs and support functions are responsible for performing activities to manage risk within tolerance.
- Via the Internal Model and Standard Formula a wide range of parameters are stressed and future developments are mapped using scenario analysis (see also next section on ORSA).
- Risks are assessed by way of periodic catch-ups with first line risk managers and analytical deep dives. The purpose of these activities is to identify, assess and analyse areas of risk exposure and associated mitigation.
- Effectiveness of controlling operational risks is measured via the Internal Control Framework (ICF). The relationship between the risk management process and the ICF is explained in section B.4.
- Reporting on the Risk Management Framework is done by the Risk function on a monthly basis to MS AISE's Executive Committee and on a quarterly basis to MS AISE's Risk & Solvency Committee.

Lessons learned from the risk management process are used as input in the strategy setting process for the following year, but also for improving risk culture and awareness entity wide.

## Decision Making Processes

MS AISE’s Board is responsible for taking key decisions across the organisation, but delegates some of its decision making responsibilities to its committees, e.g. the Executive Committee, Risk & Solvency Committee and Audit Committee. The output of the risk management system is reviewed by the Risk & Solvency Committee with a summary of key items taken to the Board. Information on risk is taken to the decision making committees by the Risk function following their review. This process facilitates the integration of the risk management system in the decision making process.

An important instrument which explains how the risk management function is integrated into the organisation decision making processes is the ORSA reporting process. This process is detailed in the next section.

### B.3.2 Own Risk & Solvency Assessment (ORSA)

The ORSA is fully embedded into the overall Risk Management Framework and aligned to capital strategy and business planning related processes and decision making. MS AISE is performing its ORSA independently of, but in conjunction with, the Group. The Company operates an annual cycle with numerous inputs and outputs to the process throughout the year, summarised into an Annual ORSA report which is presented to MS AISE’s Risk & Solvency Committee and Board.

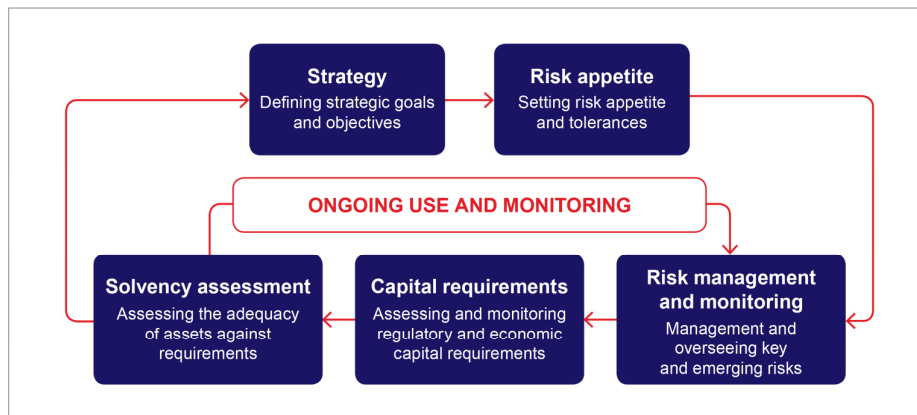
The Board is accountable for sustaining a robust ORSA process that informs management on business strategy in relation to risk exposure and solvency. MS AISE defines its ORSA process as:

- The entirety of its risk management processes and procedures that seek to identify, assess, monitor, manage, and report the short and long term risks of the Company and its strategy;
- The processes and activities used to determine the adequacy of own funds necessary to ensure that the overall solvency needs of the Company are met at all times;
- A process that links and articulates the development and management of the Company’s risk profile and associated capital requirements.

The last full iteration of the ORSA process concluded with the presentation of the annual ORSA report to the MS AISE Risk & Solvency Committee in Q2 2018.

### ORSA Processes

The ORSA leverages off key business processes, the risk appetite framework and risk management and finance processes. The process runs in conjunction to the business planning process, allowing it to inform the development of the business plan as per the annual cycle. The process covers current year business plan monitoring (quarterly) and forward looking forecasting of future years.



### *Current year monitoring*

The current year monitoring ORSA process is designed to provide MS AISE's executive management and Board with a clear understanding of the solvency position at a particular point in time, given its risk exposures. Current year monitoring runs from the start of the financial year to 31 December with quarterly reporting in place.

As part of current year monitoring MS AISE's business plan is assessed and challenged by the Risk function which take into consideration risk, capital and solvency implications. The development of the business plan against these considerations is monitored during the year to ensure the business plan and levels of risk remain within predefined risk appetites and tolerances.

The iterative current year monitoring takes account of all (net) current risk exposure that determines solvency requirements via the Internal Model and Standard Formula. Capital requirements are assessed versus actual own funds. The quarterly outcomes of current year monitoring are used to support decision making and are standing agenda items for the Risk & Solvency Committee and Board.

### *Forward looking forecasting*

Forward looking forecasting seeks to identify, assess, monitor, manage and report the longer term strategic risks and forecast returns faced by the organisation and to consider how MS Amlin's solvency is impacted by changes in these risks. Forward looking forecasting is conducted using a selection of stress and sensitivity testing which are challenged in Risk & Solvency Committee and/or Board meetings. It is an annual process with numerous inputs and outputs throughout the year that are summarised into the annual ORSA report. Capital requirements are calculated using both the Standard Formula and the Internal Model.

The process is based on a number of sub-processes operated through the year to identify, assess and manage the possible risks MS AISE may face in the next financial year and beyond, and to ascertain the own funds necessary to guarantee that complete solvency requirements would be met at all times in these future periods.

### *Ad hoc ORSA reruns*

There is a framework to determine if the ORSA process needs to be executed outside of the typical schedule. Both the quarterly current year monitoring process and forward looking process and resultant reports can be run outside of these timeframes (in full or partially) if there is a significant risk event, or series of risk events that may necessitate the immediate review and re-evaluation of MS AISE's solvency position or risk profile based on changed circumstances and assumptions.

Examples of such ad hoc triggers include, but are not limited to: Business plan reforecasts, material underwriting catastrophes, material financial market movements/volatility or material reserve adjustments. No such events arose for MS AISE during the reporting period ended 31 December 2018.

### *Assurance*

The Risk & Solvency Committee oversees the execution of the ORSA process ensuring it is appropriate and follows the governance process. The Risk & Solvency Committee ensures that:

- The ORSA is reviewed by all members of Executive Management;
- The ORSA is presented to the Risk & Solvency Committee for review and comment; and
- The Board approves the ORSA, subject to the actions raised.

## B.4 Internal Control System

### B.4.1 Internal controls system

MS AISE operated a system of internal controls for the full year ended 31 December 2018.

MS AISE's Internal Control Framework is derived from the MS Amlin Group Internal Control Framework and was adopted by MS AISE after formal approval by the MS AISE Audit Committee. The framework was developed in consultation with the Internal Audit, Compliance and Risk functions and is based on a set of core principles (control environment, risk assessment, control activities, information and communication and monitoring and testing), references the MS AISE three lines of defence model (as explained in section B.1.1 on page 25) and sets out roles and responsibilities for MS AISE staff of all levels as it relates to matters of internal control.

MS AISE's key internal control procedures comprise company level controls, IT general controls and process level controls. These include, but are not limited to, access controls, oversight controls, segregation of duties, initiation and approval controls, monitoring and oversight controls, reporting controls, reconciliation controls, as well as other controls. The effectiveness of internal controls is assured through the operation of the MS AISE three lines of defence model.

For the year ended 31 December 2018, MS AISE's internal controls contributed to meeting various objectives, including operational effectiveness and efficiency, reliable financial reporting, compliance with laws and regulations, and management of reputational and strategic risks. MS AISE managed its internal controls on a dedicated internal controls software solution that required control operators to perform a quarterly self-assessment of the effectiveness of their controls on the system, to upload supporting evidence to the system and to submit their self-assessment to an assigned control owner for review and approval. This process was managed by a dedicated Risk Assurance team within the Risk function, which was also tasked with reporting on the results of the quarterly control self-assessment cycles to the MS AISE Audit Committee. This process was further strengthened by quality assurance reviews that were carried out by the Risk Assurance team over the control self-assessments, which was done on a sample basis.

The Risk Assurance team is a centralised MS Amlin Group team and forms part of the second line of defence. Specifically, this function supports and challenges the first line of defence on their management, maintenance, enhancement and remediation of key internal controls, provides internal control training to control owners and operators, and manages the quarterly internal control self-assessment process.

Other assurance providers, such as the Internal Audit, Risk and Compliance functions, contributed to the enhancement of MS AISE's internal control framework through their respective assurance activities and reporting. Feedback loops between these assurance providers and the Risk Assurance team had been established and were operating effectively for the year ended 31 December 2018.

MS Amlin is assessed as a significant business for MS&AD, the ultimate parent company, which is a listed company in Japan. MS&AD must comply with requirements in the Financial Instruments and Exchange Act (known as 'J-SOX') and as such, there is a requirement for MS Amlin, which includes MS AISE, to attest to its compliance with J-SOX. MS AISE is not required to attest to its compliance with J-SOX on a stand-alone basis, but forms part of the MS Amlin Group wide J-SOX compliance programme.

### B.4.2 Compliance function

The MS Amlin Group Compliance function ('Compliance function') operates on the basis of its Terms of Reference with a compliance officer having responsibility for the Compliance function within MS AISE as a legal entity. The Terms of Reference set out the Compliance function's responsibilities, reporting lines, and rights to perform its duties unimpeded by management. The Terms of Reference are approved by the Group Risk & Solvency Committee and reviewed and approved annually. Up to 2017 the Audit Committee had oversight over the full compliance plan and reporting in this aspect was performed to the

Audit Committee. In 2018, the Audit Committee continued to keep oversight over compliance monitoring but the other duties of the Compliance function were overseen by the Risk & Solvency Committee Committee.

The Terms of Reference describes the role of the Compliance function as being to provide assurance to the Executive management and Boards of the Group and its subsidiary MS AISE that they comply with all regulatory requirements, associated laws, and relevant MS Amlin policies which are followed by MS AISE. These policies are adjusted to local regulations in the countries where MS AISE operates where necessary. The Compliance function has five key responsibilities to support the objective:

- Identification – identifying compliance risks and advise on them;
- Prevention – design and implement controls to protect MS AISE from identified risks, including awareness and training;
- Monitoring – monitor and report on the effectiveness of these controls;
- Resolution – resolve compliance issues if and when they occur;
- Advisory – advise functions/SBUs on compliance, rules and controls in specific cases.

Quarterly, the Compliance function reports to the Audit Committee of MS AISE in respect of Compliance Monitoring findings. To MS AISE's Risk & Solvency Committee it reports quarterly on integrity risks and regulatory breaches (if any). The compliance officer of MS AISE has a standing invitation to the meetings of the MS AISE Board and its committees.

Compliance monitoring is carried out in accordance with a plan approved annually by the MS AISE Audit Committee. The compliance monitoring process includes both thematic reviews and periodic data analysis, with the intention of ascertaining that:

- Processes operated by first line functions servicing MS AISE designed to achieve compliance with Group standards and underlying regulations would be adequate to ensure compliance if followed; and
- These processes are being followed in practice by MS AISE.

The universe of issues covered by compliance monitoring is set out in the MS Amlin Group Integrity Risk Framework (adopted by the MS AISE Risk & Solvency Committee), which is the part of the MS AISE Risk Management Framework designed to measure MS AISE's compliance with regulatory obligations. Areas covered include:

- Business integrity;
- Financial crime controls;
- Customer treatment; and
- Prudential control requirements.

The Compliance function is also responsible for monitoring and advising on prospective changes in regulation, to ensure that the Group is in a position to be compliant with them. A quarterly report is made to the MS AISE Risk & Solvency Committee, setting out upcoming changes, if any, and MS AISE's readiness to implement them.

### **Compliance with Solvency II**

In accordance with its Terms of Reference, the Compliance function has advised the MS AISE Board on a number of issues relating to Solvency II in 2018. These have included the approach to capitalisation, and fitness and propriety requirements for individuals.

## B.5 Internal Audit function

The Internal Audit ('IA') function is under the supervision of the Board and/or the Audit Committee of MS Amlin plc. Secondary reporting lines exist to the Boards and Audit Committees of other MS Amlin entities, including MS AISE. The MS AISE Board has delegated its responsibility for overseeing the Internal Audit activity to its Audit Committee.

The Chief Internal Auditor ('CIA') attends the MS AISE Audit Committee ('MS AISE AC') and reports inter-alia, on planned audit work, recent audits completed and any other matters as directed by the Board and/or the MS AISE AC. An annual audit plan is prepared during Q4 each year. The MS AISE Audit Committee approves the proposed plan of work impacting MS AISE, prior to the full group-wide planning being approved by the MS Amlin PLC Audit Committee. Following approval, the audit plan will be communicated to all relevant Boards and Committees across the Group, including the MS AISE AC for its approval. This audit plan covers all MS Amlin Group Functions and Strategic Business Units ('SBUs') and thus encompasses in its scope all subsidiaries (incl. MS AISE) and branches. Audits might focus on a particular legal entity or location or can be group-wide audits.

The Internal Audit plan is developed using a risk-based methodology, including input from senior management and the Board and/or the MS AISE AC. IA will review and adjust the plan, as necessary, in response to changes in the organisation's business, strategies, risks, operations, programs, systems, and controls. The CIA will communicate the impact of resource limitations and significant interim changes to the Board and/or the MS AISE AC and other stakeholders as deemed applicable.

IA has sufficient and timely access to key management information and a right of access to all of the organisation's records, personnel, property and operations of the Company, necessary to discharge its responsibilities, with strict responsibility for safekeeping and confidentiality.

The scope of internal auditing is based on an approved audit plan and encompasses, but is not limited to, the examination and evaluation of the adequacy and effectiveness of the organisation's governance, risk management, and the internal control framework established by management, to ensure achievement of MS Amlin's strategic and operational goals and objectives. IA will also examine the quality of performance in carrying out assigned responsibilities. This will be achieved by:

- Effective identification, assessment and management of risk;
- Compliance with those policies, standards, procedures, laws and regulations which could have a significant impact on MS Amlin's operations or reputation;
- Display of and adherence to MS Amlin's values and culture;
- Safe custody of assets; and
- Effective and efficient use of resources.

There is specific emphasis on:

- The design and operational effectiveness of governance structures and control processes, including strategic and operational decision-making information presented to the Board;
- The setting of and adherence to risk appetite;
- The effectiveness of the second line of defence with regards to its monitoring and oversight responsibilities;
- The Company's culture and management of conduct risk, including:
  - Key indicators of a sound risk culture, "tone at the top", accountability, effective communication and challenge and incentives, and
- The risk of poor customer outcomes, giving rise to reputational or conduct risk;

- High-risk key corporate events, for example significant business process changes, the introduction of new products and services, or outsourcing decisions and acquisitions/divestments.

The key responsibilities of IA are to:

- Develop and maintain a risk-based audit plan that takes account of emerging risks, significant corporate events, strategic change, regulatory themes and areas of control concern;
- Review the plan on a continuous basis and propose additions, cancellations and deferrals to the audit committee for approval on a quarterly basis;
- Provide reasonable assurance as to the adequacy and effectiveness of the internal control framework in operation throughout MS Amlin by ensuring there is appropriate audit coverage across all areas of the Group, including MS AISE;
- Report the results of internal audit activity, significant control issues identified, progress in delivering the audit plan and status of management remediation activities;
- Establish and deliver a programme of quality assurance activities to confirm that expected internal audit standards are being met and to report the results to the Audit Committee annually;
- Manage the function to ensure that audit staff have appropriate knowledge, skills, qualifications and experience to deliver the proposed plan of work;
- Provide active support to the MS AISE Board and line management in the promotion of high standards of internal control;
- Assist and advise management on the prevention of fraud and defalcations;
- Work with MS Amlin Legal, to play a leading role in the investigation of internal fraud; and
- Support the Speak Up Committee in discharging its responsibility.

In the provision of assurance, IA will ordinarily provide an opinion on the strength of the control framework in operation within the subject area covered by an audit. IA may also be asked by management to assist with the design of control processes or to complete other work, including work of an investigatory nature. Such work will not be accepted if doing so significantly impairs IA's ability to deliver on its primary objectives.

The MS Amlin IA function reports to the MS Amlin plc Audit Committee which will:

- Approve the IA Charter;
- Approve the risk based internal audit plan;
- Approve the Internal Audit budget. (Ref: UK CIIA 23);
- Approve decisions regarding the appointment and removal of CIA;
- Evaluate the performance of the Internal Audit function on a regular basis;
- Make appropriate inquiries of management and the Internal Audit function to determine whether there is inappropriate scope or resource limitations.

Approvals above are required annually except for the approval of the IA Charter as such approvals of the IA Charter are only required when it is revised. IA has the right to attend and observe all or part of the Board, Executive Committee meetings and any other key management decision making fora. The CIA operates at a sufficiently senior level within the organisation to give him the appropriate standing, access and authority.

## B.6 Actuarial function

The Actuarial function is a global team that provides actuarial services to the whole Group and its subsidiary companies, including MS AISE. The function operates largely from London with local actuarial teams to service non-UK offices. The Group Chief Actuary is a fellow of the UK Institute and Faculty of Actuaries and is the official actuarial function holder for the UK regulated entities of which MS AISE is one.

The function is organised in three broad groupings:

- A single capital modelling team which manages and maintains the group-wide Internal Model, with sub-teams dedicated to legal entities including MS AISE;
- Local teams (or individuals) aligned to different regions/locations and mapped to the legal entities: teams in Amstelveen, Brussels and London are leading MS AISE on reserving and the Solvency II Standard Formula calculations; and
- A Group reserving team providing oversight, co-ordination and peer review of the reserving process.

The core Actuarial function focuses on providing capital modelling and reserving services. Whilst pricing actuaries report directly to MS AISE's Underwriting function there is also co-operation between the pricing actuaries and the core team in the areas of business planning, reserving and setting of technical pricing standards.

In the Amstelveen and Brussels based teams (responsible for all MS AISE's branches), the main focus is on reserving and, within this, all team members have their focus areas; for P&C all reserving classes are treated and discussed per country, for Marine the main split is between Cargo and Hull. Team members review each other's classes, to improve the quality and consistency of the reserving process, and to reduce key person risk. In addition, these teams have responsibilities which align well with the reserving work e.g. calculating the Solvency Capital Requirement (SCR). All results and reports are discussed with the key stakeholders, such as the Chief Financial Officer of the legal entity and the relevant SBUs, claim handlers, underwriters and finance departments. Actuarial takes their feedback and comments into account, but ultimately remains independent of these stakeholders.

The Actuarial function also determines the reserves and required capital using the Standard Formula SCR and the Internal Model. This is a process centrally led by the Group Chief Actuary where the MS AISE local actuarial team works closely together with MS AISE's Capital & Performance Modelling Manager and the Group Reserving team. The MS AISE Lead Actuary and MS AISE's Capital & Performance Modelling Manager advise the MS AISE Board and report to the Reserving Committee and Risk & Solvency Committee on reserve and risk related subjects. The Group Chief Actuary reports directly to the Chief Finance Officer of MS Amlin plc but also has access to Non-Executive Directors of the Group and the MS AISE legal entity.



## B.7 Outsourcing

### B.7.1 Description of the outsourcing policy

#### External outsourcing

##### *Outsourcing of critical or important functions and activities*

As an MS Amlin Group company, the MS Amlin Outsourcing Policy and Outsourcing Standard documents (together the 'policy') are applicable to MS AISE. The policy outlines the approach and regulatory requirements to be considered to both the third party service provider selection and the management of outsourcing agreements. The policy applies to all new and existing outsourcing agreements.

MS AISE has outsourced the provision of certain critical or important operational functions and activities which are listed in subsection B.7.2 of this report. Material Outsourcing refers to Outsourcing of a 'critical or important' operational function of, or for, an MS Amlin regulated entity. The test as to what is 'critical or important' is if any defect or failure in the Outsourcing performance would materially impair MS AISE's,

- Continued compliance in accordance with the terms of its authorisation;
- Other obligations under its regulatory system;
- Financial performance; and
- Soundness or continuity of its services and operations.

