



ROLLING STOCK NETWORKING

Incorporating

The RSN Conference by: **RailBusinessDaily**
Sponsored by: **Achilles**

Sponsored by

WESTERMO

SHOW GUIDE



Derby Arena

30 September 2021

9.30am to 3.30pm



JOBSON JAMESRAIL
THE RAIL BROKER

Bringing the Rail Industry Together

N train

INNOVATE.



- Our industry focused, highly skilled, experienced Engineers are the best in their field and work on innovative projects shaping the future of rail.
- Our willingness to share risk, enjoy the rewards and work together with our world wide customer base underpins our commitment to long term relationships

BUILD.



- Local vehicle build capabilities from our dedicated, fully equipped depot in the UK
- Major fleet enhancement and conversion capabilities

OPERATE.



- UK wide operations capabilities giving you piece of mind that the vehicle can be in location when required
- Management of all collection, delivery, testing and commissioning responsibilities through Loram 365 Control

MAINTAIN.



- Delivering maintenance for high fleet reliability and availability from a dedicated maintenance facility at the RTC in Derby
- Field base maintenance capabilities across mixed OTM, Engineering and Freight train fleets
- Providing turnkey engineering solutions to boost fleet performance
- All maintenance provided to meet Entity in Charge of Maintenance regulations



Call us: 07554 939 396

Email us: commercial@loram.co.uk

[in](#) [t](#) #LoramRailOps



Contents

Welcome to Rolling Stock Networking	4 - 5
Exhibition floor plan	6 - 7
Meet the railbusinessdaily.com speakers	10 - 13
Event features	16 - 19
Exhibitor directory	56 - 66

Meet our sponsors

Lead sponsor



Jobson James Rail is an independent insurance broker with over 350+ railway company clients working in all aspects of the rail industry. We design and implement innovative insurance solutions through a detailed risk management-based process developed by our directors over the last 20 years which includes contract analysis to deliver aggressive and competitive premiums with niche rail specialist insurers.

Associate sponsor



On Train is a proven partner for rail vehicle technical enhancements, maintenance and railway products. We provide managed projects for many train operators that keep their fleets operational and reliable. On Train is also a rail sales specialist providing international route to market services for OEMs – offering air conditioning, passenger counting and labour supply solutions for trains trams and buses.

Platinum sponsor



Westermo is a global leader in reliable and secure railway data communications, which include wired and wireless solutions that form the backbone of operational and passenger systems worldwide, working closely with Train Manufacturers such as Alstom, Stadler, and Siemens. In the UK, our networking solutions are integral to operational systems such as TCMS and DCO. In addition, our latest wireless and 5G solutions ensure reliable on-board connectivity for operational and passenger comfort applications such as PIS, CCTV and Passenger Wi-Fi.

Gold sponsor



AEGIS is a member of IKOS Group, a global consultancy business with headquarters in Paris, France. Through our Engineering and Certification businesses we offer engineering expertise and innovative solutions to the Rolling Stock, Plant, Telecommunications, Electrification, Signalling and Infrastructure sectors within the rail industry.

Silver sponsor



RIA is the trade association for the UK-based suppliers to the railway industry. We have been established for over 140 years, with about 200 member companies representing a large proportion of the supply chain. Our network of rail contacts extends to thousands; many within our member companies, but also within government/industry bodies, as well as academia and adjacent/emerging sectors.

Bronze sponsor



railbusinessdaily.com (RBD) is the UK's leading rail daily news and profile-raising platform. RBD's website receives c8,500,000 visitors a year and has more than 50,000 daily subscribers. Our LinkedIn network contains more than 14,500 connections, all organically grown with the highest engagement rates of any rail industry media outlet in the UK.

Bronze sponsor



Composites UK is the trade association for the UK composites industry. The association acts to encourage continuous growth and development of the industry, promoting the best practice use of composites materials.

Bronze sponsor



CAF is an international market leader in the design, manufacture, supply & maintenance of rolling stock and associated equipment for rail & infrastructure systems.

Bronze sponsor



Railway PRO Communication Platform is the most effective communication tool of the railway business environment, tailored to the needs of railway professionals and investors to provide them with business opportunities existing on the market.

Bronze sponsor



Rail Forum Midlands is the regional trade association for the rail supply chain. A not for profit organisation providing a range of services to members with a key focus on helping them to grow and succeed.

This publication was produced by railbusinessdaily.com on behalf of RSN.

The entries contained in the exhibitor directory are based on information supplied by the respective companies. The publishers cannot be held responsible for any errors or omissions. All information within this guide is © Rail Infrastructure Networking Ltd TA RSN Events or is the copyright of the originator, no unauthorised dissemination, copying or disclosure of this information is permitted; save for the sole intended purpose of representing the products and services of client exhibitors.

Bronze sponsor



GBR-Rail is a leading UK supplier of specialist rail depot equipment, required for the routine daily maintenance of passenger trains.

Bringing the rail industry together

Welcome to Rolling Stock Networking (RSN) – a vibrant, free-to-attend, exhibition complemented by the railbusinessdaily.com conference, which provides a major networking platform for suppliers and customers.

We look forward to a great day. Visitors to RSN at Derby Arena will have the chance to meet companies large and small from as far afield as Austria, Canada, The Netherlands, Spain, Sweden and Italy, as well as from around the UK.

Many will be innovative, entrepreneurial organisations, offering new products and services that will transform both the industry and the passenger travelling experience.

What to expect

The RSN 2021 rail show is focused specifically on Passenger and Freight Rolling Stock, Technical Enhancements, Depot Equipment, Ancillary Services and the Rail Supply Chain. In total, RSN will showcase 150 diverse exhibitors, many of which are not normally seen on the exhibition circuit, adding an exciting and fresh perspective to the event.

A number of rolling stock manufacturers will be exhibiting, including Alstom UK, Stadler, Vivarail, and CAF. Major equipment suppliers taking part will include LPA Group, FISA, Westermo, Depot Rail, Garrandale, and many more.

Innovators, engineering companies and the services sector will be strongly represented at RSN, so visitors will be able to see first-hand both the dependable services and the exciting innovations needed to transform the passenger and freight industry.

A wide range of exhibitors

Companies of all sizes, both large and small, will be represented among the exhibitors and visitors to the show, giving all participants in the passenger and freight rolling-stock sector an unmissable opportunity to meet customers and suppliers, to learn from industry leading speakers and to engage and network.



Located in Derby, at the heart of the rail industry, RSN is easy to get to by car or by train. The venue has a large car park and is just a mile from Derby station, and the free-to-attend event has been carefully timed to avoid clashes with other rail industry events, despite the crowded railway calendar that has resulted from the ending of COVID-19 restrictions.

Safeguards will still be in place, following government guidelines, so exhibitors and visitors alike will be secure in the knowledge that their safety and wellbeing is paramount.

Joint Organiser Keven Parker said: “We are very pleased that RSN (Rolling Stock Networking) is back in force in 2021. It was created in 2019 to mirror the highly successful RIN (Rail Infrastructure Networking) series of events but with a focus on the Traction and Rolling Stock Market.



The event provides a unique reach for railway rolling stock-related supply chain companies to make contact with a wide range of operators, leasing companies, depot infrastructure companies, consultancies, maintenance companies, new train builders and other supply chain companies.

We are especially delighted to welcome the Railway Industry Association Meet the Buyer and the AEGIS Technical Seminars as additional attractions to the show in 2021.

railbusinessdaily.com
Conference



The event is complemented by the railbusinessdaily.com conference, where an impressive array of industry-leading experts will deliver engaging presentations, sharing their knowledge, experience and innovative working practices during a series of sessions throughout the day.

With speakers from throughout the rail industry, the presentations and topics will undoubtedly have something of interest to everyone.

The conference, which will include panel discussions and Q&A sessions, will give both delegates and exhibitors the opportunity to learn about projects, innovations, successes and real-life railway experiences that will help their businesses

to grow and prosper – all delivered in railbusinessdaily.com’s simple but impactful style.

David McLoughlin, CEO at railbusinessdaily.com, said: “RSN is already drawing the crowds and we are really pleased that the organisers have agreed to let us play our part in what promises to be a fantastic day.”

Railway Children charity



RSN supports the Railway Children charity, which fights for vulnerable children who live alone and are at risk on the streets.

It provides protection and opportunity for children with nowhere else to go and nobody to turn to.

The organisers will host a raffle and Vintage Trains has donated a fabulous prize of four First Class carriage tickets on a Vintage Trains excursion. All proceeds will be donated to the Railway Children. Please purchase from the Railway Children stand in the foyer.

RSN 2022

RSN 2022 will be back in Derby on Thursday, 7 July 2022.

Book your space by emailing info@rsnevents.co.uk



RSN 2021

Sponsors



Railway Industry Association						Meet the Buyer					
DIT		Siemens		Achilles		Unipart Rail		Alstom Group		Hitachi Rail	



Key:

- Reception
- Emergency Exits
- Toilets
- Cafe

RailBusinessDaily

railbusinessdaily.com (RBD) Conference at RSN



Inside Track
Rail Director
RBD



TXM Group	dormakaba	Silicone Engineering	SLC operations	MTAG Composites	En Pro Group
-----------	-----------	----------------------	----------------	-----------------	--------------

10

Alphatronix	DATUM Composite Products	Tyneside Safety Glass	Composite Braiding	Sella Controls Ltd	Railway Industry Association
-------------	--------------------------	-----------------------	--------------------	--------------------	------------------------------

Millenium Site Services	Lumier Ltd	Liebherr	Creative Design Transport	Vivarail	Hoppecke
-------------------------	------------	----------	---------------------------	----------	----------

9

Aura Brand Solutions	mpro5	EBC Brakes	ENAG	Nord-Lock Group	Railway Support Services
----------------------	-------	------------	------	-----------------	--------------------------

Vintage Trains	Solo Rail Solutions	LAPP Group	Mot McDonald	Chrysalis Rail	Mattei Rail and transportation
----------------	---------------------	------------	--------------	----------------	--------------------------------

8

Airquick (Newark) Ltd	RSG Engineering	Rail Freight Group	Ganymede Solutions	Paintbox Transport Services	Alstom UK & Ireland
-----------------------	-----------------	--------------------	--------------------	-----------------------------	---------------------

Craig & Derricott	TBAT Innovation	LJA Miers	Briben Products	Harry Needle Railroad Company	Channel Compliance
-------------------	-----------------	-----------	-----------------	-------------------------------	--------------------

7

Hepworth Rail	Northeast Transport Supplies	AD Comms	Eminox Ltd	ICP Ddatec Antonics	PROVERTHA
---------------	------------------------------	----------	------------	---------------------	-----------

Capitol Industrial Batteries	Premier Rail Pits	CTM Powered by Sopra Steria	SET Limited	Gemini Rail Group	Jones Nuttall
------------------------------	-------------------	-----------------------------	-------------	-------------------	---------------

6

Multi Mover UK	LEM International SA	Plastic Coatings	CoMech Metrology	Composites UK	netwiss
----------------	----------------------	------------------	------------------	---------------	---------

A B C D E F

G H J K L M

N O P

Design and Analysis	Muirhead	TVS Supply Chain Systems	Segula Technologies	Serco RTS	Sabre Rail
---------------------	----------	--------------------------	---------------------	-----------	------------

5

STAUFF UK Ltd	Dartford Composites Ltd	Orange Train Wash Ltd	Strukton Rolling Stock BV	FISA	Luso Electronics
---------------	-------------------------	-----------------------	---------------------------	------	------------------

AEGIS	Astute Electronics	Harmill Systems	FirstClass Safety & Control	Depot Rail	GBR Rail Ltd
-------	--------------------	-----------------	-----------------------------	------------	--------------

4

IM Kelly Rail & Aerospace	LEM International SA	Schaltbau	Dellner Polymer & Glass Solutions	TotalKare	CMCA (UK)
---------------------------	----------------------	-----------	-----------------------------------	-----------	-----------

Silver Fox Labelling	PremCal	LORUM UK	PSL Assemblies	One PLM	Holbro Engineering
----------------------	---------	----------	----------------	---------	--------------------

3

Warringtonfire	Charcroft Electronics	Brodie Engineering	Time 24 Ltd	Hydram	LPA Group
----------------	-----------------------	--------------------	-------------	--------	-----------

Achilles	Replin by Hainsworth	RVCL (UK) AESYS	Abloy UK	Nubold Group	Jobson James The Rail Broker
----------	----------------------	-----------------	----------	--------------	------------------------------

2

Pullman Rail	On Train Infodev EDI DC Airco	Flotec	CAF	Westermo Data Communications	Jewers Doors
--------------	-------------------------------	--------	-----	------------------------------	--------------

To railbusinessdaily.com Conference

Railway Industry Association - Meet the Buyer

Belvior Rail Ltd	Custom Insulation	HARTING	Bio Circle Surface Technology	FliteTrak TP Group PLC
------------------	-------------------	---------	-------------------------------	------------------------

Railway Children

Rowe Hankins Ltd	Telemecanique Sensors	Flexicon	Staytite	Ten 47 Ltd
------------------	-----------------------	----------	----------	------------

To AEGIS Tech Seminars Foyer Lift 2nd Floor

Entrance



Media Partner

Technical Seminars 2nd Floor Via Foyer Lift

Exhibition Floor Plan

HARTING develops new solutions for energy distribution

See us at Stand no. C1

Connectors for rail applications need to be extremely robust, but also easy to install and maintain. HARTING has developed three new solutions for rail vehicles which focus on the safety and durability of the entire infrastructure and form part of a complete system of cabling that extends from the vehicle roof to the underfloor distribution.



Jumper cable housing system

The Han® HPR (High Pressure Railway) VarioShell is a housing system which has been specially designed for jumper applications. Thanks to a circumferential internal seal and mounting frame, the two-piece housing/hood achieves IP69K rating. As the cover is removable, the housing/hood can be installed from both inside and outside the rail vehicle. This also simplifies servicing and maintenance as faulty components can be replaced without disconnecting all the connections.

The contours of the VarioShell allow dirt deposits to slide off while channels guide water away from the housing screws. Special curvatures on the upper side ensure that ice and snow slide off without exerting pressure on the wall and housing, increasing service life.

The VarioShell is an open system that also houses mounting frames, cable managers and shielding plates to route and hold cables with different diameters. It can be used as a surface or panel mounted housing and is a robust alternative to distribution boxes for installation on the roof, outer wall or bogie.

