



Rail Safety and
Standards Board
Annual Review
Summary
2016-2017

Chairman's Statement

RSSB has seen much change this year and we do not anticipate that pace of development slowing in 2017. The ORR review of our work gave us, our members and stakeholders, the opportunity to reflect on developments across the industry and consider how we might shape the company to build on our strengths and address future industry requirements. We have now a clear sense of direction and have clarified RSSB's role and its relationship with other industry bodies.

Importantly we have confirmed the important contribution that RSSB has played in supporting the industry by delivering continuous improvement in safety knowledge, risk management and the application of standards, over the past decade. But it is vital we never lose focus on safety and that is why the work that RSSB will do to support the industry in delivering its Strategy for Safety, Health and Wellbeing, is hugely important and has been welcomed by the industry. Going forward, we will need to develop new capabilities, particularly in relation to health and wellbeing.

In the coming year, the company has much work to do to deliver what our members have asked for in the recently concluded consultation. The board will be supporting and monitoring the executive as they deliver these changes, but we will also be paying particular attention to the medium-to long-term financial sustainability of the organisation. Defined benefit pension liabilities, a review of the funding formula for the organisation, and the changing shape of the organisation all need to be taken account of.

RSSB can achieve its purpose only because of its independence from any one part of the industry and the broad range of experience and expertise that exists on the board, on which we have also seen some change. I would like to thank Paul Kirk who completed a long term on the board, and who gave us considerable energy and commitment. I would also like to welcome Lee Jones and Phillip Hoare as industry non-executive members, and

John Clarke as a non-industry, non-executive director. We also welcomed Mark Phillips to the board as an executive director and later also as CEO. Having laid the foundations for the future, Chris Fenton left in May 2016, and we are delighted that Mark has stepped up to lead RSSB on the next stage of our journey. Together we will continue to ensure RSSB delivers what the industry needs to help it deliver a safer, more efficient and sustainable railway.



Anna Bradley,
Chairman

Chief Executive Officer's Report

During the year the board has refreshed RSSB's mission and our vision is now –

'To be a centre of excellence, valued by its members and stakeholders as an essential contributor to their success', and updated the strategic objectives.

In the summer of 2016 the board invited the Office of Rail and Road (ORR) to carry out a five-yearly review of RSSB and its functions. This led to a report published in November 2016 with several important recommendations which RSSB's board accepted in full.

As a direct consequence of the review and feedback from our members and stakeholders, we have launched a transformation programme to make RSSB fit for the future. We have made engaging more effectively with our members our number one goal. We are also asking them to commit to working with us to develop our products and services to better meet their requirements and priorities.

A first important step to doing this was the launch of our annual business plan consultation in January, supported by four themed workshops. This has helped us to prioritise our work programme and understand the emphasis our members place on new areas including sustainability, health and wellbeing.

We recognise that some of our projects and programmes have taken longer to deliver than our members consider is necessary, and that the groups and committees that support our work could be run more efficiently and effectively. To address this we have created a single project delivery team, implementing good practice project management processes and reviewing the number and operation of the groups facilitated by RSSB. I am confident that over the next year we will transform RSSB into a highly effective business, better aligned to meeting the requirements of its members and stakeholders.

In the year, we implemented the new industry Safety Management Intelligence System (SMIS+). This enables us to more effectively monitor safety trends and provides reporting for the industry's safety strategy.

In the course of the year I was delighted to appoint Chris Lawrence, Technical Director, Paul Marchant, Head of Finance, Keith Hanlon-Smith, Head of Human Resources, Tom Lee, Director of Standards, and Luisa Moisio, Research and Development Programme Director to the Senior Leadership Team.



Mark Phillips,
Chief Executive Officer

Strategic Report

Business Model

RSSB mission

Through research, standards, analysis and insight, RSSB supports our members and stakeholders in driving improvements in health and wellbeing and delivering a safer, more efficient and sustainable rail system.

Vision

To be a centre of excellence, valued by its members and stakeholders as an essential contributor to their success.

How we work

Being influential through our independent, evidence-based approach, built on strong technical capability, and the enabling of collaborative member and stakeholder engagement for the benefit of the whole rail system.