Contracts for Third Party Administrators ('TPAs') are only considered Material Outsourcing if they meet the criteria detailed below.

- The service outsourced could otherwise be reasonably and viably brought in house and undertaken using MS Amlin employees, systems and facilities;
- MS Amlin has the ability to change the TPA through a competitive sourcing exercise at the end of the contractual term;
- The service will be provided by a TPA in a jurisdiction where MS Amlin has a material claims presence (more than 10 claims staff within the relevant line of business);
- The TPA covers multiple classes of business and/or multiple underwriting contracts; and
- The TPA is allocated a loss fund exceeding 1 million currency units (£/\$/€).

The following functions will not be considered as critical or important for the purposes of Outsourcing:

- Provision of advisory services, and other services which do not form part of the core services and activities of the MS Amlin, including the provision of legal advice, the training of personnel, billing services and the security of premises and personnel;
- Purchase of standardised services, including market information services and the provision of price feeds;
- The provision of logistical support, such as cleaning or catering; and
- The provision of elements of human resources support, such as staff recruitment or payroll

##### *Policy requirements*

The policy requirements are set to undertake the outsourcing of critical or important operational functions and activities in such a way as to:

- Assure the quality of MS AISE's internal controls;
- Assure the quality, confidentiality and control of services provided to the clients;

- Enable the appropriate regulator to monitor MS AISE's compliance with all obligations under the regulatory system;
- Conduct an appropriate level of due diligence on the supplier of the services outsourced to assure the provisions of the services on an on-going basis;
- Conduct the minimum standards of due diligence for Material Outsourcing as defined in MS Amlin's Outsourcing Standard which also applies to MS AISE;
- Enter into appropriate written contracts for all outsourcing, and in accordance with MS Amlin's Legal Policy and Standard which also applies to MS AISE;
- Record material outsourcing on a register maintained by the Sourcing and Vendor Management function;
- Ensure robust due diligence is undertaken and that there is an appropriate level of internal challenge and approval prior to the ultimate decision for the outsourcing to proceed;
- Inform the Group General Counsel for guidance on regulatory communications prior to entering into a material outsourcing arrangement;
- Notify the relevant regulators of any new material outsourcing or any material changes to existing material outsourcing agreements;
- Utilise the MS Amlin Sourcing and Vendor Management function to support the commercial and contracting discussions prior to entering into or materially amending an outsourcing agreement;
- Ensure an acceptable level of rigour and governance is maintained for the oversight, relationship management and risk management of the outsourced service and its suppliers to ensure that the interests and assets of MS AISE and its policy holders remain protected.

#### *Implementation, monitoring and management of the Outsourcing*

MS AISE is responsible for implementing, monitoring and managing its outsourcing arrangements on an on-going basis to ensure the quality and efficiency of the outsourced services or functions. This is assured by:

- The Strategic Business Unit or Function reporting to the supported entities on an agreed basis and in an agreed manner sufficient to meet the entity's responsibilities;
- A register kept of all MS AISE's material outsourcing arrangements and the supported entities for each agreement which is provided to Sourcing and Vendor Management at least annually;
- The right from the Compliance or Internal Audit teams to audit the monitoring and management processes of critical or important outsourcing providers;
- The appointment of a functional head or similar grade for each material outsourcing agreement, who retains responsibility for ensuring all regulatory responsibilities are met by the supplier;
- Agreeing the Terms of Reference for the implementation, monitoring and management of the relationship and performance of the outsource service provider.

#### *Expected or Unexpected Termination and other Service Interruptions*

As part of the MS Amlin Group, MS AISE must have contingencies in place for dealing with expected or unexpected service interruptions from its outsourcing arrangements and must ensure the service provider and/or the function/SBU has adequate contingency plans to deal with emergency situations or business disruptions. MS AISE must comply with MS Amlin's Business Continuity Management Policy and Business Continuity Management Standard for all material outsourcing agreements.

#### *Renewing Outsourcing Agreements*

Outsourcing agreements may run for a fixed term, and be renewable or may be operated on a continuous basis. Not less than every two years, MS AISE has processes in place to:

- Review the financial health, business continuity plans and exit plans of MS AISE's critical and important outsource providers;

- Review the appropriateness of written agreements (both term-based and continuous) at the point of renewal or at least not less frequently than every two years;
- Report any issues identified or encountered appropriately to the entity Boards that benefit from the outsourcing.

#### *Outsourcing of underwriting activities*

Material outsource vendors for underwriting are monitored and managed through the Binder Control Framework, with data-exchange, audits, market scans and delegated authorities.

#### **Intra-group outsourcing**

##### *Underwriting activities*

Underwriting activities outsourced to another Group company are not within the Binder Control Framework but in all cases there is a signed General Binding Agreement in place. Such General Binding Agreements are renewed annually.

##### *Investments activities*

The Company has an agreement in place with an MS Amlin group company – MS Amlin Corporate Services Limited ('MS ACS') – for the provision of services, including investment services that include cash management activities. Pursuant to its Investment Governance Framework, the Company has invested the majority of its investment assets (€1,051.7 million of €1,287.1 million) with the Toro Prism Trust (the 'Trust'). The Trust has other investors from within the MS&AD Group only. The Trust has been authorised by the Central Bank of Ireland as an undertaking for collective investment in transferable securities pursuant to the European Communities - Undertakings for Collective Investment in Transferable Securities - Regulations 2011. The Trust is managed by a third-party fund management company, Carne Global Fund Managers (Ireland) Limited ('Carne').

Carne has appointed a fellow MS Amlin subsidiary, MS Amlin Investment Management Limited ('MSAIML') as the Headline Portfolio Manager of the Trust. MSAIML has been authorised and is regulated by the Financial Conduct Authority and as an investment firm subject to the "Markets in Financial Instruments Directive 2014/65/EU" (MiFID). MSAIML delegates the day-to-day portfolio management of the pools of assets within the Trust's sub-funds to external third-party investment managers.

In addition to these investment activities, the Company has engaged Veritas Asset Management LLP and CBRE Global Collective Investors UK Limited to manage €118.9 million and €122.8 million of its assets respectively.

##### *Centralised support functions*

MS ACS provides services from its personnel to MS AISE and other Group companies with appropriate skills and qualifications, e.g. legal, actuarial, investment management, accounting, etc. MS ACS as a legal entity does not provide any professional or regulated services itself.

The individuals employed by MS ACS provide services to MS AISE under the direction and supervision of the MS AISE management and Board either directly or through the centralised service functions established at Group level, and these individuals are accountable to the entities. MS ACS has contracted with MS AISE to deliver suitably qualified personnel, and the service levels to be delivered by the personnel supplied are agreed on a case-by-case basis as appropriate. The quality of the services delivered is monitored at Group level and performance information is provided to the MS AISE Board and management. The Group Head of Service Management serves as an initial escalation point if needed to resolve service issues with further escalation to the Group Executive Committee if necessary.

In substance the above means that MS AISE is serviced by centralised support functions through a commissioning model as explained in paragraph 'MS AISE's operating structure' in section B.1.1 of this report.

### B.7.2 Outsourced key functions or activities and their local jurisdiction

MS AISE is currently utilising several service providers for the outsourcing of certain critical or important operational functions or activities on its behalf. Details of the outsourced key functions and activities and the jurisdiction in which the service providers of these functions and activities are provided below:

Description of outsourced key functions or activities	Jurisdiction
<b>External outsourcing</b>	
Delegated underwriting activity for certain products in all business lines	Belgium, The Netherlands, France, United Kingdom
Global Real Estate Investment Manager	United Kingdom
End to end Claims outsource for motor and fire insurance	Belgium, United Kingdom
IT infrastructure provider for hosting managed network, workplace and service desk services	United Kingdom
Application support	United Kingdom
Loan Market Association Transaction services	United Kingdom
Cat Modelling Analytical services	United Kingdom
<b>Internal outsourcing</b>	
MS Amlin service provider acting as delegated underwriting authority for specialised P&I, Hull, Cargo and Cargo liability products	The Netherlands
MS Amlin Group company acting as headline investment portfolio manager	United Kingdom
MS Amlin Group company providing personnel and infrastructure services	United Kingdom

The table does not include external investment managers to which MSAIML delegates the day to day management of pools of assets within the Trust's sub funds.

## B.8 Any other information

All material information relating to the Company's systems of governance has been disclosed in sub-sections B.1 to B.7 above.

## Section C - Risk Profile (unaudited)

Section C presents MS AISE's risk profile in accordance with MS Amlin's Risk Management Framework which identifies the following risk categories: insurance, market, credit, liquidity, operational, and strategic. For each risk category there is an individual section which explains:

- Risk definition and appetite statements;
- Material risk concentrations;
- Risk exposure (including off-balance sheet positions);
- Measures used to assess these risks;
- Outcomes of stress, scenario and sensitivity testing; and
- Risk mitigation techniques used (including a description of monitoring activities).

The description includes exposures at year end as well as developments in exposure during the year. The tables and diagrams contain MS AISE specific data unless otherwise stated. Besides risk categories in MS Amlin's Risk Management Framework no other risk categories have been identified. Strategic risk is explained in the other risk section.

#### *Risk appetite statements*

Risk appetite statements in the document follow a standard categorisation as set out below:

- Risk Seeking (Grow) - These are risks where the Company will seek to increase exposure in the pursuit of fulfilling its strategic objectives, knowing there is reward associated with taking on the risk;
- Risk Seeking (Maintain) - These are risks the Company will continue to seek as part of the business strategy, maintaining a level of risk relatively consistent with current exposures;
- Risk Neutral - These are risks the Company will accept with caution, as by-products of pursuing risk, knowing there may be some negative impact necessary in the pursuit of strategic objectives. There is no desire for unnecessary additional exposure and strong control is expected to manage exposure within acceptable limits;
- Risk Averse – These are risks the Company has no desire to accept on the basis they should be wholly manageable and have less material contribution to the fulfilment of strategic objectives.

Methods and assumptions used for measuring exposures and concentrations, and sensitivity analyses are applicable to multiple risk categories. Therefore this introduction presents the methods and assumptions used. The actual exposures and concentrations, and outcomes of sensitivity analyses are presented in subsections per risk category.

#### *Exposures and concentrations*

As referred to in section B.3, in addition to the Standard Formula, MS AISE measures its exposures and concentrations through the use of a stochastic Internal Model. The outcome of the Internal Model is an internal capital measure per risk category and an overall capital measure. The Internal Model aggregates exposures taking into account the reducing impact of the associated mitigation strategies. Exposures and concentrations are measured on a single Occurrence Exceedance Probability basis ('OEP') as well as an Aggregated Exceedance Probability basis ('AEP'). Modelled exposures are monitored quarterly and reported to MS AISE's Risk & Solvency Committee where management actions are concluded if necessary. The exposures and concentrations in this section are presented based on the Internal Model. Furthermore deterministic in force exposure figures are used in addition to modelled recoveries output from the Internal Model and presented in this document where applicable.

#### *Stress, scenario and sensitivity testing framework*

MS AISE has an established stress, scenario and sensitivity testing framework to assess its risk profile. Testing is carried out on the business plans and capital projections (as part of the ORSA process) of the Company. The process seeks to challenge assumptions made and calibrations used in determining the

expected business plan, as well as to evaluate the financial robustness of MS AISE in extreme circumstances. The process also challenges or improves management's preparedness for extreme events. On an ad hoc basis stress and scenario analyses are performed via the risk assessment process or via deep-dives into a specific risk category. The stress and scenario analyses combine multiple risk categories.

For the design of sensitivity analyses information is taken from the following sources:

- Subject matter experts view of our business model;
- Risk and control assessments and risk ranking;
- Risk event and near miss information;
- Emerging risks;
- Market knowledge; and
- Historic data and experience.

Sensitivity analyses can be grouped in five categories as presented in below table. For each type of test the impact is assessed in line with risk appetite. The impacted parameters can all be traced back to the profit or loss account, balance sheet or capital requirements.

Type	Explanation	Process	Frequency
<b>Realistic Disaster Scenarios ('RDS')</b>	Monitors in force exposures to specific event scenarios	Business planning, ORSA	100% Annually with a Quarterly update of the most material scenario's
<b>Sensitivity analysis</b>	Assessment of standardised change in a single parameter	Business planning, ORSA internal model validation	Annually
<b>Stress testing</b>	Assessment of severe change in a single parameter	Business planning, ORSA, internal model validation	Multiple times on different occasions
<b>Scenario analysis</b>	Assessment of standardised and severe change in multiple parameters	Business planning, ORSA, internal model validation	Multiple times on different occasions
<b>Reverse stress testing</b>	Multiple parameters to stress risk of discontinuity of business activities	ORSA, capital strategy, recovery plan	Annually

#### *Risk mitigation techniques*

For each category of risk there are mitigation techniques in place as presented in the subsections. These techniques are unique for every category, but they do follow a standardised pattern. For each category at least the following are in place:

- Policies, procedures and standards;
- Tolerance, limit setting and performance monitoring;
- Stochastic modelling;
- Scenario analysis; and an
- Internal Control Framework.

## C.1 Insurance risk

MS AISE defines insurance risk as the risk of loss arising from the inherent uncertainties in the occurrence, amount and timing of insurance liabilities and premiums. This includes reserving risk or claims arising on business written prior to the year in question. The scope of insurance underwriting risk includes underwriting, catastrophe, reserving, claims and the mitigation effect of reinsurance (excluding reinsurance credit risk).

### C.1.1 Risk definition and appetite

Insurance risk consists of two core components, namely underwriting risk and reserving risk.

#### Underwriting risk

Underwriting risk relates to risk from both expected and unexpected attritional and large loss, which can be caused by inadequate pricing, terms and conditions and/or unexpected claims frequency, and catastrophe losses from large natural or non-elemental events such as earthquake, hurricane or terrorism threats.

MS AISE has a positive, risk seeking appetite towards underwriting risk and actively seeks to balance its underwriting exposures by writing a diverse risk portfolio which is made up of a number of classes of business. There is an inherent risk of insurance losses associated with these exposures. The appetite for underwriting risk is governed by the amount of business that meets our pricing requirements but also by the risk bearing capacity determined by our capital base and outwards reinsurance arrangements.

#### Reserving risk

Reserving risk relates to the possible inadequacy of claims provisions. Specifically, it relates to the uncertainty that technical provisions are adequately accounted for, taking account of fluctuations in claim settlements.

MS AISE has adopted a risk neutral approach to reserving risk, which is a consequence of underwriting a portfolio of business where claims may develop after the policy period has elapsed. MS AISE's appetite is governed by a policy which ensures that reserves (technical provisions under Solvency II) are carried above the actuarial best estimate of future outcomes by adding a risk margin. Classes of business which have a higher level of uncertainty of potential development will naturally carry a higher level of reserve provision. MS AISE does not discount reserves to take account of the investment return generated by premium or reserves held for future claims payments and takes consideration of likely cash flow requirements when investing carried reserves to reduce asset liability miss matching.

### C.1.2 Underwriting risk

#### Concentration and exposure

MS AISE has a portfolio of property, casualty and marine insurance that has exposure to weather and earthquake exposures as well as non-elemental perils such as industrial accidents. Primary underwriting risk concentration is derived from:

- Natural perils such as windstorm, flood, fire and earthquake;
- Large loss man-made events such as terrorism, cyber, industrial accidents (e.g. oil spills);
- Large risks such as shipyards and construction;
- Correlated liability coverage such as professional liability coverage for medical practice.



The following table presents MS AISE's five largest underwriting class exposures as per year end 2017 and 2018 based on the stochastic Internal Model. Exposures are modelled using volatility around expected claims included in business planning.

2018 rank	Class	2017 rank	Class
1	BE Property – Fire	1	BE Property - Fire
2	FR Property – Excess & Surplus	2	FR Property – Excess & Surplus
3	NL Property – Fire	3	NL Property - Fire
4	FR Property – Specialty	4	FR Property - Specialty
5	Marine – Ocean Hull	5	DE Property

The underwriting risk is dominated by the property classes as they tend to have bigger exposures with regards to line size. They are also exposed to accumulations from catastrophes, and the reinsurance retentions for these classes are higher than the liability classes so that more risk is retained on a net basis. Marine – Ocean Hull has appeared in the top 5 because the German Property premiums are significantly lower in 2019 due to the German branch being in run-off. Marine – Ocean Hull exposures have not changed materially over the year.

### Scenario, stress and sensitivity testing

For underwriting risk the following specific sensitivity analyses are performed; Realistic Disaster Scenarios and, stress and sensitivity testing.

#### *Realistic Disaster Scenarios (RDS)*

The table below presents the results from the RDS analysis with the largest exposures as with effect from 1 January 2018 and 2019. Data is presented including reinsurance recoveries (net losses). Exposures as per 1 January are used to reflect positions against the reinsurance program for the coming year.

Event	Jan 2019 €'000	Event	Jan 2018 €'000
EU Windstorm – UK Europe	41,260	EU Windstorm – UK Europe	39,583
EU Windstorm – France, Belgium, Netherlands	34,919	EU Windstorm – France, Belgium, Netherlands	32,284
EU Cyber Silent Scenario	29,537	EU Windstorm – Paris Munich	25,561
EU Windstorm – Paris Munich	26,230	EU Windstorm – Bordeaux Munich	24,885
EU Windstorm – Bordeaux Munich	24,707	EU Windstorm – UK, Denmark	6,442

The table above shows an approximate standalone impact from each event on profitability. All net modelled losses are within tolerance. Exposures are similar to 2018, but do increase slightly as a result of changes in MS AISE's share in the reinsurance coverage purchased at plc level and an increase in premiums. The EU Cyber Blackout scenario was previously not included in the listing.

It should be noted that the RDS does not take into account the potential for any additional reserve releases or other management actions that may be applied in the ordinary course of business leading up to or following an event.

### Stress testing and sensitivity analysis

MS AISE has a suite of stress tests used for model validation, challenging business perception and business planning assumptions, shaping tolerances and to assess capital adequacy. The following selection of tests has been made from the tests completed in 2018 in relation to underwriting risk.

# Sensitivity test	Impact on Available Capital*	Impact on SCR	Impact on Solvency Ratio
	€'000	€'000	%
Base SCR – ratio per 31 December 2018	503,878	368,154	136.9%
1 20% less gross premiums received than plan	-	(16,346)	6.4%
2 10% deterioration in net loss ratio from plan	(28,342)	16,270	(13.2%)
3 20% less gross premiums received than plan, and 10% increase in net loss ratio from plan	(32,257)	-	(8.8%)
4 20% less gross premiums received than plan, and 20% increase in net loss ratio from plan	(68,981)	3,218	(19.8%)

\* Impact on available capital takes into account a €13.0 million tax carry back provision which will firstly be used to absorb financial losses.

The results of the RDSs and stress tests are compared with MS AISE's risk appetite and target capital outlined in MS AISE's Capital Management Strategy. Based on these analyses close monitoring is required but immediate measures are not required as the probability of these events occurring is considered relatively low. A capital management plan is in place to monitor MS AISE's capital position vs predefined trigger levels.

