

The voice of the UK rail supply community

Yearbook 2020

Membership benefits

Interest Groups and Roundtables

RIA Events Calendar 2020

RIA Innovation Conference 2020

Export activities

Chief Executive Introduction

RIA Annual Dinner 2020

Campaigns for rail growth

Rail Fellowship Programme

Unlocking Innovation

Industry

Yearbook,

diverse range of RIA members and give

an overview of what RIA has in store

for the coming year. We would like to

take this opportunity to thank all the

contributing members for helping to

make this publication possible.

2019 – a turbulent vear

uncertain year for the rail industry.

regions and routes, for members to

get to grips with. And at the time

of writing we await the publication

of two major reviews which could

into the structure of the railway

industry, and the Oakervee Review

into HS2. With political changes over

the summer and, of course, Brexit, it

have significant implications for rail

businesses – the Williams Rail Review

restructure by Network Rail into

2019 has been a turbulent and

There has been a significant

designed to

showcase the

inaugural 2020



Dear Colleague

Welcome to really has been a difficult period for the Railway industry decision-makers to plan for the future. Association's

> The possibility of a General Election or changes to Ministerial roles at the end of 2019 / start of 2020 means this uncertainty looks set to continue

2020 – priorities

In 2020, RIA will be working on a number of priorities, including:

- Smoothing out 'boom and bust' rail investment ensuring consistency of upcoming activity in infrastructure, rolling stock, digitalisation and electrification
- Supporting major projects - whether Crossrail, HS2,

Transpennine Route Upgrade, Northern Powerhouse Rail, London Deep Tube, Crossrail 2, Midlands Rail Hub, East-West Rail, and more, it is important that we seek to secure as much political and media support as possible

 Seeking decarbonisation and digitalisation of the rail network

- through electrification and traction modes such as hydrogen, battery, bi-mode and tri-mode, and a signalling plan which avoids boom and bust too

- Promoting innovation in the railway industry - working closely with academia, business and clients like Network Rail to find better new and effective ways of doing things
- Brexit whatever the settlement on this, seeking for the supply chain for trade to be as frictionless as possible, standards as harmonised as possible, access to a skilled workforce, but also taking advantage of the push towards higher rail exports and strong visibility for rail in any trade deals

There are a number of other areas we will be working on. To highlight a few: delivering on a 'Rail Supply Group / DfT / BEIS' Sector Deal; working to develop a more diverse workforce, via a 'Routes into Rail' campaign which seeks to get youngsters and their parents to see the

railway industry as a positive career choice; and continuing to see if there are ways to increase private financing in the rail network.

Promoting the positives of rail

However, we will continue in 2020 to promote the positive aspects of the rail industry. The fact it delivers over £36 billion in economic benefits, supports some 600,000 jobs and £11 billion in tax revenue, and that for every pound spent on the railways, £2.20 of income is generated in the wider economy, showing rail is not just important in its own right but is also crucial for UK plc more widely.

As we look to the future, despite the uncertainty there are reasons for the railway industry and its suppliers to be optimistic. Passenger numbers and freight have gown massively in the last 20 years, and long-term are set to continue. The Government and Opposition parties seem committed to strong rail infrastructure investment, as evidenced by the £48bn in CP6. And even with political and Brexit uncertainty, our members tell us that if

only we can make inroads on some of those priority issues above, they are ready to invest more in people, skills, plant and equipment, to help build the customerfocused, world-class, railway of the future we all want to see, both at home and abroad.

Get involved

So RIA will do everything it can to try to deliver for you, our valued members. For your part, please do come along and participate in our various forums, meetings, events and initiatives, so we can not only build a better railway, but also build an even better RIA in the New Year too.

Kind regards,



Darren Caplan Chief Executive, Railway Industry Association



How RIA can work for you

RIA's first priority will always be ensuring we are representing and supporting you, the membership. Our key functions are ready to work with you to build a bigger and better rail supply community: – Public Affairs & Policy, Events & Information, Technical & Innovation, Exports, Operations (Membership, Events, Marketing and Business Administration).

In this Yearbook, you'll find a wide range of ways to get involved, including attending our more than 70 networking events a year, receiving regular market intelligence from our three mail outs each week, getting involved in our lobbying efforts through initiatives like the Rail Fellowship Programme, joining us on a trade mission, joining a regional event or attending an interest group session, to name but a few.

We look forward to seeing you over 2020 and to working with you to deliver an even better rail industry!



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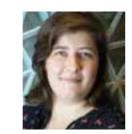
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What does RIA do for its Members?

RIA helps to grow a sustainable, high-performing, railway supply industry, and to export UK rail expertise and products. We promote and represent our members' interests to policy makers, clients and other stakeholders in the UK and overseas.



Public Affairs and Policy - member benefits

- Preferential rates for RIA's award-winning Annual Conference
- RIA-organised politician visits to Member sites, through our Rail Fellowship Programme
- Weekly Political and Brexit briefings, updates on commercial news, and industry events
- Exclusive invites to a range of Regional and National Policy Roundtables, plus RIA's annual Parliamentary Reception

We represent the rail sector to decision makers and influencers. highlighting issues of importance to our members.