Primary objective

Britain's rail industry comprises many different organisations, which together form a system with a common purpose of moving people and freight safely and efficiently by rail. RSSB's primary objective is to support its members (the rail industry) to achieve their objectives of improving safety, performance and value for money across the industry, with a focus on:

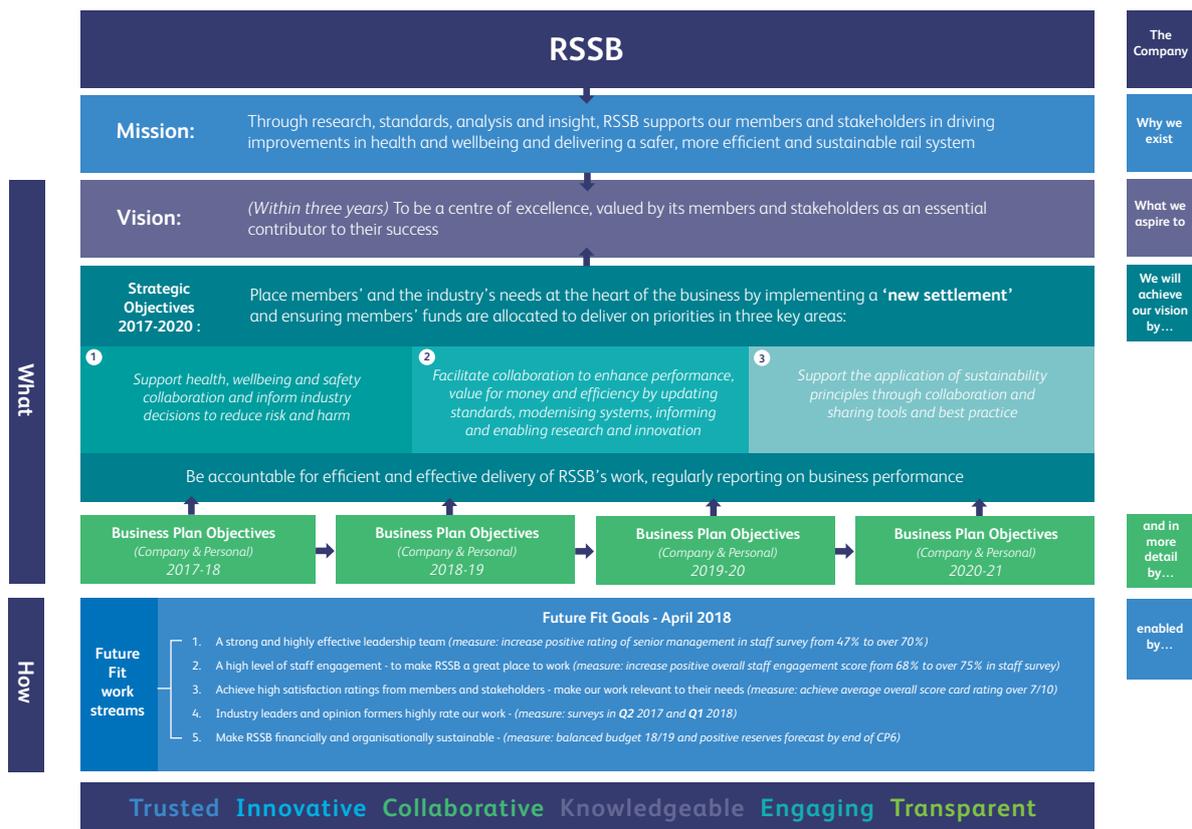
- Reducing safety risk so far as is reasonably practicable
- Increasing capacity (where appropriate)
- Improving operating performance and customer satisfaction (where appropriate)

The company fulfils its primary objective through the delivery of functions and services in accordance with the principles of operation through both our strategic and company objectives.

Strategic objectives

Underpinning our work are our Strategic Plan Objectives 2017-2020:

1. Place members' and the industry's needs at the heart of the business by implementing a 'new settlement' and ensuring members' funds are allocated to deliver on priorities in three key areas:
 - a. Support health, wellbeing and safety collaboration and inform industry decisions to reduce risk and harm
 - b. Facilitate collaboration to enhance performance, value for money and efficiency by updating standards, modernising systems, informing and enabling research and innovation
 - c. Support the application of sustainability principles through collaboration and sharing tools and best practice
2. Be accountable for efficient and effective delivery of RSSB's work, regularly reporting on business performance.