### Management, mitigation and monitoring techniques

In addition to the risk management process outlined in section B.3.1, this section discloses management and mitigation techniques in relation to underwriting risk. Monitoring results are reported to MS AISE's Risk & Solvency Committee on a quarterly basis:

- *Strategy and business planning* – as part of business planning, strategy is elaborated into plans for the coming year. In these annual plans resources are directed to those businesses which create the most desirable expected loss costs and ultimate loss ratios during the underwriting year. The goal is to realise profitable growth;
- *Policies, procedures and standards* – the Underwriting Policy and Philosophy and Insurance Risk Standard assure consistency across underwriting and related control activities;
- *Tolerance, limit setting and performance monitoring* – strategy is aligned to a risk appetite and tolerances. For every insured class there is a maximum line size, exposure, and monitoring program (using stochastic modelling). Furthermore there are underwriting authority limits and guidelines for individual underwriters in place;
- *Reinsurance* – the main instrument for risk mitigation of insurance risk is the use of reinsurance facilities. Within MS Amlin reinsurance treaties are normally purchased through Syndicate 2001 for all entities of the Group including MS AISE although the Company's fleet and engineering programmes continue to be protected on an entity specific basis. MS AISE may also purchase facultative reinsurance for specific risks;
- *Technical pricing and modelling* – technical pricing takes account of hazards so premiums are adequate and exposures are contained within tolerances. Furthermore, stochastic modelling is used to estimate exposures to assure sufficiency of the best estimate and for price setting.

### C.1.3 Reserving risk

#### Concentration and exposure

Reserving risk concentrations are the accumulation of assumed claims and the uncertainty associated with the ultimate size of the claims given the extended duration it can take for some claims to mature. Given their long tail nature, MS AISE's portfolio of casualty classes dominates the reserving risk profile.

MS AISE operates an actuarial led reserving process to estimate the reserves on a best estimate basis. Reserving risk exposures and concentration are identified through the use of the Internal Model. Exposures are modelled using volatility around the amount of reported best estimates. The following table presents MS AISE's five largest reserving exposures as per year end 2017 and 2018.

2018 rank	Class	2017 rank	Class
1	NL Liability – General Third Party Liability	1	NL Liability – General Third Party Liability
2	BE Liability - Medical	2	BE Liability - Medical
3	BE Liability - Non-Medical	3	BE Liability - Non-Medical
4	NL Fleet – Liability Binder	4	NL Liability – Professional Indemnity
5	Marine – Builders risk	5	DE Liability

Primary classes driving exposure are: Property, Medical, Casualty, Motor and Professional Indemnity. NL Fleet Liability has moved up the list following the less favourable performance of the class. Marine – Builders Risk hasn't changed materially over the year. It is appearing in the top 5 because German Liability has reduced following the German branch being put in run-off. NL Professional Indemnity is no longer in the top 5. However there is still significant exposure as the class is ranked 7<sup>th</sup> in the list.

#### Stress and sensitivity testing

For reserving stress and sensitivity analysis are performed. The following selection of tests has been made from the tests completed in 2018 in relation to reserving risk:

# Sensitivity test	Impact on Available Capital* €'000	Impact on SCR €'000	Impact on Solvency Ratio %
Base SCR – ratio per 31 December 2018	503,878	368,154	136.9%
1 10% reserve deterioration of total carried best estimate reserves	(28,213)	13,909	(16.5%)
2 10% reserve improvement of total carried best estimate reserves	41,239	(13,594)	16.9%

\* Impact on available capital takes into account a €13.0 million tax carry back provision which will firstly be used to absorb financial losses.

The results of the scenario analyses are compared with MS AISE's risk appetite and target capital outlined in MS AISE's Capital Management Strategy. Based on these analyses close monitoring is required but immediate measures are not required as probability of these events occurring is considered relatively low. A capital management plan is in place to monitor MS AISE's capital position vs predefined trigger levels.

#### Management, mitigation and monitoring techniques

In addition to the risk management process outlined in section B.3.1, this section presents management and mitigation techniques in relation to reserving risk. Monitoring results are reported to MS AISE's Risk & Solvency Committee on a quarterly basis:

- *Process and governance* – MS AISE operates a consistent, actuarially driven process quarterly to assess that appropriate level of reserves are carried, taking account of the characteristics and risks of each class of business, to arrive at a best estimate. The best estimates are subject to challenge and review by (underwriting) management and the MS AISE Audit Committee on behalf of the MS AISE Board.
- *Policies and procedures* – consistent claims processes and accurate case reserve setting aims to ensure that adequate provision is established for advised claims.
- *Tolerance setting and monitoring* – a tolerance is set for reserving as the minimum probability of carried reserves being in excess of liabilities of at least 65%. This sufficiency of reserves is monitored on a quarterly basis via the Internal Model.
- *Risk margin* – an additional margin is proposed by management which aims to reflect the level of underlying risk and to achieve the required tolerance level to determine the carried reserves.
- *Reinsurance* – the reinsurance programme responds to large loss developments from prior years.

## C.2 Market risk

Market risk is defined as risk arising from fluctuations in values of, or income from, portfolio assets, interest rates, currency exchange rates, market prices, and investment returns. MS AISE seeks to optimise its risk adjusted investment return whilst focusing on ensuring it maintains sufficient capital to meet solvency requirements and maintain sufficient liquid funds to meet liabilities when they fall due. Exposure to market risk is therefore limited to the extent that investment strategies are balanced by these primary objectives.

In addition to the description of market risk, this section explains how MS AISE adheres to the prudent person principle.

### C.2.1 Risk definition and appetite

Market risk is divided into three subcategories; investment market volatility, foreign exchange, and investment counterparty risk.

#### Investment market volatility

This is the risk of loss resulting from fluctuations or volatility of portfolio assets and in the value of financial securities, either directly or indirectly. MS AISE has a risk seeking (maintain) attitude to investment market volatility risk. The Company has multi-asset risk exposure and manages its risk according to an annual Value-at-Risk ('VaR') tolerance<sup>1</sup>. The potential drawdown characteristics of equity exposure are further limited through the implementation of the equity hedge program (EHP) which is a systematic stop-loss program. Investments are limited by the liquidity requirements of meeting claims as they become payable.

#### Foreign exchange

Foreign exchange risk is the impact on the value of balance sheet items or earnings arising from movements in the exchange rate of the Euro against other currencies. MS AISE has a risk neutral appetite to currency risk. The Company is exposed to currency risk by virtue of holding balance sheet assets, premiums and liabilities in foreign currencies.

#### Investment counterparty risk

There is a risk of loss to MS AISE if its investment counterparties are unable to or are unwilling to meet their financial obligations or if they cease to operate as a business. MS AISE has a risk seeking (maintain) appetite for investment counterparty credit risk as part of market risk. The Company manages its counterparty exposure by monitoring the concentration of its assets against grade/quality exposure limits, which are designed to maintain a level of diversification of its asset portfolio.

### C.2.2 Prudent person principle

The prudent person principle provides guidelines for undertakings about how to manage their investment strategy. Undertakings should only conduct investment management activity as long as they can reasonably demonstrate an appropriate level of understanding of the underlying investment (i.e. the ability to look through into individual positions), are able to monitor their investments (counterparty monitoring) and can justify their investments as prudent to policyholders.

MS Amlin Investment Management is responsible for the day-to-day management of MS AISE's investments and operates within the Investment Governance Framework and the Group Investment

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<sup>1</sup> Investment management uses VaR below expected return as standard VaR measure

Policy, Standards and Investment Guidelines. MS Amlin Investment Management only invests in assets and instruments whose risks can be identified, measured, monitored, managed, controlled and reported. MS AISE's investment strategy is to optimise long-term risk adjusted returns keeping in mind the interests of policyholders.

MS AISE's policyholder assets (backing technical provisions) are managed against a low appetite for risk, with assets held in funds which invest in money market funds and a mix of bonds, derivatives and currencies. The management of policyholder funds is aligned with the prudent person principle.

### C.2.3 Investment market volatility

#### Concentration and exposure

Market concentration risk can result from having too much exposure in a single asset class, currency, political domicile or counterparty. Concentration risk is managed by ensuring MS AISE's portfolio is well-diversified across multiple asset classes and multiple regions and is managed to tolerances that prohibit excessive market and credit risk concentrations.

MS AISE's asset allocation as at 31 December 2018 is presented below per asset class based on a Solvency II basis. Following the implementation of the change in investment structure in 2017, allocations are now largely held through the Company's investment in the Toro Prism Trust. This is an open-ended investment unit trust authorised by the Central Bank of Ireland as a UCITS (Undertakings for Collective Investment in Transferable Securities) regulated by the European Union.

	2018		2017	
	€'000	%	€'000	%
Collective investment undertakings (excl. Property)*	1,035,542	79%	998,321	79%
Property*	120,175	9%	117,203	9%
Equities*	112,858	9%	120,036	10%
Bonds*	-	0%	-	0%
Derivatives*	5,109	0%	1,772	0%
Cash and deposits	34,070	3%	23,667	2%
<b>Total assets invested</b>	<b>1,307,754</b>	<b>100%</b>	<b>1,260,999</b>	<b>100%</b>

\* These items are presented together under the line Investments (incl. participations) in the Solvency II assets table on page 77.

Exposure is assessed using the stochastic VaR statistic at a 99.5% confidence interval and is reported on a monthly basis. This VaR is measured against a maximum tolerance of 8.5% and exposure remained below tolerance throughout the year.

## Scenario analysis

Scenario analysis is performed for investment market volatility risk. The following selection of tests has been made from the tests completed in 2018:

# Sensitivity test	Impact on Available Capital* €'000	Impact on SCR €'000	Impact on Solvency Ratio %
Base SCR – ratio per 31 December 2018	503,878	368,154	136.9%
1 No investment income from plan	-	-	0,00%
2 Repeat of Financial Crisis: severe market decline and general instability	(13,954)	4,993	(5.8%)
3 Strong inflation; in this test an investment loss of €31 million is modelled	(10,202)	-	(2.8%)

\* Impact on available capital takes into account a €13.0 million tax carry back provision which will firstly be used to absorb financial losses.

The results of the scenario analysis are compared with MS AISE's risk appetite and target capital outlined in MS AISE's Capital Management Strategy. Based on these analyses close monitoring is required but immediate measures are not required as probability of the financial crisis and strong inflation scenario occurring is considered relatively low. A capital management plan is in place to monitor MS AISE's capital position vs predefined trigger levels. Please refer to the next paragraph for an overview of monitoring activities in place.

## Management, mitigation and monitoring techniques

In addition to the risk management process outlined in section B.3, this section presents management and mitigation techniques in relation to investment market volatility risk. Monitoring results are reported to MS AISE's Risk & Solvency Committee on a quarterly basis.

- *Strategic asset allocation* – investment opportunities are evaluated taking into consideration risk and reward, liquidity, and effects on capital requirements in relation to solvency requirements;
- *Policies, procedures and standards* – the investment policy aims to maximise risk-adjusted investment return in relation to an agreed risk budget;
- *Tolerance, limit setting and performance monitoring* – strategy is aligned to a risk appetite and tolerances. For every asset class there is a maximum exposure, and monitoring program;
- *Stochastic VaR monitoring* – exposure is assessed using a stochastic model at confidence levels of 99% (one month) and 99.5% (one year);
- *Scenario and stress tests* – Stress and scenario tests are performed outside of the Stochastic VaR monitoring to provide alternate portfolio losses in a variety of stressed circumstances;
- *Sub-advisor monitoring* – a spread of sub-advisors is appointed to carry out asset selection within the asset class they specialise in. Each sub-advisor has discretion to manage the funds on a day-to-day basis within their Investment Guidelines or Mandates. These are designed to ensure that their investments comply with the Investment Frameworks.

## C.2.4 Foreign exchange risk

### Concentration and exposure

MS AISE is exposed to the fluctuations in the exchange rates of currencies. Besides Euro (EUR) denominated exposures, MS AISE holds material exposures in US dollars (USD) and British Pound Sterling (GBP).

The next table presents the 31 December exposures in USD and GBP (presented in EUR amounts). The total balance sheet is presented based on Solvency II valuation methods and in MS AISE's functional currency being EUR. Total liabilities against the balance sheet are presented including technical provisions. The USD exposures mainly relate to marine business due to the international character. The GBP exposure mainly results from positions and transactions with other MS Amlin Group companies.

Value by currency ('000)	2018			2017		
	Total (EUR)	USD	GBP	Total (EUR)	USD	GBP
<b>Total assets</b>	1,509,125	81,359	33,758	1,451,969	74,177	13,296
<b>Total liabilities</b>	1,007,645	73,842	33,590	1,018,511	76,604	32,641

In addition to exposure on the balance sheet, MS AISE holds the Lilac (cash/money markets) and Blue (bond) Toro Prism Trust share classes in multiple currencies, with the aggregated exposures against liabilities contributing significantly to the required capital for market risk.

### Sensitivity analysis

For foreign exchange risk there are no sensitivity analyses performed. These form part of the wider market risk stress tests.

### Management, mitigation and monitoring techniques

In addition to the risk management process outlined in section B.3.1, this section presents management and mitigation techniques in relation to foreign exchange risk. Monitoring results are reported to MS AISE's Risk & Solvency Committee on a quarterly basis.

- *Hedging* – Currency exposures in the investment portfolio are hedged by using derivatives for key currencies (EUR, USD and GBP).
- *Asset liability matching* – To help manage currency risk on the balance sheet a proportion of the assets are matched to its liabilities.

## C.2.5 Investment counterparty risk

### Concentration and exposure

Risk concentration can occur as a result of accumulation of MS AISE owned assets with a limited number of counterparties. The investment guidelines are designed to mitigate credit risk by ensuring diversification of the holdings. For each portfolio there are limits to the exposure to single issuers and to the total amount that can be held in each credit quality rating category, as determined by reference to credit rating agencies. MS AISE is exposed to counterparty risk primarily through its investment in the Toro Prism Trust.

### Stress Testing

There are no specific stress and sensitivity tests. These form part of the wider market risk stress tests.

### Management, mitigation and monitoring techniques

In addition to the risk management process outlined in section B.3.1, this section presents management and mitigation techniques in relation to investment counterparty risk. Monitoring results are reported to MS AISE's Risk & Solvency Committee on a quarterly basis.

- *Counterparty on-boarding* – due diligence processes exist to pre-vet any counterparties before they are on-boarded;



- *External credit ratings* – MS AISE uses ratings from multiple credit rating agencies in conjunction with market Credit Default Swap prices – the latter providing a more up-to-date market view of credit risk;
- *Credit rating limits* – investment counterparty exposure is managed through limits over exposure based upon credit ratings;
- *Creditworthiness monitoring* – is conducted by the investment quant/risk team for all institutions MS AISE transacts with, both current and potential. A summary is sent to the investment management and compliance functions;
- *Investment Counterparty Management* – the custodians of MS AISE's investment assets are contractually bound to hold all assets specifically on behalf of MS AISE and not in their own right.

## C.3 Credit risk

MS AISE defines credit risk as the risk of loss, or adverse change in the financial situation, resulting from fluctuations in the creditworthiness of issuers of debt securities, counterparties and any debtors to which MS AISE is exposed, in the form of counterparty default risk, or counterparty spread risk, or counterparty market risk concentrations. Credit risk could therefore have an impact upon MS AISE's ability to meet its claims and other obligations as they fall due and upon the investment return. Counterparties include reinsurers, brokers, coverholders, insured, finance houses and investment counterparties.

### C.3.1 Risk definition and appetite

Credit risk is divided into three subcategories; reinsurance credit risk, broker credit risk and investment counterparty risk. Treasury intermediaries and other investment counterparties have a high proximity to market risk. Therefore exposure to investment counterparties is described within the market risk section.

#### Reinsurance credit risk

Reinsurance credit risk is the risk of loss if a reinsurance company fails to perform its obligations or fails to perform them in a timely fashion. MS AISE has a risk seeking (maintain) attitude to reinsurance credit risk, which emanates from use of reinsurance to increase MS AISE's risk capacity and to protect MS AISE against severe catastrophe events and significant risk losses.

#### Broker credit risk

MS AISE defines broker credit risk as the risk of loss if an insurance or treasury intermediary fails to meet credit obligations in a timely fashion. MS AISE has a risk neutral attitude to intermediary credit risk. MS AISE recognises that brokers need to collect both premiums and claims as part of their services, and sets limits according to broker financial strength to control exposure for each counterparty.

### C.3.2 Reinsurance credit risk

#### Concentration and exposure

Reinsurance credit risk includes both reinsurers' share of outstanding claims, as well as amounts expected to be recovered on unpaid outstanding claims (including incurred but not reported claims) in respect of earned risks. Reinsurance recoverables by external credit rating due at 31 December are shown in the table below.

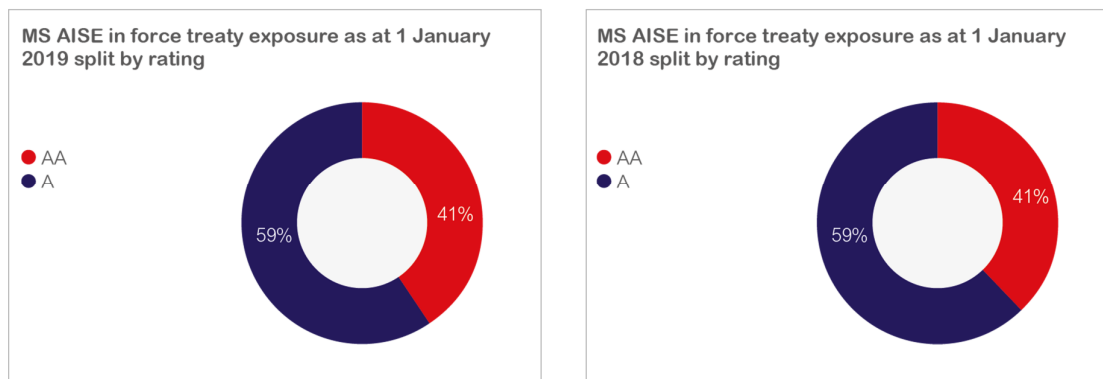
Reinsurance recoverables	2018		2017	
	€'000	%	€'000	%
AA	92,594	73.53%	84,565	54.40%
A	14,120	11.21%	9,952	27.70%
BBB	488	0.39%	0	0.70%
Other	18,717	14.86%	17,258	17.20%
<b>Total</b>	<b>125,919</b>	<b>100.00%</b>	<b>111,775</b>	<b>100.00%</b>

The reported table above differs from the reported table prior year due to the fact that last year the reinsurance share of technical claim reserves according to IFRS was reported. The table above provides a more accurate view in line with the SII RI Technical provisions.

MS AISE monitors every quarter if exposures and concentrations are within risk appetite. Deterministic and stochastic tolerances apply.

There are deterministic tolerances applicable at Group level for each reinsurer reflecting MS Amlin internal credit ratings assigned by the Reinsurance Security Committee. Per reinsurer limits apply on a single loss basis and to aggregate exposure across all programmes written.

The chart below shows in force reinsurance aggregate exposure (assuming one total loss for each contract written) across all treaty programmes protecting MS AISE with effect from 1 January 2018 and 2019, broken down by financial strength rating. Exposures as per 1 January are used to reflect positions against the reinsurance program for the coming year.



### Stress, scenario and sensitivity testing

Reinsurance credit risk is considered in applicable stress and scenario tests conducted for purposes of business planning, risk appetite development and validation of the Internal Model.

The quarterly deterministic RDS process provides a regular opportunity to monitor potential for single event clash between programmes written by a single reinsurer. RDS scenarios consider the impact of a wide range of first and second events in peak peril regions. There were no breaches of reinsurer single event tolerances during 2018. The assumptions used within the RDS process include a provision for reinsurance credit risk based on each reinsurer's MS Amlin internal credit rating.

As reinsurance contracts are purchased and managed at the Group level, reinsurance credit risk stochastic Internal Model tolerance analyses are also performed at the MS Amlin Group level. The two most important analyses performed for reinsurance credit risk in 2018 were exposure based on a 1 in 50 year event and exposure based on a 1 in 200 year event. Minor breaches occurred in Q2 and Q3 of 2018, both related to parameter updates in the Internal Model, and were considered to be of no concern.

The results of the sensitivity analyses are compared with MS Amlin Group's and MS AISE's risk appetite and target capital outlined in MS AISE's Capital Management Strategy. Based on these analyses no additional measures are required.