We campaign for sectoral growth and showcase the value of the UK rail industry.

Technical & Innovation - member benefits

- Exclusive access to online communities for a wide range of Interest Groups
- Weekly TechTalk email, covering technical and research related news, events and developments
- Exclusive invites to 30+ technical events and workshops a year, plus Unlocking Innovation conferences
- Preferential rates to network and exhibit at our award-winning 2-day Innovation Conference

We drive innovation in rail,

through our Unlocking Innovation programme and our award-winning 2-day Innovation Conference.

We support industr with academia; RIA partner of the UK Ra Innovation Network £92 million partners

Exporting – member benefits

- Listing in RIA's online Member Directory, which is shared at global events where RIA has a presence
- Weekly Exports email, summarising global opportunities, upcoming trade missions, exhibitions and briefings
- Access to our member-only Exports online community

We help UK rail companies export across the world, as the only fully accredited Department for International Trade (DIT) Trade Challenge Partner in rail.

a variety of countries, including at the biennial InnoTrans trade show in Germany - the largest in the world for rail.

We explain industry views to assist policy makers and legislators, providing statistics and facts, to improving the industry's chances of success.

ry collaboration	We contribute to development of
A is a founding	industry standards and initiatives,
Rail Research and	working closely with clients on
k (UKRRIN), a	technical strategic programmes
ship.	such as Digital Railway and
	Decarbonisation.

We organise UK export missions in

We promote RIA members while assisting those companies that take part through DIT

Interest Groups

Much of RIA's activity is focused through a series of Technical and Special Interest Groups, covering key issues for members and invited stakeholders. Each group typically meets three times a year to discuss recent technical and policy developments, updates on standards, potential new work opportunities, best practices, lessons learnt and updates from major clients. We invite speakers from customer and other organisations. There are 12 groups covering various topics.

Technical Interest Groups

Electrification Technical Interest Group covers all technical issues on electrification and electrical engineering, including standards.

Information Management (IMG) Covers the use and development of Information Management for rail, including data, BIM and cyber security.

Infrastructure Technical Interest Group covers developments in the UK and European best practice, standards, research and other matters of technical interest for Civils and Track Infrastructure.

Safety, Standards & Sustainability Group covers key developments and best practice in standards, safety and sustainability in rail.

Signalling & Telecoms Technical Interest Group covers all technical issues on signalling and telecoms, including standards.

Traction & Rolling Stock Group covers updates and developments on rolling stock design and maintenance, R&D and innovation, national standards and policy.

Vehicle-Track Interface Group covers mitigation for Rolling Contact Fatigue and other track and wheel damage; adhesion and lubrication; 'system friendly' vehicle modifications and Vehicle Track Access charging Related research.

Special Interest Groups

Consultants Group offers regular access to senior industry procurement representatives.

Infrastructure Clients Interface Group invites suppliers to build relationships with Network Rail, Transport for London and other major infrastructure clients. Includes a subgroup on Economic Affairs.

Renewals Group looks at cost drivers for renewals.

SME Group explores key topics, including commercial projects, Brexit & exports, skills and industry structure.

Trains Clients Interface Group, with senior-level representation from the train builders, ROSCOs and major subsystem suppliers, includes updates from major clients and debate on key issues, such as future new train builds, rolling stock cascades, forward maintenance programmes and the DfT's rolling stock plans.

Roundtables

RIA hosts regular regional roundtables with industry executives giving the opportunity for RIA members to discuss key issues. Past guests at the roundtables included Chief **Executive of Network Rail Andrew** Haines, Department for Transport Permanent Secretary Bernadette Kelly, Chief Executive of Crossrail Ltd Mark Wild, the independent Chair of the Williams Railway Review Keith Williams, the Scottish Cabinet Secretary for Transport, Infrastructure and Connectivity Michael Matheson, Lilian Greenwood MP, Wales Office Minister Nigel Adams MP and Transport for Wales Chief Executive James Price.

In 2019 we have hosted 34 Technical **Interest Group** meetings attended by over 900 RIA members and guests.



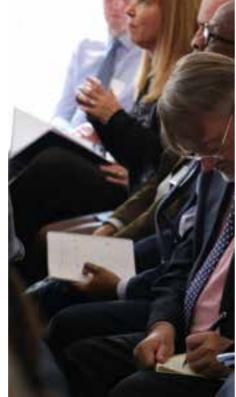






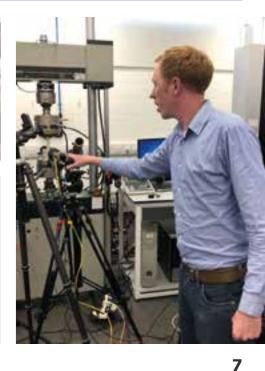


four roundtables attended by some 230 RIA members and guests.





In 2019 we have hosted **11** Special Interest Group meetings attended by some 450 RIA members and guests.