High performance connectors for transformers

The Han® HPR HPTC (High Performance Transformer Connector) has been developed to meet all the requirements of the rail market. Hoods, housings and cable glands have been optimised for outdoor use, ensuring connections remain stable. Existing contours on the transformer can be reused, meaning design changes are unnecessary.

The hoods and housings are metallically contacting on all sides, which means the cover and underside are connected across the entire contact surface. This is a new development, being the first transformer connector that is specially designed for shielded connections.

Collecting and discharging residual currents is achieved with the Han® HPR HPTC P800 thanks to its two separate contact zones. It is directly connected to the flange housing by a surface on the underside and there is a thread on the upper side for a potential grounding, which dissipates the remaining residual currents. Neither shrinking nor taping are required in the assembly process and the interfaces are quick to prepare; simply crimp the contacts, insert the insulating body with shield contact into the housing, close the cover, and the cable side is ready.

Train power line for the vehicle network

The Han® HPR TrainPowerLine (TPL) replaces existing solutions such as UIC, power or Y-distributors for train busbars. It is tailored to modern trains running in a network and offers weight advantages of up to 10 kilograms per rail vehicle compared to previous standards. As a result, very little space is required to reliably supply all the electrical equipment and systems of the train.

A uniform solution replaces the many variants that were previously required for busbar construction and the number of parts used has been significantly reduced. At the same time, safety is top priority: male and female contacts are designed to be touch-proof and there are ground potentials on the top and bottom of the housing.

Previous interfaces for the underfloor were often hard-wired. The TPL is designed so that all connection points are now pluggable. The housings are equipped with Han® HC Modular high-current contacts that transmit power up to 800 A / 5100 V DC / 3000 V AC. The housing is based on the Han® HPR design and is made of corrosion-resistant aluminium die castings. Benefits include shorter installation times, economical use of materials, weight reduction and standardised assembly processes.



To learn more about HARTING's range of rail products and solutions, please visit www.harting.com/UK/en-gb/markets/transportation or email salesUK@harting.com

HARTING
Han[®]
PUSHING INDUSTRIAL CONNECTIVITY



“Often the little things provide the greatest benefits.”

Han® 1A - Compact, robust and versatile.

Space-saving universal connectors for railway vehicles

- **Compact and lightweight:** EN 45545-2, R22-24, HL1-3. IP 20 / IP65
- **Flexible applications:** Options for data, signals and power
- **Highly versatile:** Door systems, sounders, lighting, wipers and more

One Range. No Limits:
www.HARTING.com/UK/en-gb/compact-connector-rail



The railbusinessdaily.com conference – with six industry professionals

railbusinessdaily.com conference is sponsored by Achilles



Join us at the railbusinessdaily.com conference today which will run between 9.50am and 2.30pm.

The conference features six leading industry professionals who will share their knowledge, experiences and innovative working practices during short sessions.

With sessions throughout the day and speakers drawn from all sectors of the rail industry, the topics will be varied and will undoubtedly have much to interest all delegates.

Simply turn up to this event, booking is not required.

Find us to the left of the entrance on the raised area within the main hall.

9.50am Nigel Wordsworth, Managing Editor of RBD Publications officially opens the Conference	11.50am Lunch
10.00am Katie Ferrier	12.40pm Pablo Moreno
10.40am Louise Shaw & Sara Brooks	1.20pm Kate Jennings
11.20am Karl Watts	2.00pm Andrew Goodman
	2.30pm The conference closes



David McLoughlin
Chief Executive,
railbusinessdaily.com



David McLoughlin said: "We are delighted to be involved with RSN, particularly this year as the rail industry leads the way in building back better as lockdown restrictions are lifted.

"As well as a superb platform to network, there will be some great speakers taking to the stage throughout the day, making it a must-not-miss event."



Nigel Wordsworth
Managing Editor, RBD
Publications
(Inside Track, Rail
Director, Rail Insider,
railbusinessdaily.com)
will compare the event



Nigel Wordsworth has become a well-known observer and commentator on the railways, particularly on a wide range of technical topics.

Graduating with an honours degree in Mechanical Engineering from Nottingham University, Nigel's career has seen him work worldwide across a variety of sectors.

Joining a rail industry publication in 2008, Nigel has risen to prominence in the rail industry. In 2021, Nigel became Managing Editor of RBD Publications as part of the growth in popularity of its digital and printed publications.

The railbusinessdaily.com newsletter gives a snapshot of news in the rail industry straight to the inboxes of 50,000 influential subscribers every day.

Rail Director, released every month, is sent directly to directors working in the industry, providing insight into everything from track to train.

Inside Track is another printed publication that looks at the UK rail industry in detail – describing how it works, discusses all the latest projects and technology, and investigates opportunities for the supply chain.

Rail Insider, distributed digitally once a week, offers the latest rail industry news, views and reports in addition to the views and opinions of the people who matter.



Katie Ferrier

Senior Vice President of Customer Engagement
and Quality Assurance
Achilles



10.00am

Katie has extensive experience and knowledge of the UK rail sector, having spent many years delivering significant projects. At Achilles she is focused on developing relationships across buyer and supplier networks and driving value for customers.

Achilles

Achilles Information is the global leader and partner of choice for supply chain risk and performance management. Through supplier pre-qualification programmes, industry audits and risk management, we have been a pivotal link between buyers and suppliers for nearly 30 years. This experience provides the data and perspective to give customers unparalleled levels of insight into the businesses they work with. Working in partnership with customers, Achilles supports supply chains that perform flawlessly and meet critical humanitarian and environmental standards.

Achilles has offices across the world, with a network of over 800 buyers and 175,000 suppliers across industrial, infrastructure and natural resources sectors.

Chosen topic

Katie will be talking about the challenge to create sustainable & diverse supply chains, and how sourcing assured suppliers from multiple industry networks can be a game changer for the rail industry.

Prizes to be won with SLC Operations at the railbusinessdaily.com conference!

Railbusinessdaily.com is delighted to announce that SLC Operations will be hosting a giveaway at the railbusinessdaily.com conference so make sure to attend to potentially win some fantastic prizes.

Further details for this will be announced on the day. SLC Operations will be exhibiting at Stand D10.



Louise Shaw & Sara Brooks

Head of Systems - Rolling Stock and Depots &
Customer Strategy Executive
East West Railway



10.40am

Louise Shaw is leading on the development of rolling stock and depot requirements for East West Railway Company (EWR Co). Having joined the company in January 2021, Louise has 30-years' experience in the rail industry, in engineering, projects and business development roles for a variety of TOCs, FOCs, ATOC and British Rail, at technical, management and leadership level.

Sara Brooks works in the East West Railway Company's Customer Strategy team where she manages customer research to inform the design of the future railway. Sara joined EWR Co six months ago from Eurostar where she was a Product Manager for the Business Premier class of service, and prior to that worked as a Project Lead in the Customer Experience team at HS2. Before working in rail, Sara worked in Market Research on quantitative and qualitative projects across multiple industries. This year at EWR Co she has been running customer research projects spanning the entire end to end journey including fares and ticketing, accessibility and active travel.

East West Rail

East West Railway Company was set up by the Secretary of State for Transport in 2018 to develop East West Rail, a railway with customers and communities at its core.

Our vision is delivery of a safe and secure railway that is better for the customer; cheaper for the taxpayer; delivered quicker than before and is greener for the environment. Our distinctive outlook and commitment to doing the right thing for our customers and local communities runs through everything we do and every decision we make.

Chosen Topic

Louise and Sara will share the latest on the East West Rail project, as well as East West Railway Company's exciting customer vision in relation to rolling stock.



Karl Watts

Chief Executive Officer
Rail Operations (UK) Limited



11.20am

Karl is a career railwayman, businessman and entrepreneur. In recent years, he has spearheaded the development and growth of Rail Operations Group (ROG), the UK's first dedicated rolling stock services and test train operating company, Traxion, the UK's first dedicated rolling stock storage company and, more recently, Orion, the UK's first railborne high-speed logistics train operating company.

Rail Operations Ltd

ROG is the UK's most innovative train operating company, dedicated to the rolling stock manufacturing, engineering and leasing sectors. Rail Operations (UK) Limited is the parent company of Rail Operations Group, Traxion and Orion High Speed Logistics. It specialises in train movements relating to rolling stock delivery, testing, maintenance, modification and refurbishment programmes.

Rail Operations (UK) Limited also has a fleet of dedicated locomotives which have been modified with electrical brake translation equipment and a range of coupler types to enable direct coupling to, and through automatic brake control of, most UK EMU types. This negates the need to use historic barrier and translator type vehicles.

Chosen Topic

In the last 12 months alone, numerous things have occurred which offer great opportunity to the UK rail industry, especially the freight sector. As well as the publication of a number of high level policy papers, the government now has an obligation to promote rail freight and to determine rail freight growth targets. Modal shift from road to rail has never been more important.

At Rail Operations UK, the team has already started that process. Its new Orion High Speed Logistics services start in the autumn using converted class 319 EMUs and class 768 BMUs, its class 93 tri-mode locomotives are in the process of being built and it is delivering high-speed freight operations. Rail Operations UK is transforming the world of rail freight. This presentation outlines this transformation.



Pablo Moreno

UK Procurement Manager
CAF Rolling Stock UK Ltd



12.40pm

Pablo Moreno is the UK Procurement Manager at CAF Rolling Stock. He joined CAF Rolling Stock in January 2018 with a wealth of previous supply chain experience in both the automotive and aerospace markets. Pablo's previous experience includes; Airbus UK, Aernnova (Aerospace Tier 1), Benteler Automotive (JIT/JIS Tier 1 at Mercedes-Benz Spain).

CAF

Since CAF was founded, it has been noted for its versatility, flexibility and for its capacity to constantly adapt to the requirements of each and every customer, in all areas. CAF is a multinational group with over 100 years of experience in the supply of comprehensive transit solutions positioned at the forefront of technology for high value-added sustainable mobility.

The company is a leader of the railway industry offering one of the most comprehensive and flexible arrays of products in railway related markets, such as rolling stock, components, infrastructure, signalling and services (maintenance, refurbishing and financial services). CAF's committed personnel and the cooperation with business partners enables the business to enhance customer satisfaction and create value for its shareholders.

Chosen Topic

CAF Group is a multinational group with over 100 years of experience in the supply of comprehensive transit solutions positioned at the forefront of technology for high value added sustainable mobility.

The company is a leader of the railway industry offering one of the most comprehensive and flexible arrays of products in railway-related markets, such as rolling stock, components, infrastructure, signalling and services (maintenance, refurbishing and financial services). CAF will be presenting its current scope of activities in the UK and it's strategic plans to consolidate their activities in this market.



Kate Jennings

Policy Director
Railway Industry Association



1.20pm

Kate has had an extensive career in the civil service, which began in the Foreign & Commonwealth Office, including a posting to Beijing working on the handover of Hong Kong. She has subsequently worked in the Cabinet Office on the Better Regulation agenda, leading the secretariat for a PM-chaired committee which challenged Government to ensure regulation minimised costs on business.

Before joining RIA, Kate had been the DfT's Head of Rail Strategy Projects Division from October 2016 to November 2019, supporting rail strategy development, including the Transport Secretary's 'Strategic Vision for Rail', and the launch of the Williams Rail Review. Her responsibilities included rail policy, including devolution, investment, workforce, freight, and engagement with industry clients like Network Rail and the Rail Delivery Group. From December 2019 to February 2020, Kate worked on the development of transport policy for EU exit.

RIA

RIA is the voice of the UK rail supply community; the national trade association for UK-based suppliers to the railway industry.

Established over 140 years ago, RIA now has over 300 member companies from across the supply chain, over 60% of which are small or medium sized enterprises (SMEs). Our member companies represent a large proportion of the rail industry by turnover, reflect a great diversity of disciplines within the sector and cover the lengths and breadths of the UK.

Chosen Topic

Kate will discuss supply chain priorities for rolling stock.



Andrew Goodman

CEO
Railway Support Services



2.00pm

Andrew Goodman's interest and work within the UK and worldwide rail industry has spanned over 40 years having worked extensively in the UK, Europe, North America, and South-East Asia.

RSS

Since incorporation in 2008, Railway Support Services has become a leading complete services provider within both the rail and heavy haulage industries and boasts market-leading experience in: Locomotive Breakdown & Recovery, Wheel-skating of Locomotives and Rolling Stock, Heavy & Abnormal Load Haulage, Locomotive Hire & Maintenance, Permanent Way services, Heavy Installation and Lifting services, General Road Haulage, Rolling Stock Storage, Management & Overhaul, Fabrication & Machining services.

Chosen Topic

The varied substantial activities and services undertaken by RSS encompassing:

- Locomotive hire
- On-site maintenance of locomotives
- Breakdown and recover railway locomotives and rolling stock
- Wheelskating of defective rollingstock
- Specialised road transport of all types of railway equipment
- General transport
- Warehouse and storage
- Machine shop facilities
- Design and fabrication
- Reverse engineering

IF YOU DON'T SUBSCRIBE, YOU ARE MISSING OUT!

The UK's biggest and most powerful RAIL news platform. 50,000 influencers and decision-makers subscribe daily. Reach the people you want to speak to. Subscribe today. Visit: www.railbusinessdaily.com.



Meet the railbusinessdaily.com Speakers

RAIL AID IS BACK FOR 2021!

GET ON BOARD TO RAISE FUNDS FOR RAILWAY CHILDREN

The rail industry's event of the year is back for 2021 and it's the perfect chance for your company and colleagues to get involved, have fun, and change children's lives at the same time. Rail Aid was launched last year in aid of the industry's favourite charity – Railway Children, after the pandemic wiped out the charities entire fundraising events programme.

The organisation protects vulnerable children in the UK, East Africa and India and when it faced difficulty, the rail community came together in an amazing show of support – namely, Rail Aid. Dubbed 'the rail industry's answer to Children in Need,' it was a huge success, raising thousands of pounds and harnessing the power and passion of people from throughout the rail family. It was so successful that the organisers have decided to do it all again – and make it even bigger and better this time.



YOUR OPPORTUNITY TO GET THE RAIL FAMILY INVOLVED

There are so many opportunities for rail businesses to get involved and every event is a chance to come together as an organisation, network across the sector and show the industry what you and your colleagues are made of.

Whether you have serious cyclists, demon dancers, winning walkers or quick-thinking quiz teams – there's an event for everyone.



