

RISK MANAGEMENT CONTINUED

PRINCIPAL RISKS AND UNCERTAINTIES





We maintain a register of principal risks and uncertainties covering the strategic, operational, financial and compliance risks faced by the Group.





We review each risk and rate them according to the current net risk position i.e. the likelihood of occurrence, taking into account external factors and current internal mitigating controls, and we

consider an appropriate target exposure or risk appetite. This, and our 'velocity' metric, which reflects the expected time we would have to react should a risk materialise, drives mitigation priorities. Our trend metric shows the net position of the risk year-on-year.

We updated our register of principal risks and uncertainties following the Executive Committee workshop held during FY2018.

While we continue to monitor and manage a wider range of risks, the tables below summarise those which might have the greatest impact if they were to materialise, and the key mitigating controls in place to address them. These principal risks are ordered based on our current consideration of potential impact, taking into account the time we would have to react.













Risk	Potential impact	Key mitigating controls		
<p>TECHNOLOGY</p> <p>Differentiated new products and services are critical to our success. We may be unable to maintain technological differentiation or to meet customers' needs and may face disruptive innovation by a competitor.</p> <p>Strategic objective</p> <p>2 DELIVER WORLD-CLASS COMPETITIVENESS</p>	<ul style="list-style-type: none"> - Loss of market share - Material adverse effect on profitable growth - Erosion of our reputation as a leader in our markets and of our ability to attract and retain talent - Need for higher R&D spend to maintain sales growth 	<ul style="list-style-type: none"> - Diversified technology portfolio serving a range of sectors and geographies, mitigating exposure to any one sector or area - Proactive repositioning of the portfolio around the most attractive markets, where we can sustainably hold a top three position based on technology leadership - Sustained and smarter investment in R&D (FY2018: 4.6% of revenue, FY2017: 4.6%) - Focus on building a culture of innovation - Innovation Fund to leverage critical mass and accelerate key areas - New Product Introduction (NPI) process rolled out across divisions to accelerate time to market 		
	<p>Current</p> 	<p>Target</p> 	<p>Trend</p> 	<p>Velocity</p> 

Risk	Potential impact	Key mitigating controls			
<p>PEOPLE</p> <p>People are our only truly sustainable source of competitive advantage and competition for key skills is intense, especially around science, technology, engineering and mathematics (STEM) disciplines. We may not be successful in attracting, retaining, developing, engaging and inspiring the right people with the right skills to achieve our growth ambitions.</p> <p>Strategic objective</p> <p>2 DELIVER WORLD-CLASS COMPETITIVENESS</p>	<ul style="list-style-type: none"> - Inability to attract key talent leading to a loss of competitive advantage - Difficulty in retaining personnel, at all levels of the organisation, leading to a loss of competitive advantage - In acquisitions, losing key personnel from the newly-acquired business which may significantly impact performance and value 	<ul style="list-style-type: none"> - Investment to build a learning organisation with a focus on culture, reward and recognition - Implementation of the right HR infrastructure - Delivery of a range of learning and development opportunities at all levels of the organisation - Talent and succession plan reviews - Remuneration packages evaluated regularly against market trends - Chief Executive assessment of the leadership team - Annual performance management reviews for the majority of employees using best practice processes such as 360 degree feedback surveys - Formal career counselling for senior people in the business - A clearly defined people integration plan for acquisitions 			
		<p>Current</p> 	<p>Target</p> 	<p>Trend</p> 	<p>Velocity</p> 

Key

<p>Current exposure to risk</p>    <p>Low Medium High</p>	<p>Target exposure of risk</p>    <p>Low Medium High</p>	<p>Trend: Net position of risk vs FY2017</p>    <p>Lessened No change Increased</p>	<p>Velocity: Time to react</p>    <p>Years Months Days/Weeks</p>
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RISK MANAGEMENT CONTINUED





