



# Improving automotive quality, safety and environmental impacts



# Consumers of today expect more from their vehicles

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The automotive industry is one of the most innovative sectors, investing €85 billion in research and development annually to keep ahead of consumer needs.

In 2013, 87 million vehicles were produced globally. Manufacturing this amount of vehicles requires over 8 million employees to produce these vehicles and the parts that go inside them. It's also estimated that another 50 million people are indirectly employed from the automotive industry.

With this high volume of production and therefore employees, the automotive industry has long been one of the most efficient and productive sectors. But has the landscape of the industry changed?

Consumers and governmental organizations are expecting more from the global automotive sector in terms of quality, safety, value and corporate social responsibility. Current and future business pressures include:

- Cheap labour in emerging economies driving competitive prices down
- Consumer pressure for innovative vehicles forcing collaborative partnerships and extending supply chains
- Increased safety requirements
- Increased pressure to address the environmental impacts of carbon emissions from consumers and governmental organizations
- Global supply chain management systems under constant review to maintain efficiency

Securing your systems and managing the sustainability of your operations, will allow you to manage performance, reduce risk and improve trust.

Our services outlined in this brochure address the key issues facing the automotive sector today and into the foreseeable future. The automotive sector falls into three key areas:

## Automotive manufacturing

production and assembly of vehicles and the parts that go inside them, including digital technology.



## Automotive wholesale/retail

Sale and rental of vehicles.



## Automotive maintenance/repair

Repairing vehicle damage and maintaining the efficiency of vehicles.





By Royal Charter

# BSI – an industry thought leader

## BSI is the world's first National Standards body with over 100 years' experience

BSI pioneered the development of many of the world's leading standards and we have extensive experience shaping global standards to assist trade and improve business.

The majority of the most widely used and implemented international standards were originally shaped by us. For example, ISO 9001 for Quality Management, ISO 14001 for Environmental Management and ISO/IEC 27001 for Information Security.

Our standards developers, assessors and tutors include some of the world's leading automotive experts who can assist your business.

We bring together experts and innovators to tackle the ever-changing issues facing the whole supply chain from component manufacturers through to vehicle repairers.

- **Quality Management** – We produced the world's first quality management standard in 1979, BS 5750, now ISO 9001 which is the most recognized quality management standard.

- **Supply Chain Management** – We developed the first Supply Chain Management standard ISO 28000 and were co-founders of the Transported Asset Protection Association (TAPA).
- **Environmental Management** – We produced the world's first environmental standard, BS 7750, now ISO 14001, back in 1992.
- **Occupational Health and Safety** – We work in partnership with industry experts, government bodies, trade associations and consumer groups to shape standards like BS OHSAS 18001 for the challenges facing organizations today.