Members

At RSSB we bring the industry together to make collective decisions. As well as helping the industry in areas of safety, standards, knowledge, and innovation we also provide support across a wide range of cross-industry topics requiring our knowledge and independence. In summary we provide a constant point of reference in a changing environment.

Our work involves close collaboration, but as technical experts we are also able to step back and provide an informed view. And because we can see both the big picture and the detail, we are able to furnish the industry with the information and tools it needs to continuously improve.

We are an expert body with extensive technical knowledge, skills and experience. We work for the industry, are non-profit-making and independent of any commercial interests.

We span the entire rail system, including in our membership:

- Infrastructure companies
- Train and freight operators
- Rolling stock owners and
- Suppliers to the industry

Funding

RSSB is a not-for-profit company which has two funding streams:

Member Funding: A fixed five-year membership levy paid by our members, set out at the start of any given control period and governed by the existing constitution. This accounts for circa £25m of funding per annum.

Non-Member Funding: We receive a series of discretionary, ring-fenced grants from the Department of Transport to fund activities beyond our core member-funded activities. Currently we receive grants for the following activities: Research, Innovation and the Rail Technical Strategy.

RSSB's future development

During 2016/17, RSSB invited the Office of Rail and Road (ORR) to review our purpose and role within the industry to ensure the correct focus to support the industry. The review concluded that RSSB should develop a new settlement with its members and become a more responsive, member-centric organisation. As a result, an internal transformation change programme, Fit for the Future, commenced in 2016/17 to meet the challenges raised in the ORR review. The majority of this programme will be delivered in 2017/18.

RDDS principal activity

The principal activity of the subsidiary company, Railways Documentation and Drawing Services Limited (RDDS), is to act as a custodian of the library of the British Railways Board's Traction and Rolling Stock drawings and documents and provide copies of such to persons and organisations entitled to receive them.

Business review

A snapshot of our year

Throughout 2016/17, RSSB has developed and delivered some significant programmes and projects to support the industry's transformation. In addition to working on individual programmes, we have also worked with the industry to develop several key strategies to guide future activity.

Safety

Safety remains central to our work and, in collaboration with the industry, we developed Leading Health and Safety on Britain's Railway, now adopted and published by the Rail Delivery Group (RDG). The strategy identifies 12 priority areas for the industry where, by working together, levels of risk can be reduced more effectively. These areas range from those not traditionally associated with the railway – such as fatigue and road driving risk – to better understood risk such as that emanating from level crossings. The strategy also identified nine capabilities the industry needs to develop further to address health and safety issues. The strategy, which was endorsed by all RSSB members, will now be led by RDG and monitored and driven through the Industry Health and Safety meeting. The Network Rail/RSSB team responsible for developing the strategy won Rail Safety Team of the year at the Rail Staff Awards.

Data and risk

It has been a decade since the last passenger fatality in a train accident on the GB mainline railway. That said, there is no room for complacency on safety. One of the key ways that RSSB has been supporting the industry in improving its safety record is by using data and intelligence to identify risks, trends and issues. This year we also published the cross-industry Data and Risk Strategy, and made a first step in delivering it by rebuilding the industry Safety Management Intelligence System (SMIS) as a platform for further enhancement. Based on member feedback further refinements to the system will be delivered this year.

RSSB's analysis of key issues also enabled us to provide an independent perspective on the ongoing debate around driver only operation in relation to door

control and train dispatch. We also undertook key risk assessment projects for industry including work on the case for retro-fitting internal train doors, and on controls to prevent freight train derailments. Both of these assessments have helped to inform the railway's decision-making to reduce risk and harm.

Work continued to support industry's growing interest in improving the approach to health and wellbeing, one example being a quick-start guide for people and operational teams to procure cost-effective occupational health arrangements.

Our two supplier assurance schemes, RISAS and RISQS, and the confidential reporting service CIRAS, have also been supporting safe operations across the industry. RISAS benefited from new RSSB guidance for companies working through new human factors requirements in the assessments. The second phase of R2, the industry's rolling stock register, also went live during 2016/17.