Risk	Potential impact	Key mitigating controls				
<p>PRODUCT QUALITY</p> <p>In the ordinary course of business, we are potentially subject to product liability claims and lawsuits, including potential class actions. The mission-critical nature of many of our solutions makes the potential consequences of failure more serious than may otherwise be the case.</p> <p>Strategic objective</p> <p>2 DELIVER WORLD-CLASS COMPETITIVENESS</p>	<ul style="list-style-type: none"> - Recall of products due to manufacturing flaws, component failures and/or design defects in order to avoid serious, or potentially catastrophic, failure - Exposure to losses in the event of a cyber security breach relating to our products, particularly at Smiths Detection and Smiths Medical. These include not only customer losses, but also those of a potentially large class of third parties - Damage to our reputation and reduction in market acceptance of, and demand for, our products from an adverse event involving one of our products 	<ul style="list-style-type: none"> - The US SAFETY Act provides legislative protection for certain Smiths Detection products in the US. We support efforts to implement similar legislation in other markets - Divisional quality risk assessments that address product failures, product compliance, regulatory compliance, product performance, product safety and market authorisation risks - Quality assurance processes embedded in manufacturing locations for critical equipment, supporting compliance with industry regulations (e.g. FAA, FDA, API, etc.) - Quality development and quality integration built into NPI processes - Material litigation managed under the oversight of the Group General Counsel - Group-wide Quality Council drives standard definitions, identifies and shares best practice and reduces the cost of poor quality - Insurance cover for product liability - Risk analysis and mitigation processes relating to product cyber-resilience embedded in the product lifecycle process. Proactive steps taken to ensure product cyber-related risks are continually monitored and managed 				
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Risk	Potential impact	Key mitigating controls								
<p>CYBER SECURITY</p> <p>Cyber attacks seeking to compromise the confidentiality, integrity and availability of IT systems and the data held on them are a continuing risk. We operate in markets and product areas which are known to be of interest to cyber criminals.</p> <p>Strategic objective</p> <p>2 DELIVER WORLD-CLASS COMPETITIVENESS</p>	<ul style="list-style-type: none"> - Compromised confidentiality, integrity and availability of our assets resulting from a cyber attack, impacting our ability to deliver to customers and, ultimately, financial performance and reputation - Exposure to significant losses in the event of a cyber security breach relating to our security or medical products. These include not only customer losses, but also those of a potentially large class of third parties 	<ul style="list-style-type: none"> - Board oversight of the approach to mitigating cyber risks - Proactive focus on information and cyber security risks supported by a strong governance framework - Group-wide assessment of critical information assets and protection to enhance security - Information Security Awareness programme - Security monitoring to provide early detection of hostile activity on Smiths networks and an incident management process - Partnership and monitoring arrangements in place with critical third parties, including communications service providers - Risk analysis and mitigation processes relating to product cyber-resilience embedded in the product lifecycle process 								
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RISK MANAGEMENT CONTINUED

Risk	Potential impact	Key mitigating controls		
<p>ECONOMY AND GEOPOLITICS</p> <p>While global economic conditions remain relatively benign, there is concern that we are in the late stage of the economic cycle. Threats to free trade are increasing.</p> <p>Strategic objective</p> <p>1 OUTPERFORM OUR TARGET MARKETS</p> <p>2 DELIVER WORLD-CLASS COMPETITIVENESS</p>	<ul style="list-style-type: none"> – Stresses on operational capacity resulting from a recovery in volumes driven by higher oil prices – Governments continue to look for ways to improve tax revenues to ease fiscal budget pressures – Adverse impact on business performance due to the imposition of tariffs. Sanctions have already affected trade with Iran and Russia. The consequences of Brexit are uncertain. Potential effects applicable to many businesses include economic and operational uncertainty, volatility of currency exchange, regulatory changes and the imposition of tariffs on trade between the UK and the Eurozone – Geopolitical tensions, most notably in the Middle East and the Koreas, carry a direct financial threat, particularly if the latter escalates into a global issue 	<ul style="list-style-type: none"> – Diversified portfolio of businesses which mitigates exposure to any one country or sector and geographic spread that mitigates the impact of trade barriers between regions – Divisions monitor order flows and other leading indicators so that they may respond quickly to deteriorating trading conditions and tariffs/barriers to free trade – Identification and application of learnings from past downturns through the cycle – Sustainable tax strategy to optimise the Group's position – Representation of our interests by our Government Relations team – Trade compliance officers monitor compliance with sanctions and other trade restrictions – Monitoring of the ongoing negotiations between the UK and the EU in order to assess the potential impact of Brexit and any transitional arrangements that may be agreed 		
	<p>Current</p> 	<p>Target</p> 	<p>Trend</p> 	<p>Velocity</p> 