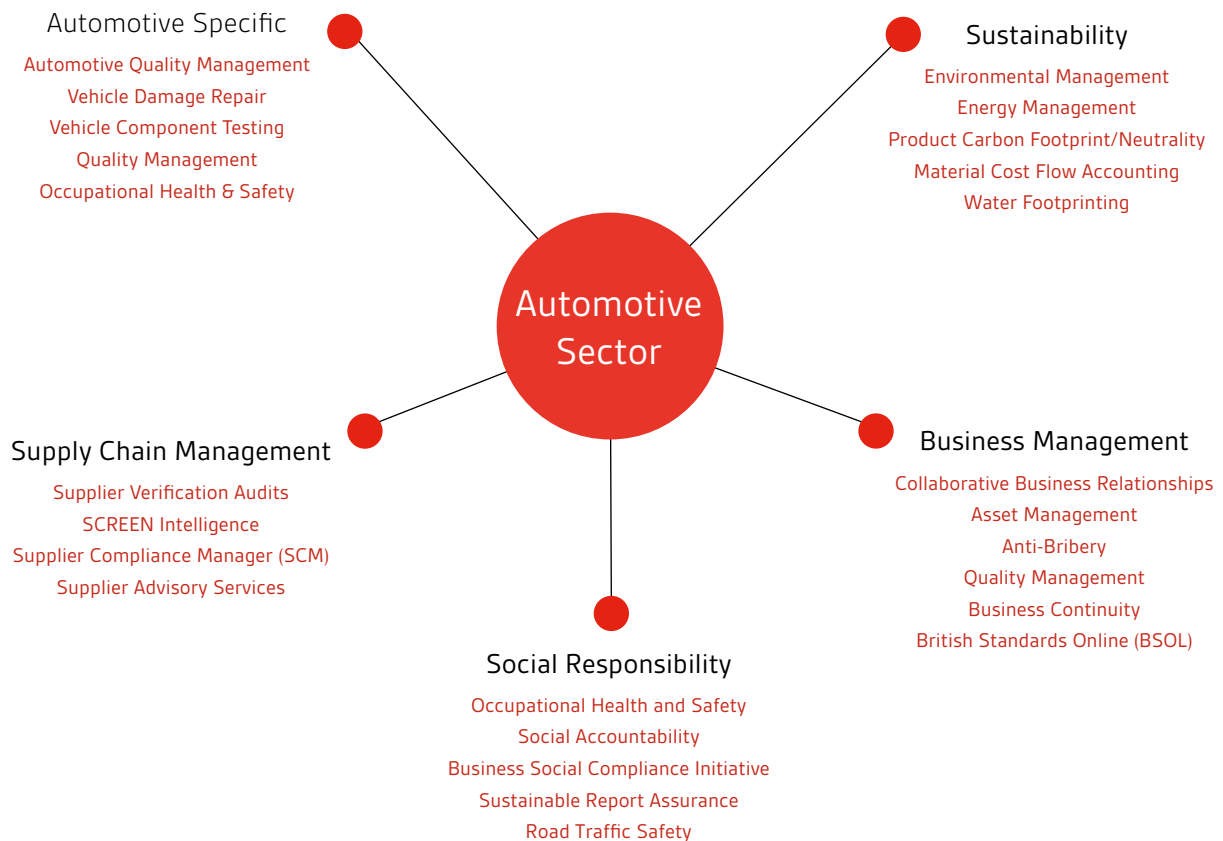
As a royal charter company, with 70 offices worldwide, we have the global reach to help your organization, large or small, make a difference to your business and help manage your risks now and into the future.



...With 70 offices worldwide, we have the global reach to help your organization, large or small make a difference...

# BSI Solutions

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Our range of integrated services can be structured to your specific needs and help you address quality, supply chain, sustainability and general business management concerns. Our solutions include:

- Standards and subscription services provide access to an enviable source of knowledge through standards and publications
- Training introduces you to standards and explains how to implement and audit against them
- Independent certification and verification proves you're compliant to your stakeholders

# Business Management



## Embedding good business practices can be the backbone to creating a more successful business

From entrepreneurs to established companies, achieving true success is all about how you perform day in, day out and how you manage your risks. Your organization's competitiveness and ability to survive is determined by how well it operates.

### Key Facts

- 93% of large organizations and 76% of small businesses had a security breach in 2011<sup>1</sup>
- 79% think an organization has an ethical duty to fight corruption<sup>2</sup>
- 86% believe business continuity planning improves business resilience<sup>3</sup>
- Effective partnering can reduce overall costs by 20-30%<sup>4</sup>

Embedding standards and best practice into your organization can provide the answer helping to reduce risk, build stakeholder confidence and perform at its best.

### BSI Services

#### Quality Management – ISO 9001

The world's most widely recognized quality management standard outlines ways to achieve consistent performance and service.

#### Asset Management – ISO 55001

A new international standard which focuses on the effective and efficient management of your assets. Including usage and return from your asset, while potentially lowering the overall cost of ownership or management.

#### Business Continuity – ISO 22301

This international standard allows you to identify potential threats to your business and increases your capacity to deal with unexpected disruptions.

#### Anti-bribery – BS 10500

A best-practice framework to manage bribery risk and develop adequate procedures BS 10500 can help to protect your organization and help your regulatory requirements.