CableGuardian is the *only* product to offer proactive monitoring, detection and location of both insulator and conductor faults on live signalling power systems as specified in Network Rail specification NR/L2/SIGELP/27725.

JOIN THE REVOLUTION to prevent signal failures

IET

AWARDS

INNOVATION 2

FINALIST 2018

This unique product provides continuous monitoring of live signalling power supply systems at a cable section level without the need to power down the system, reducing the need for manual trackside fault-finding, reducing maintenance costs and 'boots on ballast'.

CableGuardian is the technological alternative to the 5 yearly manual cable testing requirement NR/L2/SIGELP/50000. Empowering the rail industry to move from the uncertainty of periodic testing, to a real-time condition based approach.

Key Benefits:

- Fewer boots on ballast fault finding and cable testing
- Quickly and accurately locate cable faults and cable theft
- User friendly web portal for fault diagnosis and location
- Allows trending of insulation resistance and insulation capacitance at a cable section level.

CableGuardian helping passengers to arrive on time.

For more information or to book a demo, visit https://cableguardian.viperinnovations.com

or speak to one of our experts on: 01275 78 78 78 or enquiries@viperinnovations.com



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Challenge Programmes

RIA actively champions the big issues for rail suppliers through the RIA Challenge Programme. The challenges share the common characteristic that, if properly addressed, they have the potential to improve the efficiency and whole life cost of delivering railway projects to the benefit of all parties.

Renewals Cost Challenge

In 2017 RIA members started to notice a downturn in renewals volumes. It became apparent that this was a Network Rail funding issue and was resulting in experienced staff being made redundant. Recognising this example of 'boom and bust' was counterproductive for everybody RIA worked with NR and the DfT to allow £200m of funding to be made available to reduce the impact. This work has led to further discussions about 'smoothing' the work profile in the transitions between funding periods.

Electrification Cost Challenge

RIA believes electrification is the optimal form of traction for an intensively used railway and reflecting this, a substantial programme of electrification was launched in 2009. Unfortunately, some of the projects had major cost and schedule overruns which led to the government stopping most electrification projects in 2017. As a result, RIA launched a new cross-sector initiative – the Electrification Cost Challenge - to establish the lessons which should be learnt and demonstrate that electrification can and is being delivered cost effectively. The report published in March 2019 has been influential in getting electrification 'back on the agenda' and already we see the Scottish Government announcing a rolling programme of electrification.

This cross-industry workstream commenced in early 2018 following the Rail Minister announcing an ambition to "take all diesel only trains off the track by 2040". RIA was a member of the industry taskforce which confirmed that it was feasible to meet this challenge and to achieve net zero carbon with a combination of additional electrification and the introduction of zero carbon battery or hydrogen fuel-cell self-powered rolling stock. RIA members have been actively developing and demonstrating these latter technologies to the point that train customers should be confident to place fleet orders. What is needed now is the clarity about which routes will be electrified and which will be self powered and RIA is supporting the cross-industry Traction Decarbonisation Network Study which will draw this map.

Standards Challenge

Standards are often criticised as being complex and driving up cost. Recognising this issue, Network Rail worked with RIA Members to develop a new process to allow third parties including suppliers, to challenge Network Rail's standards. This new process has resulted in over 70 challenges which are being actively managed through the process. One of the challenges resulted in a significant reduction in future electrification costs and another allowed a RIA Member to get a composite platform into service,



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Decarbonisation Challenge

resulting in a doubling of orders. Subsequently RIA has helped TfL to implement a similar process.

Signalling Cost Challenge

The Rail Sector Deal includes an objective to reduce the cost of digital signalling to European benchmark levels if the government provides a clear longterm implementation plan against which suppliers can plan. RIA members have helped develop the 'Long Term Delivery Plan' (LTDP) which has now been published and so RIA is supporting the work to establish the actions needed to both build up industry delivery capability and to reduce unit costs.

Major Projects Challenge

RIA is now working on a best practice report for achieving Excellence in Major Projects.



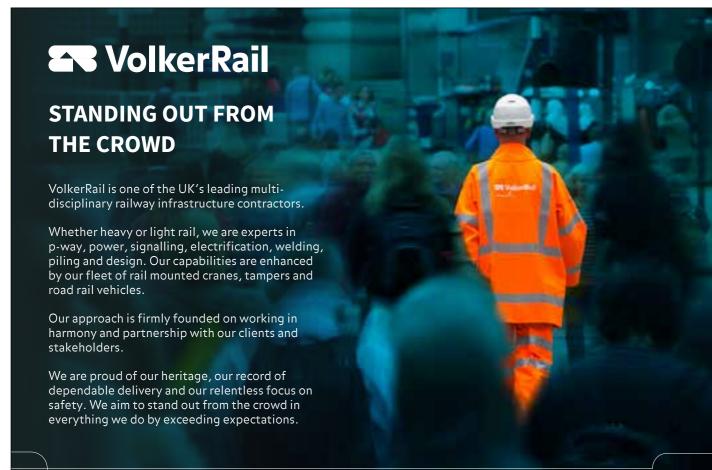


This initiative, which launched in 2018, pairs politicians with RIA members to promote the work of the organisations that build, maintain and enhance the UK's railways.