Risk	Potential impact	Key mitigating controls		
<p>GROWTH MARKETS</p> <p>A significant proportion of our revenue comes from the US and European markets, with a notable proportion coming from governments.</p> <p>Strategic objective</p> <p>1 OUTPERFORM OUR TARGET MARKETS</p>	<ul style="list-style-type: none"> – Failure to develop other markets and geographies impacts strategic progress and financial performance – Significant disruption to government budgets results in fewer contracts being awarded to Smiths Detection, Smiths Medical and Smiths Interconnect, impacting financial performance 	<ul style="list-style-type: none"> – A diversified portfolio of businesses mitigates exposure to any one country, sector or customer – Growth strategy that places emphasis on expanding operations in higher-growth markets and regions that are currently underserved, including Asia – Strategic process to capture continuing opportunities in current markets – Government Relations function that collaborates with colleagues across the Group to advise on developments – More resilient services and consumable components built into some of our government-related business 		
	<p>Current</p> 	<p>Target</p> 	<p>Trend</p> 	<p>Velocity</p> 

Risk

Potential impact

Key mitigating controls

ETHICS AND COMPLIANCE

We have c.22,000 employees in more than 50 countries. Individuals may not all behave in accordance with the Company's values and ethical standards. We operate in highly regulated markets requiring strict adherence to laws with risk areas including:

- bribery and corruption;
- anti-trust matters;
- international trade laws and sanctions;
- human rights, modern slavery and international labour standards; and
- General Data Protection Regulation (GDPR).

- Failure to comply with export regulations leads to significant fines and a loss of export privileges
- Failure to meet strict conditions within government contracts, particularly in the US, could have serious financial and reputational consequences
- Increased risk of illegal anti-competitive activity such as collusion with competitors, due to operating in relatively consolidated markets. US fines and penalties imposed for price fixing, bid rigging and other cartel-type activities can exceed \$100m per violation
- Ethics or compliance breach causes harm to our reputation, financial performance, customer relationships and our ability to attract and retain talent

- Group-wide ethics framework which includes the Smiths Way, the Code of Business Ethics and the Supplier Code of Conduct
- Policies and procedures to mitigate distributor and agent-related risks including due diligence, contractual controls and internal approvals
- Anti-bribery and corruption training for all employees supported by the 'Speak Out' line encouraging the reporting of ethics violations (includes a non-retaliation policy)
- Reporting and investigation mechanisms
- Competition law/anti-trust training programmes and guidance
- Network of trade compliance officers across the Group that oversee import and export activities
- Dedicated staff at Smiths Medical who maintain close contact with the FDA and other key regulators
- Group General Counsel and divisional General Counsels monitor legislative changes and report and monitor actions as necessary
- Anti-Modern Slavery Policy and procedures to reduce the risk of modern slavery within the Company and our supply chain
- GDPR working group driving programme to ensure compliance

Strategic objective




2
DELIVER WORLD-CLASS COMPETITIVENESS













Current	Target	Trend	Velocity





Key

Current exposure to risk	Target exposure of risk	Trend: Net position of risk vs FY2017	Velocity: Time to react
Low Medium High	Low Medium High	Lessened No change Increased	Years Months Days/Weeks