### Management, mitigation and monitoring techniques

In addition to the risk management process outlined in section B.3, this section presents management and mitigation techniques in relation to reinsurance credit risk. Monitoring results are reported to MS AISE's Risk & Solvency Committee on a quarterly basis.

- *Accreditation* – the Reinsurance Security Committee is responsible for reinsurer accreditation and (approval of new reinsurers and review of existing reinsurers);
- *Policies, procedures and standards* – procedures for the approval of new reinsurers, review of existing reinsurers and use of unapproved reinsurers on an exception basis are set out in the MS Amlin Reinsurance Security Standard and associated process document;
- *Tolerance, limit setting and performance monitoring* – the Company seeks to manage and monitor exposures to reinsurance companies by a number of risk tolerances across the risk category;
- *Stochastic modelling* – is utilised to report on modelled reinsurance recoveries;

- *Reinsurer review process* – takes account of the latest available full year financials, comparison with MS Amlin Group recommended standards, rating agency input, recent developments, and background information;
- *Debt control* – reinsurance debt credit control is carried out to limit outstanding balances owed by counterparties. Credit risk is controlled by applying maximum in force exposure limits applicable to each reinsurer, linked to their ability and willingness to pay claims;
- *Cross entity cost sharing and loss usage* – there is an MS Amlin Group protocol for cross entity (including MS AISE) cost sharing and loss usage in place for the allocation of reinsurance credit cost and losses;
- *Claims management* – MS AISE's claims end-to-end process is designed to pursue and secure claims recoveries in an efficient manner.

### C.3.3 Broker Credit risk

#### Exposure and concentrations

The table below presents the breakdown at 31 December of insurance receivables by external credit quality. The table includes credit risk exposures to brokers, coverholders, and insured.

Insurance and reinsurance receivables	2018		2017	
	€'000	%	€'000	%
AA	5,326	3.18%	12,448	6.70%
A	6,384	3.82%	8,856	4.80%
Other	155,565	93.00%	164,160	88.50%
<b>Total</b>	<b>167,275</b>	<b>100.00%</b>	<b>185,464</b>	<b>100.00%</b>

Premium receivables representing amounts due from policyholders are not graded, but based on historical experience there is limited default risk relating to these amounts.

Broker credit risk is managed through a number of controls including broker approval, annual financial review and internal rating of brokers and regular monitoring of premium settlement performance.

#### Sensitivity analysis

For broker credit risk there are no sensitivity analyses performed. After managing our exposures to brokers via the debt control process the residual risk is no longer significant.

#### Management, mitigation and monitoring techniques

In addition to the risk management process outlined in section B.3.1, this section presents management and mitigation techniques in relation to broker credit risk. The process of risk mitigation is similar for brokers and cover holders. Monitoring results are reported to MS AISE's Risk & Solvency Committee on a quarterly basis.

- *On-boarding* – local broker committees are responsible for broker accreditation and on-boarding (approval of new brokers).
- *Policies, procedures and standards* – policies and standards are in place to explain the process of on-boarding, broker review, debt control and claims management.
- *Tolerance, limit setting and performance monitoring* – the Company seeks to manage and monitor exposures to brokers by a number of risk tolerances across the risk category.
- *Broker review process* – takes account of the latest available full year financials, comparisons with MS Amlin Group recommended standards, recent developments, and background information.

- *Debt control* – broker debt credit control is carried out to limit outstanding balances owed by counterparties.
- *Claims management* – MS AISE's claims management process is designed to pursue and secure claims recoveries in an efficient manner.

## C.4 Liquidity risk

Liquidity risk refers to the risk that sufficient financial resources are not available to meet liabilities as they fall due. That is, the risk that cash is not available to pay claims or other key financial commitments. In addition to the description of liquidity risk, this section presents the impact of expected profit in future premiums.

### C.4.1 Risk definition and appetite

The scope of liquidity risk includes managing unexpected changes in funding sources, market conditions and cash flow planning incorporating asset-liability management. MS AISE has a risk averse attitude to liquidity risk and seeks to avoid any situation where funds are not available to meet claims as required because this would have significant reputational and regulatory impact. The Company recognises its duty to pay claims promptly and that this could result in heavy cash flow demands in the event of catastrophe claims. MS AISE ensures the availability of sufficient funds to cover any claims from such events and the combination of other adverse circumstances which may give rise to short term cash requirements in excess of MS AISE's available liquid funds. It should be noted that MS AISE is ultimately backed by the financial security of the MS Amlin Group.

### C.4.2 Concentration and exposure

Responsibility for cash management and the allocation of assets to ensure appropriate liquidity is delegated to the MS Amlin Investment Management function. MS AISE therefore aims to ensure its investment portfolios are sufficiently liquid to allow its liabilities to be settled. The prudent person principle, as described in paragraph C.2.2, is applicable to managing liquidity risk.

Liquidity risk concentration can develop as a result of its combined correlative exposure to underwriting perils that can result in significant claims occurring concurrently. The strength and liquidity of the balance sheet is fundamental to our proposition as an insurer of choice, providing us with the ability to respond quickly to claims. This is particularly relevant in the event of large losses such as European windstorms. Liquidity risk can result from having concentrations in financial assets which cannot be monetised quickly.

MS AISE periodically monitors its liquidity ratio as part of the risk appetite monitoring process. The ratio as at year end of 2018 is well above the tolerance of 100%. There are no issues to report in relation to the overall liquidity risk profile.

It is important that MS AISE can pay its obligations as they fall due. Levels of cash are therefore managed on a daily basis and buffers of liquid assets are held in excess of the immediate requirements. This is to reduce the risk of being forced sellers of any of MS AISE's assets, which may result in realising prices below fair value, especially in periods of abnormal asset liquidity.

### C.4.3 Sensitivity analysis

The Lilac (cash/money markets) and Blue (bond) share classes held in the Toro Prism Trust are inherently liquid and can usually be liquidated within two days. The Company also monitors its level of High Quality Liquid Assets (HQLA) against Solvency Capital Requirements (after applying Basel III regulatory haircuts). The results indicate that MS AISE is well funded and positioned to handle multiple loss events before liquidity becomes an issue.

### C.4.4 Management, mitigation and monitoring techniques

Management and mitigation of liquidity risk is done via cash management and liquidity ratio monitoring:

- Cash management is performed at the Group level at a daily basis. The rapid collection of reinsurance recoveries following settlement of major claims is a key priority within cash management;

- Liquidity ratio monitoring is done to assess if MS AISE can meet its liabilities in a stressed liquidity environment.

#### **C.4.5 Impact of expected profit in future premiums**

Any profits expected from premiums that have not yet materialised but are expected in future periods are utilised in business planning and amounted to €67.0 million as at 31 December 2018 (2017: €63.9 million) on future expected premiums of €337.7 million (2017: €370.8 million).

Management are aware of the risk of falling short of either the expected profit or the level of future expected premiums, both of which can contribute to liquidity risk if large enough. MS AISE's capital position is strong and liquid enough to absorb shocks of this magnitude and no material liquidity issues are expected to arise if the level of expected profits from expected future premiums is not met.

## C.5 Operational risk

MS AISE operates a diverse business across a number of European offices and jurisdictions and is expected to comply with legal, regulatory and best-practice standards. The potential exists for a failure of critical business processes, people or systems resulting in an interruption to normal operations. Operational risk excludes strategic and reputational risk.

### C.5.1 Risk definition and appetite

Operational risk is divided into five subcategories: people risk, process risk, systems and technology risk, legal and regulatory risk, and group structure related risk. Besides these categories operational risks within other risk categories are also taken into account.

MS AISE has a risk averse appetite for operational risk for all five categories. MS AISE does not wish to have any operational failures which may hinder trading or result in financial loss, or any regulatory sanction for inadequate compliance. It is recognised, however, that achieving complete certainty that such failures could not occur would entail an unacceptable cost.

### C.5.2 Concentration and exposure

#### *People risk*

The experience and expertise of MS AISE's staff is an important aspect of the business model and contributes to the strength of MS AISE's market franchise, the ability to underwrite profitably, and to fulfil policyholder expectations. Relationships with policyholders, investors, regulators and other external parties are all of equal benefit. Therefore, the loss of key people or not being able to recruit the right people, who support and facilitate processes that support MS AISE's desired outcomes, is a risk to MS AISE. In addition, MS AISE is exposed to operational risk through the direct or indirect loss resulting from the inadequacy or failure of employees in executing their duties.

#### *Process risk*

Process risk relates to key processes which are integral to the delivery of MS AISE's strategy. Any failures or inefficiencies in these capabilities have the potential to cause loss or interruption to the Company and potentially impact expected profit, as well as the potential to negatively impact MS AISE's ability to fulfil policyholder expectations. This category includes risks related to sourcing & vendor management, change management, data quality, financial and tax reporting, conduct and fraud risk.

#### *Systems and technology risk*

Systems and technology risks relate to the following aspects of MS AISE's operational environment: cyber risk, data centres, network availability, software, end user computing, business continuity and information security.

#### *Legal and regulatory risk*

MS AISE operates within a legal and regulatory framework in many jurisdictions around the world and failure to operate within prescribed rules could result in investigations and sanctions through fines and/or limitations on future trading. This category includes governance, breach of competition law, sanctions, financial crime, data protection, conduct risk, and identification of new laws and regulations.

#### *Group structure related risk*

Risks faced by MS AISE that may arise as a result of MS Amlin's particular Group structure as explained in sections B.1.1 and B.7.1. This includes risks that arise through operation of a centralised Group operations strategy including resource stretch, priorities clash or misunderstanding of regulatory requirements that could impact one or all entities included in the MS Amlin Group.



### Top 5 operational risk drivers

Risks are identified via periodic engagement with relevant functions and SBUs to conclude on current risks and issues, project risks, emerging risks and mitigation adequacy taking into account all operational risks as described above. Deep dive assessments and other assurance activities also seek to evaluate risks from a thematic perspective. MS AISE uses a stochastic model to assess which operational risks to prioritise in its risk management system. This assessment takes into account financial loss, legal and regulatory implication, reputational, and business disruption.

The top five modelled operational risk drivers (presented below) remain diverse in nature in both 2017 and 2018. Over the past year there has been more emphasis on changes in law, intermediary default and sanctions. The risk drivers are ranked based on required operational capital using the Internal Model.

2018 rank	Class	2017 rank	Class
1	Expenses exceed plan	1	Breach of Competition law
2	Change in law affects AISEs business	2	Expenses exceed plan
3	VAT on cross-border charges	3	Underwriter writes unauthorised business
4	Intermediary default	4	VAT on cross-border charges
5	Breach of regulatory requirements - sanctions	5	Loss of IT infrastructure / Primary Data Centre

As part of the annual parameterisation process the scenarios which serve as input for the calculation of the operational risk capital charge have been updated. This evaluation assures internal and external developments are accurately reflected in the Company's Risk Management system and Internal Model. These evaluations resulted in a different ranking of operational risks.

In addition to concluding risk drivers via the Internal Model there is a periodic engagement process with the relevant functions/SBUs for analysing operational risk from a more qualitative perspective. This resulted in attention for other operational risks related to the implementation of GDPR requirements, improving of IT infrastructure and making sure strategic projects are successfully executed.

### C.5.3 Stress and Sensitivity analysis

Operational stress tests seek to identify management actions to mitigate exposure or to develop future management actions that would be utilised if the event was to occur. Recent operational stress tests have covered office outages, crisis management simulations, breach of competition law and cyber-attacks, where possible historic internal or external events are utilised to build simulations. Results showed the existing resilience and preparedness of MS AISE for such events. None of the stress tests had an impact higher than the €13.0 million tax carry back provision which is available to absorb financial losses. As a consequence the scenarios did not have an impact on MS AISE's solvency position.

### C.5.4 Management, mitigation and monitoring techniques

In addition to the risk management process outlined in section B.3, this section presents management and mitigation techniques in relation to operational risks. Monitoring results are reported to MS AISE's Risk & Solvency Committee on a quarterly basis.

- *Policies, procedures and standards* – the Operational Risk Standard ensures all significant operational risks are identified, assessed, evaluated, managed, monitored and reported in a consistent manner across the organisation. The Internal Control Framework explains the standards required for the ownership, operation and performance of internal controls. Besides these standards there are policies in place for managing business continuity, data quality, information security, outsourcing, and procurement;
- *Tolerance setting* – strategy is aligned to a risk appetite and tolerances. Tolerances monitor the scale of operational losses versus modelled operational risk measures calculated for the annual

SCR, as well as the adequacy of the mitigation strategies via the Internal control framework. Finally, monitoring of risk treatment plans is factored into tolerance monitoring;

- *Risk Management Framework* – the implementation of a framework for the identification, assessment and control of operational risks ensures that operational risks are understood and managed by relevant functions/SBUs;
- *Internal Control* – effectiveness of managing operational risk is measured via the Internal Control Framework. This framework measures operation of key controls in day to day operations;
- *Risk assessments* – the identified risks are assessed via periodic risk discussions with relevant functions/SBUs and via thematic deep dive assessments;
- *Risk events and near misses* – are reported to raise awareness and identify areas for improvement. MS AISE's risk appetite is used as the basis for evaluating risk events;
- *Scenario analyses* – are used to determine the level of regulatory and economic capital required to support the level of operational risk within the Company;
- *Insurance coverage* – the MS Amlin Group purchases insurance protections for all subsidiaries to cover property damage, liability, cyber risk, errors and omissions and fraud.

## C.6 Other risks

MS AISE only identifies strategic risks as input for the other risks section. Besides the risk categories in MS Amlin's Risk Management Framework no other risk categories have been identified.

### Strategic risk

MS AISE has a strategy setting process in place to respond effectively to changes in the internal and external environment. The Board is closely involved in the strategy setting process. The aim of the process is to identify impending changes that could compromise the business model in the long term and to identify opportunities for growth through organic expansion and acquisition where market conditions allow. Once change and/or acquisition targets are secured change resources are assigned to deliver the necessary objectives.

This section explains risk concentration and exposure and concludes with a description of mitigation techniques. In this section no outcomes of sensitivity analyses are given. Sensitivity analyses can all be grouped to one of the other risk categories as described in this chapter.

#### C.6.1 Risk definition and appetite

Strategic risks are defined as risks to current and prospective earnings or capital arising from adverse business decisions, improper implementation of decisions or lack of responsiveness to industry changes. These include risks associated with the appropriateness of business strategy in the face of the current and future commercial, political, legislative and economic environment.

MS AISE has a risk seeking (maintain) attitude to strategic risk as it actively pursues ways of developing the business model. MS AISE also faces a number of external factors which may impact demand for or supply of our products. These risks are analysed and actions are agreed to adapt the strategic approach to cater for them.

#### C.6.2 Concentration and exposure

MS AISE sees strategic risk concentration derived from:

##### *Developments in relation to strategic objectives*

The development of strategic objectives is carried out by MS AISE senior executives and through the decisions of the MS AISE Board. The strategy is fundamental to the development of MS AISE's market share, brand, reputation, underwriting aims, and the fulfilment of the expectations of its parent and other interested parties such as policyholders, rating agencies and regulators.

Several macro trends have been identified that will drive the future of the insurance industry. These trends serve both as opportunity and threat for achieving strategic objectives.

- *Competitive market* – MS AISE operates in highly competitive markets with market averages close to a 100% combined ratio. Under these competitive conditions achieving profitable growth is challenging.
- *Increasing power of the broker* – The broker market is consolidating across Europe. Larger brokers exercise more power in the value chain. This drives our need to be more proactive and differentiate our value proposition.
- *Increasing use of technology and data* – This will lead to changes in distribution to small and medium sized enterprises (SME) and requires investment in analytical tools.
- *New markets / models & sectors emerging* – New markets (like Cyber & Decennial) and insurance business models (like digital business models and distribution partnerships) will challenge the existing status quo.

- *Push for Client Intimacy* – Market dynamics are changing as capital becomes more abundant and sophisticated than before. Proximity to broker and client will therefore be more important. End client focus needs to be strengthened in order to be able to provide better value to brokers and clients.
- *Increased regulation* – There is a stronger push for compliance (e.g. around know your customer, sanctions and facilities) resulting in higher costs for brokers and insurers. Management insight, control and compliance processes are therefore important.

#### *Political and economic factors*

MS AISE is exposed to political uncertainty and resulting instability that could affect the delivery of MS AISE's strategy and/or the provision of its products and services. This could crystallise as a result of political decisions, events or conditions.

The main driver for political and economic uncertainty is Brexit as the UK is scheduled to leave the European Union ("EU") in 2019. MS Amlin made the decision to re-domicile MS AISE from the UK to Belgium in 2017, which has been effective as from 1 January 2019. Other drivers for political and economic risk are US-fuelled trade disputes and the EU elections in May 2019.

#### *Strategic Group risk*

MS AISE is a subsidiary of the MS Amlin group and there is a risk that losses in other parts of the MS Amlin group of companies may impact on the ability of MS AISE to execute its strategy, especially if the impact is upon the Group's capital management strategy and limits options to recapitalise in the event of a material capital reduction. Other examples include Group's influence over entities strategy, potentially clashing with the fulfilment of local strategy.

Whilst MS AISE accepts these risks are pertinent to the sector and local jurisdiction, it is necessary to understand the risk and manage its potential impact where possible.

### **C.6.3 Scenario analysis and reverse stress testing**

At a strategic level scenario analysis and reverse stress testing are used to evaluate the financial robustness of MS AISE in extreme circumstances. These assessments are performed as part of the ORSA process of which outcomes are reported to the regulator.

The scenario testing is performed over a 3-year business planning horizon with multiple losses against the business plan assumptions. The scenarios take into account major catastrophe losses, reserve releases, an investment loss and a change in business mix. Outcomes are analysed to conclude on potential mitigating actions.

Reverse stress testing is performed to assess scenarios and circumstances that would render MS AISE's business model unviable, thereby identifying potential business vulnerabilities. These tests take into account qualitative parameters like data quality, process inefficiencies, project overload and quantifiable market stresses and sever business plan breaches

The results of the scenario analysis and reverse stress testing are compared with MS AISE's risk appetite and target capital outlined in MS AISE's Capital Management Strategy. Based on these analyses close monitoring is required but immediate measures are not required as probabilities of these events is relatively low.

### **C.6.4 Management, mitigation and monitoring techniques**

In addition to the risk management process outlined in section B.3, this section presents management and mitigation techniques in relation to strategic risk. Monitoring results are reported to MS AISE's Risk & Solvency Committee on a quarterly basis.

- *Group Strategy Alignment* – MS AISE's strategic objectives and decisions take account of the expectations also include consideration of the strategies requirements of the MS Amlin group and its parent MS&AD, including capital needs, and regulatory requirements and risks.
- *Culture* - MS AISE's culture and strategic objectives take account of customer needs and expectations.
- *Strategy commitment* - There is resource commitment to support the duration of the executed strategy, strategies have flexible re-directive decision points in their plan.
- *Market monitoring* - Horizon scanning of external factors takes place often, decisions take account of current and longer term market movements.
- *Governed decision making* – Strategic risks are assessed taking account of all requirements and risk acceptance is undertaken within a controlled manner taking account of capital constraints and the cost of capital.
- *Capital management* - Aggregate risk exposure is continually monitored against available capital, and response is taken where solvency ratios are deemed unacceptable. Contingency and resilience plans are developed to manage adverse capital events.
- *Stress Testing* - Business plans are thoroughly considered and reviewed against the potential impact of external factors and developments.
- *Merger & Acquisition risk assessments* - Due diligence and risk assessment processes are conducted for acquisitions.

## C.7 Any other information

All material information relating to the Company's risk profile has been disclosed in sub-sections C.1 to C.6 above.