WALK THE LINE

Explore the disused railway line on the traffic-free route along the Tissington Trail in Derbyshire. Join friends and family for our fully supported 13 or 26 mile walk on 16/10/21.



GET ON TRACK

Clock up your distances as the whole industry aims to run, walk, cycle, or scoot 26,201 km by 1/11/21.



THE LOVE TRAIN DANCE CHALLENGE

People all over the world join hands and choreograph a dance routine to the classic track 'The Love Train'. Put your moves to a public vote to be crowned Rail Aid dance team champions.

THERE ARE OTHER WAYS TO GET INVOLVED WITHOUT EVEN LEAVING HOME TOO

- **Donate** auction lots or incredible money-can't-buy opportunities.
- **Contribute** an artefact, memorabilia or mementoes for the Railwayana auction.
- **Sponsor** an event or become a champion and start promoting Rail Aid to inspire as many people as possible to join in.

There are so many more ways to participate in Rail Aid 2021 – head to RAILAID.CO.UK to find out more and get your organisation on board for the event of the year.

ANNOUNCING OUR PROUD SPONSORS FOR 2021

There's still time to join our line-up of industry leaders, contact enquiries@railaid.co.uk for details.

USB & Wireless Solutions for Passenger Device Charging



Derby-based electronics manufacturer Alfatronix will be at Rolling Stock Networking, showcasing its range of onboard, passenger-accessible charging solutions.

The PV65R range of USB chargers offer all the performance benefits of its successful PVPRO range but with additional protection to meet the rigorous standards required for rail. Units can be installed directly into bulkheads, carriage walls, into seat fittings and underneath seats using the mounting POD. Alfatronix also has several USB products in development, which it looks forward to promoting at the exhibition.

With wireless charging increasingly common in mobile devices, Alfatronix now produces a range of Qi-compatible

solutions. There is a tabletop product, as well as a compact wireless module suitable for integration into equipment such as seat-back consoles. Finally, its "Podsole" offers a combination of wireless and USB charging, including retaining clips such that the device can be held in place whilst charging on the move.

In addition to charging solutions, Alfatronix also manufactures DC to DC converters with rail certifications, with this range continuing to develop, including higher power ratings and input voltages.

Alfatronix will be displaying on Stand G10 and would welcome the opportunity to discuss how its solutions can enhance passengers' experience.



See us at **G10**

ONBOARD CHARGING FOR RAIL

www.alfatronix.com sales@alfatronix.com
Tel: +44 (0)1202 715517

RAISING STANDARDS RAILWAY LIFTING JACKS



With 40 years' experience in heavy duty lifting solutions, Totalkare combines world class products with industry leading support to facilitate effective maintenance and repair, keeping you on track for success.

CALL 0121 585 2724
VISIT WWW.TOTALKARE.CO.UK



AEGIS Technical Seminar Programme



Gold Sponsor AEGIS is delighted to be exhibiting at RSN 2021.

During this much-anticipated event, we are also hosting a Technical Seminar from 10am – “The future of railways, standardisation and legislation in the UK” that will be of key interest to all those operating in the rail industry.

AEGIS Seminars at RSN 2021 2nd Floor Access Via Lift or Stairs

SEMINAR AGENDA

The future of railways, standardisation and legislation in the UK

10.00 – 10.20 – SESSION 1

Followed by a 10-minute Q & A

Brexit: The new regime

Authorisation of Vehicles and Infrastructure

Speaker: Luigi D'Angelo – Head of Assessment Body Services



12.20 – 12.40 – SESSION 5

Followed by 10 min Q & A

Electromagnetic Compatibility (EMC)

EMC and EMC standards and how they apply to the UK railway

Speaker: Colin Place
Head of EMC



10.30 – 10.50 – SESSION 2

Followed by a 10-minute Q & A

Cyber Security in railway and CENELEC TS50701

Railway cyber security challenges to be addressed and the CENELEC technical specification

Speaker: Lucia Capogna –
Head of Software and Cyber Security



12.50 – 13.10 – SESSION 6

Followed by 10 min Q & A

RAMS Standardisation

2021/2022 – What the future might hold?

Speaker: Daniele Diana
RAMS Specialist



11.00 – 11.20 – SESSION 3

Followed by a 10-minute Q & A

The Independent Verification of modifications to Rolling Stock

What types of modification can be verified using the RIS-2700-RST process, what is the process, how is the verification undertaken and what are the outputs?

Speaker: Kathryn Kelly
Head of Certification (Rolling Stock)



13.20 – 13.40 – SESSION 7

Followed by 10 min Q & A

Automation: A Holistic Approach

Automation is key in today's fast paced work environment to achieve higher levels of productivity. AEGIS has been providing a holistic approach to automation solutions to improve streamlining methodologies, processes, tools, people and their work culture. Overview of the different strategies and when best to implement these in the project lifecycle.

Speaker: Gopal Sivaswamy
Head of Test & Automation



11.30 – 11.50 – SESSION 4

Followed by a 10-minute Q & A

Digital Railway Signalling: ERTMS and the Future

Introduction to the current signalling and train protection systems used in the UK and how they are changing. The basics of ERTMS such as the ETCS Architectures, Levels and Operating Modes and an overview of digital signalling in the UK. Changing concepts, emerging technologies and key ideas that are shaping the future of railway signalling.

Speaker: Dr Shamal Crowther
Senior Engineer



13.50 – 14.10 – SESSION 8

Followed by 10 min Q&A

Level Crossing Suitable and Sufficient Risk Assessment

An overview of level crossing risk and how risk is managed.

Speaker: Andrew Allen
Senior Engineer



LUNCH BREAK 12.00 – 12.20

FINISH 14.20

Railway Industry Association Meet the Buyer



“The Railway Industry Association (RIA) is delighted to be back supporting Rolling Stock Networking (RSN), particularly after so long not being able to meet face-to-face. We're excited to be organising the 'meet the buyer' sessions at the event, bringing rail companies together, supporting business opportunities and helping rail companies build new supply chains that can go on to support our fantastic railway network. It's never been more important for the rail industry to come together to attract passengers and freight onto the network and support the government's aims for an economic recovery, so we hope to see suppliers there in force. Make sure you come along and take part in this essential event!”

Gaynor Pates, Operations Director,
Railway Industry Association



The Railway Industry Association (RIA) is a key partner of the Rolling Stock Networking show and, this year, is organising the Meet the Buyer event.

Exhibitors and RIA Members have the opportunity to pre-arrange face to face meetings with potential buyers to discuss future collaborations and business development.

Buyers taking part of RIA's Meet the Buyer include Alstom, Hitachi, Siemens, Unipart, Department for International Trade and Achilles.

1. Alstom Transport UK Ltd



Looking for/to:

- Information Systems/Connectivity: provision of information systems which improve connected passenger journeys and data exchange between the train, infrastructure, operators and maintainers
- Maintenance: Provision of maintenance services for the operational life of the train, focused on innovation and RCM, includes logistics solutions and modernisation
- Hydrogen fuel cell technology and associated systems
- Battery technology

2. Hitachi Rail



Looking for/to:

- Gain an understanding of the UK manufacturing businesses supporting rail industry, to broaden the knowledge and supplier competence network
- Companies not yet supplying Hitachi Rail across interiors, metal fabrication and electronics categories

3. Siemens



Looking for/to:

- Rolling Stock Maintenance Suppliers
- B/C Category Suppliers for new rolling stock
- Refurbishment suppliers
- New innovations

4. Unipart Rail



Looking for/to:

- Meet existing and new suppliers
- Market intelligence
- New products

5. Department for International Trade



See next page

6. Achilles



Looking for/to:

- Help suppliers and buyers alike to have a more comprehensive approach to supplier assurance, whilst ensuring they are fully compliant with specific industry requirements, like Sentinel.
- Become part of the Achilles Network, gaining access not just to the rail industry but to over 50,000 UK and global suppliers across multiple regions and sectors

Department for International Trade at RSN 2021

Bill Smith is a Trade Adviser specialising in rail who supports the Midlands Engine, which is part of the Department of International Trade. Bill will be at the RSN 2021 show on 30 September in Derby and would like to discuss your experience of exporting and how you would like to start or increase exporting.

The Department for International Trade (DIT) helps businesses export and grow into global markets. We also help overseas companies locate and grow in the UK. Visit www.gov.uk/government/organisations/department-for-international-trade/about-our-services for more information.

The Midlands Engine is a coalition of Councils, Combined Authorities, Local Enterprise Partnerships (LEP), Universities and businesses across the region, actively working with government to build a collective identity, to enable us to present the Midlands as a competitive and compelling offer that is attractive at home and overseas. Visit www.midlandsengine.org for more information.

Bill is able to connect you with the appropriate services and information that is available through DIT. Bill can also help you to develop an export plan and is able to mentor you through the process as he has many years of exporting experience in rail and other highly regulated industries.

Examples of the support available are:

- read guidance for new, occasional and frequent exporters
- find out about services offered by GREAT partners
- use the selling online overseas tool to find the best marketplaces to showcase your products online – you can take advantage of special deals negotiated by the government for UK businesses and find out more about the government's e-exporting programme

- apply for overseas export opportunities for your products or services
- create a business profile, which will allow you to promote your products and services to international buyers

You can also:

- search for events, trade fairs, missions and webinars relevant to your sector or overseas markets
- see upcoming DIT international ministerial visits
- apply for a trade show access grant to attend an overseas event
- read our country export guides to selling overseas
- contact a trade adviser in your area

DIT can also help with getting local market help to sell overseas. DIT has trade specialists who can help you commission services from local experts overseas. This includes:

- country and sector advice
- local market research
- support during overseas visits
- identification of possible business partners
- preparation for exhibitions and events



Winter protection for turnouts

Keeping turnouts free of ice and snow ensures trains continue to run safely during the cold winter months.

Our IP68 power supply system connects plugs with a 4-way distributor in moulded rubber which is both simple to install and maintain, even in hard to reach environments.

Easily transportable flexible elements with protective channels and barbed 'knock on' clips reduces the time to track to a minimum.



SwitchPoint Heating Ltd
 Industrihuset
 Hällingsjövägen 15
 S-43896 Hällingsjö,
 Sweden
 Phone: + 46 (0)301-418 50
 Mail: info@vkts.se
www.switchpointheating.se



less than
20p
 a day



All about people

people working in public transport...
 ...people like you!

In times of need, hardship and distress TBF is here to support its members by helping them to keep the wheels of the public transport industry turning. TBF offers financial and medical benefits, a wide range of complementary and alternative therapies, bereavement grants and welfare advice.

£1.25 a week covers you, your live-in partner and dependent children.

0300 333 2000
help@tbf.org.uk
www.tbf.org.uk

Transport Benevolent Fund CIO, known as TBF, is a registered charity in England and Wales, 1160901, and Scotland, SC047016.

Belvoir brings Valeo Thermal systems to the UK rail industry

See us at Stand no. A1

Belvoir Rail Ltd offers the rail industry a comprehensive range of engineering solutions and products, with a focus on passenger and infrastructure rolling stock.

One of its core activities is providing heating solutions and spare parts for driver cab and saloon coach heating. With this wealth of experience, Belvoir was approached to promote and represent the brand Valeo Thermal Systems within the rail industry. Valeo (formally Spheros) is a German-based manufacturer of the Thermo Diesel Heaters fitted to most fleets throughout the UK.

To support its customers, Belvoir keeps a comprehensive stock of Thermo parts to keep downtime as minimal as possible. It is also currently in the process of building a heater test station so that it can offer its customers a diagnostic fault find or service exchange option.

During the RSN show, Belvoir will be promoting the latest in diesel heater technology, including the "Thermo Plus", and also displaying spare parts and diagnostic support for existing Thermo systems in the field.

Contact: James Brown via email jbrown@belvoir-rail.com



TVS Supply Chain Solutions

See us at Stand no. C5

TVS Supply Chain Solutions addresses organisations' supply chain challenges. It is a global business that offers clients a wide range of tailor-made solutions to meet their exacting requirements. Our technology-led ethos allows us to transform supply chains, building resilience and growth-ready solutions that scale with any organisation.

We work across a number of industries, including automotive, beverage, defence, utilities, and rail, and take our experience operating in these sectors and apply expert knowledge to our approach.

Supporting more than 4,000 field service engineers as part of our integrated supply chain solutions, TVS SCS empowers engineers with the right technology to ensure they can do their job safely and efficiently.

TVS SCS is constantly looking to digitalise the supply chain in order to add value and improve efficiency.

Digital twin, data management and Artificial Intelligence (AI) are some of the technology innovations – alongside our own Msys Information system – we deploy as part of our solution, providing data management for informed decision-making.

Key elements of our service include sourcing and strategic procurement, inventory management (including funding options), demand forecast planning, and a full range of logistics solutions.

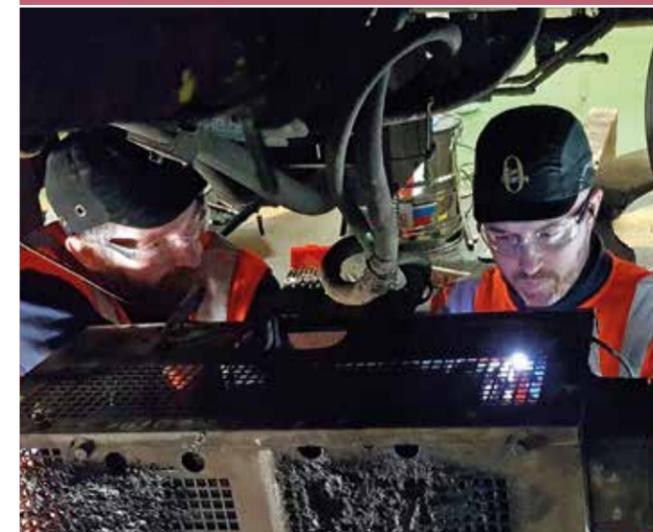
Visit us: www.tvsscs.com

Contact us: rail@tvsscs.com



www.jjrail.co.uk

A track record of success in rail industry insurance



We are a specialist railway insurance broker with unrivalled knowledge of the rail industry:

- Risks approved
- Risk management approach produces lower premiums
- Technical and contractual advice

We insure any business which works partly or wholly within the rail industry.