#### Collaborative Relationships – BS 11000

This framework for collaborative business relationships can help you develop and manage your interactions with other organizations for maximum benefit to all.

#### British Standards Online - BSOL

BSOL provides instant access to over 55,000 British, European and international standards 24/7.

These services can help organizations to:

- Identify and manage current and future risk throughout your business and supply chain
- Demonstrate compliance and gain status as a preferred supplier
- Increase stakeholder and customer trust that your organization is managed effectively.

# Automotive sector



## Demonstrating best practice across the wide range of automotive disciplines can reinforce your company's reputation and secure new business

The global automotive industry demands maximum levels of product quality, safety, productivity and continual improvement. This is where standards and certification can make all the difference.

### Key Facts

- 92% of consumers view fuel efficiency as their top purchasing requirement<sup>1</sup>
- 80% of equipment manufacturers see business partnerships as the key to success<sup>1</sup>
- 61% of automotive executives believe that customers in Brazil, Russia, India and China (BRIC) will demand higher levels of quality, safety and reliability by 2018<sup>1</sup>
- 15.9% of man-made CO2 emissions come from road transport<sup>2</sup>

By focusing on the key risks to your organization, you can reduce your threats and impact. Third party certification can provide additional reassurance to key stakeholders that risks are being managed effectively.

## BSI Services

### Automotive Quality Management – ISO/TS 16949

ISO/TS 16949 is the globally recognized quality management standard for the automotive industry. It brings together standards from Europe and the US, providing a framework for achieving best practice for the design and manufacturing of products within the automotive supply chain. BSI is one of the IATF's contracted certification bodies for the provision of ISO/TS 16949 certification - not all certification bodies are contracted to IATF<sup>3</sup>.

### Vehicle Damage Repair – BS 10125

Whether you're a fleet manager or a vehicle repairer, BS 10125, formerly PAS 125, proves to your customers that your vehicle repairs meet and exceed the industry standard with the BSI Kitemark.

### Road Traffic Safety – ISO 39001

This new international standard focuses on road traffic safety management. It provides a best practice framework which helps you actively contribute to reducing the risk of death and serious injury.

### Vehicle Component Testing

Vehicle component testing involves testing samples of the product and assessing your quality system. It ensures that ongoing production meets the appropriate requirements and regulations, such as ECE Regulations or EU Directives.

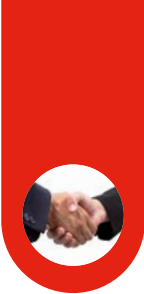
### Carbon Neutrality – PAS 2060

PAS 2060 sets out the requirements for achieving and demonstrating carbon neutrality. It allows you to improve your environmental credentials with accuracy and transparency.