The Programme helps to educate politicians on the sector's crucial importance to the UK by placing them at state-of-the-art sites where highly skilled rail professionals showcase the fascinating work they do. It focuses on three key areas – innovation, exports and skills.

Participating Fellows spend a day 'on location' with a RIA Member whose work is relevant to their role or constituency. Participants become part of an annual RIA Railway Fellowship Class and are recognised at our yearly Parliamentary Reception in November – where MPs are reunited with the organisations they visited. At the Reception, each MP is given a trophy, marking their participation and as a reminder of the importance of rail supply.





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Testimonies from the Rail Fellowship Programme



"Visiting the National Training Academy for Rail and Siemens' Traincare Facility, as part of RIA's Rail Fellowship Programme,

businesses that are based in Britain."

today was a great opportunity. I was able to see up close how the rail industry is helping to generate highly valuable skills for young people and why this site is so vital a resource in building up the UK's skills capabilities as we prepare to leave the European Union. Thank you to the whole team for a fascinating day."

Rail Minister Chris Heaton-Harris MP



"My visit to the **Bombardier** site in Ilford as part of the RIA Railway Fellowship Programme provided brilliant insight into the rail supply chain

and how the rail industry is an important part of our economy. As with all highly skilled industries I was pleased to see how Bombardier are investing in skills, apprentices and innovative practices to support high quality rail services. The long term success of the UK's economy and productivity is dependent upon a thriving supply chain to deliver critical investment in the rail network. I would



Transport Select Committee Chair Lilian Greenwood MP



like to see the Government look at new ways to support these

Home Secretary Priti Patel MP

"It was exciting to see all the great work that is being done in the rail industry and to meet the people on the ground who are making it happen. From manufacturing trains, to software and digital innovation, the rail sector has been at the heart of the Midlands' economy for over a century, and I was happy to see first-hand the transformative impact investment in rail is continuing to have on the region, and the whole of the

Innovation Centre gave me a great insight into the crucial work being done to bring the Digital Railway to Britain and secure all the benefits that come with it. I was also pleased to tour Derby Station and see for myself the investment being delivered to provide better journeys for the four million customers who use the station



Get involved

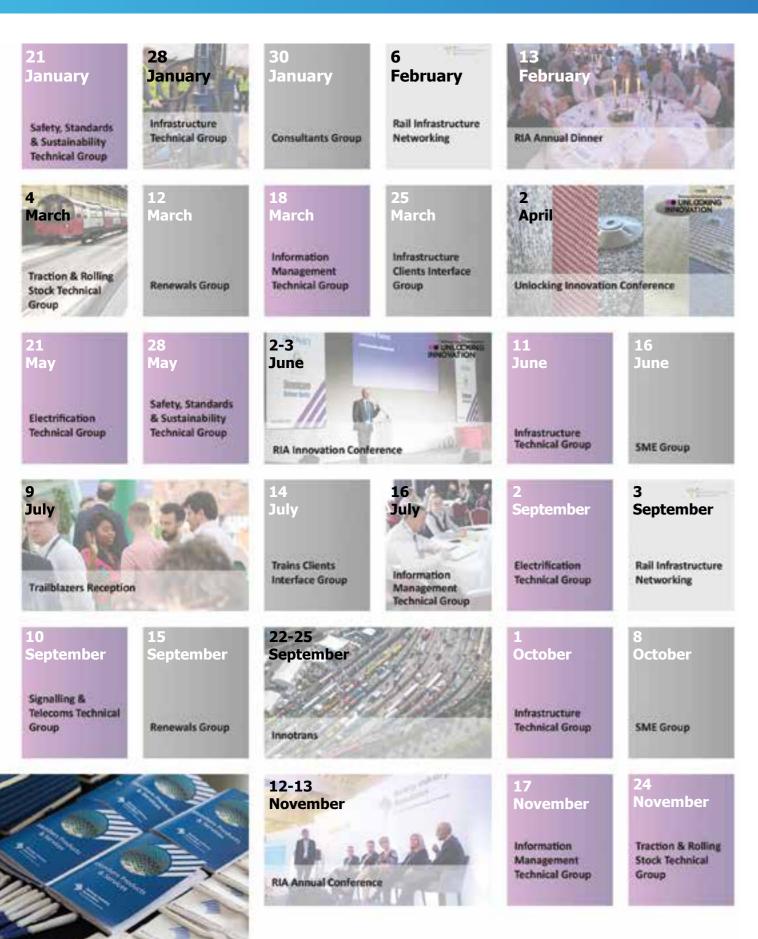
RIA is looking for sites for our 2020 RIA Rail Fellowship Programme.