Contact Keven Parker on:
07816 283949 / 0121 4528717 / 0207 9839039
Email: keven.parker@jjrail.co.uk

Offices in London and Birmingham. Nationwide coverage. Jobson James Insurance Brokers Limited are authorised and regulated by the Financial Conduct Authority



See us at Stand no. F2

We are the market leader for specialist insurance programmes for railway companies acting for 350+ clients from Glasgow to Kent in the UK, the Far East and Australia. We insure and we are members of RIA, Rail Forum Midlands and the PWI. We have detailed railway contract knowledge and are fully conversant with the needs of ROSCOs, TOCs and the supply chain that serves them.

We act for all types of railway company, manufacturers of products that are incorporated into rolling stock and rail infrastructure, advisors and consultants, engineers and contractors making/installing modifications to rolling stock. Our rail clients have come to us because they need expert advice and we usually place cover which is wider and provide a premium saving because we use specialist rail-friendly insurers we have developed relationships with over the past 10 years.

Please call by our stand to speak to one of the team and we will be happy to provide advice – or call Rail Director Keven Parker on 07816 283949.

Developing depots

The number of new train fleets coming onto the railway network has resulted in a major building programme to provide depot facilities



Larger fleets of trains, which are often longer than their predecessors and filled with the latest technology, mean that depot workshop buildings need to be extended and stabling sidings need to be both longer and more numerous.

Trains now have self-diagnostic systems on board, which identify faults and notify the depot in advance, so that everything is ready for a quick repair when they arrive back at base that evening. This includes everything from the change of a light fitting, which can be done in the sidings, to a complete bogie swap that needs the use of the particular road in the depot that has the bogie-drop built into it.

Sometimes the fault needs urgent attention, so the train has to be scheduled into the depot as a matter of urgency, other times it is just another item to add to the list for attention next time that train undergoes scheduled maintenance.

Over the past few years, a number of depot enhancement projects have taken place. Stabling sidings, such as those at Bedford, Cricklewood, Gidea Park and elsewhere, have been extended. Depots at Exeter (GWR), Beckton (DLR), new Cross Gate (London Overground) and Newton Heath (Northern) have been enlarged and refurbished.

Hitachi Rail took over the former Eurostar depot at North Pole to service its Class 800/802 trains for GWR. Tyne and Wear Metro built a complete new 'temporary' depot at Howdon so it could transfer the fleet there while it knocked down and rebuilt its depot at Gosforth, although the Howdon site may actually be retained, even once Gosforth is back in operation.

Old Oak Common

One of the largest new construction projects was at Old Oak Common, where Crossrail built a completely new depot to look after the fleet of Class 345 Elizabeth line trains being procured from Bombardier Transportation (now Alstom).

Constructed on the site of previous sidings, and about a quarter of a mile to the east of the former steam/diesel-era depot that closed in 2018 and the Heathrow Express depot that was demolished in 2021, the new Old Oak Common depot has nine maintenance roads inside its workshop and a further 33 stabling sidings outside.



“ No longer are they cold and draughty sheds – they are now well heated and ventilated workshops ”

The facility includes light and heavy maintenance roads, a wheel lathe, twin equipment drop-pits, synchronised train jacking facilities and inspection pits, an underframe cleaning facility, workshop and stores, driver/train crew accommodation and a driver training suite.

As well as the latest in railway depot technology, Old Oak Common is also fitted with a hybrid renewable energy scheme, developed by Vinci Construction, that will deliver significant monetary and environmental savings. Working from the baseline of the thermal load demand,

it utilises site-wide LED lighting, solar-thermal and solar-photovoltaic panels, ground source heat pumps and combined heating and power units. These are linked with a thermal energy store in an integrated system, switching between energy sources as demand and availability dictate.

This is a common feature of modern depot design. No longer are they cold and draughty sheds – they are now well heated and ventilated workshops with well-fitting doors and computer-controlled systems to keep the workforce safe. Walkways and gantries have interlocks to make sure that the workforce, moving trains and live electrical supplies never come into contact with each other.

Clean and well laid out, they are intentionally designed to be as appealing as possible to an increasingly diverse workforce. ■

Originally published in Inside Track, subscribe via www.railbusinessdaily.com/rbd-publications

RIA's Annual Conference returns to London!

The Railway Industry Association's (RIA) award-winning Annual Conference is back this year, taking place on 4 – 5 November 2021 at the London Hilton Bankside Hotel. A key event for the UK rail industry, the Conference sees a mix of speeches from policy makers, industry leaders, international guests and key influencers, networking, panel sessions, interviews and much more.

This year's Conference will focus on the theme of "Build back better. Build back greener. Build back rail", looking at the role the railway industry can play in supporting the government's economic bounceback post-coronavirus, while also supporting the race to net zero by 2050. Over the space of two days, the Conference will discuss how the rail supply sector can continue to support jobs, investment and economic growth at such a critical time for the UK.

The Conference has an impressive speaker line-up, with Rail Minister Chris Heaton-Harris MP, Network Rail Chief Executive Andrew Haines OBE, HS2 Chief Executive Mark Thurston, Midlands Connect Director Maria Machancoses and Tim Wood, Northern Powerhouse Rail Director at Transport for the North, all down to attend – and many more to be confirmed soon. Renowned journalist and ITV presenter Sameena Ali-Khan will be the compère over the two days. On the evening of 4 November, the prestigious Railway Industry Supplier Excellence (RISE) Awards will take place, showcasing the very best of the UK rail supply industry.

As Network Rail Chief Executive Andrew Haines said, "The RIA Annual conference this November is a great opportunity



for the rail industry and supply chain to come together and discuss the challenges and opportunities for the future. And it's a platform to discuss how we can build back better together."

Following the easing of coronavirus restrictions, the Conference will return as a physical event, though it will also be livestreamed for those who wish to connect remotely.

Book your ticket today at www.riagb.org.uk/AC2021

RIA Annual Conference 2021

"Build back better. Build back greener. Build back rail."

4-5 November 2021, London

// 2-day Conference including 25+ national and international speakers

// Unique networking opportunities to meet with key industry leaders

// Programme combines keynote speeches, panel discussions and interview sessions

Register today:
www.riagb.org.uk/AC2021



Speakers highlight

Chris Heaton-Harris MP
Minister of State,
Department for Transport

Andrew Haines
Chief Executive, Network Rail

Maria Machancoses
Chief Executive Officer, Midlands Connect

Mark Thurston
Chief Executive Officer, High Speed Two (HS2) Ltd

Platinum Sponsor



On Train continues to grow its breadth of services and capability

The company is RISQS verified and has completed numerous rail vehicle projects
See us at Stand no. H2

On Train has an adaptable and responsive profile, built upon mutually advantageous partnerships that bring the very best products to market. We form a team with our OEM clients to install and then maintain those products through their entire life-cycle, providing train owners and operators with the added assurance that their rail services and vehicles will be fully supported by a local partner.

The company provides UK-wide sales representation and project services for DC Airco and Infodev EDI. Our low-cost method of operation constructs project teams appropriate to project scale and duration.

We have installed Passenger Counting on Class 185, maintained Passenger Counting on Voyagers and other vehicles while our FGAS qualified refrigeration engineering teams provided maintenance of Cab Air con on Classes 317, 158, 456 and 323.

In 2021 the company stepped up and provided a turnkey project for Transport for Wales installing new DC Airco Cab Air Con onto the Class 769 Units.



On Train expects an exceptionally busy 2021 and 2022 and remains focused on controlled growth through addition of OEM products, providing support to rail

vehicles and keeping trains running. We are, where you need us, when you need us.

Where You Need Us When You Need Us

International Sales Services
Technical Product Installations
UK Sales Representation



Turnkey Projects
Installation Services
Maintenance Services
Consultancy

UK Representatives of Infodev EDI
UK Representatives of DC Airco
Service Agents for Passenger Counting
Service Agents for Cab Air Conditioning



sales@on-train.co.uk
07527 811700



Channel Compliance, supporting new fleet introduction and systems training

See us at Stand no. F7

At Channel Compliance we have the skills, knowledge, and experience to work with most fleets operating today. We have tested experience of working and supporting new fleet introduction and systems training. As examples, we have supported Alstom with the Class 345 Project, Stadler with the Class 745 and 755 project and CAF with the 3GT Tram Project.

For operational training we can deliver depot driver and shunter training, PTS and DP, and wheel lathe training and assessments.

Within the portfolio of health and safety training we can deliver IOSH and NEBOSH qualifications; these can be

supported by the writing of Safe Systems of Work and the completion of risk assessments.

We are also able to support with competence assessments both in maintenance and operational activities, using your in-company processes and procedures or our own Competence Management System which is mapped to the National Occupational Standards.

We fully understand that training is a cost to any business, to support this, we will work with you to evaluate the most cost-effective delivery model, classroom, e-learning, practical activities, or blended learning, ensuring that your learners get best value from the learning sessions whilst adding value in the workplace.



On site Training, Consultancy and Auditing Services including Railway Engineering and Health and Safety Courses

Come visit us at stand F7!

0117 3251119 sales@channelcompliance.com

HNRC – providing industry-leading vehicle storage, locomotive leasing and maintenance



Workshop
Train Care Facility

Over more than 20 years, the Harry Needle Railroad Company (HNRC) has built a strong reputation specialising in locomotive spot hire and maintenance / repair from its base at Barrow Hill (Chesterfield).

In the past three years HNRC has invested heavily into a train care facility at its two sites in Worksop (Nottinghamshire). The facility is spread over two sites covering 35 acres and can provide rolling stock storage for up to 700 vehicles and has four fully equipped sheds for modifications and maintenance of rolling stock. The facility can also provide fuel, CET, sand, water etc. In respect of security the site has 24-hour CCTV at

vulnerable points, motion sensors linked to CCTV with remote monitoring provided at Bassetlaw Council, including police response and perimeter fencing to the whole site with out-of-hours site-based security patrols with guard dog and handler.

The company serves a wealth of customers and rail sites across the UK, having developed a workforce of industry experts with the ability to provide exceptional technical knowledge and service.

Contact 01909 509671 or email harrycneedle@aol.com for further information.

LEADING RAIL INDUSTRY SPECIALISTS IN VEHICLE STORAGE AND THE LEASING AND MAINTENANCE OF LOCOMOTIVES

WE LOOK AFTER YOUR RAILWAY ASSETS AS THOUGH THEY ARE OUR OWN



Worksop, S80 1UJ

harrycneedle@aol.com

+44 (0)1909 509671

East West Rail – connecting Oxford with Cambridge

Plans to reconnect the two great university towns by rail have been under discussion for the past 15 years



Photo: Network Rail

Oxford Parkway station

The UK railway network, while extensive, isn't great across country. Most of the main lines radiate from London, and connections between other parts of the country can be more difficult. Many of the ones that did exist were badly affected by the Beeching report of 1963.

Strangely, the Varsity line, which connected the two great university towns of Cambridge and Oxford, wasn't closed by Dr Beeching – he actually recommended the line be kept open. However, as it was losing money, most of it closed anyway.

Two parts remained open. Oxford to Bicester, although reduced to a single-track railway, and the Marston Vale line between Bletchley and Bedford both stayed in operation.

Plans to reopen the route, at least between Oxford and Bedford, started to take shape around 2006. They were confirmed by the government in 2011 and became part of the Department for Transport's rail strategy in 2012.

Oxford to Bicester

The first part of the route to be rebuilt was the stretch between Oxford and Bicester. Train operator Chiltern Railways had announced its Evergreen 3 project in 2008. Its plans were to introduce services from Oxford to London by joining the Chiltern main line at Bicester.

The track was to be redoubled with a new station – Oxford Parkway – to be built alongside the existing Water Eaton park-and-ride bus-service site between Kidlington and Oxford. The track would be extended beyond Bicester Town station and a new chord constructed, allowing trains to join the Chiltern main line and head to London Marylebone. Provision would be made for the future electrification of the line.

The project got underway in February 2014. Trains started running between the new Oxford Parkway station and

Bicester (where the station had been renamed Bicester Village, not due to a downsizing of the town but after the nearby Bicester Retail Village) in October 2015.

Two trains an hour went all the way to Marylebone, but the new services didn't reach Oxford's main station until December 2016.

East West stage 1

To continue the route eastwards, the government originally planned for Network Rail to upgrade the route. However, electrification was deleted from the project's scope by the Department for Transport in 2016, though passive provision for a future scheme would remain.

In December 2016, Transport Secretary Chris Grayling announced plans to privatise the line and the Department for Transport set up East West Railway Company late in 2017.

The line from Bicester to Cambridge would be delivered in three 'connection stages'.

Connection stage 1 would effectively be Bicester to Bletchley, since Oxford to Bicester had already been completed. Connection stage 2 would be Bletchley to Bedford and Connection Stage 3 Bedford to Cambridge.

The work is being carried out by the East West Rail Alliance, a partnership of Atkins, Laing O'Rourke, Network Rail and VolkerRail.

Following confirmation of funding in the 2020 Spending Review, work on constructing the section between Bicester and Bletchley has commenced. This will allow trains to run from Oxford to Milton Keynes by 2025.

Plans for this stage include:

- Making railway crossings safer by replacing structures and diverting or closing highway, foot and field crossings;
- Upgrading track, including doubling track and upgrading infrastructure between Bicester and Bletchley;
- Installing new and upgraded signalling and associated cabling;
- Establishing Environmental Compensation Sites (ECS) to offset the ecological impacts of constructing the project;
- Clearing overgrown vegetation along the railway corridor;
- Constructing and restoring structures, including a new station at Winslow, new high-level platforms at Bletchley station, refurbishments, reconstruction and general repairs to existing infrastructure.

Work commenced in 2020 with marking out and preparing the additional land needed to build the new railway. Parts of the mothballed line were very overgrown, so this had to be cleared and the remaining vegetation managed.

To bring the Bletchley flyover up to modern standards, parts of it need to be deconstructed and rebuilt. Work compounds were set up, to act as main hubs for construction workers and equipment.

Environmental mitigation, including the creation of new habitats for badgers, otters, reptiles, great crested newts, bats and butterflies, also began.

Bridges and structures along the route needed repairing and strengthening, and local roads were improved, putting in passing bays to enable construction traffic to use them safely.

Heavier construction work commenced in 2021, on the new station at Winslow, on the rebuilding of the Bletchley flyover and on a new road bridge at Charbridge Lane in Bicester.

Work on the Bletchley flyover is due to be completed by 2022. So, too, will the installation of railway tracks between Bicester and Claydon Junction, which will allow installation of the new signalling system, power and communications systems to start.