## Section D - Valuation for Solvency Purposes

## D.1 Assets

### D.1.1 Solvency II valuation method and differences compared to IFRS per material asset class

		As reported under IFRS	SII reclass	IFRS re- presented	SII valuation adjustment	SII balance sheet 2018	SII balance sheet 2017
	Note	€'000	€'000	€'000	€'000	€'000	€'000
Cash and cash equivalents	1	26,295	7,774	34,070	-	34,070	23,667
Investments (incl. participations)	2	1,273,705	(21)	1,273,684	-	1,273,684	1,237,332
Reinsurers' recoverables	3	225,022	-	225,022	(99,103)	125,919	111,775
Insurance, reinsurance and intermediaries receivables	4	167,275	-	167,275	(147,026)	20,248	28,321
Receivables (trade, not insurance)	5	53,435	(7,681)	45,754	(797)	44,957	32,660
Deferred acquisition costs	6	36,857	-	36,857	(36,857)	-	-
Deferred tax asset	7	7,635	-	7,635	1,305	8,940	16,322
Property, plant & equipment held for own use	8	1,307	-	1,307	-	1,307	1,891
Goodwill	9	28,843	-	28,843	(28,843)	-	-
Intangible assets	10	15,858	-	15,858	(15,858)	-	-
<b>Total Assets</b>		<b>1,836,232</b>	<b>72</b>	<b>1,836,304</b>	<b>(327,179)</b>	<b>1,509,125</b>	<b>1,451,968</b>
<b>Total Liabilities</b>		<b>1,311,148</b>	<b>72</b>	<b>1,311,220</b>	<b>(303,575)</b>	<b>1,007,645</b>	<b>1,018,511</b>
<b>Excess of Assets over Liabilities</b>		<b>525,084</b>	<b>-</b>	<b>525,084</b>	<b>(23,604)</b>	<b>501,480</b>	<b>433,457</b>

The above table shows the reclassification of assets from IFRS to Solvency II presentation, as well as Solvency II valuation adjustments, as at 31 December 2018. The 2017 Solvency II balance sheet has been included for comparative purposes.

The breakdown into asset classes in the above table is less granular than the S.02.01 Balance sheet QRT, as presented in the Annex. This has been done to allow a clearer understanding of the valuation differences.

#### *Solvency II reclassification*

For Solvency II reporting purposes, investment related receivables and payables are reclassified to be included in the Investments (incl. participations) line. Also different treatment of cash and cash equivalents, as well as a grossing up of derivative values, results in further reclassifications in and out of the Investments (incl. participations) line.

These reclassifications are presentational in nature, thus do not impact the excess of assets over liabilities balance. They have been summarised in the below table:

	As reported under IFRS	SII re-class	IFRS represented
	€'000	€'000	€'000
Cash and cash equivalents	26,295	7,774	34,070
Investments (incl. participations)	1,273,705	(21)	1,273,684
Receivables (trade, not insurance)	53,435	(7,681)	45,754
Derivative liabilities	(5,739)	166	(5,573)
Financial liabilities other than debts owed to credit institutions	-	(238)	(238)
<b>Total</b>	<b>1,347,697</b>	<b>(0)</b>	<b>1,347,697</b>

One major reclassification can be identified which primarily relates to a receivable of € 7.6 million from the Toro Prism Trust (the 'Trust'). This receivable will not be received in cash but will be invested into

additional shares of the Trust. Therefore, it is considered within the deposits part of the Trust. The deposits are held as a buffer within the Trust to enable instant purchases of additional shares. All deposits, including the €7.6 million reclassification, have been included as cash equivalents on the Solvency II balance sheet.

#### *Solvency II valuation and classification adjustments*

In order to arrive at the Solvency II balance sheet, the following valuation adjustments are required,

- De-recognition of Deferred Acquisition Costs, Goodwill and Intangible assets, as well as certain prepayment assets;
- Conversion of IFRS best estimate net insurance liabilities and net future receivables to Solvency II technical provisions standard;
- Re-calculation of net Deferred Tax Asset to consider impact of above valuation changes.

Set out in the remainder of this section are the Solvency II valuation principles for material asset classes with a comparison to the corresponding IFRS valuation principles, if different.

### **1. Cash and cash equivalents**

Cash and cash equivalents are defined differently under IFRS than Solvency II. Under IFRS, cash equivalents include short-term, highly liquid investments which are believed to be subject to an insignificant risk of changes in value. For Solvency II reporting, cash equivalents are defined as deposits exchangeable for currency on demand at par and which are directly usable for making payments by cheque, draft, giro order, direct debit/credit, or other direct payment facility, without penalty or restriction.

The different definitions have resulted in re-classifications of IFRS cash equivalents to different asset categories for Solvency II reporting. Cash and cash equivalents are valued at fair value under both Solvency II and IFRS.

### **2. Investments (incl. participations)**

Investments are recognised at fair value both under Solvency II and IFRS. Therefore no valuation differences exist for investments. There were no significant changes to the valuation techniques during the year.

MS AISE classifies its investment securities either as fair value through profit or loss or available-for-sale. The classification drives how the financial instruments are measured under IFRS, though both are at fair value. Management determines the classification of its investment securities at initial recognition.

MS AISE's investment assets designated at fair value through profit or loss amounted to €1,272.7 million (2017: €1,236.2 million). The remaining assets of €1.0 million (2017: €1.2 million) are classified as available-for-sale investments and these relate to equity stakes in certain investments that do not have a quoted market price. Hence, the IFRS value is considered a suitable approximation of the Solvency II fair value requirement.

Note that MS AISE's investment in the Trust is structured into 3 sub-funds, i.e. Blue, Emerald and Lilac fund. The Company has assessed for each of these whether MS AISE should recognise its investment as a participation in line with the requirements of the Solvency II directive. The Company has a share of respectively 6.1%, 5.0% and 66.6% in the funds under management, so the Lilac fund must be considered as a participation. This particular Trust fund is classified as an 'Other financial sector' undertaking and thus the net investment value must be presented within the 'Holdings in related undertaking, including participations' line in the S.02.01 QRT. The other Trust funds are included within the 'Collective Investments Undertakings' line. The investment in the Trust is described further in the Collective investment undertakings section below.

#### *Fair Value Hierarchy*



For Solvency II reporting purposes, MS AISE classified its Investments (incl. participations) into the three Solvency II levels of fair value hierarchy as follows:

**Quoted market prices** – Quoted prices (unadjusted) in active markets for identical assets or liabilities. An active market is a market where transactions for the asset occur with sufficient frequency and volume to provide readily and regularly available quoted prices.

**Adjusted quoted market prices** – Where the use of quoted market prices in active markets for the same assets or liabilities is not possible, the Company will value assets and liabilities using quoted market prices in active markets for similar assets and liabilities with adjustments to reflect differences. Those adjustments reflect specific and relevant factors such as:

- (a) the condition or location of the asset or liability;
- (b) the extent to which inputs relate to items that are comparable to the asset or liability; and
- (c) the volume or level of activity in the markets where the inputs are observed.

**Alternative valuation methods** – Inputs to a valuation model for the assets or liabilities that are not based on observable market data (unobservable inputs) and are significant to the overall fair value measurement. Unobservable inputs may have been used to measure fair value to the extent that observable inputs are not available, thereby allowing for situations in which there is little, if any, market activity for the assets or liabilities at the measurement date (or market information for the inputs to any valuation model). As such, unobservable inputs reflect the assumptions that market participants would use in pricing the assets.

At the reporting date, MS AISE's Investments (including participations) classified by hierarchy is as follows:

Investments classification under Solvency II	Quoted market prices €'000	Adjusted quoted market prices €'000	Alternative valuation methods €'000	Total €'000
Holdings in related undertakings, including participations	331,828	-	-	331,828
Collective investment undertakings	703,623	-	120,266	823,889
Equities	111,908	-	950	112,858
Derivative assets	2,167	2,942	-	5,109
<b>Total investments</b>	<b>1,149,527</b>	<b>2,942</b>	<b>121,216</b>	<b>1,273,685</b>

Furthermore MS AISE has derivative financial instruments amounting to €5.6 million included in Other Liabilities also classifying as Adjusted quoted market prices under Solvency II and disclosed in section D.3 of this report.

#### *Collective investment undertakings*

Collective investment undertakings and participations include MS AISE's investment in the Trust of €1,034.4 million, a managed fund co-invested into with other MS&AD companies.

This fund represents an Irish domiciled UCITS-vehicle, which is structured into 3 sub-funds, a fixed income securities fund (Blue), a liquidity fund (Lilac), an equity securities fund (Emerald) and a number of currency based share classes.

The investment shares in the funds are valued using quoted market prices for the same assets.

The collective investment undertakings balance also includes investments in property fund portfolios of €120.3 million. MS AISE's property fund portfolios are valued by using an alternative valuation method. Alternative valuation methods are explained in section D.4 of this report.

The remainder of the collective investment undertakings balance relates to investments in money market funds of €1.0 million.

#### *Equities*

As stated above, MS AISE has both listed and unlisted equities which are respectively classified as investments classifying as Quoted market prices and Alternative valuation methods under Solvency II.

#### *Derivatives*

Listed derivative contracts are valued using quoted prices from the relevant exchange and are classified as Quoted market prices. Over the counter ('OTC') currency options are valued by the counterparty using quantitative models with multiple market inputs such as foreign exchange rate volatility. The market inputs are observable and the valuation can be validated through external sources. Therefore OTC derivative contracts are classified as Adjusted quoted market prices.

In the IFRS financial statements derivatives assets and liabilities are netted off if IAS 32 offsetting criteria are met. Under Solvency II, derivatives are presented on a gross basis. At 31 December 2018 this resulted in an increase of both derivative assets and liabilities in the Solvency II balance sheet compared to the IFRS financial statements. The value of derivative liabilities has been included in Other liabilities for which reference is made to section D.3 of this report.

### **3. Reinsurance recoverables**

In the Solvency II balance sheet Reinsurance recoverables represent amounts due from reinsurers on unsettled claims arising from the related reinsurance contracts. Under IFRS this is presented as the Reinsurers' share of outstanding claims as well as the Reinsurers' share of unearned premium.

Please refer to subsection D.2.5 for a bridge table from IFRS to Solvency II net technical provisions.

### **4. Insurance, reinsurance and intermediaries receivables**

Under Solvency II the insurance, reinsurance and intermediaries receivables represent amounts due as at the balance sheet date valued at fair value. Under IFRS the above receivables are initially recognised at fair value and subsequently measured at amortised cost using the effective interest rate method.

Receivables not overdue more than 90 days are considered within the calculation of the technical provisions as future premiums, resulting in an adjustment of €147.0 million to receivables. The receivables overdue more than 90 days are presented as an asset on the Solvency II Balance Sheet.

Due to the short-term nature of the remaining overdue receivables, the IFRS carrying value (amortised cost net of bad debt provision) is considered not materially different from the fair value under Solvency II. Therefore no other adjustment is made.

### **5. Receivables (trade, not insurance)**

Receivables (trade, not insurance) include prepayments, sundry debtors and other receivables. Investment related receivables are re-classified to be part of the Investments (incl. participations) line.

Under Solvency II, receivables are measured at fair value. The IFRS receivables are initially recognised at fair value and subsequently measured at amortised cost using the effective interest rate method.

For Solvency II reporting purposes prepayments are considered to have fair market value of nil resulting in an adjustment of €0.8 million.

Due to the short-term nature of the other receivables, the IFRS carrying value is considered not materially different from the fair value under Solvency II. Therefore no other adjustment is made.

### **6. Deferred acquisition costs**

Acquisition costs comprise brokerage commissions incurred on insurance contracts written during the financial year.

Under Solvency II, deferred acquisition costs are included in the best estimate of future cash outflows for the technical provisions. Therefore deferred acquisition costs are valued at zero.

Under IFRS, the deferred acquisition costs are amortised over the period in which the related premiums are earned.

## 7. Deferred tax assets

In the Solvency II balance sheet, MS AISE recognises deferred taxes on the basis of the difference between values of the assets, liabilities and technical provisions assessed in accordance with Solvency II valuation methods and the values ascribed to assets and liabilities as recognised for tax purposes.

Under IFRS the valuation of deferred tax assets and liabilities is based on IAS 12, whereby for deferred tax assets, an assessment is made of the probability of future taxable profits and the realisation of the deferred tax asset within a reasonable time frame. There are no methodology differences between Solvency II and IFRS for the valuation of deferred tax assets and liabilities.

A deferred tax asset is recognised to the extent that MS AISE is capable and allowed to utilise it within the applicable tax legislation. MS AISE does not discount its deferred tax assets and liabilities. MS AISE offsets deferred tax assets and liabilities only if it has a legally enforceable right to set off and if it relates to taxes levied by the same tax authority on the same taxable undertaking.

Therefore the Solvency II deferred tax assets are adjusted for the amount of €1.4 million to reflect the tax impact of differences in valuation of assets, liabilities and technical provisions under IFRS and Solvency II.

Next to the impact of the above valuation differences, deferred tax assets relate mainly to Belgian and French losses. These losses incurred can be offset against future profits for the period.

MS AISE has unused tax losses in the Belgian and German branches for total amounts of €56.9 million and €31.8 million respectively (2017: €55.9 million and €27.2 million). MS AISE German branch has unused tax credits for which no deferred tax asset is recognised for a total amount of €31.8 million (2017: €27.2 million). MS AISE Belgian branch has unused tax losses for which no deferred tax asset is recognised for a total amount of €32.1 million (2017: nil).

For more explanation with regard to changes in applicable tax rates and its implication on the deferred tax calculation, refer to note 12 of the Company's annual report.

## 8. Property, plant and equipment held for own use

Property and equipment are the physical assets utilised by the Company to carry out business activities and generate revenues and profits. It consists of the following:

- Fixtures and fittings;
- Computer equipment.

The Company does not own any 'plants', so the text that follows only refers to property and equipment as described above.

Property and equipment is included in the IFRS financial statements at historical cost less accumulated depreciation and provision for impairment where appropriate. Solvency II requires property and equipment to be valued at fair value. In all respects, the IFRS carrying value is deemed not materially different from the fair value under Solvency II.

## 9. Goodwill

Goodwill is valued at nil within the Solvency II balance sheet in accordance with article 12 of Delegated Regulations.

For information on the IFRS valuation and basis of Goodwill held by the Company, please see note 18 in the 2018 annual report for details.

### **10. Intangible Assets**

Intangible assets are recognised in the Solvency II balance sheet at a value other than zero only if they can be sold separately and it can be demonstrated that there is a value for the same or similar assets that is derived from quoted market prices in active markets.

Intangible assets of MS AISE consist of internally developed software that do not meet these criteria. As a result the intangible assets are valued as nil in the Solvency II balance sheet.

#### **D.1.2 Financial and operational leasing arrangements per material asset class**

MS AISE entered into several non-cancellable operating lease arrangements for office space and cars. No material class of assets is subject to any operating lease arrangement. Please refer to section A.4 for details on the Company's leases.

MS AISE does not have any finance lease arrangements.

#### **D.1.3 Changes made to the recognition and valuation bases used or to estimations**

No changes to the recognition and valuation bases used or to estimations have been made since the last Solvency and Financial Condition Report.

## D.2 Technical provisions

### D.2.1 Overview

This section contains an analysis of the MS AISE Solvency II technical provisions.

Below is a summary bridge of the components of the technical provisions from IFRS to Solvency II. The 2017 Solvency II values have been included for comparative purposes.

	As reported under IFRS €'000	SII valuation adjustment €'000	SII balance sheet 2018 €'000	SII balance sheet 2017 €'000
Technical provisions	1,183,993	(249,452)	934,541	926,166
Reinsurers' recoverables	(225,022)	99,103	(125,919)	(111,775)
Deferred acquisition costs	(31,075)	31,075	-	-
<b>Net technical provisions</b>	<b>927,896</b>	<b>(119,274)</b>	<b>808,622</b>	<b>814,391</b>

The decrease in Solvency II net technical provision is a result the increase in reinsurance recoverables (€ 14.1 million) offset by an increase in the gross technical provisions (€8.4 million). This recoverables movement is caused by large claim development (€ 7.5 million) and anticipated recoverables for future risks (€ 6.6 million).

### D.2.2 Best estimate plus risk margin by Solvency II line of business

The table below shows the Solvency II technical provisions, including the amount of the best estimate and risk margin separately for each material line of business.

	Fire & other damage to property insurance €'000	General liability insurance €'000	Marine Aviation and transport insurance €'000	Motor vehicle liability insurance €'000	Other SII Lines of Business €'000	Total non- life obligation 2018 €'000	Total non- life obligation 2017 €'000
Total best estimate - gross	163,204	371,814	176,474	128,986	39,096	879,573	866,519
Less: Total best estimate - reinsurance	(22,746)	(78,953)	(12,579)	(5,272)	(6,369)	(125,919)	(111,775)
<b>Total best estimate - net</b>	<b>140,458</b>	<b>292,861</b>	<b>163,895</b>	<b>123,714</b>	<b>32,726</b>	<b>753,654</b>	<b>754,744</b>
Add: Risk margin	10,758	19,342	13,642	7,407	3,819	54,968	59,647
<b>Technical provisions - total</b>	<b>151,216</b>	<b>312,203</b>	<b>177,537</b>	<b>131,121</b>	<b>36,545</b>	<b>808,622</b>	<b>814,391</b>

### D.2.3 Description of bases, methods and main assumptions

#### Introduction

The Solvency II technical provisions are calculated as the sum of a best estimate of the insurance liabilities and a risk margin.

The best estimate portion of the Solvency II technical provisions represents the sum of probability-weighted average future cash flows in respect of all policies that are legally obligated as at the valuation date, taking into account the time value of money (expected present value of future cash flows) using the EIOPA risk-free interest rate term structure. These future cash flows include future premium receipts,

future claims payments, future reinsurance spend, future reinsurance recoveries and associated future expense cash flows.

The risk margin represents the risk premium that would be required to be paid to a third party in order to take over and meet the insurance and reinsurance obligations over their lifetime.

### **Best estimates: the foundation of the IFRS and Solvency II technical provisions**

The actuarial best estimate reserves calculated as part of the IFRS balance sheet form the foundation of the best estimate portion of the Solvency II technical provisions. This is adjusted to allow for Solvency II principles.

### **Full year projections**

Projections are carried out at a reserving class level using standard actuarial techniques and incorporating actuarial judgement. Ultimate premiums and claims are selected using a reserving tool which allows a variety of standard actuarial reserving methods to be used with a high level of efficiency whilst displaying a range of key diagnostics. Input from underwriters is provided at an early stage of the process in order to capture information such as changes in the portfolio and softer information such as market conditions.

All assumptions are reviewed in light of the diagnostics and other information. All projections are subject to review by actuaries and by a wider audience including representatives from the finance, underwriting, risk, claims and senior management teams.

In the case of large or catastrophe losses, the actuaries make use of expert knowledge from the claims and underwriting departments.

### **Actuarial judgement**

The projections are subject to a significant amount of certain judgment as many, often conflicting, factors are considered when determining the ultimate income and losses.

### **Accident full year projections – calculation of earned portion and estimation of unearned incepted claims**

For the majority of MS AISE, accident year projections are carried out. At year-end valuation dates, the net of reinsurance earned incurred but not reported (IBNR) reserve is a natural output of the process. At non year-end valuation dates, the accident year ultimates are split between earned to date and expected earnings through the rest of the accident year.

The unearned incepted claims which form part of the premiums provision is calculated by applying an initial expected prior loss ratio and net to gross ratio assumptions to the unearned premium reserve (UPR) from the IFRS balance sheet. These assumptions are consistent with the quarterly reserving process which produces the accident year projections and the budget. The initial expected prior loss ratios are consistent with the business plan, unless the actuarial view differs materially. During the year these loss ratios will be updated, if the performance of the class or new information leads to a materially different view.

### **Gross future premiums**

Solvency II requires technical provisions to include all gross future premium cash flows except overdue premium debtors.

The starting point for this amount is the IFRS not-yet-due premium debtors figure. This is adjusted for specific known differences in the basis of preparation between Solvency II and IFRS which are explained below (see sections on binder adjustment and discount credit).