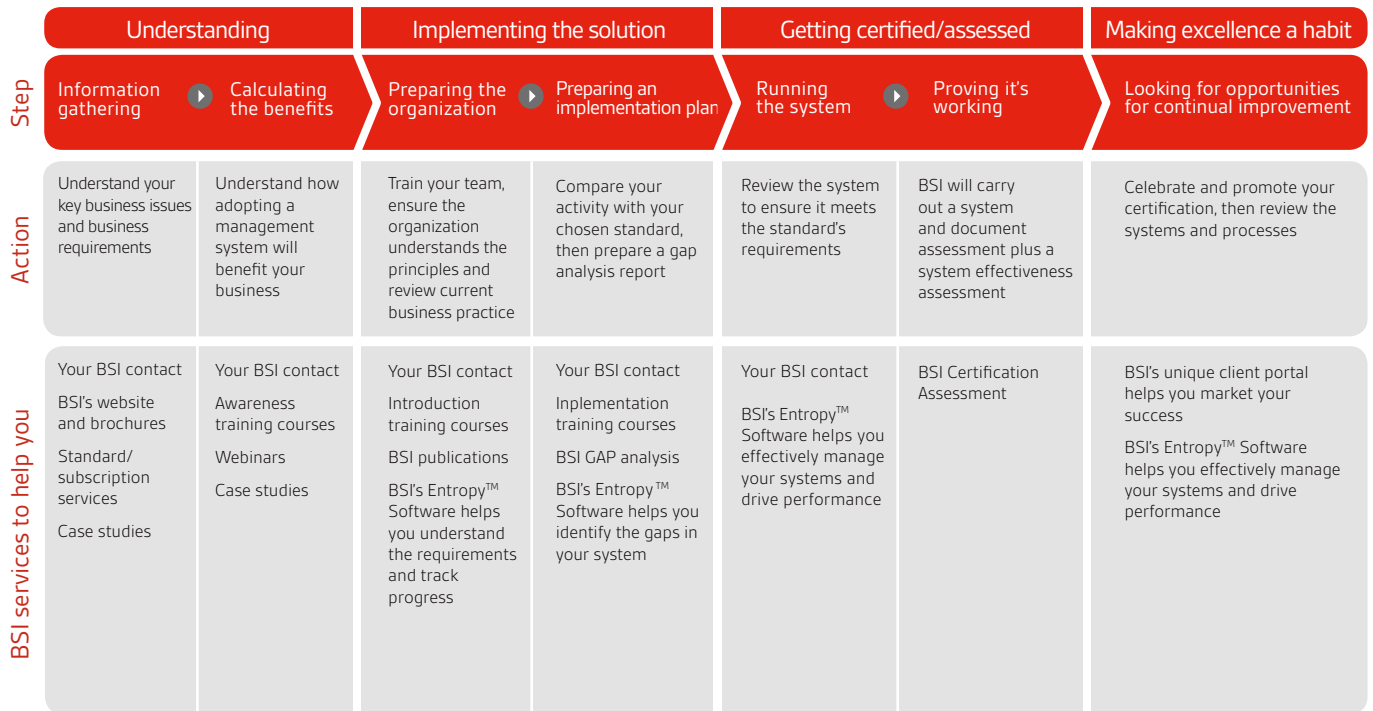
#### These standards can help organizations to:

- Identify your specific risks and put controls in place to manage or reduce them
- Gain stakeholder and customer trust that your vehicles and components are safe and reliable
- Demonstrate compliance and gain status as a preferred supplier
- Develop automotive services that are driven by and support your business objectives
- Integrate people, processes and technology to support business growth.

# Client Journey



## A guide to your journey with BSI



### Automotive Quality Management

"TS 16949 provides an easily understood and managed system for all staff which ensures consistency of actions and improved customer service.

The new product introduction process operates effectively and provides confidence to our clients.

It aids continuous improvement programmes which has recently seen for example scrap reduction improve by up to 12.5%"

**Laurence Duncan**, Quality Manager, Sanoh UK Manufacturing Ltd

### Quality Management

"The benefits far outweigh the time involved in maintaining our quality management system. To date, we have seen dramatic improvements to our build quality, including efficiency and cost-savings."

**Jo Wallis**, Director of Quality Management, Warnerbus

### Vehicle Damage Repair

"Customer safety is very important to Aviva. We believe the BSI Kitemark PAS 125 standard endorses the correct standards for Man, Method, Material & Machine covering all aspects required to deliver consistent levels of quality to ensure customer satisfaction and safety is delivered in every repair."

**Adam Murray**, Motor Technical Manager, Aviva UK

### Road Traffic Safety

"Any company committed to improving its road safety will benefit from the introduction of BS ISO 39001, but so will every other road user as the approach will make our roads safer for all who use them."

**Kevin Cook**, Group Health and Safety Director, Mark Group

# Supply Chain



## Successfully manage your supply chain risks by knowing your real suppliers – real people, real production lines and real facilities

Today we move from domestic to regional and then to global supply chains which are more complex and spread over wider distances. As a result, the definition of quality has moved to include environmental, social, ethical and security issues. Reputational risk is becoming increasingly important as transparency and globalization accelerates.