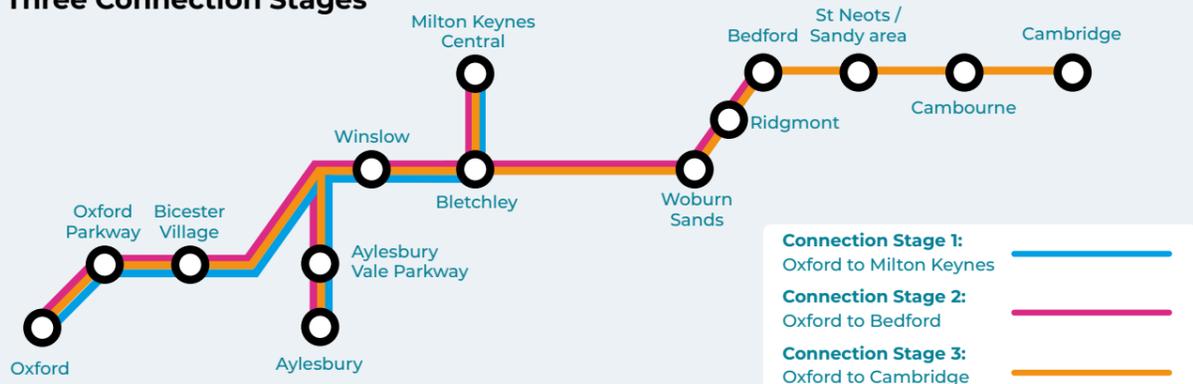
Track between Claydon Junction and Bletchley will be laid in 2023. HS2 will hand over the area where the two new railways cross. This intersection requires the current Claydon to Aylesbury line to be realigned towards the East and for the Oxford to Bletchley route to be raised in order to provide the necessary vertical clearance for the HS2 route to pass beneath it.

Claydon is also the planned location of a major construction depot, which will later become the principal Infrastructure Maintenance Depot (IMD) for HS2 South. Near Little Kimble, the HS2 alignment will pass beneath the Aylesbury to Princes Risborough branch. Testing the signalling, power and communication systems will begin in 2023 and run through into 2024. By the end of that year, the new route will see its first test trains, ready for passenger services to commence in 2025.

Bletchley to Bedford

Having reviewed original plans for construction, East West Rail found the level of upgrade required between Bletchley and Bedford was much higher than originally planned and would need much larger levels of investment than anticipated. »

The Three Connection Stages



Bletchley flyover span lift May 2020

Photo: Network Rail

A public consultation was held during the first half of 2021. Based on this feedback, a 'statutory consultation' is being prepared that will take place next year. This section of the route is the current Marston Vale line, largely twin-tracked but with a speed limit of 60mph.

It is classified as a rural line, operated by West Midlands Trains two-car Class 230 units.

East West Rail will upgrade the line to increase speeds and service frequency. Platforms will be extended, to handle the longer trains, at Woburn Sands and Ridgmont stations, and consideration is being given to moving Lidlington station to the northeast, to replace the existing Lidlington and Millbrook stations, and moving Stewartby station to the north to replace the existing Stewartby and Kempston Hardwick stations.

Bedford St Johns station is also likely to be moved, with two different options under consideration. Substantial improvements will be needed to the existing Bedford station. A number of infrastructure changes may well be necessary, including to the existing railway as it approaches the station, the Thameslink (Jowett) sidings, Platform 1A and other platforms, and the location of the station building, and its access.

Bedford to Cambridge

Unlike stages 1 and 2, where current mothballed and rural routes can be upgraded and brought back into service, the route for stage 3 will be completely new railway, the old formation of the Varsity line no longer being available due to building that has taken place over the intervening years.

East West Rail sought public opinion on nine alternative routes between Bedford and Cambridge. These were then whittled down to five, with two of them looking the most likely, both quite similar. Their route goes via Cambourne and the Sandy/St Neots area, the most popular option and one which also provides the best value for money and the best environmental outcomes.

Plans will now be refined, taking public feedback into account, before final proposals can be formulated. In 2023/24, East West Rail hopes to submit its proposals to the Secretary of State as part of an application for a Development Consent Order.

On his behalf, the Planning Inspectorate will carry out a public examination of the application, which normally lasts up to six months.

Once any initial conditions or requirements included in the Development Consent Order have been adopted, the government will consider the full business case for the project to make the final decision to proceed.

Following further conversations with the public and stakeholders, construction of stage 3 – Bedford to Cambridge – could start in 2025.

With construction of the various stages stretching forward to well after 2025, there are plenty of opportunities for the railway supply industry to get involved.



Stages 1 and 2 of the project, Bicester to Bedford, include the need for:

- Earthworks – 1 million m³
- 100km new track and drainage
- Two new stations
- Three platform extensions
- 15 new bridges
- 23 refurbished bridges
- Four bridge demolitions
- 130km new fencing

UK supply chain portal CompeteFor has a section dedicated to East West Rail, with 26 opportunities currently listed, including for rail signage, scaffolding, drainage and telecoms cable.

Mark Cuzner, project director at Laing O'Rourke and a director of the East West Alliance, said: "The East West Rail Alliance is committed to supporting and developing the local and SME supply chain, both directly and indirectly across various sectors; delivering long-term social and economic benefits to the communities that line the route of the project."

The East West Rail project will therefore not only benefit the travelling public in the future, but the rail supply industry for years to come. ■

Originally published in Inside Track, subscribe via www.railbusinessdaily.com/rbd-publications

Representatives from East West Rail will be speaking at the railbusinessdaily.com conference at 10:40am



SUBSCRIBE TODAY
To get the latest issues of RailDirector and InsideTrack direct to your door



Be the first to read the latest news, views and insight from the rail industry

RailDirector // **InsideTrack**

SUBSCRIBE

www.railbusinessdaily.com/rbd-publications

Railway Support Services

See us at Stand no. M9



Since incorporation in 2008, Railway Support Services has become a leading complete services provider within both the rail and heavy haulage industries and boasts market-leading experience in:

- Locomotive Breakdown & Recovery
- Wheel-skating of Locomotives and Rolling Stock
- Heavy & Abnormal Load Haulage
- Locomotive Hire & Maintenance
- Permanent Way services
- Heavy Installation and Lifting services
- General Road Haulage
- Rolling Stock Storage, Management & Overhaul
- Fabrication & Machining services



Locomotive Breakdown & Recovery

Despite the high standards of the UK permanent way systems, rail operations still experience breakdowns and derailments of rolling stock and subsequent damage to permanent way infrastructure.

Railway Support Services offers 24/7 availability of recovery teams and equipment, allowing simultaneous attendance to multiple incidents within the UK mainland, with a typical arrival time within four hours from mobilisation.

Railway Support Services is experienced and familiar with the majority of UK rail depots, locomotives and rolling stock ensuring safe and timely completion of re-railing operations, regardless of severity of the incident.

Wheel-skating

Railway Support Services is the only independent UK wheel skate operator, utilising available jacking equipment and a fleet of skates which allows for the movement of the majority of UK Rolling stock. Railway Support Services can design and fabricate bespoke wheel skates to suit specific client and locomotive requirements.



Heavy & Abnormal Load Haulage

Specialising in the transportation of rolling stock, the extensive Railway Support Services transport fleet is able to facilitate and provide efficient national and worldwide transportation of both standard and oversized loads.



Locomotive Hire & Maintenance

The Railway Support Services rail fleet comprises of an expanding range of shunting locomotives which can be hired out, maintained, and operated by a team of highly skilled and experienced locomotive engineers. The locomotives include:

- 1100t capacity – Clayton CD40 low-emission diesel
- 1200t capacity – Class 08 diesel

The demand for locomotives of larger tractive capacity along with lower emissions is increasing. Railway Support Services is committed to the development of innovative locomotive design and will soon introduce a new standard in powerful low-emission locomotives into the UK market:

- 3000t capacity – TS56 low-emission diesel

These locomotives are built from a modular construction which enables tried and tested components to be adapted to hybrid or electric power units when required by the client.

Andrew Goodman from RSS is speaking at the railbusinessdaily.com conference at 2.00pm



RSS

RAILWAY SUPPORT SERVICES

RSS OVERVIEW

LOCOMOTIVE BREAKDOWN AND RECOVERY

WHEEL SKATING OF LOCOMOTIVE AND ROLLING STOCK

HEAVY & ABNORMAL LOAD HAULAGE

LOCOMOTIVE HIRE & MAINTENANCE

PERMANENT WAY SERVICES

HEAVY INSTALLATION & LIFTING SERVICES

GENERAL ROAD HAULAGE

ROLLING STOCK STORAGE AND OVERHAUL

FABRICATION & MACHINING SERVICES

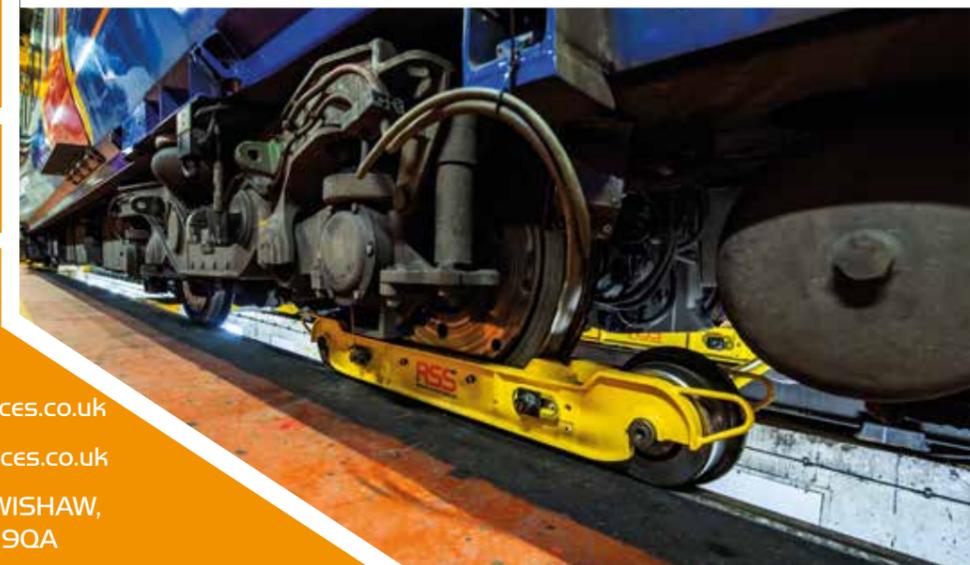
CONTACT DETAILS

☎ 01675 475 590

✉ info@railwaysupportservices.co.uk

🌐 www.railwaysupportservices.co.uk

📍 UNIT 15, DUNTON LANE, WISHAW, SUTTON COLDFIELD B76 9QA



GBR-Rail is a market leader in the delivery of specialist rail depot maintenance equipment

See us at Stand no. F4

GBR-Rail's core business remains the design, manufacture, supply, installation, commissioning and maintenance of depot equipment including carriage wash machines, controlled emission toilet (CET) emptying systems, fuelling stations, lubricating and monitoring systems and sanding systems.

Our extensive experience of the rail sector and our understanding of the pressures on a depot to deliver routine but critical maintenance, has been the driving force behind the foundation of our own Research Division, specialising in operationally and environmentally resilient solutions to these essential tasks. Cleartrak, which is currently being tested with Chiltern Railways, is a fully digital, sustainable train toilet wastewater treatment system that works while the train is in passenger service.

Fitting within the same space envelope as a CET, it is half the weight of a conventional CET system and can be retrofitted to legacy fleets or installed onto new.

Cleartrak purifies and recycles liquid waste for reuse in hand washing and flushing and processes solid waste into a dry biochar, which only requires emptying once every three months, without the need for specialist emptying systems. It reduces CAPEX and OPEX costs, water and energy consumption, CO₂ emissions and waste.

GBR-Rail Ltd	ginny.truslove@gb-rail.com
Dartmouth House, Bawtry	+44 (0) 7876 224300
Road, Wickersley,	+44 (0) 800 949 9575
Rotherham, S66 2BL	www.gb-rail.com



The smart & sustainable train toilet waste treatment system that does it all on the move.

- | | |
|--|--|
| Toilet & sink wastewater
- Purified into clean water
- Recycled for sink and toilet

Solid waste
- Reduced to Biochar | Excess pure water
- Released harmlessly to track

Requires
- Maintenance every 3 months (any location) |
|--|--|

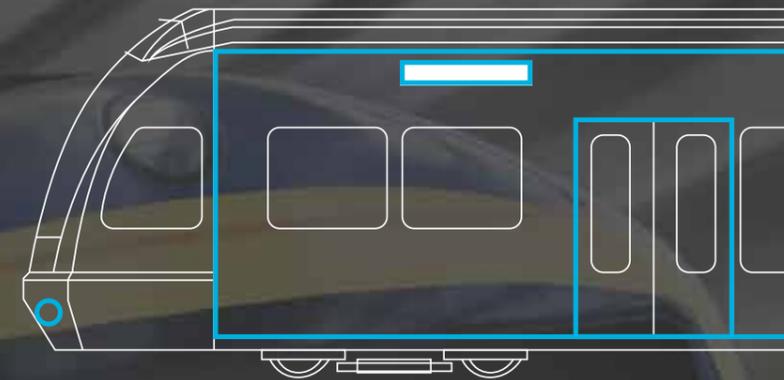
SCRT® Emission abatement exhaust systems for a range of diesel applications

- Trains/Rolling stock
- Construction equipment/NRMM
- Light commercial vehicles

UK Office:
 Phone:
 01344 566050 • 07733 227889
 mark.cooper@hjs.com
 www.hjs.com/uk



ksil® V-0 SILICONE SPONGE



Sealing, Insulation & Protection for Rail Interiors



- Seals & Gaskets
- Vibration Isolation
- Sealing Profiles
- Thermal Insulation

Approved



BOMBARDIER

Silicone
Engineering Ltd

www.silicone.co.uk enquiries@silicone.co.uk

Innovative battery-charger for VLR

In a world-first, Dudley's National Innovation Centre for Very Light Rail has installed an ultra-rapid charging station



Image: : John Zammit/Absolute

When it comes to decarbonising transport, the big prize is modal shift.

Private cars account for 59 per cent of the UK's climate warming emissions from surface transport. However, buses and trains still rely, to a large extent, on diesel power, and this accounts for a sizeable five per cent of surface transport emissions.