The resulting future premium value is allocated by class, and then split between the claims and premiums portions of the technical provisions. This apportionment is done by comparing the rate of cash collection for a class to the rate of earned premium. If the rate of cash collection is greater than the rate of earned premium, then the future premium is allocated in full to the premiums provision. If the converse is true, then the future premium is allocated based on how much of the difference between cash collected and ultimate premium is represented by the difference between cash collected and earned premium. In respect of the latter, it will be allocated to the claims provision, with the remainder to the premiums provision.

### Reinsurance future premiums

The Solvency II technical provisions include:

- All future reinsurance premiums that are legally obligated; and
- A contribution towards reinsurance to be bought in the future providing cover to inwards legally obligated gross business.

Similar to gross future premiums, the basis of the legally obligated portion is the not-yet-due reinsurance premium debtors from the IFRS balance sheet, to which the minimum legally obligated unaccepted reinsurance programmes cost is added. This cost is calculated consistently with inputs into the capital model. The future cost portion is calculated on a 'correspondence' basis where the cost of the cover is shared across the relevant legally obligated and non-legally obligated gross business.

### Expenses

Under Solvency II, all future expenses that will be incurred in servicing existing policies are allowed for.

Future expense cash flows are captured using expense percentage assumptions to apply to future cash flows. Expense percentage assumptions are calibrated using the current forecast annual expense budget for MS AISE, scaled to allow for only the portion relating to servicing existing business.

### Unaccepted legally obligated contracts

IFRS only consider accepted contracts at the valuation date whereas Solvency II requires the inclusion of future cash flows in respect of all contracts that are legally obligated as at the valuation date. This includes contracts that will accept after the valuation date but have been written prior to the valuation date. MS AISE takes into account that the insurance contracts have a cancellation clause of two or three months and that MS AISE is legally obligated to contracts expected to accept within this period.

Expected premiums from contracts meeting this criterion are obtained and initial expected loss ratios are applied to calculate expected losses. Other items such as reinsurance bad debt, expenses, discount credit, binder adjustments and events not in data (ENIDs) associated with these contracts are calculated as per other sections of this document.

### Reinsurance obligation adjustments

The Solvency II technical provisions include all future reinsurance premiums that are legally obliged and a contribution towards reinsurance to be bought in the future providing cover to inwards legally obligated gross business. The latter is done on a 'correspondence' basis where the cost of the cover is shared across the relevant legally obligated and non-legally obligated gross business.

### Binder adjustment

Solvency II requires gross contracts to be recognised on a legal obligation basis. Under IFRS binding authorities are recognised in full at inception whereas under Solvency II, only underlying policies that are legally obligated should be included. Therefore, a look-through approach to the underlying contracts is taken. Simplifying assumptions are made since full look through data is not available, the main assumption being that in most cases insurance contracts are assumed to accept evenly throughout the

duration of the binder. MS AISE also takes into account the previously mentioned two to three month cancellation clause when determining the legal obligation under the binding authority contract.

Reinsurance recoveries on the gross binder adjustment are calculated by applying net to gross ratios to the gross binder adjustment.

### **Settled but unpaid claims**

Gross settled but unpaid claims are transferred from insurance creditors into the Solvency II technical provisions which have a neutral impact on the Solvency II balance sheet.

### **Events Not In Data (ENIDs)**

Under Solvency II the mathematical mean of the distribution of all possible future outcomes should be captured. A load is added to the earned and unearned future losses to allow for ENIDs which would not be captured in the best estimate calculated on an IFRS basis.

The load varies by entity depending on the skewness of the underlying distribution of potential outcomes and a judgment as to how much allowance has already been made for this skewness within the existing best estimates. An allowance is made for reinsurance recoveries which consider the relatively high likelihood of the loss being reinsured but also considers the increased probability of default under these conditions.

Since historical data does not include the full distribution of all possible outcomes, all methods employed to calculate ENIDs are necessarily simplifications and are highly subjective.

### **Reinsurance bad debt**

Where appropriate an allowance is made for potential bad debt on reinsurance recoveries. Charge factors are applied to the outwards reinsurance cash flows as they run off over time. Charge factors represent the mix of reinsurer ratings for relevant lines of business, probability of default and expected recoveries given default.

### **Discount Credit**

Under Solvency II all cash flows are discounted for the time value of money. The yield curves are the risk-free interest rates issued by EIOPA.

### **Segmentation**

Solvency II requires technical provisions to be reported by line of business and original currency. Reserves are analysed at a level which ensures that volumes of data remain credible. Therefore only in rare cases an allocation is required before Solvency II technical provisions can be mapped to lines of business and original currency. Mappings of the Solvency II technical provisions to lines of business is consistent with the mapping of IFRS balance sheet items to Solvency II lines of business to maintain consistency across the MS AISE Solvency II submission.

### **Risk margin**

The risk margin is calculated using the Standard Formula SCR for MS AISE and represents the risk premium that would be required to be paid to a third party in order to take over and meet the insurance and reinsurance obligations over their lifetime.

Conceptually, the risk margin is calculated as the discounted cost of capital required to be held to run off legally obligated business. For this, an SCR is calculated for each future year during the run off period. Market risk is not included in the calculation of the SCR because if the insurance liabilities were transferred to a third party it would be expected that they would be able to switch to a risk-free investment portfolio.



The SCR is assumed to run off proportionally to the technical provisions, taking into account the delay in run off of the premium risk. This assumption is a good approximation, since most sub-risks are heavily influenced by the size of the technical provisions. For example, the counterparty default risk is dependent on the size of the reinsurance, which in itself is closely related to the net technical provisions. The remaining risks are not material. It is a requirement to allocate the risk margin to Solvency II line of business. The risk margin is allocated to Solvency II line of business in proportion to the future claims as at the Balance Sheet date.

#### D.2.4 Level of uncertainty associated with the Solvency II technical provisions

The majority of the uncertainty in the Solvency II technical provisions arises in the process of setting quarterly reserves. The inputs for the net earned future claims and future premiums come directly from the quarterly projections of the ultimate premiums and ultimate claims.

The assessment of the reserves is based on commonly accepted actuarial techniques applied in a consistent manner. Whilst professional judgment has been exercised in all instances, projections of future ultimate losses and loss expenses are inherently uncertain due to the random nature of claim occurrences. The accuracy of the results is dependent upon the accuracy of the underlying data and additional information supplied to the actuarial teams.

The projections are also dependent on future contingent events and are affected by many additional factors, including:

- Claim reserving procedures and settlement philosophy;
- Social and economic inflation;
- Legislative changes;
- Changing court and jury awards;
- New sources of claims;
- Changes in the frequency and/or severity of extreme weather events;
- Improvements in medical technology;
- Changes in policyholder behaviour;
- Underwriting and reserving cycles;
- Other economic, legal, political and social trends; and
- Random fluctuations, particularly on small accounts.

For longer tail classes, where development potential exists but is not present in historical data, allowance is made for this within the IBNR. The level of uncertainty naturally reduces over time as claims are reported and settled, depending upon the nature of the event, the complexity of the losses and the potential for disputes.

Sources of uncertainty that are more specific to the nature of underwriting risks written are as follows:

**Property catastrophe losses:** catastrophe losses by their nature are large and often unpredictable and hence can often give rise to additional uncertainty. There is a relatively large amount of uncertainty in respect of future events. In respect of historic events the uncertainty may not always be that large as a percentage of the overall reserves, but often the magnitude of the losses arising means the uncertainty is still material.

**Large (disputed) 'risk' losses:** individual large losses can give rise to relatively high levels of uncertainty, particularly where there is an element of dispute, litigation or uncertainty as to the form of the claimed losses, including reinsurance collections.

**Emergence of new latent claims:** some classes are exposed to latent claims, in particular liability classes. Where new claim types have arisen, it can take many years for the full scale of the number and

size of claims to emerge. For claims yet to arise there is additional uncertainty around how much allowance to make for future unknown claim types.

**Established long-tailed classes:** longer-tailed classes can give rise to relatively large amounts of uncertainty due to the size of the best estimate reserves held in respect of them and the fact that the oldest years may not be fully developed. In particular the possibility exists for legislative changes applying both prospectively and potentially retrospectively that could affect multiple years of account. Additionally if there are changes in development in more recent years the changes may take some time to emerge.

**Changes in the mix of business/re-underwriting and case reserving procedure:** some classes have undergone a change in the mix of business written or rate changes in recent years. Other classes have undergone changes in claim handling policy. These changes impact the development profile of relevant lines of business and the loss ratios expected. For longer-tailed classes this can have similar considerations in respect of uncertainty as for new long-tailed classes. The effect of rate changes and re-underwriting on more recent underwriting years is uncertain and hence less weight can be placed on the historic development.

Other components of the Solvency II technical provisions also have some uncertainty, although typically to a lesser extent. The material areas of uncertainty related to each of the other components is set out below:

**Expenses:** In estimating the expenses, the starting point is the expense budget for the upcoming year. Assumptions are used to estimate the proportion of annual expenses required to service existing policies, and the run-off pattern of the liabilities. There is a medium level of uncertainty on all of these assumptions. There is additional uncertainty around the expense assumptions since the methodology is relatively new.

**Unaccepted legally obligated contracts:** A large proportion of policies that MS AISE writes incept at 1 January each year. This means that at year-end there are large amounts of future premiums and future claims arising from these unaccepted but legally obligated contracts. Uncertainty in these items arises not only from the same factors mentioned above with regard to setting the reserves, but also from the quality of the business plan used to set assumptions, including premium volumes by inception month, loss ratios, and the volume of binders written. There is also uncertainty around whether the business plan will be achievable given the commercial conditions in place at the time of writing.

Factors influencing whether the unaccepted premium will be more or less than expected are less material to the overall technical provisions, as any difference in unaccepted premium will partially be offset by a corresponding movement in the unaccepted claims. Factors relating to the loss ratio used to calculate the unaccepted claims lead to a large level of uncertainty in the overall technical provisions.

**Future Reinsurance premiums:** Assumptions are made for the proportion of reinsurance contracts that are losses-occurring during, earnings patterns and the nature of the reinsurance contracts (quota share or excess of loss). The key assumption underlying all of these is that management will continue to buy the same/similar reinsurance program in future years. While this assumption is reasonable based on past years, there is uncertainty over the availability and price of reinsurance in future years, which could influence management decisions.

**Events not in data (ENIDs):** As discussed above, the method employed to calculate ENIDs is necessarily highly subjective. However, since the net figure is small in the context of the overall technical provisions, then considerable uncertainty in this amount does not lead to significant uncertainty in the overall technical provisions.

**Reinsurance bad debt:** There is considerable uncertainty in this amount, driven by whether or not recoverable events occur, future economic conditions and the long-term solvency of our individual reinsurers. However, the reinsurance bad debt makes up an immaterial part of the total technical provisions, so there is little uncertainty in the overall technical provisions arising from this item.

**Risk Margin:** The methodology to calculate the risk margin is prescribed, and depends only on the SCR (which is calculated using the standard formula) and its expected run-off. Uncertainty arises from the inputs into the standard formula, and from the assumed cash flows used to run-off the SCR.

**Discount Credit:** The yield curves used for discounting are prescribed by EIOPA. Uncertainty arises from assumptions around the timing of any cash flows, driven by both the timing of claim events, and the period needed to settle claims. Although yields are increasing, they are still low by historical standards, meaning that the overall discount credit is relatively small. Therefore the uncertainty on the overall technical provisions is low.

## D.2.5 Material differences between IFRS and Solvency II technical provisions

The adjustments required to bridge the gap from IFRS reserves to Solvency II technical provisions as at 31 December 2018 are shown in the chart below both at the total level and for the lines of business that are most material for MS AISE.

Most of the adjustments are explained in the sections preceding this. Additional items are explained below the table. IFRS data split by Solvency II line of business is approximate since not all business is allocated at source to a line of business therefore in some cases judgement has been used.

	Fire & other damage to property insurance €'000	General liability insurance €'000	Marine Aviation and transport insurance €'000	Motor vehicle liability insurance €'000	Other SII Lines of Business €'000	Total non-life obligation 2018 €'000
<b>IFRS net technical provisions</b>	<b>173,521</b>	<b>358,254</b>	<b>203,724</b>	<b>150,461</b>	<b>41,935</b>	<b>927,896</b>
Adjustments to IFRS technical provisions	(29,166)	(60,217)	(34,243)	(25,290)	(7,049)	(155,966)
<b>Best estimate net earned future claims</b>	<b>144,355</b>	<b>298,036</b>	<b>169,481</b>	<b>125,171</b>	<b>34,887</b>	<b>771,930</b>
Other future claims on incepted contracts	21,585	44,565	25,342	18,717	5,217	115,425
Future premiums including unincepted	(63,843)	(128,941)	(75,966)	(53,437)	(16,648)	(338,835)
Unincepted claims	33,174	68,491	38,948	28,765	8,017	177,395
SII expenses	4,149	8,566	4,871	3,598	1,003	22,187
ENIDs	1,780	3,674	2,089	1,543	430	9,516
Discounted credits	(1,499)	(3,094)	(1,759)	(1,299)	(362)	(8,013)
Risk Margins	10,758	19,342	13,642	7,407	3,819	54,968
Other	757	1,564	889	657	183	4,050
<b>SII net technical provisions</b>	<b>151,216</b>	<b>312,203</b>	<b>177,537</b>	<b>131,121</b>	<b>36,545</b>	<b>808,622</b>

**Adjustments to IFRS reserves:** This includes removal of the management margin (held over and above the best estimate - €17.3 million) and UPR net of DAC (€138.7 million),

**Other future claims on incepted contracts:** This includes claims cash flows other than those included in the best estimate earned future claims which arise from incepted contracts, It includes settled not paid and unearned future claims.

**Other:** This includes the smaller adjustments, e.g. reinsurance bad debt calculated on a Solvency II basis.

**D.2.6 Matching adjustment, volatility adjustment or transitional measures**

The Solvency II technical provisions calculations do not apply the matching adjustment, volatility adjustment or transitional measures referred to in Article 77b, d and 308c, d of Directive 2009/138/EC.

**D.2.7 Reinsurance recoverables**

The calculation of reinsurance recoverables is explained in more detail in prior sections (accident full year projections, unaccepted legally obligated contracts, binder adjustments). In calculating the reinsurance recoveries and the reinsurance premiums, the characteristics of the MS AISE reinsurance program are considered.

The outward reinsurance contracts are written on a variety of bases, including risks attaching during, losses occurring during, excess of loss and quota share bases, and with a variety of reinsurers. MS AISE does not have outwards reinsurance contracts with special purpose vehicles.

**D.2.8 Material changes in methodology and assumptions**

There are no material changes in methodology and assumptions to calculate the Solvency II technical provisions since the last reporting period.

## D.3 Other liabilities

### Solvency II valuation methods and differences compared to IFRS per material other liabilities class

		As reported under IFRS	SII reclass	IFRS re-presented	SII valuation adjustment	SII balance sheet 2018	SII balance sheet 2017
	Note	€'000	€'000	€'000	€'000	€'000	€'000
Technical provisions		1,183,993	-	1,183,993	(249,452)	934,541	926,166
Insurance & intermediaries payables	3	34,889	-	34,889	(25,670)	9,219	4,083
Reinsurance payables	3	30,680	-	30,680	(30,680)	-	-
Payables (trade, not insurance)	4	41,874	-	41,874	-	41,874	64,113
Derivative liabilities		5,739	(166)	5,573	-	5,573	1,496
Financial liabilities other than debts owed to credit institutions		-	238	238	-	238	-
Retirement benefit obligations	1	8,631	-	8,631	-	8,631	10,683
Deferred tax liabilities	2	2,945	-	2,945	2,226	5,171	9,585
Subordinated liabilities	5	2,398	-	2,398	-	2,398	2,385
Contingent liabilities	6	-	-	-	-	-	-
<b>Total Liabilities</b>		<b>1,311,148</b>	<b>72</b>	<b>1,311,220</b>	<b>(303,575)</b>	<b>1,007,645</b>	<b>1,018,511</b>
<b>Total Assets</b>		<b>1,836,232</b>	<b>72</b>	<b>1,836,304</b>	<b>(327,179)</b>	<b>1,509,125</b>	<b>1,451,969</b>
<b>Excess of Assets over Liabilities</b>		<b>525,084</b>	<b>0</b>	<b>525,084</b>	<b>(23,604)</b>	<b>501,480</b>	<b>433,458</b>

The above table shows the reclassification of liabilities from IFRS to Solvency II presentation, as well as Solvency II valuation adjustments, as at 31 December 2018. The 2017 Solvency II balance sheet has been included for comparative purposes.

The breakdown into liability classes in the above table is less granular than the S.02.01 Balance sheet QRT, as presented in the Annex. This is to allow a clearer understanding of the valuation differences.

For information on the Solvency II reclassifications please refer to the explanation in section D.1 Assets. For information on Technical provisions, please refer to section D.2 Technical provisions.

Set out in the remainder of this section are the Solvency II valuation principles for material liability classes with a comparison to the corresponding IFRS valuation principles, if different.

#### 1. Retirement benefit obligations

Under IFRS, the liability recognised in the balance sheet in respect of defined benefit pension plans is the fair value of plan assets less the present value of the defined benefit obligation at the reporting date, together with adjustments for restrictions on the recognition of a defined benefit asset due to an asset ceiling. The present value of the defined benefit obligation is determined by discounting the estimated future cash outflows using discount rates set on the basis of the yield of high-quality debt instruments (AA rated or equivalent) issued by blue-chip companies, with maturities consistent with those of the defined benefit obligations.

There is no change in the valuation of pension liability between IFRS and Solvency II.

For further information on the defined benefit pension plans in operation by the Company, please see note 19 of the Company's annual report.

#### 2. Deferred tax liabilities

Please refer to Section D.1 for valuation methods and details surrounding deferred tax positions.

The IFRS deferred tax liability mainly relates to the revaluation of the Dutch investment portfolio. For Dutch tax purposes, the investment portfolio is valued against cost price. As a result only realised gains

are taxable. Hence a deferred tax liability is recognised to the amount of unrealised gains for accounting purposes.

Current tax liabilities are included in Payables (trade, not insurance) and are valued at fair value under Solvency II.

There is a Solvency II adjustment to deferred tax liability of €2.2 million for the tax impact of differences in valuation of assets, liabilities and technical provisions under IFRS and Solvency II.

No material changes in the valuation of the deferred tax liability position have taken place over the reporting period.

### **3. Insurance and intermediaries payables and Reinsurance Payables**

The IFRS insurance and intermediaries' payables and reinsurance payables are held at amortised cost. Similar to the insurance and reinsurance receivables as described under Section D.1, due to the short term nature of these payables, the IFRS carrying value is not materially different from the fair value under Solvency II and therefore, no adjustment is made.

Under Solvency II adjustments of €25.7 million (Insurance and intermediaries payables) and €30.7 million (Reinsurance payables) (2017: €25.4 million and €32.3 million respectively) have been made for settled but not paid claims and reinsurance premiums payable but not-yet-due at the balance sheet date. These amounts have been transferred to technical provisions and form part of the valuation of technical provisions. Please refer to section D.2 for further details on technical provisions and the valuation thereof.

### **4. Payables (trade, not insurance)**

Trade and other payables represent liabilities to pay for goods or services that have been received or supplied in the normal course of business, invoiced by the supplier before the balance sheet date, but for which payment has not yet been made.

Trade payables comprise principally of collateral repayable on the derivative contracts, revolving credit facility and other sundry payables. Amounts payable for investments purchased are re-classified to be part of the Investments (incl. participations) line.

Similar to trade receivables (as described in section D.1 of this report), due to the short-term nature of the other payables, the IFRS carrying value is considered not materially different from the fair value under Solvency II. Therefore no other adjustment is made.

### **5. Subordinated liabilities**

The company has received three subordinated interest loans from MS Amlin plc, the Company's parent, for a total amount of £1.9 million. Interest is accrued at the rate of 1% above the 3-month LIBOR set on the effective date and then on the first business day of each calendar quarter to be capitalised at 31 December each calendar year. This agreement is in effect and the interest is payable upon repayment of the loan. The IFRS value is considered a suitable approximation of the Solvency II fair value requirement.