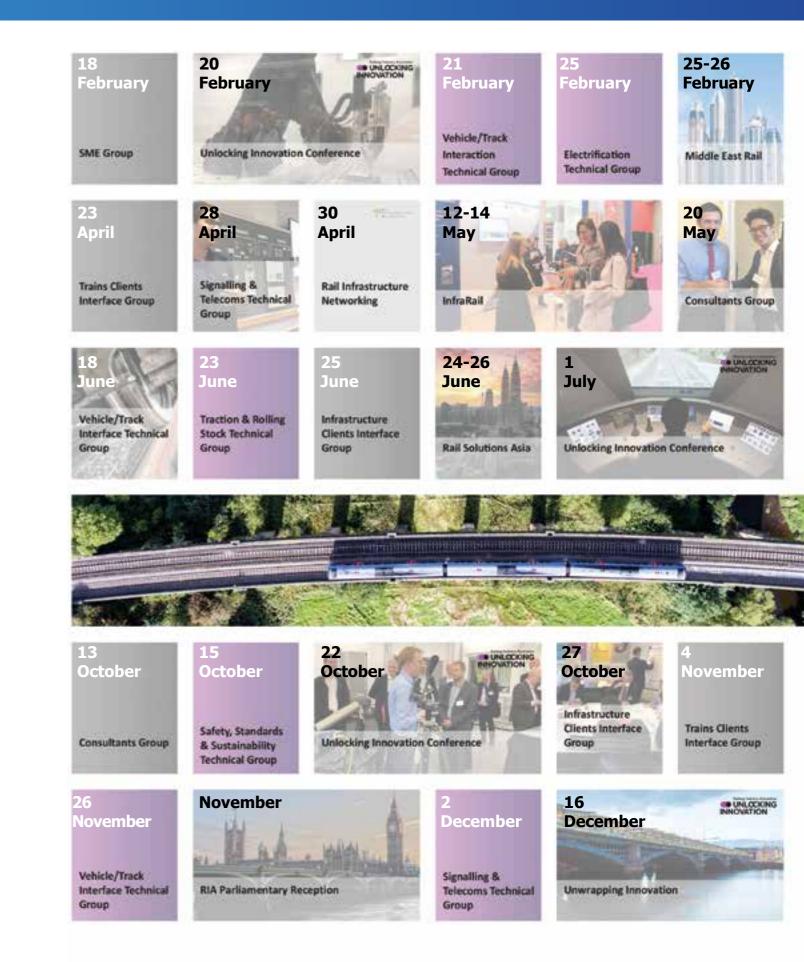
If you are a RIA member and would like to host a **Rail Fellowship Programme** visit, please contact Max Sugarman at max. sugarman@riagb.org.uk

RIA 2020 Events

This calender highlights regular RIA and partner events*, including conferences, Special and Technical Interest Groups, Unlocking Innovation Events, Export missions, and partner events where RIA has significant presence. Find out more at **www.riagb.org.uk/events**

*Please note that our many "one-off" events, such as Policy Roundtables are not listed.









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THE REAL PROPERTY IN COMPANY

Campaigns RIA campaigns on a number of key issues, on behalf of the rail supply community.

mT.

Our key campaigns include:

Demonstrating the value of UK rail

In February 2018, RIA published The Economic Contribution of UK Rail in response to concerns that the size and economic impact of the rail industry was being under-reported.

This ground-breaking report, developed by independent researchers Oxford Economics, found that UK rail:

 Contributes over £36bn annually to the UK economy (a greater economic impact than the food, drink and tobacco manufacturing and the chemical and pharmaceutical industries)

- revenue
- network

Ending 'Boom and Bust' Rail Funding

'Boom and bust' funding in the rail industry is having a significant detrimental effect on the supply chain, leading to redundancies and recruitment freezes, reductions in investment, threatening the ability of SMEs to survive and adding up to 30% to rail industry costs. This is across both the infrastructure and rolling



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Provides around 600,000 jobs (employing more people than the entire workforce of Birmingham)

Generates £11bn annually in tax

Generates £2.20 of income from every £1 spent on the rail stock sectors.

RIA believes a long term strategy is needed that delivers consistent workloads for the industry, building up a sustainable supply sector that can deliver effectively, to time and budget.

Cost Effective Electrification

Electrification remains the optimal form of traction for an intensively used railway, as it has a number of benefits, including costing less in the long term, reducing journey times, producing less wear on the track and being more environmentally friendly.

In 2017, the Government halted a



www.riagb.org.uk/AD2020

number of electrification schemes due to cost overruns. RIA's Electrification Cost Challenge report, published in March 2019, shows how the cost of electrification can be reduced by up to 50% in comparison with some past projects.

RIA is urging the Government to develop a ten-year rolling programme of electrification for the core network, whilst developing new technologies like hydrogen, battery and hybrids for regional lines.

Supporting Major Projects

The UK rail network needs major projects to deliver additional capacity. We continue to support HS2 and Crossrail, but we also seek to ensure support is maintained for Northern Powerhouse Rail, East West Rail, Trans Pennine Route Upgrade, Midlands Rail Hub and Crossrail 2 all of which will provide significant economic boosts across the UK as well as improving connectivity and capacity.

Preparing for Brexit

Brexit poses a number of challenges and opportunities for the rail industry.