The eyes of governments around the world are on modal shift to public transport – to get commuters and travellers out of their cars and into public transport that is cleaner and greener, especially if it is electrified.

However, electrified railways are not always the cost-effective way to go, especially for rural lines. That is why the rail industry press has, for the last few years, been filled with articles on hydrogen-powered trains, on trams that use batteries and superconductors, and even on solar power and liquified petroleum gas.

In the West Midlands, the Black Country Innovative Manufacturing Organisation (BCIMO) is building a National Innovation Centre in Dudley to develop Very Light Rail (VLR) transit systems to suit the needs and budgets of the world's smaller towns, cities and suburbs. A big part of the equation is how to deliver the traction power.

One solution is to deploy an alternative to electrification for urban passenger transport that brings down the upfront cost while still providing some of the benefits of a light rail system.

The VLR Innovation Centre in Dudley plans to do this through Opportunity Charging, which involves the rapid, high-power charging of a vehicle's batteries at the terminus of a very light rail route through an inverted pantograph – the arm extends

“ We could see networks of these chargers serving electric bus fleets, the Very Light Rail network and even bin lorries! ”

down and charges the vehicle via connections on the roof.

Opportunity Charging is more established in Europe, and there is a Global OppCharge standard, with four contacts and two parallel bars, to ensure interoperability across vehicles and charging providers.

Swiss company Furrer+Frej has developed chargers for this system that are already in use in the Netherlands, Luxemburg, Sweden, Spain and Switzerland. They also have deployed chargers in Canada. But, crucially, all of these are only charging buses.

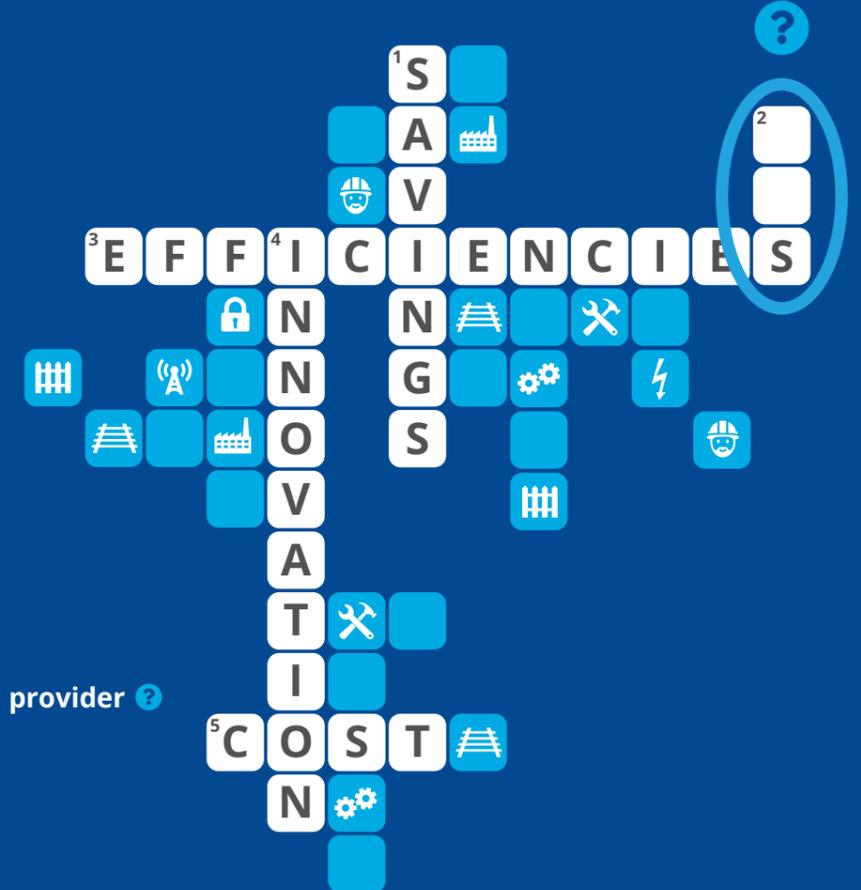
“Supplying electricity direct from the national grid to provide traction power via overhead line electrification is the gold standard for mainline rail and metros,” explained Noel Dolphin, co-author of the Rail Industry Association's recent ‘Why Rail Electrification’ report and head of UK projects at Furrer+Frej.

“However, there is room for innovation and battery charging for projects like VLR, with short end-to-end journeys. Ultra-rapid charging can support new modes of decarbonised transport.”

World first

In April, Furrer+Frej installed its All-in-One Opbrid charging station on the test track in Dudley – the first use of this type of charger in the UK, and a first for light rail in the world.

At 450 kilowatts, the station will charge the VLR vehicle's on-board batteries in three to five minutes. As a result of such short periods of downtime, the VLR could offer service frequencies on par with the London Underground during the peak. »



ACROSS

- 3. Improvement gain- ✓
- 5. Amount paid- ✓

DOWN

- 1. A reduction in spend- ✓
- 2. The UK's leading Supply Chain provider ?
- 4. Leading the way- ✓

Are we the missing part of your puzzle?



Image: John Zammit/Absolute

It maximises the time the vehicles are up and running and not in the depot charging, offering a turn-up-and-go service to rival the convenience of the car.

One key benefit of the opportunity-charging system is battery size. Vehicles do not need heavy, expensive batteries, saving up-front cost and creating more room for passengers, but the batteries don't need to be so small that charging becomes prohibitively frequent. The charger and battery configuration can be matched to the design of the service and schedule.

Indeed, apart from driving the vehicle close to the station, there is very little manual effort involved. The Furrer+Frej overhead pantograph works autonomously. "This required some novel software from our engineers to make sure the station would 'talk' to the light rail vehicle," Noel continued. "But it saves the time and effort of having someone plug-in or fill-up the vehicle, which is why this solution should be really attractive to electrify a whole city."

"With the chargers strategically located, we could see networks of these chargers serving electric bus fleets, the very light rail network and even bin lorries!" The more vehicles using each charger, the better the value-for-money.



Increased performance

Digitisation is a key part of the efficiency gains provided by opportunity charging, as operators can monitor vehicle and charger performance remotely and even provide data back to the grid, ensuring a reliable electricity supply to the service. This can also support passengers by integrating into monitors at the station that also report on wait times, show news and weather information or display advertising. Likewise, the station can support lighting and cameras, becoming a more integrated part of street or station furniture.

The footprint of the charger is particularly small, at 0.72 square metres on a one square metre foundation. It is hoped that this will make it suitable for typical British and European streets, where space is at a premium. Likewise, its relatively compact nature makes it easier for transport authorities or operators to move, if they should need to reorganise bus routes or optimise the service.

A fear, of course, is that a system dependent on just the one charger is a vulnerable to failure. But the system's "plug and play" power modules have built-in redundancy, along with remote monitoring, which means operators can respond quickly to any incidents.

Made in UK

So, does the technology have any potential for heavier rail? A recent white paper in the German Electric Railways publication highlighted its potential to power short branch lines, offering a clean alternative to diesel without the cost associated with OLE (overhead line equipment).

The precedent for this stretches right back to the Battery Electric Multiple Unit (BEMU) train based in Aberdeen in the 1950s – a converted Derby Lightweight EMU from the original British Rail works in the city. This is an industry the VLR project hopes to rejuvenate. The charge station is a critical part of the multi-million-pound project to prove the concept and create green manufacturing jobs to 'level-up' the Black Country.

Noel is also keen to stress the charger's 'made in the UK' credentials: "The software was made by our team in the UK, and we plan to manufacture future units here in Britain. Even this unit was built with steel from Newport."

"This is the culmination of around 10 years' work for us and we are delighted to be building on our long history of rail electrification with this new All-in-One (AIO) solution for Very Light Rail." ■

Originally published in Inside Track, subscribe via www.railbusinessdaily.com/rbd-publications



LIFTING JACKS & PIT EXPERTS

Lifting and inspection equipment you can rely on for all maintenance of rail vehicles.

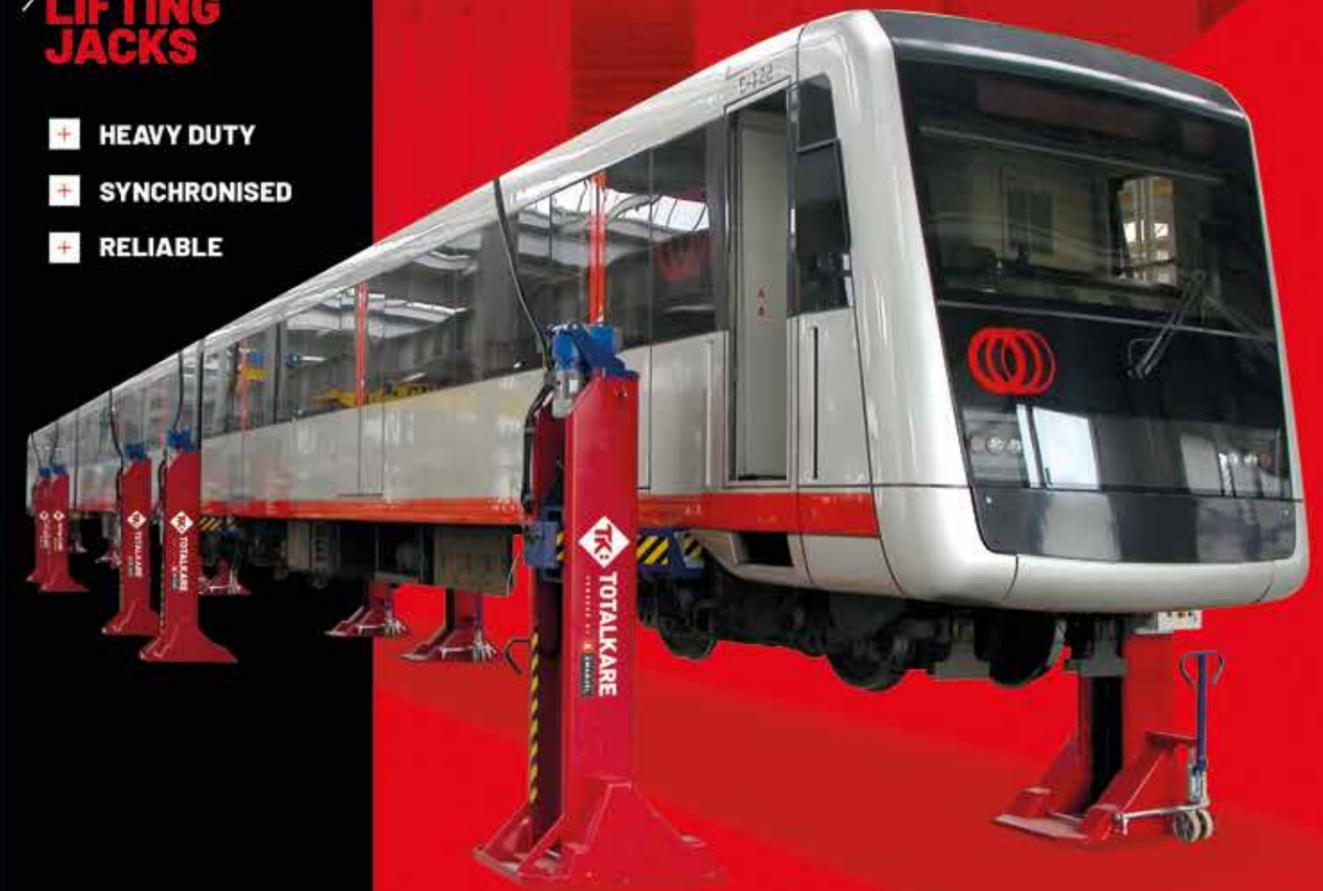
With 40 years' experience on heavy duty lifting solutions, Totalkare combines world class products with industry leading support to facilitate effective maintenance and repair.

RAIL INSPECTION PITS

- + INCREASE PRODUCTIVITY
- + SAFE
- + QUALITY LIGHTING

RAILWAY LIFTING JACKS

- + HEAVY DUTY
- + SYNCHRONISED
- + RELIABLE



CALL 0121 585 2724
WEB WWW.TOTALKARE.CO.UK

Cross-sector collaboration is the key to building back better

Achilles on the importance of utilising resources and data across traditional supply chain boundaries

See us at Stand no. A2



As restrictions lift and the UK starts to resume travel and commuters return, a key theme for the post-COVID economy and world is to "build back better".

Part of this, given that the transport sector is responsible for 28 per cent of all greenhouse gas emissions in the UK, will be ensuring that our transport system is both sustainable and materially reduces carbon emissions.

Furthermore, the plan to outlaw the sale of new petrol and diesel cars and vans has been brought forward to 2030, five years earlier than previously announced, so the urgency around having an effective transport infrastructure has been heightened. Whether businesses are prepared or not, change is both imminent and inevitable.

Implications for the rail industry?

Against this backdrop, electrification can be a great opportunity for businesses to meet their sustainability targets and drive competitive advantage. This is something that has been the subject of much discussion in the rail industry over the past decade.

However, the need for power has never been greater with the demand on our electricity infrastructure increasing exponentially as a result in the growth of electric vehicles and demand from the rail network.

Along with the demand on the infrastructure comes the demand for skilled resources such as linesmen and electrical engineers.

It is critical therefore that rather than working in silos a multi-sector approach to these challenges is implemented by utilising resources and data across traditional supply chain boundaries.

Through the Achilles Network, customers are able to learn



from best practice both cross sector and cross region. Working with suppliers of all sizes to improve standards across the supply chain ensures cross-industry improvement, and enables organisations to create sustainable business practices through improved regional economies, higher levels of employment and an upskilled workforce.

UKPN at the forefront

UK Power Networks Services solves energy challenges through innovative solutions that deliver resilience, cost efficiency and sustainability. It supports its clients through the full life cycle of delivery through consulting, design and build, capital finance and operations and maintenance.

Employing world-class engineers and professionals across the UK, it works with Network Rail, London Underground and High Speed 1 to deliver traction power and innovative energy solutions.

The network's experience is also in industries such as aviation, defence, water, logistics and fleet operation, manufacturing, ports, local and central government, and commercial buildings.

Michael Downing, Category Manager UKPN Services and Supplier Relationship Manager, said: "As a business with widespread supply chain requirements, the Achilles Network provides one interface to collaborate, review compliance information and drive innovation across these historically independent sectors."

The rail industry is facing pressure to evolve. Sustainable, effective infrastructure is the foundation upon which a post-COVID economy will thrive; and to do this, industries need to come together to collaborate and learn.