For further information on the Company's borrowings, please see note 15(e) of the Company's annual report.

### **6. Contingent liabilities**

MS AISE does not have any material contingent liabilities to disclose.

## D.4 Alternative methods for valuation

Methods of valuation for items other than net technical provisions recognised in the Solvency II balance sheet and valued based on quoted market prices or adjusted quoted market prices have been disclosed in section D.1 and D.3 of this report.

MS AISE's property fund portfolios are valued by using an alternative valuation method. The most recent net asset value provided by the fund managers is used. The net asset values, which may be a quarter in arrears, are determined by the fund managers using proprietary cash flow models. Rental growth and income are expected to be the predominant drivers of returns rather than capital appreciation. In certain instances, adjustments are made to bring the net asset value to a more current valuation. The inputs into that valuation, such as discount rates, are primarily unobservable and as a result, these assets are classified as Alternative valuation methods. Where an investment is made into a new property fund the transaction price is considered to be the fair value if that is the most recent price available.

Furthermore the present value of MS AISE's defined benefit pension plan obligation is determined by using an alternative valuation method which is explained in note 19 of the Company's annual report.

During the reporting period, MS AISE had no other material assets or liabilities valued by using alternative valuation methods in accordance with Article 10(5) of the Delegated Regulation.

## D.5 Any other information

The risks associated with the assets and liabilities set out in sections D.1 to D.4 of this report and how these are managed in accordance to Article 260 of the Delegated Regulation (EU) 2015/35 are explained in section C of this report.

All other material information relating to the Company's valuation for solvency purposes has been disclosed in sub-sections D.1 to D.4 above.

## Section E - Capital Management



## E.1 Own Funds

### Capital Management

MS AISE's approach to capital management aims to ensure that MS AISE maintains sufficient capital for regulatory and rating agency purposes, can withstand major catastrophe claims, can attract good quality business and be in a position to exploit opportunities for profitable growth.

MS AISE's diverse spread of underwriting risk and geographical exposure among thirty principal classes of business, spread over four material Solvency II lines of business which are described in section A of this report, helps to increase capital efficiency through diversification of risks.

MS AISE's policy is to actively manage capital so as to meet regulatory requirements and contribute to the Group target to deliver a cross-cycle return on equity in excess of 12%. This return on equity target will be reviewed periodically to ensure that it remains appropriate. MS AISE's internal target Solvency ratio is 125% (based on the Standard Formula).

MS AISE believes that significant value can be added over the insurance cycle, through a combination of organic growth and carefully selected acquisitions. MS AISE's goal is to maintain a diverse and balanced portfolio, which reduces volatility and enhances capital efficiency.

Capital needs are determined by the Solvency II Standard Formula for MS AISE but are also assessed through Dynamic Financial Analysis (DFA). The DFA model forecasts a range of potential financial outcomes for each area of the Company, incorporating underwriting, investment and operational risk. This provides the economic capital, capital requirements and return on capital projected over the business planning time period of five years.

Capital deployment to meet short and long-term business needs is balanced with the need to meet the requirements of stakeholders. MS AISE operates a planning period of between three and five years. Business plans are reviewed and debated at executive level and approved by the Board. MS AISE ensures that it continuously maintains own funds of suitable quality and permanence to meet the relevant tier requirements of Solvency II, whilst making prudent use of instruments to enhance the earnings of the entity. At least 50% of the SCR should be covered by Tier 1 own funds and no more than 15% of the SCR should be covered by Tier 3 own funds (with the balance being Tier 2 basic own funds).

### Differences between IFRS and Solvency II Net Asset Value

	2018	2017
	€'000	€'000
<b>IFRS net asset value</b>	<b>525,084</b>	<b>458,361</b>
Disallow items – Goodwill, Intangible assets, Prepayments and Deferred Acquisition Costs	(76,588)	(91,128)
Solvency II Technical Provision adjustment	150,349	160,493
Future premiums and claims adjustments	(96,444)	(94,137)
Deferred tax on adjustment items	(921)	(131)
<b>Excess of assets over liabilities – Solvency II</b>	<b>501,480</b>	<b>433,458</b>

Sections D.1 to D.3 of this report explain the Solvency II valuation methods and adjustments to the IFRS net asset value.

### Available Own Funds

As at 31 December 2018, MS AISE had Available own funds of €503.9 million (2017: €435.8 million). MS AISE does not have any non-available or non-transferrable own funds. MS AISE's Available own funds are made up of:

	2018	2017
	€'000	€'000
Excess of assets over liabilities	501,480	433,458
Subordinated liabilities	2,398	2,385
<b>Total Basic and Available Own Funds</b>	<b>503,878</b>	<b>435,843</b>

MS AISE's Available own funds only consists of Basic own fund items. Basic own funds primarily consist of the Solvency II excess of assets over liabilities as well as subordinated liabilities presented as own funds as part of the Solvency II transitional measures. For further details please refer to the reconciliation of own funds to excess assets over liabilities below.

MS AISE does not have any ancillary own funds.

### Own Funds structure

	2018				2017			
	Total	Tier 1	Tier 2	Tier 3	Total	Tier 1	Tier 2	Tier 3
	€'000	€'000	€'000	€'000	€'000	€'000	€'000	€'000
Ordinary share capital	1,321	1,321	-	-	1,582	1,582	-	-
Reconciliation reserve	496,390	496,390	-	-	415,554	415,554	-	-
Subordinated liabilities	2,398	-	2,398	-	2,385	-	2,385	-
An amount equal to the value of net deferred tax assets	3,769	-	-	3,769	16,322	-	-	16,322
<b>Total Own Funds</b>	<b>503,878</b>	<b>497,711</b>	<b>2,398</b>	<b>3,769</b>	<b>435,843</b>	<b>417,136</b>	<b>2,385</b>	<b>16,322</b>

The table above shows the composition and quality of own funds as at 31 December 2018 and 31 December 2017.

On 3 April 2019, by special resolution the Board approved an increase to the share capital of the Company by an amount of € 28.7 million to increase from € 1.3 million to € 30.0 million without the issuance of new shares and by incorporation of reconciliation reserve (retained earnings under IFRS). MS AISE's parent, MS Amlin plc, also approved the increase by special resolution. Thus, at the date these financial statements were approved, the subscribed shared capital of MS AISE is represented by 1,164,000 shares at a nominal value of € 25.77 each.

Available own funds are classified into tiers based on the extent to which they possess the characteristics of permanency and subordination. Four further features also taken into consideration, namely:

- Sufficient duration;
- An absence of incentives for redemption;
- An absence of mandatory servicing costs; and
- An absence of encumbrances.

Based on these classification criteria allotted, called up and fully paid ordinary shares and reconciliation reserve are Tier 1 items. The decrease in Tier 1 items by € 0.3 million is due to the conversion of share capital in GBP to EUR at the conversion rate as per 31 October 2018 in preparation of re-domiciling to Belgium at 1 January 2019.

Subordinated liabilities recognised in the IFRS balance sheet have been assessed for classification purposes under Solvency II. It was concluded that subordinated liabilities do not meet the classification

criteria for Tiers 1 or 3. As Tier 3 criteria were not met, MS AISE assessed classification under the grandfathering/transitional provisions. These provisions state that where at 17 January 2015 insurers had in issue basic own fund items that complied with the requirements of the Solvency I Directives then these items are eligible for inclusion within Tier 1 or Tier 2 basic own funds for a period of ten years from the implementation of Solvency II. Therefore MS AISE's subordinated liabilities are classified as Tier 2.

The reconciliation reserve consists of IFRS retained earnings of €426.4 million, IFRS other reserves of €97.1 million; offset by the cumulative effect of differences between IFRS net assets and Solvency II excess of assets over liabilities of €33.3 million. The other reserves primarily relates to the merger reserve which is a result of the application of Group Reconstruction Relief as per Section 611 of the Companies Act 2006 and arose on the creation of MS AISE on 4 January 2016. For details on the other reserves, please see note 20 of the Company's annual report.

Tier 3 own funds represent Net deferred tax assets only. The Net deferred tax assets position decreased compared to prior year mainly driven by the decrease in recognized deferred tax assets for carried forward losses in Belgium because of the uncertainty whether all losses can be used in the future. Please refer to section D.1 for details of deferred tax assets valuation.

### Analysis of significant changes to Available own funds during the period

#### *Ordinary share capital and share premium account*

MS AISE's internal target Solvency Ratio is 125% (based on the Standard Formula) with the purpose to be able to absorb, among other reasons, adverse claim development. To ensure that the Company is appropriately capitalised to this target ratio, a capital contribution from the parent company, MS Amlin plc, was received over the course of 2018. The total amount of the capital contribution added €70.0 million of which €5.8 million represented the conversion of current unsecured intercompany liabilities of MS AISE owed to MS Amlin plc. The remainder was paid by MS Amlin plc in cash to a bank account of the Company. The capital contribution has been added to the Tier 1 Eligible own funds through its classification into the reconciliation reserve.

For further information on these balances, please refer to note 20 of the Company's annual report.

#### *Movements in the reconciliation reserve*

The other main constituent of Available own funds is the reconciliation reserve which comprises the excess of assets over liabilities as valued for the Solvency II balance sheet. The movements in the reconciliation reserve during 2018 are presented in the table below:

	€'000
<b>Reconciliation reserve at 31 December 2017</b>	<b>415,554</b>
<i>Movements in Solvency II balance sheet</i>	
Increase in Financial assets (excluding cash & cash equivalents)	35,769
Increase in Other assets	14,627
Decrease in Technical provisions	5,770
Decrease in Other liabilities	24,411
Conversion share capital in GBP to EUR	261
	<b>80,836</b>
<b>Reconciliation reserve at 31 December 2018</b>	<b>496,390</b>

The Movements in Solvency II balance sheet is inclusive of the impact of changes to the IFRS net assets, as well as movements in the Solvency II valuation adjustments. Movements in net deferred tax asset are excluded. For more details on the changes to the IFRS net assets, please see the Strategic Report in the Company's annual report.

The increase in financial assets is primarily driven by the capital contribution. The received funds were primarily invested into financial assets. However, this effect was partly offset by the bad performance of the stock markets in 2018.

The increase in Technical provisions is described in section D.2 of this report.

### Own Funds to cover solvency capital requirements and minimum capital requirements

The eligible amounts by tier to cover the Solvency Capital Requirement ('SCR') and the Minimum Capital Requirement ('MCR') are shown in the table below:

	2018				2017			
	Total	Tier 1	Tier 2	Tier 3	Total	Tier 1	Tier 2	Tier 3
	€'000	€'000	€'000	€'000	€'000	€'000	€'000	€'000
Eligible own funds covering SCR	503,878	497,711	2,398	3,769	435,843	417,136	2,385	16,322
Eligible own funds covering MCR	500,109	497,711	2,398	-	419,521	417,136	2,385	-
SCR	368,154				362,311			
MCR	132,931				134,983			
Solvency Ratio	136.9%				120.3%			
MCR ratio	376.2%				310.8%			

MS AISE's policy is to actively manage capital so as to meet regulatory requirements and contribute to the Group target to deliver a cross-cycle return on equity in excess of 12%. This return on equity target will be reviewed periodically to ensure that it remains appropriate. As explained above MS AISE's internal target Solvency Ratio is 125% (based on the Standard Formula). As at 31 December 2018 MS AISE's Solvency Ratio was 136.9% (2017: 120.3 %). This increase is mainly driven by the received capital contribution in 2018 which ensures that the Company is appropriately funded in the coming years.

There is no restriction to Tier 1 capital. The amount of Eligible own funds to cover the MCR has been adjusted to exclude tier 3 capital, as ineligible. No adjustments to tier 1 and 2 capital are required.

The SCR is calculated using the Standard Formula basis as prescribed in the Solvency II Directive, and the calculation is explained in section E.2 of this report.

### Analysis of significant changes to Solvency Ratio during the period

	€'000	%
<b>Total Available own funds over SCR at 1 January 2018</b>	<b>73,532</b>	<b>120.3%</b>
Change in IFRS net assets	66,723	18.0%
Change in Solvency II valuation adjustments	1,299	0.3%
Change in subordinated liabilities value	13	0.0%
Change in SCR	(5,843)	(1.7%)
<b>Available own funds over SCR at 31 December 2018</b>	<b>135,724</b>	<b>136.9%</b>

The change in IFRS net assets, which includes the impact of a loss after tax of €8.6 million for the Company, is explained in more detail in the Strategic Report of the Company's annual report.

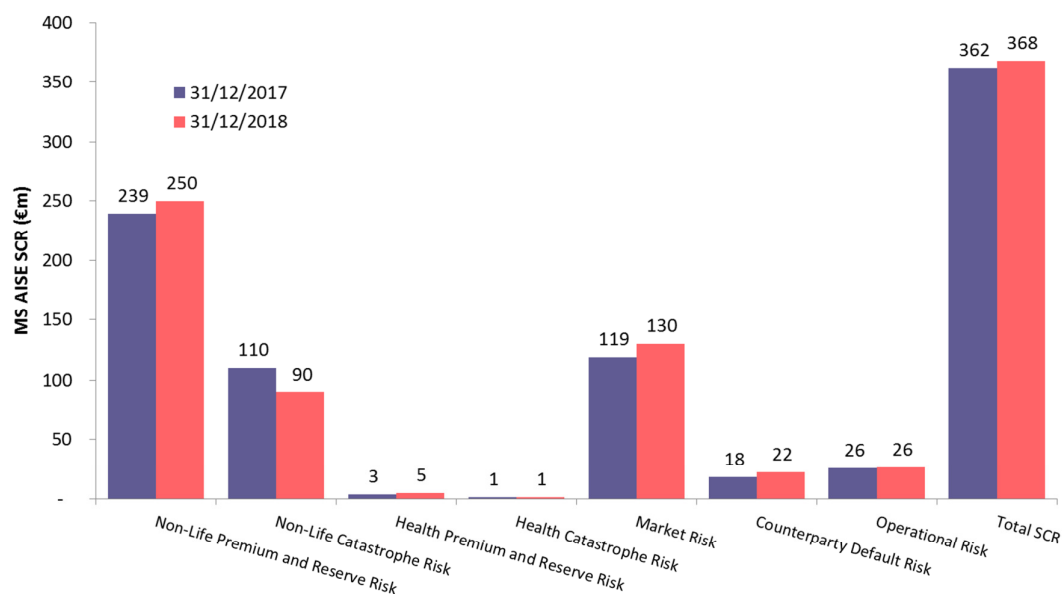
The change in Solvency II valuation adjustments reflects those movements in sections D.1 to D.3 of this report. The change in SCR (as well as the MCR) is explained in section E.2 of this report.

## E.2 Minimum Capital Requirement and Solvency Capital Requirement

### E.2.1 Solvency Capital Requirement (SCR)

MS AISE uses the standard formula for the calculation of its SCR. The total SCR as at 31 December 2018 was €368.1 million, an increase of €5.8 million since 31 December 2017 (€362.3 million).

The following chart summarises the components and movements in the SCR as produced by the standard formula calculations as at 31 December 2017 and 31 December 2018:



The sum of the standalone risk categories is greater than the total SCR, owing to the benefits available to MS AISE through diversification. This is by way of the geographic, product and capital diversity MS AISE employs in managing its risks. This is also to reflect the likelihood that not all risks will emerge concurrently.

The main components driving the total SCR for MS AISE are:

1. **Non-life premium and reserve risk** (€250.0 million), of which the majority of the risk (~55%) is due to reserve risk.
2. **Market risk** (€129.9 million). This is comprised of several sub-risks, the largest of which is currency risk (€87.1 million). The size of each sub-risk is heavily dependent on the chosen investment strategy.
3. **Non-life catastrophe risk** (€89.7 million). This is mitigated by reinsurance programmes which lower the capital charge significantly.
4. **Operational risk** (€26.4 million). Information on the operational risks faced by MS AISE can be found in section C.5 of this report.
5. **Counterparty default risk** (€22.2 million). This covers the risk to MS AISE of third parties defaulting on their obligations. Relevant third parties include reinsurers, counterparties providing derivative products and banks.

Under the standard formula guidelines, simplified calculations can be used within some of the risk modules and sub-modules. The following simplification is used by MS AISE:

- Non-life catastrophe risk – the EEA catastrophe risk exposures should be provided by CRESTA zone, but as the data is not available at that level of granularity, it is provided by country instead. If the calculation is to follow the Delegated Regulation (EU) 2015/35 requirements, each CRESTA zone within a country would have a specific damage factor applied, and these would then be aggregated to country level totals using a correlation matrix. As the exposure data is only available by country, MS AISE applies a damage factor of 1 to the total exposure for each country.

For the calculation, no undertaking specific parameters or matching adjustments are being used. This also applies for the duration-based equity risk module which was not used.

The 2018 SCR is subject to supervisory assessment.

## E.2.2 SCR movement

The movement in the SCR between 31 December 2017 and 31 December 2018 is shown in the table below:

	€ million
<b>SCR as at 31 December 2017</b>	<b>362</b>
Risk changes	9
Modelling changes	-
Data input change	6
Impact of diversification	(7)
Impact of loss absorbing capacity deferred taxes	(2)
	<hr/> 6
 <b>SCR as at 31 December 2018</b>	 <b>368</b>

### 1. Risk changes

Over the period, the material movements in the high-level risk types due to changes in MS AISE's risk profile were as follows:

- Market risk (increase of €11.0 million). This is largely driven by changes within currency risk and equity risk:
  - a. Currency risk (increase of €18.4 million). MS Amlin Investment Management Limited ('MSAIML'), the Headline Portfolio Manager, rotate funds between fund managers periodically as part of the investment strategy of the Company. In this case, the transfer led to an increase in the proportion of USD denominated assets. As this occurred without a corresponding increase to USD liabilities, currency risk increased as well.
  - b. Equity risk (decrease of €8.5 million). This stems from an increase in the use of futures hedging and a reduction in the value of the equity holding.
- Non-life underwriting risk (decrease of €1.3 million). This small movement is the result of a material reduction to catastrophe risk offset against an increase in premium and reserve risk and a loss of diversification benefit which follows the reduction in catastrophe risk.
  - a. Catastrophe risk (decrease of €20.2 million). The majority of this movement stems from a reduction to natural catastrophe exposures with earthquake, windstorm and flood

exposures all decreasing materially over the year. This follows the closure of the German branch of MS AISE, the transfer of the fixed premium protection & indemnity business to another group company (MS AAG) on a net basis and a review of the Dutch engineering exposures.

- b. Non-life premium and reserve risk (increase of €10.7 million): This is driven by an increase in net premiums expected to be earned over the next 12 months and a reduction to the geographical diversification applied to marine business. The change to diversification follows a review of marine exposure data which has led to both premiums and reserves being more concentrated within Western Europe.

## 2. Modelling changes

No material modelling changes occurred during the reporting year 2018.

## 3. Data input change

A number of instruments are used by MSAIML in order to control MS AISE's exposure to market risk. According to the standard formula guidance there should be some risk associated with the potential default of the counterparties providing these instruments, in the same way that there is risk associated with reinsurance protection on insurance risk.

Prior to Q2 2018, it was not possible to include this aspect of risk in the standard formula calculation as the data required to calculate it was not available. This was noted as a limitation in the documentation of the calculation. From Q2 2018 onwards, it has been possible to obtain all of the data required for the calculation. The inclusion of this data increased counterparty default risk by €6.0 million.

## 4. Impact of diversification

The impact of the movement in the standalone risks types is higher than the movement at a total SCR level due to diversification between the risk types. This offsets the standalone movement by €7.4 million, mainly because of the diversification between market risk and non-life underwriting risk.