Improving standards

Our work in standards has also been supporting the industry. Industry's agreed strategy is designed to help with transition from domestic to European to International standards and clarifies how standards help rail companies in addressing their legal and other obligations. This includes reviewing and re-assigning standards to give organisations an efficient and consistent approach while offering appropriate flexibility. This has included removing requirements from Railway Group Standards (RGS) and moving them to Rail Industry Standards (RIS), allowing more flexibility in their application.

There have been several significant changes to standards over the last year, including the removal of the requirement for yellow front ends.

In a successful collaboration with industry - including trades unions - we have updated the arrangements to apply when the industry train radio system (GSM-R) fails. A new Rail Industry Standard sets out the minimum requirements for Internet provision, including performance, security, and responsibilities for improving on-board Internet access. This work earned RSSB the Rail Exec's award for Most Interesting Approach to Train Operations.

47%



Gender diversity of the headcount of staff which is almost **50/50** split, with **145** women and **168** men.

15%

Increase in **CIRAS** members, rising to **1860** paid members.
www.ciras.org.uk

40006



Number of twitter followers on www.twitter.com/rssb_rail

National

27

Trade

22



Number of media articles over the year



20

Industry engagement events over the year

6

New **RSSB** members



587 users of the Carbon Tool in March 2017 compared to **301** in March 2016

In addition to individual standard changes, we have developed the Rail Industry Cyber Security Strategy – an industry first. The strategy has now been adopted and promoted by the Rail Delivery Group.

Making the Rule Book more user friendly and accessible has also been a priority. We have developed the Digital Rule Book, an app for mobile devices that contains all the modules and handbooks needed for specific roles on the railway. The Apple version has been well received in trials with train drivers and guards at one busy franchise. Following trials of the Android and Windows versions, the product will be made available to the industry towards the end of 2017.

The rail industry of the future

Supporting the industry's vision of the future has been a key driver for RSSB. Building on the successful Rail Technical Strategy from 2012, RSSB developed and delivered the Capability Development Plan (CDP). The CDP is the detailed plan which sets out the steps needed to bring about a transformation of the railway to meet current and future demands for mobility; and to be flexible enough to respond to the changing expectations of passengers and freight customers. The CDP has now been adopted by the Rail Delivery Group to promote and deliver.

Research and innovation activity have played a valuable part in developing ideas and solutions to improve and enhance the industry performance in relation to efficiency and effectiveness. Partnership work between RSSB and Loughborough University developed a set of railway points, Repoint, to eliminate the risk of derailment. The Repoint work continues to receive positive support across the industry and was recognised with the prestigious 2016 Institute of Engineering and Technology award for transport. Our partnership working with academia via RRUKA, and the support of young people in the industry have continued to develop and our annual Next Generation Rail Conference attracted a large turnout from across the industry.

Funding for new ideas and innovations through our competitions has generated some interesting ideas on the rail industry's objectives regarding capacity, efficiency, and cost. The Tomorrow's Train Design Today competition delivered two seating solutions named Horizon and Island Bay to help maximise passenger

capacity and comfort. Both designs can be installed on new or existing trains and trams, with the potential to boost capacity in carriages by up to 30%.

We also launched the Powertrain programme to develop alternative technologies for rail vehicles to power themselves. Potential fuel savings of around 30%, and similar reductions in carbon dioxide and nitrous oxide emissions, have been suggested by eight RSSB-funded feasibility studies which aim to find more efficient ways of powering trains.

Successful methods could also suggest new approaches to the electrification of the network. Two companies, Artemis Intelligent Power and Dynamic Boost Systems, were both awarded funding by RSSB to develop alternative ways of powering trains that could deliver improvements of up to 30% in fuel efficiency.

RSSB's innovations team has provided £1.6m to Transport Design International (TDI), to develop Very Light Rail (VLR) which will help industry to meet the increasing demand for transport connectivity between regional and rural areas. VLR can reduce carbon emissions and cost through lower levels of track damage. Facilitating low-cost use of VLR will provide integrated and sustainable short-range public transport systems. The bogie technology design, which was supported by the University of Warwick's WMG (*Warwick Manufacturing Group*) and Unipart Rail, was successfully demonstrated in the laboratory early in 2016, confirming the benefits of the hybrid drive propulsion system. The next stage is to develop and build the VLR vehicle body, and integrate it with the bogie technology. Existing regulations and safety standards relating to very light railcars have also been evaluated to support take-up.