Challenges include the need for certainty on whether rail standards will be harmonised, diverged, or a mixture of the two, ensuring there is continued access to certain a skilled workforce and avoiding any overly bureaucratic tariff or non-tariff barriers, which could cause border delays for exporting suppliers.

The main opportunity is the role of rail in trade deals. Given the size and strategic significance of rail to UK plc, it is important the rail sector is included in - and takes advantage of - trade deals when the Department for International Trade negotiates with non-EU and EU countries.

RIA is working to ensure the challenges are mitigated whilst the opportunities are seized.

Rail Enhancements

In 2019, RIA secured a campaign win with the publication of the Rail Network Enhancements Pipeline. The publication provides some visibility of upcoming projects and was the result of significant campaigning by RIA, including:

- We met with parliamentarians across the parties
- We produced a SURE poster,







including a hard-hitting logo, which we took to the party conferences

- We ramped up the PR, and secured an interview on BBC Radio 4's Today programme to talk specifically about the enhancements issue
- We conducted a progress review to report on how far the Government had implemented the Transport Select Committee's recommendations, since first agreed 12 month's previous, in September 2018
- We launched an Enhancements Clock, showing the amount of time since the Government committed to publishing the RNEP list of projects without yet doing so - this stood at one year and 26 days when the new Ministerial team at the DfT made its announcement and at last released the list on 26 October. just ahead of Transport Secretary Grant Shapps' first appearance before the Transport Select Committee

In 2020, we will continue to monitor these developments on behalf of its members in the months ahead.







THE MOST INNOVATIVE AND TECHNICALLY ADVANCED MEWPS AVAILABLE TODAY

New product development relies upon practical, technical and sales experience, and this is ably illustrated in the evolution of Rail Product's range of Mobile Elevated Work Platforms (MEWPs).

The team at Rail Products has drawn on decades of front-line working experience in the rail industry to help develop the company into one of the UK's leading manufacturers of MEWPs.



This has earned it industry plaudits for its foresight and for its development of rail road products that continue to redefine the parameters of a machine's current capabilities.

In conjunction with Manitou, which provides a worldwide backup service. Rail Products continues to design and engineer innovative and technically advanced road/rail MEWPs such as the ART 17TH and 17THM Multi Gauge, both available with Pantograph. The unique multi-gauge system of the 17THM allows the machine to work on and across all major rail lines around the world.

Highly reliable and technically superior to the competition, demand for these specialist vehicles has been unprecedented throughout the UK as well as internationally. The MEWPS are now approved for use in many countries including Australia,



Austria, Belgium, DB (Germany), Denmark, Netherlands, New Zealand, Norway, Poland, Romania, Switzerland and the UK.

Furthermore, a new framework agreement recently signed with Manitou Group will now extend and reinforce the highly successful partnership between the two companies, as well as accelerate Rail Product's expansion into new global markets through the development of new concepts together.

Exports

Rail is not only a crucial mode of transport, but also a major exporter for the UK.

UK rail suppliers and RIA Members work with partners and clients in the UK and around the world to plan, design, build and operate advanced and sustainable railways. The UK offers first rate expertise, innovation and value at every level in all areas of rail discipline from professional services to manufactured products.

RIA's aims are to assist our Members and the wider industry to help them export their products and services and - by working with DIT - to increase the exporting potential of the sector.

RIA organises numerous export events on our own, as well as under our long-established Trade Challenge Partnership (TCP) rail delivery partner status with Department for International Trade (DIT). Events include:

- Seminars
- Meet the Buyers/1-2-1 meetings
- Road shows in the UK •
- Briefing and Educational Rail Tours
- Inward Missions •
- Outward Missions
- UK Pavilions at overseas trade fairs

Trade Challenge Partner

RIA is the only organisation in the sector fully accredited by DIT as a Trade Challenge Partner, this allows us to deliver events,

research activity and to administer DIT's Trade Access Programme (TAP) grants for SME's exhibiting at selected Trade Fairs.

The TAP grants that **RIA** administers for DIT allows UK SME's to apply for financial support grants to exhibit helps UK business get the most from overseas trade shows.

Highlights from 2019

- Submitted evidence to Parliament's International Trade Select Committee, asking for greater export supportin promoting rail products overseas, greater rail content, more grant funding for SMEs
- RIA attended Middle East Rail with 30 companies on the UK Pavilion and a reception organised by RIA & HM Consul-General hosted, with 160+ attendees.
- RIA organised a Rail Mission to Australia and New Zealand with 12 companies
- RIA organised a mission to Rail Baltica's Global Forum where **Exports Director Neil Walker**

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www.railproducts.uk.com

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at core overseas rail exhibitions. The funding is available to both members and non-members and



- At Railtex at the NEC Birmingham, RIA organised a 'Meet the Commercial Office' over two days with 133 meetings booked by 54 companies for 14 DIT officers
- In September, RIA attended Trako with 26 UK exhibitors with separate visits and tours from the UK Rail Minister Chris Heaton-Harris MP, the Polish Secretary of State for Infrastructure Andrzej Bittel, HM Trade Commissioner to Europe Andrew Mitchell and HM Ambassador to Poland Jonathan Knott
- In October, RIA organised a trade mission to India and in December, RIA is organising a UK Pavilion at AusRail Plus



Unlocking Innovation M.A.D.E. for Rail

How new materials, automation, data and sustainable energy sources are improving UK's railways

According to the Organisation for Economic Co-operation and Development, innovation is both a process and an outcome and the Railway Industry Association (RIA) has been working with its members to understand how to improve the innovation process through a series of Unlocking Innovation events. RIA is a founder member of the UK Rail **Research & Innovation Network** (UKRRIN), which was formed in 2017 to bring together the leading Universities in Rail with industrial collaborators, along with funding from the Higher Education Funding Council for England (HEFCE), to create a step-change in innovation.

