Chris Fenton, incoming CEO at RSSB, outlines his priorities

It is an exciting time to be joining RSSB as the industry moves from Control Period 4 to Control Period 5. Many of the challenges for the industry are now clearly defined and the focus is very much on how to implement. This is equally true for RSSB.

RSSB has sound foundations on which to build, outlined in the 2013 Annual Review, and the legacy left by Len Porter provides a real asset for the industry – a strong technical base with critical mass, an excellent reputation for independence and integrity, both at home and internationally, and an evidence based approach to underpin safe decision making. My priorities build on these strengths and address areas for improvement identified by our members and stakeholders.

Foremost of these is to maintain and enhance the technical reputation of the organisation. This means attracting and developing our talent and working with the industry to keep this up to date. The appointment of Colin Dennis as Technical Director whose responsibilities include the ownership of this skill base is the first step.

Secondly, like all organisations we must be efficient and effective in our

For details of changes to Railway Group Standards view the Latest Updates page on the RGS Online website www.rgsonline.co.uk

You can subscribe to Information Bulletin on the RSSB website. RSSB subscriptions page

For details of forthcoming dates for RSSB consultations on standards and associated documents, please see: http://www.rssb.co.uk/library/standards-and-the-rail-industry/forthcoming-standards-consultations.pdf or search at www.rssb.co.uk
delivery. The funding agreed for CP5 has in-built efficiency targets and I know we will be asked to do more within these resources. Providing a carbon tool for the industry and supporting members on health and well-being are two activities already incorporated within current funding. Of course there are limits, but introduction of resources management and stream-lining processes will ensure we provide value for money.

The output of our work only truly adds value if it is addressing industry priorities and is clearly reported. This is reflected in our Strategic Business Plan for 2014-19. Communication is widely identified as an area where we can improve. More “engagement” (in the jargon) at all levels and clear communication is therefore also a key priority. The launch of the new RSSB website at the start of CP5 provides a clearer outline of activities and simpler access to the tools and technical information within the site.

These activities can be summarised as

- **Understanding risk** – using safety intelligence from across the rail industry and elsewhere with the latest risk modelling to inform members and support safe decision making.
- **Guiding standards** – producing the Rule Book; creating, reviewing and simplifying standards; changing the UK approach to standards to align with European requirements; all with the aim of making it easier for the railway to deliver efficiently and safely.
- **Managing research, development and innovation** – undertaking, commissioning and managing research and innovation programmes to address current needs, provide knowledge for decision making and for new technologies to deliver the Rail Technical Strategy. Latest competitions are featured in this publication.
- **Collaborating to improve** - RSSB is often asked to support activities which require cross industry collaboration from supplier assurance schemes - Rail Industry Supplier Qualification Scheme (RISQS), Railway Industry Supplier Approval Scheme (RISAS) - to confidential reporting (CIRAS), from health and well-being strategies to sustainability principles.

I am really looking forward to working with the RSSB staff, members and stakeholders in CP5 to support the industry in meeting their objectives.

### RSSB Strategic Business Plan and Constitution

RSSB helps the industry understand risk, guide standards, manage research, development and innovation and collaborate to improve.

RSSB has published its Strategic Business Plan 2014-19 which sets out its vision and strategy to deliver products and services to support the industry’s objectives in Control Period 5.

RSSB bring all parts of this GB railway system together to support shared decisions, products and services, to help industry drive out unnecessary cost, improve business performance and develop long-term strategy.

With increased investment transforming the network and growth in passengers and freight there is a new sense of direction and the Plan sets out the context of RSSB’s role. This will involve better two-way communication and engagement with our members while maintaining independence from any one company and lead in areas where its functions hold the industry’s leading competence.

The **Strategic Business Plan 2014-2019** can be viewed on the RSSB website.

RSSB has a new Constitution Agreement from 1 April 2014 which has clarified its purpose and governance arrangement. It has established a funding mechanism that gives members the 5-year horizon in which to plan.