### Key Facts

- 93% of executives believe that addressing supply chain risks is a growing priority <sup>1</sup>
- 75% of organizations recorded at least one supply chain disruption in 2013 <sup>2</sup>
- 55% of organizations experienced productivity loss as a result of a supply chain incident <sup>2</sup>
- 45% of executives lack confidence in their supply chain risk management programmes <sup>3</sup>

Managing the supply chain is essential to protecting an organization's brand and corporate reputation.

## BSI Services

### Supply Chain Solutions – Suppliers Verification and Risk Assessment

An intelligence based approach from BSI can help an organization manage its supply chain risk and protect its brand reputation. It leverages standards, risk evaluation tools, verification and supply chain tools to help clients identify and manage their supply chain and thus mitigate risks.

### BSI Supplier Verification Audits

On site profile validation and verification audits based on BSI or client requirements.

### Supply Chain Risk Exposure Evaluation Network (SCREEN)

A comprehensive supply chain intelligence tool including country heat maps covering security, environmental and CSR. SCREEN helps organizations to identify and understand their supply chain threats.

### Supplier Compliance Manager (SCM)

A web-based tool designed to facilitate and automate mandatory supplier risk assessments. Manage supplier self-assessment and on-site supplier qualification and verification programmes including on-boarding, scheduling, reporting, corrective and preventive action management and benchmarking.

### Supplier Advisory Services

Offering technical advice and information on supply chain risk, programme set-up and design.

#### These services can help organizations to:

- Mitigate supply chain risks
- Protect brand and corporate reputation
- Provide assurance to key stakeholders that suppliers are being managed effectively
- Comply with government security programs

Find out more at [www.bsi-supplychainsolutions.com](http://www.bsi-supplychainsolutions.com)



# Supply Chain Stress Test



## How would your organization and supply chain stand up to a public opinion stress test?

Customers, journalists, directors, NGOs, shareholders and investors are increasingly interested in your supply chain and how you manage your quality, safety, environmental and social issues:

How many suppliers do you have?

How many are direct versus indirect?

Do you actively verify your suppliers?

Have you conducted risk assessments on all your suppliers?

How many have you physically visited?

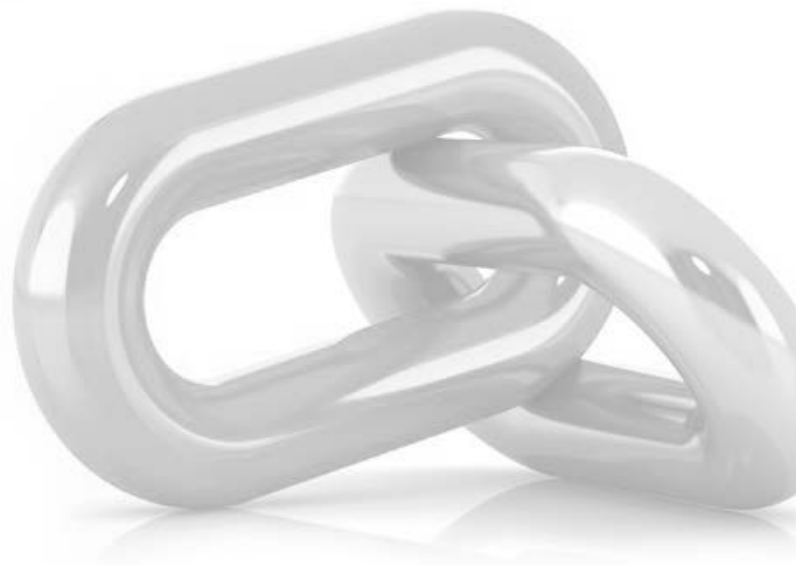
What are the issues and where?

What improvements have you made?

Does your supply chain adhere to your corporate values?

In recent years, international suppliers have sometimes found themselves hitting the headlines – for all the wrong reasons.

Having your company aligned to one of these suppliers, or having your reputation damaged due to unforeseen circumstances, is not a risk worth taking. That's why it's imperative to quantify supply chain risk for your team globally, so you can trade with confidence, mitigate risk and build lasting resilience.