### E.2.3 Minimum Capital Requirement (MCR)

The MCR calculation is a linear formula calculated using the net written premiums in the previous 12 months and the net best estimate technical provisions (excluding risk margin). This is subject to a minimum of 25% of the SCR and a maximum of 45% of the SCR. The MCR is subject to an absolute minimum depending on the nature of the undertaking (as defined in Article 129 (1) (d) of the Directive 2009/138/EC).

The total MCR as at 31 December 2018 is €132.9 million, which is 36% of the SCR (2017: €135.0 million and 37%).

The decrease of €2.1 million over the period is driven by a decrease in net premiums written over the last 12 months, mainly stemming from a reduction in motor business.

## E.3 Use of the duration-based equity risk sub-module in the calculation of the Solvency Capital Requirement

MS AISE does not use the duration-based equity risk sub-module in the calculation of its SCR.

## **E.4 Differences between the standard formula and any Internal Model used**

MS AISE uses only the standard formula in the calculation of its SCR. Therefore this section is not applicable.

## **E.5 Non-compliance with the Minimum Capital Requirement and non-compliance with the Solvency Capital Requirement**

As disclosed in section E.2, MS AISE holds sufficient capital in excess of the MCR and SCR. This helps to ensure MS AISE's Eligible own funds exceed SCR and MCR requirements on a continuous basis.

There are currently no foreseeable risks that could result in non-compliance with the SCR and/or MCR requirements.

## **E.6 Any other information**

All material information relating to the Company's capital management has been disclosed in sub-sections E.1 to E.5 above.



## Annex - specific Quantitative Reporting Templates (all amounts expressed in EUR thousands)

Includes the following public QRTs:

- S.02.01.b
- S.05.01.b
- S.05.02.b
- S.17.01.b
- S.19.01.b
- S.23.01.b
- S.25.01.b
- S.28.01.b

## S.02.01.02

## Balance sheet

		Solvency II value
		C0010
<b>Assets</b>		
R0030	Intangible assets	0
R0040	Deferred tax assets	8,940
R0050	Pension benefit surplus	0
R0060	Property, plant & equipment held for own use	1,307
R0070	Investments (other than assets held for index-linked and unit-linked contracts)	1,273,684
R0080	<i>Property (other than for own use)</i>	0
R0090	<i>Holdings in related undertakings, including participations</i>	0
R0100	<i>Equities</i>	112,858
R0110	<i>Equities - listed</i>	111,908
R0120	<i>Equities - unlisted</i>	950
R0130	<i>Bonds</i>	0
R0140	<i>Government Bonds</i>	0
R0150	<i>Corporate Bonds</i>	0
R0160	<i>Structured notes</i>	0
R0170	<i>Collateralised securities</i>	0
R0180	<i>Collective Investments Undertakings</i>	1,155,717
R0190	<i>Derivatives</i>	5,109
R0200	<i>Deposits other than cash equivalents</i>	0
R0210	<i>Other investments</i>	0
R0220	Assets held for index-linked and unit-linked contracts	0
R0230	Loans and mortgages	0
R0240	<i>Loans on policies</i>	0
R0250	<i>Loans and mortgages to individuals</i>	0
R0260	<i>Other loans and mortgages</i>	0
R0270	Reinsurance recoverables from:	125,919
R0280	<i>Non-life and health similar to non-life</i>	125,919
R0290	<i>Non-life excluding health</i>	125,813
R0300	<i>Health similar to non-life</i>	107
R0310	<i>Life and health similar to life, excluding index-linked and unit-linked</i>	0
R0320	<i>Health similar to life</i>	0
R0330	<i>Life excluding health and index-linked and unit-linked</i>	0
R0340	<i>Life index-linked and unit-linked</i>	0
R0350	Deposits to cedants	0
R0360	Insurance and intermediaries receivables	11,058
R0370	Reinsurance receivables	9,190
R0380	Receivables (trade, not insurance)	44,957
R0390	Own shares (held directly)	0
R0400	Amounts due in respect of own fund items or initial fund called up but not yet paid in	0
R0410	Cash and cash equivalents	34,070
R0420	Any other assets, not elsewhere shown	0
R0500	<b>Total assets</b>	<b>1,509,125</b>

## S.02.01.02

## Balance sheet

		Solvency II value
		C0010
<b>Liabilities</b>		
R0510	Technical provisions - non-life	934,541
R0520	<i>Technical provisions - non-life (excluding health)</i>	924,893
R0530	<i>TP calculated as a whole</i>	0
R0540	<i>Best Estimate</i>	870,518
R0550	<i>Risk margin</i>	54,375
R0560	<i>Technical provisions - health (similar to non-life)</i>	9,648
R0570	<i>TP calculated as a whole</i>	0
R0580	<i>Best Estimate</i>	9,055
R0590	<i>Risk margin</i>	593
R0600	Technical provisions - life (excluding index-linked and unit-linked)	0
R0610	<i>Technical provisions - health (similar to life)</i>	0
R0620	<i>TP calculated as a whole</i>	0
R0630	<i>Best Estimate</i>	0
R0640	<i>Risk margin</i>	0
R0650	<i>Technical provisions - life (excluding health and index-linked and unit-linked)</i>	0
R0660	<i>TP calculated as a whole</i>	0
R0670	<i>Best Estimate</i>	0
R0680	<i>Risk margin</i>	0
R0690	Technical provisions - index-linked and unit-linked	0
R0700	<i>TP calculated as a whole</i>	0
R0710	<i>Best Estimate</i>	0
R0720	<i>Risk margin</i>	0
R0740	Contingent liabilities	0
R0750	Provisions other than technical provisions	0
R0760	Pension benefit obligations	8,631
R0770	Deposits from reinsurers	0
R0780	Deferred tax liabilities	5,171
R0790	Derivatives	5,573
R0800	Debts owed to credit institutions	0
R0810	Financial liabilities other than debts owed to credit institutions	238
R0820	Insurance & intermediaries payables	9,219
R0830	Reinsurance payables	0
R0840	Payables (trade, not insurance)	41,874
R0850	Subordinated liabilities	2,398
R0860	<i>Subordinated liabilities not in BOF</i>	
R0870	<i>Subordinated liabilities in BOF</i>	2,398
R0880	Any other liabilities, not elsewhere shown	
R0900	<b>Total liabilities</b>	1,007,645
R1000	<b>Excess of assets over liabilities</b>	501,480





S.17.01.02

Non-Life Technical Provisions

Direct business and accepted proportional reinsurance													Accepted non-proportional reinsurance				Total Non-Life obligation
Medical expense insurance	Income protection insurance	Workers' compensation insurance	Motor vehicle liability insurance	Other motor insurance	Marine, aviation and transport insurance	Fire and other damage to property insurance	General liability insurance	Credit and suretyship insurance	Legal expenses insurance	Assistance	Miscellaneous financial loss	Non-proportional health reinsurance	Non-proportional casualty reinsurance	Non-proportional marine, aviation and transport reinsurance	Non-proportional property reinsurance		
C0020	C0030	C0040	C0050	C0060	C0070	C0080	C0090	C0100	C0110	C0120	C0130	C0140	C0150	C0160	C0170	C0180	
R0010	Technical provisions calculated as a whole																
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
R0050	Total Recoverables from reinsurance/SPV and Finite Re after the adjustment for expected losses due to counterparty default associated to TP calculated as a whole																
																	0
Technical provisions calculated as a sum of BE and RM																	
Best estimate																	
Premium provisions																	
R0060	Gross																
	0	-317	0	-2,620	-5,237	-15,351	-202	-21,243	0	-238	0	-11,795					-57,003
R0140	Total recoverable from reinsurance/SPV and Finite Re after the adjustment for expected losses due to counterparty default																
	0	-33	0	698	411	-5,331	-4,882	-1,273	0	2	0	-10,194					-20,602
R0150	Net Best Estimate of Premium Provisions																
	0	-284	0	-3,317	-5,648	-10,020	4,681	-19,970	0	-240	0	-1,601					-36,401
Claims provisions																	
R0160	Gross																
	0	9,373	0	131,605	9,552	191,825	163,405	393,057	0	3,407	0	34,351					936,576
R0240	Total recoverable from reinsurance/SPV and Finite Re after the adjustment for expected losses due to counterparty default																
	0	139	0	4,574	198	17,910	27,628	80,226	0	515	0	15,331					146,521
R0250	Net Best Estimate of Claims Provisions																
	0	9,233	0	127,031	9,354	173,915	135,777	312,831	0	2,892	0	19,020					790,055
R0260	Total best estimate - gross																
	0	9,055	0	128,986	4,315	176,474	163,204	371,814	0	3,170	0	22,556					879,573
R0270	Total best estimate - net																
	0	8,949	0	123,714	3,706	163,895	140,458	292,861	0	2,653	0	17,419					753,654
R0280	Risk margin																
	0	593	0	7,407	1,679	13,642	10,758	19,342	0	187	0	1,360					54,968
Amount of the transitional on Technical Provisions																	
R0290	Technical Provisions calculated as a whole																
																	0
R0300	Best estimate																
																	0
R0310	Risk margin																
																	0
R0320	Technical provisions - total																
	0	9,648	0	136,393	5,994	190,116	173,962	391,156	0	3,357	0	23,916					934,541
R0330	Recoverable from reinsurance contract/SPV and Finite Re after the adjustment for expected losses due to counterparty default - total																
	0	107	0	5,272	609	12,579	22,746	78,953	0	517	0	5,137					125,919
R0340	Technical provisions minus recoverables from reinsurance/SPV and Finite Re - total																
	0	9,541	0	131,121	5,385	177,537	151,216	312,203	0	2,839	0	18,779					808,622

S.19.01.21

Non-Life insurance claims

Total Non-life business

Z0020

Accident year / underwriting year

Gross Claims Paid (non-cumulative)														
(absolute amount)														
Year	C0010	C0020	C0030	C0040	Development year						C0110	C0170	C0180	
	0	1	2	3	4	5	6	7	8	9	10 & +	In Current year	Sum of years (cumulative)	
R0100	Prior											14,435	14,435	14,435
R0160	2009	104,205	155,762	74,015	36,294	37,703	9,662	4,484	7,551	4,865	1,840		1,840	436,382
R0170	2010	114,084	186,041	83,085	50,679	57,875	10,130	9,671	5,802	5,469			5,469	522,836
R0180	2011	117,031	153,348	65,810	52,033	13,289	14,945	5,991	5,073				5,073	427,520
R0190	2012	74,006	143,215	60,758	17,224	15,201	24,059	4,794					4,794	339,256
R0200	2013	96,077	131,456	58,647	21,466	11,227	7,416						7,416	326,289
R0210	2014	86,967	131,092	63,302	17,434	11,081							11,081	309,876
R0220	2015	94,111	126,657	52,553	24,386								24,386	297,708
R0230	2016	96,195	123,099	44,176									44,176	263,470
R0240	2017	104,096	139,795										139,795	243,891
R0250	2018	123,328											123,328	123,328
R0260												<b>Total</b>	381,794	3,304,992

Gross Undiscounted Best Estimate Claims Provisions													
(absolute amount)													
Year	C0200	C0210	C0220	C0230	Development year						C0300	C0360	
	0	1	2	3	4	5	6	7	8	9	10 & +	Year end (discounted data)	
R0100	Prior											102,128	102,058
R0160	2009	0	0	0	0	0	0	59,860	53,077	49,045			48,895
R0170	2010	0	0	0	0	0	40,619	43,728	39,771				39,434
R0180	2011	0	0	0	0	39,861	30,433	23,884					23,631
R0190	2012	0	0	0	0	60,560	28,693	24,048					23,703
R0200	2013	0	0	0	44,269	38,209	31,693						31,286
R0210	2014	0	0	67,535	50,205	40,480							39,949
R0220	2015	0	133,684	91,787	73,227								72,307
R0230	2016	228,943	158,712	115,428									114,236
R0240	2017	350,462	164,159										162,990
R0250	2018	279,803											278,092
R0260												<b>Total</b>	936,580

S.23.01.01

Own Funds

Basic own funds before deduction for participations in other financial sector as foreseen in article 68 of Delegated Regulation 2015/35

R0010	Ordinary share capital (gross of own shares)
R0030	Share premium account related to ordinary share capital
R0040	Initial funds, members' contributions or the equivalent basic own-fund item for mutual and mutual-type undertakings
R0050	Subordinated mutual member accounts
R0070	Surplus funds
R0090	Preference shares
R0110	Share premium account related to preference shares
R0130	Reconciliation reserve
R0140	Subordinated liabilities
R0160	An amount equal to the value of net deferred tax assets
R0180	Other own fund items approved by the supervisory authority as basic own funds not specified above

R0220 **Own funds from the financial statements that should not be represented by the reconciliation reserve and do not meet the criteria to be classified as Solvency II own funds**

R0230 **Deductions for participations in financial and credit institutions**

R0290 **Total basic own funds after deductions**

**Ancillary own funds**

R0300	Unpaid and uncalled ordinary share capital callable on demand
R0310	Unpaid and uncalled initial funds, members' contributions or the equivalent basic own fund item for mutual and mutual - type undertakings, callable on demand
R0320	Unpaid and uncalled preference shares callable on demand
R0330	A legally binding commitment to subscribe and pay for subordinated liabilities on demand
R0340	Letters of credit and guarantees under Article 96(2) of the Directive 2009/138/EC
R0350	Letters of credit and guarantees other than under Article 96(2) of the Directive 2009/138/EC
R0360	Supplementary members calls under first subparagraph of Article 96(3) of the Directive 2009/138/EC
R0370	Supplementary members calls - other than under first subparagraph of Article 96(3) of the Directive 2009/138/EC
R0390	Other ancillary own funds
R0400	<b>Total ancillary own funds</b>

**Available and eligible own funds**

R0500	Total available own funds to meet the SCR
R0510	Total available own funds to meet the MCR
R0540	Total eligible own funds to meet the SCR
R0550	Total eligible own funds to meet the MCR

R0580 **SCR**

R0600 **MCR**

R0620 **Ratio of Eligible own funds to SCR**

R0640 **Ratio of Eligible own funds to MCR**

**Reconciliation reserve**

R0700	Excess of assets over liabilities
R0710	Own shares (held directly and indirectly)
R0720	Foreseeable dividends, distributions and charges
R0730	Other basic own fund items
R0740	Adjustment for restricted own fund items in respect of matching adjustment portfolios and ring fenced funds
R0760	<b>Reconciliation reserve</b>

**Expected profits**

R0770	Expected profits included in future premiums (EPIFP) - Life business
R0780	Expected profits included in future premiums (EPIFP) - Non- life business
R0790	<b>Total Expected profits included in future premiums (EPIFP)</b>

Total	Tier 1 unrestricted	Tier 1 restricted	Tier 2	Tier 3
C0010	C0020	C0030	C0040	C0050
1,321	1,321		0	
0	0		0	
0	0		0	
0		0	0	0
0	0			
0		0	0	0
0		0	0	0
496,390	496,390			
2,398		0	2,398	0
3,769				3,769
0	0	0	0	0
0				
0				
503,878	497,711	0	2,398	3,769

0				
0				
0				
0				
0				
0				
0				
0				
0				
0				
0				
0			0	0

503,878	497,711	0	2,398	3,769
500,109	497,711	0	2,398	
503,878	497,711	0	2,398	3,769
500,109	497,711	0	2,398	

368,154
132,931
136.87%
376.22%

C0060

501,480
0
5,090
0
496,390

100,134
100,134



S.25.01.21

Solvency Capital Requirement - for undertakings on Standard Formula

- R0010 Market risk
- R0020 Counterparty default risk
- R0030 Life underwriting risk
- R0040 Health underwriting risk
- R0050 Non-life underwriting risk
- R0060 Diversification

R0070 Intangible asset risk

R0100 **Basic Solvency Capital Requirement**

**Calculation of Solvency Capital Requirement**

- R0130 Operational risk
- R0140 Loss-absorbing capacity of technical provisions
- R0150 Loss-absorbing capacity of deferred taxes
- R0160 Capital requirement for business operated in accordance with Art. 4 of Directive 2003/41/EC
- R0200 **Solvency Capital Requirement excluding capital add-on**
- R0210 Capital add-ons already set
- R0220 **Solvency capital requirement**

**Other information on SCR**

- R0400 Capital requirement for duration-based equity risk sub-module
- R0410 Total amount of Notional Solvency Capital Requirements for remaining part
- R0420 Total amount of Notional Solvency Capital Requirements for ring fenced funds
- R0430 Total amount of Notional Solvency Capital Requirements for matching adjustment portfolios
- R0440 Diversification effects due to RFF nSCR aggregation for article 304

Gross solvency capital requirement	USP	Simplifications
C0110	C0090	C0120
129,920		
22,228		
0		
10,876	3,5	
285,878	7,8	
-93,354		
0		
355,548		
C0100		
26,387		
-733		
-13,048		
0		
368,154		
0		
368,154		
0		
0		
0		
0		
0		

**USP Key**

**For life underwriting risk:**

- 1 - Increase in the amount of annuity benefits
- 9 - None

**For health underwriting risk:**

- 1 - Increase in the amount of annuity benefits
- 2 - Standard deviation for NSLT health premium risk
- 3 - Standard deviation for NSLT health gross premium risk
- 4 - Adjustment factor for non-proportional reinsurance
- 5 - Standard deviation for NSLT health reserve risk
- 9 - None

**For non-life underwriting risk:**

- 4 - Adjustment factor for non-proportional reinsurance
- 6 - Standard deviation for non-life premium risk
- 7 - Standard deviation for non-life gross premium risk
- 8 - Standard deviation for non-life reserve risk
- 9 - None

S.28.01.01

Minimum Capital Requirement - Only life or only non-life insurance or reinsurance activity

Linear formula component for non-life insurance and reinsurance obligations

R0010 MCR<sub>NL</sub> Result

C0010

132,931

- R0020 Medical expense insurance and proportional reinsurance
- R0030 Income protection insurance and proportional reinsurance
- R0040 Workers' compensation insurance and proportional reinsurance
- R0050 Motor vehicle liability insurance and proportional reinsurance
- R0060 Other motor insurance and proportional reinsurance
- R0070 Marine, aviation and transport insurance and proportional reinsurance
- R0080 Fire and other damage to property insurance and proportional reinsurance
- R0090 General liability insurance and proportional reinsurance
- R0100 Credit and suretyship insurance and proportional reinsurance
- R0110 Legal expenses insurance and proportional reinsurance
- R0120 Assistance and proportional reinsurance
- R0130 Miscellaneous financial loss insurance and proportional reinsurance
- R0140 Non-proportional health reinsurance
- R0150 Non-proportional casualty reinsurance
- R0160 Non-proportional marine, aviation and transport reinsurance
- R0170 Non-proportional property reinsurance

Net (of reinsurance/SPV) best estimate and TP calculated as a whole	Net (of reinsurance) written premiums in the last 12 months
C0020	C0030
0	0
8,949	7,309
0	0
123,714	61,362
3,706	41,541
163,895	140,546
140,458	149,816
292,861	112,992
0	0
2,653	651
0	0
17,419	15,688
0	0
0	0
0	0
0	0

Linear formula component for life insurance and reinsurance obligations

R0200 MCR<sub>L</sub> Result

C0040

0

- R0210 Obligations with profit participation - guaranteed benefits
- R0220 Obligations with profit participation - future discretionary benefits
- R0230 Index-linked and unit-linked insurance obligations
- R0240 Other life (re)insurance and health (re)insurance obligations
- R0250 Total capital at risk for all life (re)insurance obligations

Net (of reinsurance/SPV) best estimate and TP calculated as a whole	Net (of reinsurance/SPV) total capital at risk
C0050	C0060

Overall MCR calculation

- R0300 Linear MCR
- R0310 SCR
- R0320 MCR cap
- R0330 MCR floor
- R0340 Combined MCR
- R0350 Absolute floor of the MCR
- R0400 Minimum Capital Requirement

C0070

132,931
368,154
165,669
92,038
132,931
2,500
132,931



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