The **Constitution Agreement** and **Articles of Association** can be viewed on the RSSB website.

A new section, introducing a risk based and proportionate approach to investigations, has been introduced in Part 2 to assist in setting the level of investigations. This approach has been endorsed by the Office of Rail Regulation (ORR).

**Accident Investigation Training Programme**

RSSB, with the support of industry representatives, has developed a new digital training programme, to support and walk through the key principles of the guidance. It is divided into 10 modules taking around 20 minutes to complete but the whole programme can be completed in 4 to 5 hours.

This programme, which comes on a memory card, is intended to supplement company arrangements for the training and competence of staff involved in investigating accidents. It can either be led by a trainer or used by individuals but it may require the support of internal IT departments to host on company systems. The programme also complements and builds on RSSB’s Human Factors Awareness course.

For reasons of copyright it has been developed solely for use in the GB railway industry and wider distribution requires RSSB’s prior approval.

The updated guidance and the training programme are intended to improve accident investigations, and reaffirm the overriding importance of learning lessons from accidents leading to improved safety performance.

For more information on any of RSSB’s products and services please contact the RSSB Enquiry Desk on 020 3142 5400 or enquirydesk@rssb.co.uk

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**Guidance and training for accident investigation**

The guidance will soon be available from RSSB. Please email accident-investigation@rssb.co.uk. Printed copies of the guidance and more information can be obtained from sms.programmes@rssb.co.uk

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**Future Railways – Active Competitions**

The FutureRailway programme is collaboration between Network Rail and RSSB working with industry and the supply chain to deliver the Rail Technical Strategy. Its purpose is to accelerate research, development and innovation in the rail industry.

**Increasing capacity and improving performance - Pantograph Technologies**

To support the electrification programme, FutureRailway launched a competition in March to design a Pantograph Dynamic Behaviour Measurement Device for use in Rolling Stock Maintenance Depots.

A pantograph is used to connect an electric train with power from an overhead line. Currently pantographs cannot be run too close together and train speed is sometimes limited. Electric trains which could run at faster speeds whilst coupled together in multiple units would improve both train performance and network capacity. Improvements in pantograph capability would help to realise these benefits.

FutureRailway are seeking a device to test the dynamic performance of the pantograph before being put into service with the overall objective of improving pantograph performance as part of a wider programme of system performance, and to achieve operation at higher speeds.

Innovators, engineers and designers across a wide range of sectors including transport, civil engineering, electrical engineering, and design have been invited to develop proposals for this competition. The closing date for competition submissions is 5pm on Friday 2 May 2014.

To find out more about the competition and how to get involved, please visit [http://futurerailway.org/eit/Pages/Funding.aspx](http://futurerailway.org/eit/Pages/Funding.aspx)

**Reducing the costs of electrification - Avoiding Bridge Reconstruction**

Bridges and tunnels pose a major challenge for an electrification scheme since catenary may not fit underneath some bridges. In an effort to counteract this problem and as part of the electrification programme, FutureRailway, Network Rail and the Department for Transport have launched a £3m competition to help develop technology enabled solutions which avoid the need for bridge reconstruction.

Ideas are being encouraged from a wide range of sectors including transport, civil engineering, electrical engineering, design and construction to develop novel methods of increasing the clearance below the bridge avoiding reconstruction, and minimising the cost of the works and disruption to the trains and road users beneath and across the bridge.

The competition closing date is 5pm on Friday 2 May 2014.

For further information about the competition please visit [http://futurerailway.org/eit/Pages/Funding.aspx](http://futurerailway.org/eit/Pages/Funding.aspx)
This competition will follow the Small Business Research Initiative (SBRI) process. For further information please visit [http://www.innovateuk.org/sbri](http://www.innovateuk.org/sbri)

**Encouraging innovation - 'Tomorrow's Train Design Today' competition**

In March, FutureRailway launched, ‘Tomorrow’s Train Design Today’, at the headquarters of the Royal Institute of British Architects (RIBA). This competition aims to bring about new and innovative design concepts for GB passenger rolling stock.