# Sustainability



## Sustainable practice is key to growth without compromising resources for the future

With the world's population increasing, the pressure on the environment and natural resources is growing. Transparently measuring and reporting on consumption of natural resources will help you assess the role you are playing in key environmental issues

### Key Facts

- 93% of CEOs regard sustainability as key to the future success of their business<sup>1</sup>
- The environmental impact of doing business costs the global economy £3.1 trillion per annum<sup>2</sup>
- Energy costs are forecast to grow by 25% over the next 10 years<sup>3</sup>

Management systems can help an organization fully evaluate its performance and demonstrate leadership and credibility to employees, key stakeholders and customers.

## BSI Services

### Environmental Management Systems – ISO 14001

Originally developed by BSI, ISO 14001 is the first and most established international standard for environmental management. This international standard can help organizations to reduce environmental impact as well as grow.

Several of the Automotive Original Equipment Manufacturers also require that their suppliers are certified to ISO 14001.

### Energy Management – ISO 50001

The latest best practice framework for energy management, ISO 50001 helps organizations better manage and maintain their energy consumption.

### Water Footprint – ISO 14046

This new standard demonstrates an organization's leadership in environmental protection helping manage and reduce water consumption.

### Product Carbon Footprint/Carbon Neutrality - PAS 2050/PAS 2060

This standard helps organizations to quantify, monitor, report and verify the carbon footprint or neutrality of a product or service.

### Material Flow Cost Accounting (MFCA) – ISO 14051

A management process tool standard, ISO 14051 which helps trace all materials through production and measures the output in finished products or waste material. It provides a framework which helps develop an integrated approach to optimizing the use of materials.

#### These services can help organizations to:

- Identify opportunities to reduce resource usage and operational costs
- Improve green credentials by reducing waste and environmental impact
- Reduce business costs associated with inefficient use of resources, materials and energy.

# Social Responsibility



## Demonstrate responsibility through activities that have a positive impact on society and protect human and ethical values

More now than ever, it is unacceptable to conduct business unethically or act irresponsibly. Organizations are accountable for their actions like never before and need to manage their reputational risk.

### Key Facts

- Almost half the world – over 3 billion people – live on less than £2.50 a day <sup>1</sup>
- Every day 6,300 people die as a result of occupational accidents or work-related diseases <sup>2</sup>
- 21 million people worldwide are estimated to be victims of forced labour – being in jobs which they are coerced or deceived into and which they cannot leave <sup>3</sup>
- 1.3 million deaths and 50 million serious injuries occur each year in road traffic accidents <sup>3</sup>

Corporate Social Responsibility (CSR) is about taking responsibility for the organization's supply chain actions and ensuring a positive impact on society. Third party certification can provide confidence that an organization is operating ethically.

## BSI Services

### Occupational Health & Safety – BS OHSAS 18001

Ensuring employee safety is critical and BS OHSAS 18001 provides an occupational health and safety framework that will help identify and mitigate risk as well as defend and protect your workforce, reputation and brand.

### Sustainable Report Assurance (SRA)

BSI's SRA processes are conducted in accordance with the internationally recognized Global Reporting Initiative guidelines (GRI) and AccountAbility AA1000 Assurance Standard.

### Social Accountability – SA 8000

SA 8000 is the most widely recognized global standard for managing human rights and provides a framework for organizations to develop, maintain and apply socially acceptable practices in the workplace.

### Business Social Compliance Initiative – BSCI

BSCI is a leading business-driven initiative for companies committed to improving working conditions in the global supply chain.

#### These standards can help organizations:

- Protect against negative publicity
- Prove transparency, visibility, trust and confidence in reporting through a trusted 3rd party
- Achieve best practice in ethical employment, trading and operation
- Maintain existing business and attract new customers and investors
- Improve relations with workers, trade unions, insurers, bankers, NGOs and customers.

<sup>1</sup> World Bank Development Indicators 2008  
<sup>2</sup> International Labour Organization Statistics  
<sup>3</sup> World Health Organization

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