The Achilles Network, which brings buyers and suppliers together to do just that, will enable all those involved in the rail industry to maximise this once-in-a-generation opportunity to build back better. ■

Visit www.achilles.com

Katie Ferrier – Senior VP Customer Engagement and Quality Assurance Email: katie.ferrier@achilles.com

Originally published in Rail Director, subscribe via www.railbusinessdaily.com/rbd-publications

Katie Ferrier from Achilles is speaking at the railbusinessdaily.com conference at 10:00am



Supplier assurance, you're on the right track

Providing trusted supply chain assurance to the UK rail sector for over 20 years, Link-Up meets the evolving needs of Buyers and Suppliers, going beyond simple pre-qualification and trackside safety, to deliver assurance, insight and more effective procurement across the wider infrastructure sector.

We collect and validate supplier information so that you don't have to, covering their products and services, finance insurance and legal, environment quality standards, sustainability, health and safety details and more.

Powered by the latest technology, our platform allows you to build a package that aligns to the sectors and regions that you operate in. With our packages you can include suppliers from rail, construction, utilities, facilities services – be it direct or indirect spend.

CALL US
+44 (0) 1235 861118

EMAIL US
enquiries@achilles.com

VISIT US
www.achilles.com

It's got to be rail freight

The growth of rail freight is one of the success stories to come out of the past couple of years



Although the rail industry was hit hard by the COVID-19 pandemic, one sector didn't do too badly out of it – rail freight.

Granted, there was an impact. In the early days of the first lockdown, when the country almost totally stopped, freight levels were reduced, like everything else.

The construction industry was at a standstill, so aggregate trains didn't run, and people stopped buying cars, so trains transporting cars and automotive components were cancelled.

Trains hauling fuel and oil were also postponed, as no one was driving cars or catching planes. Overall, rail freight traffic was down around 40 per cent – not as badly affected as passenger loadings, which were down 95 per cent, but still a significant drop.

However, British homes still had to be heated, so biomass trains to Drax power station kept running, and waste still had to be removed from major cities, so those trains ran as well.

But then the great British public, stuck at home during lockdown, discovered online shopping. Intermodal traffic increased, boosted also by deliveries of protective equipment and medical supplies coming into the country in containers.

Not only did freight recover, new routes opened up. The port of Felixstowe became congested, with so many containers coming in, so ships were re-routed to other ports, such as Liverpool. That meant freight trains had to carry containers from Liverpool to the rest of the country.

Express rail terminals

In May 2020, Transfesa Logistics, working with DB Cargo UK and Network Rail, launched new 72-hour express rail services from terminals in Valencia and Murcia, Spain, to the UK, using refrigerated containers.

The new services operate into DB Cargo UK's Barking Intermodal Terminal in London, which is strategically connected to the High Speed 1 (HS1) rail link. Thousands of tonnes of goods began to be transported by rail, supporting the economy and keeping supermarkets stocked up with vital supplies.

Having said that the carriage of building materials and fuels was depressed, many companies took the opportunity to plan for the future, by either resigning contracts or planning new services.

DB Cargo UK signed a new three-year contract with Puma Energy (UK) for rail haulage and the supply of rail tank wagons. This arrangement continues the existing partnership between DB Cargo and Puma Energy and involves the transportation of more than one million tonnes of fuel each year from Milford Haven and Immingham to fuel terminals at Theale in Reading and Westerleigh, Bristol, with each train of up to 30 wagons capable of transporting over three million litres of fuel.

Direct Rail Services (DRS) opened up a new electrified freight route between Daventry International Railfreight Terminal (DIRFT) and Mossend Yard, Motherwell, near Glasgow. This allowed the use of one of the company's Class 88 electric locomotives on freight trains from Daventry to Mossend and back via the East Coast main line (ECML).

“Running container train services at 775 metres not only improves the productivity and efficiency of rail freight but has significant environmental gains”

Normally, these trains would use the West Coast main line, but engineering work required that a diversionary route be used, and the traditional diversionary route was also undergoing work, so a third option was sought.

In the past, that would have meant a Class 66 or Class 68 diesel locomotive being used to haul the train across country on non-electrified lines. Although these locomotives are the workhorses of the rail freight network and do sterling work, they are not as 'clean and green' as electric locos. Using a lot of initiative, and some lateral thinking, DRS' planning team decided to go south in order to go north and came up with a route that, although longer, was electrified the whole way.

New route

GB Railfreight (GBRf) opened up a new service for building material supplier CEMEX from its Dove Holes quarry, near Buxton in Derbyshire, to Crawley in West Sussex. The train, which consisted of 22 used cut-and-shut aggregate hoppers that had been repurposed from coal hoppers, carried more than 1,675 tonnes, exceeding previous deliveries to Crawley by approximately 350 tonnes. Once the coronavirus outbreak is over, and normal service has been resumed, the new service between Dove Holes and Crawley is expected to run once a week.

A new aggregate terminal at the site of the old Newhaven Marine station in East Sussex was opened to supply the construction industry, mainly in London, with aggregate, sand and gravel. Newhaven Marine station closed to passengers on safety grounds in August 2006. Although it continued to be used by some trains so as to fulfil legal obligations – the so-called Parliamentary Trains – it closed officially on 26 September 2020.

Network Rail completed extensive modifications and refurbishment at the site, developing rail freight capacity for the transportation of marine-dredged sand and gravel, both important in the making of concrete and other materials for the construction sector, locally and in London.

The work – carried out in partnership with Brett Aggregates and the Newhaven Port Authority – saw the area open again after years of inactivity, providing much-needed local jobs. The first DB cargo freight train, hauled by locomotive 66113, ran from the new terminal on Thursday 18 June 2020.

From Southampton to Derby

A new, regular freight service began operating from the Port of Southampton to East Midlands Gateway, Derby, in July 2020. GBRf is operating the new intermodal service, five days a week, from the rail terminal operated by Solent Stevedores at the Port of Southampton. Its destination is the 50-acre intermodal terminal, managed by Maritime Transport, that operates 24/7 at East Midlands Gateway (EMG), next to East Midlands airport and junction 24 on the M1.

Maritime Transport also launched another new service, its tenth, operating five trains a week between DP World London Gateway (LGP) and its terminal at EMG. Each of the five weekday services can carry 34 containers and is hauled by DB Cargo.

In addition to this new service, and the one hauled by GBRf to Southampton, two other services already run daily from EMG to the Port of Felixstowe, hauled by DB Cargo UK and Freightliner.

GBRf also signed a new five-year deal with Mediterranean Shipping Company (UK) (MSC). The new volume-based deal is expected to increase wagon utilisation that in turn will help further reduce carbon emissions. Services will operate from Felixstowe and London Gateway to both the Midlands and Yorkshire, with a minimum commitment of five days a week.

Major changes to the railway transformed access for freight trains to the Port of Southampton.

A £17 million upgrade provided almost a mile of new track, 22 new signals and 14 new sets of switches and crossings. As a result, longer freight trains, each capable of carrying up to 14 containers more than before, are able to access the facility and there is no longer the need to move in and out of Freightliner's Maritime Terminal to load and unload goods, boosting efficiency of freight operations by as much as 30 per cent.



Work commenced between Southampton Central and Redbridge at the end of January 2021 and the upgrade was completed during February.

Following this work, Southampton joined London Gateway in becoming the first deep-water ports in the country capable of handling Freightliner's new 775-metre intermodal container trains, the longest in use on the national rail network.

Longer trains

The new 775-metre trains are 250 metres longer than a typical freight train and so can carry between 12 and 14 additional containers on each service, generating significant cost and environmental benefits for customers transporting goods to and from the ports.

The trains depart the freight rail terminals at DP World's Southampton and London Gateway ports every working day of the week for Manchester, Birmingham and Leeds, carrying a range of goods.

Freightliner chief executive Eddie Aston commented: "Running container train services at 775 metres not only improves the productivity and efficiency of rail freight but has significant environmental gains. The three daily, roundtrip, 775-metre intermodal trains that Freightliner is currently running from the Port of Southampton are collectively saving over four million road miles and 9,500 tonnes of carbon emissions (CO2e) per year, further contributing to the government's commitment to bring all greenhouse gas emissions to net zero by 2050."

The rail terminal at the Port of Sunderland was reopened in June 2021, the first time that rail freight has operated at the Tyne and Wear port in over 20 years. DB Cargo is operating a new freight service to Wolverhampton, transporting steel coil for new-to-rail company Marcegaglia, the largest independent global operator in the steel processing industry and the largest precision tube manufacturer in Great Britain, with facilities in Dudley in the West Midlands and Rotherham in South Yorkshire.

With all this activity, rail freight is good news for a government committed to net-zero carbon and levelling up every region of the UK. It has a significant contribution to make in achieving both agendas.

The Rail Delivery Group recently commissioned a report on rail freight from Deloitte. Data gathered as part of that exercise shows that rail freight delivers £2.5 billion in economic and social benefits to the UK annually.

At the same time, rail freight removes traffic from Britain's roads, with each freight train estimated to take an average of 76 lorries off the road network (and up to 110 lorries for some aggregates trains). ➤

Rail freight therefore plays a key role in decarbonisation. In fact, there are seven million fewer lorry journeys per year thanks to rail freight, with 1,000 lorries removed from London roads each working day alone, making the capital's streets cleaner and safer.

John Thomas, RDG's Director of Policy, commented: "While goods will still require road transport at certain points in their journeys, reducing those road miles wherever possible delivers benefits to the UK as a whole, and especially for those communities close to major hubs of activity, such as ports, logistics centres and construction sites.

"Enabling more trains to run and more goods to be shifted from road to rail will help to ease congestion on the road network, lower carbon and particulate emissions in the air, and reduce social impacts from noise and safety incidents.

"Rail freight has an important role to play in enabling the government's plans to recover and build back from COVID-19 in a way that levels up the regions of the UK on several fronts: oiling the wheels of the economy by facilitating the movement of materials to build and power new infrastructure; relieving pressure on the strategic road network, allowing car drivers and other freight on the roads to travel more freely; delivering key infrastructure projects like HS2 and new offices and housing; and, importantly, facilitating inward investment into the regions and industries of the UK.

"Established freight hubs also lead to the clustering of activity, as businesses co-locate to boost productivity, creating jobs and services in their local areas.

"Rail freight already supports a more balanced, green economy for Britain. It is a success story the government should build on in the recovery."

The government intends to do just that. Rail Minister Chris Heaton-Harris, whose constituency includes DIRFT, the UK's largest rail freight terminal, said: "I know, through my constituent John Smith (managing director of GBRailfreight), that there is quite a lot of private investment waiting to happen



out there, but the market was waiting to see what the future for it looked like.

"I'd like to think that, in the Great British Railways document, we've demonstrated that we believe there's a massively strong future for rail freight. I fully expect the market to respond by getting diesel out of the way at some point when it's viable, which I think will be quite soon, and helping us with our decarbonisation effort in that way.

"When you read the Williams Shapps Plan for Rail, you see that freight is one of the things that's threaded all the way through it.

The UK government published its Transport decarbonisation plan on 14 July 2021.

"I believe there is a massive future for rail freight if we are going to decarbonise, level up, get our roads decongested and improve air quality.

"It's got to be rail freight." ■

Originally published in Inside Track, subscribe via www.railbusinessdaily.com/rbd-publications

Imagine as a train operator being able to clean every train every day...

See us at Stand no. J5



Very little has changed in the last 30 years in train wash cleaning until now.

Rather than a massive, expensive wash taking up swathes of space with a large amount of civil engineering install cost, The Orange Train Wash has just a 3m x 1m footprint sited either side of the train where it's needed – rather than shunt trains round.

With no drainage required as all the water is recycled and reused, this really is a game-changer.

Each road can have its own pair of machines so on a four road depot all 60 trains can be cleaned every day.

No chemicals are required as the 85° deionised water with unique brushes cleans the carriage, and the air blades push the water downwards onto the trackpan to pump back into each machine for recycling.

Another benefit is that winter washing can continue whatever the weather, no 3° and having to stop as our washer constantly maintains 20° before heating back to 85° ready for the approaching train.

The software report on the water usage and recycling is excellent proof of hitting your carbon saving targets.

Cleaning a carriage every 22 seconds means even an eight-car train is less than four minutes.

Imagine cleaning every train every day and only using one per cent of the normal water usage.

Please visit our stand or message us through the website www.theorangetrainwash.com

IMAGINE... as a train operator being able to clean every train every day.

- Cleaning with 85° Hot Deionised Water
- Totally Chemical Free
- Recycle The Water
- Filter Re-deionise and Reuse
- Recycle 90%
- Report of the carbon saving & water saving on your desktop as evidential proof of the clean.



THE ORANGE TRAIN WASH
CLEAN - CAPTURE - RECYCLE - REPORT

FIND US AT:
ROLLING STOCK NETWORK SHOW
Stand J5 Derby 30th September 2021
sales@theorangetrainwash.com
www.theorangetrainwash.com



One of the UK's leading Welfare Hire Companies

See us at Stand no. O6

Welfare Vans 4 Less is one of the leading UK providers of Welfare Vans, Towable Welfare Cabins and Portable Toilets, including our newest purchase of the MEWU toilets. Trading since 2017 and with experience of Car and Van Hire, since 1981 through the association of our sister company Afford Rent a Car, we are fast becoming one of the leading independent hire companies in the UK.

We offer delivery and collection nationwide, seven days per week. We also offer a full support service where we can clean and maintain the vans around the clock, as well as a 24-hour breakdown service. We hold RISQS, UVDB and FORS accreditations and some of our drivers are also PTS trained

(Personal Track Safety). Our vehicle numbers are increasing, and we update our fleet regularly to offer our customers with newly converted vans and cabins.

Our solar powered conversions and Welfare Cabins are all powered with ECO Generators and are perfect to minimise emissions within the environment. We offer competitive hire rates and excellent customer service.

Royal Oak Garage, City Rd, Fenton, Stoke-on-Trent ST4 2PX
 info@welfarevans4less.co.uk
 01782 848855



WELFARE VANS 4 LESS

afford Rent-A-Car
Our Name Says It All

Welfare Vans 4 Less are one of the UK's leading suppliers of professionally converted welfare vans.