The competition will be launched under the Small Business Research Initiative model with up to £3.5m of grant funding available to successful applicants. This is a well-established process to connect public sector challenges with innovative ideas from industry, supporting companies to generate economic growth and enabling improvement in achieving government objectives.

Awards will be 100% funded. Building on the industry’s long-term strategy for rolling stock as set down in the 2012 Rail Technical Strategy, the competition aims to provide a ‘design focussed response’ to the challenge of dramatically increasing the vehicle fleet size and capability over the next 30 years.

The competition will incorporate two challenge themes:

- **4Cs Train Challenge - Long-term horizon designs for rolling stock that push the envelope of what can be delivered, by rolling stock, against the industry’s high-level objectives of reducing costs and carbon emissions whilst increasing capacity and customer satisfaction.**
- **Next-Gen Train Interiors - Medium-term horizon designs for rolling stock interiors with a focus on flexibility and adaptability to meet different service requirements.**

**Increasing innovation in railway operations - Rail Operator Challenge Competition**

The GB rail industry is a success story with increasing expectations in the areas of capacity, performance, cost and sustainability.

Rail operators have little risk capital and their franchise terms are often too short, giving little incentive for longer-term innovation. The purpose of this competition is to encourage collaboration to deliver innovative solutions between the supply chain and the rail operating companies.

FutureRailway will provide up to £3.5m of funding towards co-funded activity for projects budgeted from £250k to £1.5m with a timescale of less than two years. Larger projects could be considered.

The focus of proposals encouraged include:

- Increasing patronage and identifying new revenue opportunities of the railway
- Improving the customer experience
- Improving the level and consistency of train operations performance
- Enhancing the efficient delivery of services
  - reducing energy use and carbon emissions
  - reducing the cost of train operations

Proposals can address any, or all, of people, process or technology innovation in operations, engineering or retail and must be led or supported by a passenger or freight rail operator licensed as a railway undertaking to operate on the GB network.

This is a two stage competition opened for expressions of interest on 31 March 2014 and closes at midday on 13 June 2014.

- **Stage 1** – applicants submit an expression of interest which is assessed
- **Stage 2** – selected applicants are invited to submit a full application

All potential applicants should first register their interest by emailing trainoperatorchallenge@futurerailway.org

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**RSSB publishes new industry rules for Manually-controlled barriers with obstacle detection**

Two research projects that followed the accident at Ufton Nervet in 2004 considered obstacle detection at level crossings and whether it had the potential to reduce risk. Following the publication of this research, Network Rail developed a detailed design for a crossing with obstacle detection (MCB-OD) and carried out trials at Filey in Yorkshire.

New style crossings have now been introduced at a number of locations where full barrier (Closed Circuit TV monitored) or gated crossings (Crossing keeper controlled) existed. In normal operations the crossing will close to road traffic automatically on the approach of trains with Radar and Lidar laser light technology ensuring that the crossing is clear before the protecting signal clears automatically.

To support the introduction of manually-controlled barriers with obstacle detection, the industry has now set new rules to support staff working at these locations.

Updates to the following Rule Book Modules and Forms will come into force in June 2014.

- **GERT8000-TS9 Level crossings – signallers’ regulations,** Module T3 Possession of a running line for engineering work, Module TS1 General signalling regulations and Module TW8 Level crossings - drivers’ instructions.
- **Forms RT3180 Signallers Line Blockage, RT3181 IWA / COSS / PC Line Blockage, RT3191 Pilotman’s Single Line Working, RT3192 Signaller’s Single Line Working, RT3193 Driver’s Single Line Working Ticket, RT3198 Possession Arrangements and RT3199 Engineer’s Supervisor’s Certificate.**

For more details see Issue 26 of the Rule Book Briefing Leaflet