RIA has looked at the needs of the industry for practical implementation of innovation, and following the work on technologies which deliver this, we have arrived at four key themes – Materials, Automation, Data and Energy, or M.A.D.E., to give our members and the rail industry an opportunity to have a first hand experience with these technologies and its potential implementation in rail. Each Unlocking Innovation event is hosted in an iconic location, highlighting the work that is being done on each theme.



Materials

Unlocking Innovation – Composites in Rail event was hosted by the National Composites Centre in Bristol on 27 Sept 2018. 96 attendees from 78 organisations joined the event to discuss the innovative use of composite materials for railway infrastructure and rolling stock.

The construction of new structures, tunnels, platforms, track and ballast, as well as the manufacturing of rolling stock, mean that the rail industry is a significant user of materials and resources. It is increasingly important that the industry considers how it uses these materials to ensure it is delivering both environmentally and cost-effectively.

Composites are one example of the potential use of new materials, offering lighter, stronger and more durable solutions compared to traditional materials. Fibre-reinforced polymer (FRPs) composites are already being used in track and station infrastructure, as well as rolling stock manufacturing, interior furniture and platform systems.

Automation

Unlocking Innovation – Automation in Rail event took place in Sheffield on 30 May 2019 at the AMRC Factory 2050. 111 Attendees from 72 organisations joined the event to discuss how automation can benefit the rail industry and what exciting new opportunities will come out of it.

Maintaining and monitoring the UK's vast network of railway infrastructure requires a lot of manual work, which, can often be in a dangerous environment and can mean reduced or no service on railway lines, with the potential costs and disruption this brings.

Instead, rail businesses are increasingly exploring automated systems that can allow for



monitoring key assets with minimal disruption to passengers and freight services. Using innovative robotic platforms, augmented and virtual reality, machine learning, the 'Internet of Things', data gathering and analytics tools mean the industry can now automate many of these tasks, leading to improved safety for passengers and employees, and improved services on our railways.

Data

Unlocking Innovation – Data in Rail event took place on 08 January 219 at Birmingham University. 176 attendees from 120 organisations joined the event to discuss opportunities created by rail digitalisation to utilise data.

The UK rail network generates an immense amount of data every day. New digital tools that collect, understand and present this data opens up an array of possibilities to improve our railways, helping everyone from those who build and maintain our rail network and those who operate it to those who use it.

Data includes everything from passenger-facing interfaces to rolling stock and station design, scheduling, disruption management, and track maintenance benefits from intelligent use of data. Ensuring we keep data secure, however, is of vital importance.

Energy

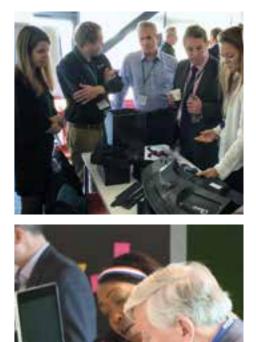
Unlocking Innovation – Energy in Rail event took place on 26 March 2019 in Coventry at RIA member Schneider Electric. 74 attendees from 54 organisations joined the event to discuss practical solutions for efficient energy use in rail.

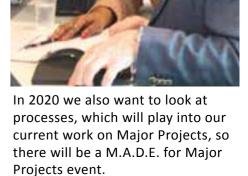
In 2017, the Government set out a challenge to the rail industry to decarbonise the network by 2040. Since then, the Rail Industry Decarbonisation Taskforce has set out how we can achieve this goal, made all the more pertinent by the UK's commitment to achieve net zero carbon emissions by 2050, with Scotland targeting 2035 to achieve the same goal.

There is no single solution for decarbonising our rail network. It will require the electrification of intensively used rail lines, with a rolling programme to extend the frontier of electrified railways. For less used, commuter and rural lines, new technologies like battery and hydrogen can help replace diesel passenger trains. Developing these technologies further will be vital, with consideration of how they can be applied to freight and passenger rolling stock. Ensuring our stations and depots are optimised to reduce energy usage will also be essential.

After further development work with Network Rail, which confirms these as the key technologies for their own R&D programme, we have decided to look at M.A.D.E. from another angle and to see how each technology maps to the sectors of our industry. Therefore, we are currently planning the 2020 programme along the lines of our upcoming pilot event - M.A.D.E. for Rolling Stock, which will focus the industry on the UKRRIN Centre of Excellence at Huddersfield University on 10 December 2019. The series will also cover M.A.D.E. for Infrastructure and M.A.D.E. for Signalling.