RISK MANAGEMENT CONTINUED













Risk	Potential impact	Key mitigating controls								
<p>CONTRACTUAL LIABILITIES</p> <p>We may fail to deliver the products and services we are obliged to deliver, or fail in our contractual execution due to delays or breaches by our suppliers or other counterparties.</p> <p>Strategic objective</p> <p>2 DELIVER WORLD-CLASS COMPETITIVENESS</p>	<ul style="list-style-type: none"> - Production delays, unexpected increases in costs of materials, freight, quality and warranty issues resulting from differences between estimated and actual costs in our medium and long-term contracts - Breach of contract resulting in significant expenses due to disputes and claims, loss of customers, damage to Smiths reputation with other customers/prospective customers, and loss of revenue and profit due to higher costs, liquidated damages or other penalties. Smiths contracts, particularly those with governments, may include terms that provide for unlimited liabilities, including for loss of profits, IP indemnities, perpetual warranties or allowing the counterparty to cancel modify or terminate unilaterally and seek alternative sources of supply at Smiths expense. 	<ul style="list-style-type: none"> - Contracts managed and delivered by programme management teams that regularly review risks and take appropriate action - Review and approval process for significant and higher-risk contracts in place at Group and divisional levels - Diversified nature of the Group mitigates exposure to any single contract - Programmes in place across the Group that harmonise the contract review process - Cross divisional US Government working group determines and shares best practice on government contracting 								
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<p>ACQUISITIONS AND INTEGRATION</p> <p>Our strategy is predicated primarily on organic growth. However, acquisitions can also play a role in building and/or strengthening competitive positions. Acquisitions carry risk, but also opportunity.</p> <p>We may invest substantial funds and resources in acquisitions which fail to deliver on expectations – due to incorrect appraisal of the target and/or poor execution. The opposite risk is that (perhaps through an excess of caution) we miss out on opportunities to build market-leading positions and growth.</p> <p>Strategic objective</p> <p>1 OUTPERFORM OUR TARGET MARKETS</p> <p>3 STRONG FINANCIAL FRAMEWORK</p>	<ul style="list-style-type: none"> - Poor acquisitions lead directly to financial damage and indirectly to loss of shareholder confidence in management - Newly-acquired products and solutions deliver less value, fewer synergies, or require more investment than anticipated - Fall in our return on capital employed measure - Financial performance suffers from goodwill or other acquisition-related impairment charges 	<ul style="list-style-type: none"> - Investment in greater internal capability for the evaluation and execution of transactions - Regular reviews of the acquisition pipeline and a stage-gated M&A process - Detailed due diligence and integration work in accordance with our acquisitions and disposals policy - Larger transactions approved only by the full Board - Post-acquisition reviews with lessons learned incorporated into future projects 								
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Risk	Potential impact	Key mitigating controls
<p>SUPPLY CHAIN – MANUFACTURING</p> <p>Timely, efficient supply of raw materials and purchased components is critical to our ability to deliver to our customers drive growth. Manufacturing continues to be exposed to external events which could have significant adverse consequences, including natural catastrophes, disease pandemics and terrorist attacks. We are also affected by the social, economic, regulatory and political conditions where we operate.</p> <p>Strategic objective</p> <p>2 DELIVER WORLD-CLASS COMPETITIVENESS</p>	<ul style="list-style-type: none"> - Inability to deliver products/solutions to customers, impacting financial performance and reputation 	<ul style="list-style-type: none"> - Supply Excellence pillar of our SES operating model delivers increased focus on efficient, resilient and cost-effective supply - Business continuity and disaster recovery plans in place and tested for critical locations - Regular evaluation of key sites for a range of risk factors using externally benchmarked assessments - Business interruption and property damage insurance
	<p>Current </p> <p>Target </p> <p>Trend </p> <p>Velocity </p>	

Risk	Potential impact	Key mitigating controls
<p>SUPPLY CHAIN – SOLE SOURCE</p> <p>Our businesses depend on the availability and timely delivery of raw materials and purchased components. Where sole or single source suppliers are the only qualified source of raw material and/or components, any disruption to supply could adversely impact production, associated customers and the downstream supply chain.</p> <p>Strategic objective</p> <p>2 DELIVER WORLD-CLASS COMPETITIVENESS</p>	<ul style="list-style-type: none"> - Inability to deliver products/solutions to customers, impacting financial performance and reputation 	<ul style="list-style-type: none"> - Risk management process based on failure mode and effects analysis (FMEA) principles developed by the Group Strategic Sourcing team that includes sole or single suppliers - Mitigation plans, including qualification of alternative sources of supply where appropriate, in place - All critical suppliers screened on a daily basis with any change to risk status communicated to the appropriate procurement leader for analysis and follow-up
	<p>Current </p> <p>Target </p> <p>Trend </p> <p>Velocity </p>	

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