Innovation and efficiency

Research into enhancing train sanding processes, to improve adhesion during braking and acceleration, has been successful; and this will be followed up with more detailed practical application research in the year ahead. In addition, the research into the impact of climate change and how this will affect the industry has been completed. It provides the industry with a clear understanding of the issues and a set of priorities. RSSB also launched the Rail Sustainability Development Principles for the industry. Use of RSSB's Rail Carbon Tool has continued to increase, and it has now supported over 500 projects.

The £4m TOC 16 competition is designed to encourage greater collaboration between both train operators and suppliers, challenging them to work together to develop new and innovative ways to improve performance, reliability and safety on the railway while enhancing the customer experience. RSSB funding has enabled the winners to move their projects into the delivery phase. This year's winning projects include new ways to manage service disruption and station overcrowding as well as the use of wearable technology to understand customer wellbeing throughout their end-to-end journey.

Putting members first

As well as delivering a range of programmes and projects to support the industry, 2016/17 saw RSSB accept the recommendations of the ORR review, including undertaking a member consultation to better understand their priorities and how we can refocus our relationship with the industry through a 'new settlement'.

We have also grown our membership from 69 members in 2015/16 to 75 members in 2016/17.

Our 'Future Fit' transformation programme is heralding significant improvements to internal office systems and processes, positioning RSSB for the challenges ahead. Board and internal governance and reporting have been strengthened, with better quality information on budgeting and forecasting. Revised procedures will ensure that our outputs are more targeted towards, and useable by, those people who have to implement findings or recommendations.

Our People

Head count

The Group headcount as at 31 March 2017 was 313 with **145 females** and **168 males**.

Reward

The company operates a discretionary bonus scheme for all permanent and fixed-term employees. This is determined through the company meeting a series of stretching goals and individual performance against a set of personal performance objectives.

Diversity and inclusion

RSSB is committed to equality and valuing diversity within its workforce. We embrace diversity and seek to provide an inclusive working environment. We provide equality of opportunity and will not tolerate discrimination on grounds of gender, marital status, sexual orientation, race, nationality, religion or belief, age, disability, or indeed any other criteria.

During the year we have appointed a diversity and inclusion champion from the Senior Leadership Team who has participated in the Inclusive Leadership program. The Wider Leadership Team will also be involved in raising awareness on diversity and inclusion and a company strategy will be developed in the coming year.

RSSB staff actively participate in the Women in Rail programme, including staff both mentoring and being mentored through the programme.

Employee engagement

Ensuring our people feel valued and motivated at work underpins our ethos and supports our strategy. Striving for continuous improvement in this area, we ask our people to tell us what they think and involve them in our action plans for change.

Each year, we ask our people to complete an employee survey (Viewpoint). This survey comprises a series of themed questions, aligned to a pre-defined

engagement model which measures our people's relationship with management and how they feel.

Results are shared with employees through briefings and team meetings, as well as being published on our internal intranet along with action plans to tackle the key themes. This is designed to assure our people that key issues will be addressed. The results are also discussed with the board.

We had an 88 % response rate and overall engagement was 68 % (up 21 % since October 2015).

Employee involvement

The company recognises the importance of its people and is committed to effective two-way communication and consultation on matters impacting them directly. There is a single union agreement in place with the Transport Salaried Staffs' Association (TSSA) and the company recognises the rights of every employee to join a Trades Union and participate in its activities. We update our people about a wide range of subjects that affect the business, including progress on business projects, impact of regulatory issues, and wider financial and economic issues that may affect the company. Information is provided using a variety of internal communication channels including briefing sessions, staff newsletter, CEO blog and the company intranet.

The Company held its first Annual Staff Conference in 2016 and held its second successful event in May 2017. As part of the Terms and Conditions Review in 2016 Change Champions were involved in contributing to the delivery of the project acting as spokesmen, communications channels, advisors, and representative for a broad cross-section of the company.

Other staff champion initiatives have proved successful throughout the year, providing a platform for a good cross-representation of our people advocating initiatives and helping to disseminate information more effectively across the business.



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