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InnoTrans, the world's biggest rail trade fair returns to Berlin from 22 to 25 September 2020.

Two years ago, when the Show was last held, there was a strong presence from the UK, with RIA Members and UK companies out in force with over 120 registered UK companies plus a number of UK based multi-nationals exhibiting at the show.

The RIA Team attended to support our three RIA UK GREAT branded Pavilions, showing the then-Transport Secretary Chris Grayling around during his RIA arranged tour of the UK Pavilions and various UK companies exhibiting independently in the many halls.

RIA also arranged with DIT and sponsors, (UKRRIN, Ramboll, SNC Lavalin/Atkins and Furrer + Frey) - a major networking reception for members and UK Companies. Attendance on the night was around 280 delegates, with rail representatives from 16 International countries attending. Grayling spoke alongside Her Majesty's Ambassador



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to Germany Sir Sebastian Wood and RIA's Chief Executive Darren Caplan.

RIA will be back for InnoTrans 2020 – contact Exports Director Neil Walker at neil.walker@ riagb.org.uk to find out more.





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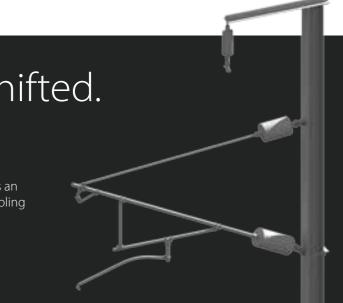
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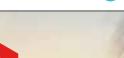
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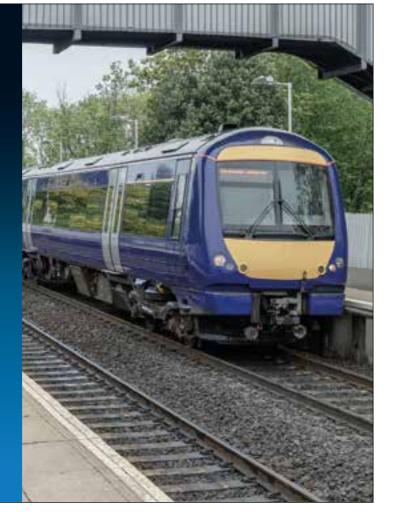
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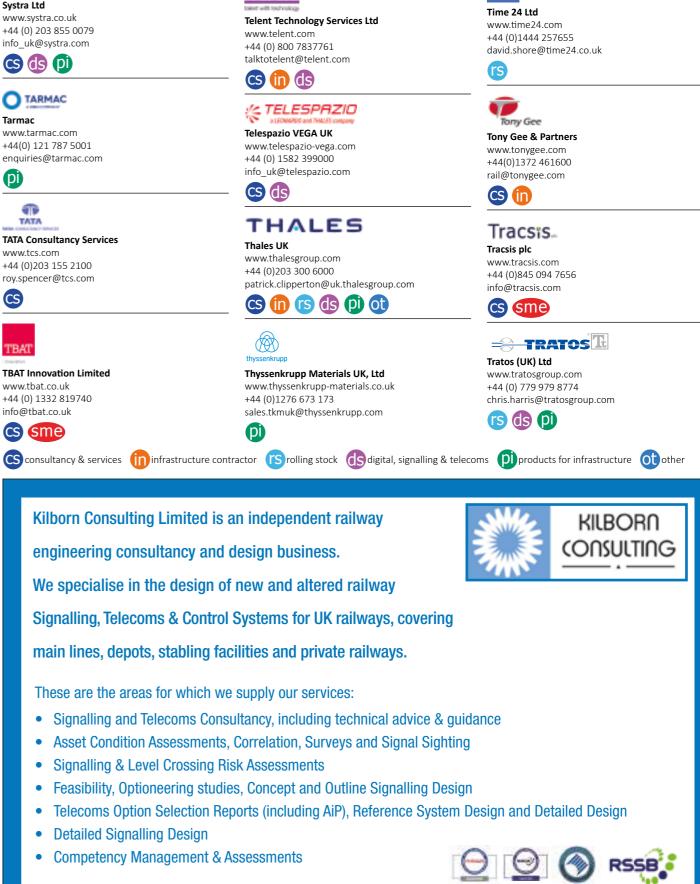
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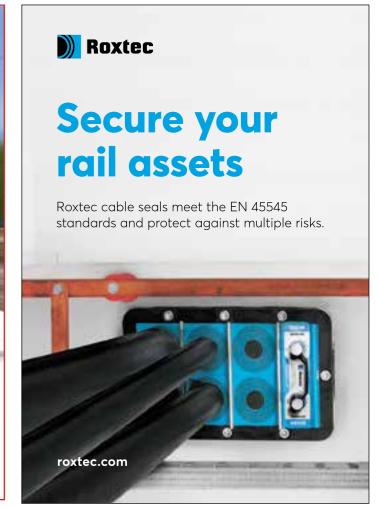
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