Affordable Car, Van and MPV Rental in Stoke on Trent, Staffordshire and Cheshire

01782 848855
e: info@welfarevans4less.co.uk www.welfarevans4less.co.uk

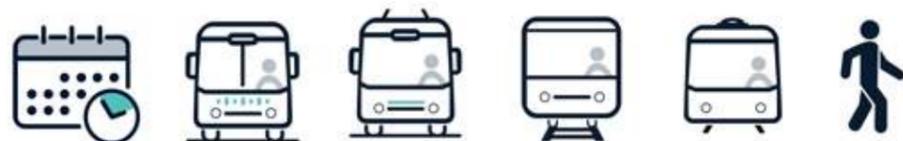
01782 848627
WWW.AFFORD.CO.UK

WE ARE COVID COMPLIANT

Specialists in Automatic Passenger Counting Systems and Smart Transit Solutions since 1993



Meet Us on Stand **H2**



Accurate Data to Manage and Plan Your Services

Award Winning - Highly Accurate **Automatic Passenger Counting** Systems

In the UK alone Infodev EDI equipment is fitted to train classes :
 142, 144, 150, 153, 155, 156, 158, 165, 168, 170, 185, 220, 221, 222, 230, 315, 321, 322, 323, 333, 442 and HST.

www.infodev.ca

⇒ For more info, contact our UK Representatives ⇐



www.on-train.co.uk

sales@on-train.co.uk

07527 811700

Jones Nuttall Ltd – Delivering cost-effective, reliable components and assemblies to the rail industry

See us at Stand no. F6

Exhibitor at Rolling Stock Networking, Jones Nuttall Ltd with its dedicated Rail Division, both manufactures' and 'overhauls a large selection of traction and rolling stock components. Our drive is to provide the best and most cost-effective solution to the train owner or operator. Jones Nuttall was established in 1971 and constant investment means Jones Nuttall has become one of the UK's leading specialists in the rail industry. The efficiencies we have put in place have enabled sustained growth and allowed us to maintain not only very competitive pricing but also quality products approved to ISO9001:2015 delivered within required lead times along with dedicated customer service.



Jones Nuttall prides itself on being able to work closely with any company, large or small. We are able to offer CNC machining, specialist fabrication and welding of carbon and stainless steels, as well as other services which include projection welding, brazing of copper, brass and bronze components.

We are also able to assist with 'reverse engineering', helping many companies overcome delivery or supply issues on items that they are unable to source or that have been superseded or made obsolete. Jones Nuttall will work with the customer's sample or drawing in order to offer the best and most cost-effective solution.

Rolling stock varies in age and to assist in the improvement of the reliability of vehicles we specialise in the manufacture, modification and overhaul of components and assemblies associated with the following fleets:

Electrical Multiple Unit (EMU) classes: 313, 315, 317, 318, 320, 321, 322, 365, 376, 377, 442, 455, 456, 507, 508

Diesel Multiple Unit (DMU) classes: 159, 165, 166

Locomotive classes: 37, 47, 55, 57, 73, 83, 87, 90, 91

Coaches: MK2, MK2F (Scot Rail Sleepers, Kiwi Rail, M3, Northern Belle, VSOE Pullman)

Tram systems: Manchester Metrolink, DB Regio Tyne & Wear, Metro Trains Melbourne.

We have years of technical data and expertise, working to WOSS (Workshop Overhaul Standard Specification) and BR Cat. (British Railway Catalogue) references.

Jones Nuttall also has a Precision Engineering Division with expertise in CNC precision machining of both ferrous and non-ferrous metals. Materials that we commonly machine include silver, copper, brass, titanium and aluminium.



Our Laminates & Plastics Division is capable of machining a vast range of industrial laminates and thermoplastics which include SRBF, SRBP, Epoxy Glass, Polyester Glass, EM42 and heat resistant materials eg. Sindanyo, Monolux, Nylon (including filled), Acetal (including oil filled), Peek, Polypropylene Polyethylene and PTFE to name a few.



Jones Nuttall
PRECISION ENGINEERING

50 years of high quality engineering solutions

60+ staff with a genuine interest in every job

- General precision engineering
- CNC machining
- Fabrication
- Refurbishment
- Valves
- Controllers
- Couplers
- Gangways & anti friction liners
- Flexitors
- Interior lighting diffusers
- Clevises
- Hinges & pulleys
- Resistor grids
- Contactors
- Reversers
- Relays
- Dedicated inspection service

+44 (0)1925 628630 | sales@jonesnuttall.co.uk | www.jonesnuttall.com

RISQS VERIFIED

Intertek UKAS

Solving the branch-line challenge

A new National Innovation Centre is being built at Dudley in the West Midlands to develop the concept of Very Light Rail



The VLR National Innovation Centre in Dudley

Image: BCIMO

Light Rail is the name given to tram networks, to distinguish them from traditional or 'heavy rail'.

Trams – light rail vehicles – spend a lot of their time running on tracks embedded in city streets, though they do also have dedicated tracks, segregated from road traffic. The vehicles are normally quite small in railway terms, consisting of anything from two to five cars, and are often segmented and articulated, having fewer axles and bogies than there are segments.

In the UK there are tram systems in Croydon, Nottingham, the West Midlands, Blackpool, Manchester, Sheffield and Edinburgh.

So, if trams are 'Light Rail', what is 'Very Light Rail'? Even smaller trams?

Energy efficient

The simple answer is that Very Light Rail (VLR) can indeed be small trams, and Coventry City Council is intending to use VLR for its on-street project in exactly this application.

However, VLR vehicles are also well-suited for branch lines, where passenger demand, while still significant, is light.

They are energy efficient, often powered by alternative 'green' technologies, and very light, so their power-to-weight ratios are good, and they are kind to the infrastructure.

For this reason, the technology is attractive to those looking to reopen abandoned branch lines – closed in the time of Beeching.

Their light weight means that older track alignments and bridges don't need such expensive rebuilds, and their 'green' technology makes them clean and cheap to run.

An early example of a VLR unit is the Parry People Movers Class 139, two of which provide services on the UK's shortest branch line – the Stourbridge Town branch in the West Midlands, which is just under a mile long. The pair of small railcars, which each seat 25 people and can carry a maximum of 60, are powered by flywheel energy storage.

A large, spinning flywheel drives the wheels. It takes kinetic energy from the braking energy during deceleration, and then releases that energy to accelerate the vehicle. A small engine, powered by liquified petroleum gas (LPG), spins up the flywheel at the start of operations, tops up the energy storage to reinstate losses, and powers onboard lighting and other systems.

The Parry People Mover concept was originally tested in 2002. The two Class 139 vehicles currently in service date from 2008.

To bring the concept up to date, a new organisation has been set up to take VLR to another level. The Black Country Innovative Manufacturing Organisation (BCIMO) is building a state-of-the-art Very Light Rail National Innovation Centre in Dudley, at a cost of around £28 million, where it will help to develop the next generation of VLR vehicles and infrastructure.

“ This initiative is about developing a new form of low-cost rail-based transport ”

BCIMO's formation was made possible by a collaboration between Dudley Metropolitan Borough Council and Coventry City Council, together with input from Cenex, the low emission transport consultancy.

Dr Nick Mallinson, chief executive of BCIMO, explained: "This initiative is about developing a new form of low-cost rail-based transport, which will be manufactured and installed by UK companies and, in particular, supported by manufacturing companies in Dudley

and the wider Black Country."

Funded by the European Regional Development Fund (ERDF) and the Black Country Local Enterprise Partnership (BCLEP), the centre will include a triple-height engineering hall, research laboratories, conference and seminar rooms and offices for 45 people.

There will also be a dedicated 2.2km test track running along part of an old disused railway line. Constructed from all new track to Network Rail 100mph standard, it includes an 845-metre refurbished tunnel, with full radio cover and lighting as well as a safe walkway, and a unique 15-metre-radius turning loop for Urban VLR vehicle cornering trials.

In its mission statement, BCIMO talks about positively transforming the rail industry by providing supplementary VLR solutions and helping the Black Country to both regenerate and innovate. But Dr Mallinson maintains that it is more than that. "We plan to look at the bigger picture and how VLR systems can fit into the overall concept of hub-to-home public transport," he added.

Around the country, the government is providing start-up funding for a number of schemes under its 'Restoring Your Railway' programme. Several of these proposals are to reopen former branch lines, especially where there is need for new local connections, perhaps to mainline inter-city services, and VLR could be an ideal solution for a number of them.

Richard Jones, BCIMO's business and partnerships manager, said: "We're not in competition with the railways. Very Light Rail both supports and sustains the current railway network, providing more railway and more connections."

Low-cost option

VLR's main benefits stem from its low capital and operating costs and shorter lead times, with fewer disruptions than conventional rail systems. It can be especially useful on short routes, where operating traditional heavy rail or tram solutions is uneconomic.

It can also help with the government's challenge to the transport industry to clean up its act, based on its 'Decarbonising Transport' document. Although rail is already one of the most efficient ways of moving high volumes of people into and out of city centres, there are still moves to reduce emissions even further, and VLR could well be an answer in some areas.

While the response to the government's decarbonisation challenge has focused largely on the removal of diesel-only trains from mainline routes, and the establishment of a major electrification programme, what about branch lines and other areas where electrification simply isn't viable for such short journeys and low volumes of traffic? This is where Very Light Rail could well be able to help.

Development of 'Revolution VLR', a lightweight vehicle for branch-line applications, led by Warwickshire-based Transport Design International, is well advanced. Working with the Warwick Manufacturing Group (WMG), the design team's key aim is to facilitate low-cost connectivity of regional and rural lines. Its first prototype vehicle is nearing completion and will then start testing at Dudley.

“ The Very Light Rail Test Track and National Innovation Centre is a key project for our borough ”

However, revitalising old 'Beeching' lines, and providing an alternative motive-power choice on shorter existing routes, is not the only application for VLR technology.

Production line

There are new-build schemes in the pipeline too, and these bring us back to the concept of small, light trams.

One such application is being planned in Coventry, where the city council, together with lead partner WMG, is developing a VLR solution that will

see battery-powered vehicles running on a route that will connect major employment sites with the city centre and the railway station.

These vehicles will run on innovative lightweight track, specifically designed for the Coventry system.

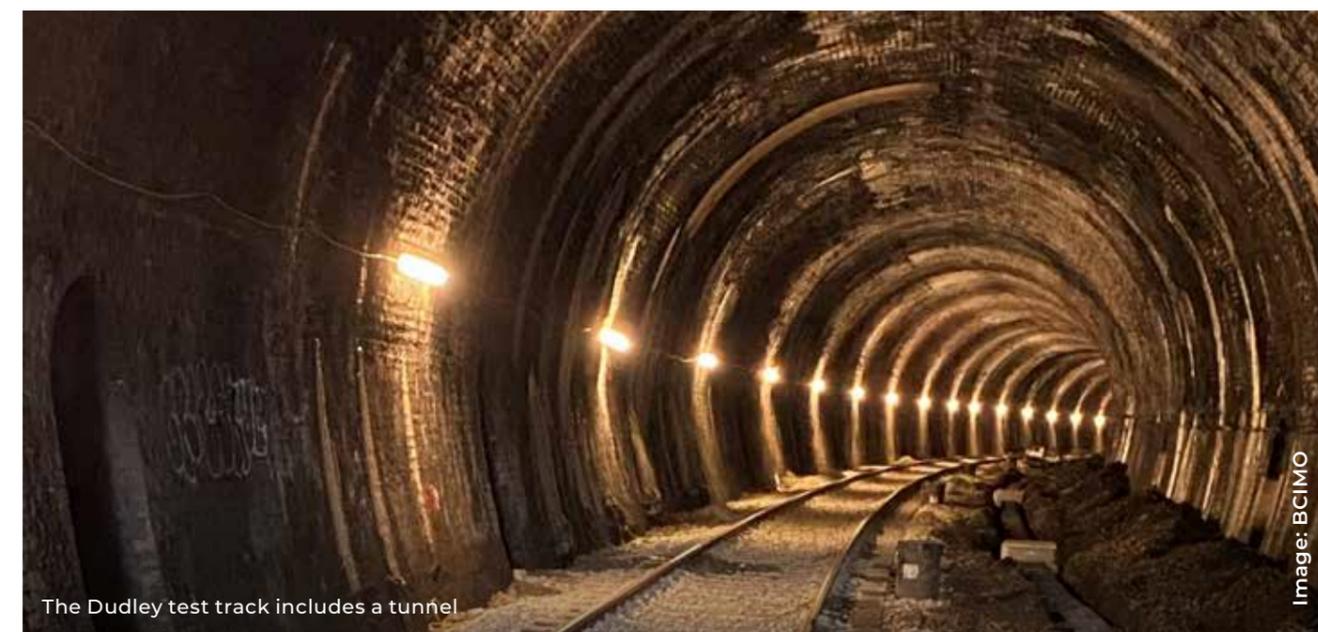
This has the advantage of being laid into the road surface, removing the need for deep foundations and for moving buried services – a task which adds so much to the cost of conventional tram tracks. ➤



Class 139 Parry People Mover on the Stourbridge Town branch

Image: Network Rail.

Article



The Dudley test track includes a tunnel

Image: BCIMO

Cllr Jim O'Boyle, cabinet member for jobs and regeneration at Coventry City Council, commented: "We want our public transport to be efficient, affordable and, most importantly, environmentally friendly. Coventry led the industrial revolution and now we are leading the green industrial revolution."

"I firmly believe that VLR is the future of public transport in small and medium sized towns."

The first vehicle for this project will shortly undergo rigorous testing at the new centre in Dudley.

Developing the supply chain

The work of the BCIMO is not only dedicated to pioneering the VLR concept, it is also about developing and nurturing a new supply chain in the Black Country. "We have set up an 'Innovation Forum' to encourage and support the local SME community," Dr Mallinson explained. "Many companies might only be active in certain sectors and might not realise that the products they make, for instance automotive components, could be adapted for new markets, including for use in the Very Light Rail industry."

Cllr Patrick Harley, leader of Dudley Metropolitan Borough Council, added: "The Very Light Rail Test Track and National Innovation Centre is a key project for our borough. It will offer an innovative and exciting opportunity to provide lower cost local rail connectivity, encouraging shift from private vehicles towards public transport."

Very Light Rail, as a concept, has been talked about for some time, but it now seems to be coming of age and is bringing with it the promise of lower-cost, greener and better-connected public transport.

In the Black Country, it is also hoped the development of VLR will help to create new jobs and secure others, which might be under threat as a result of the COVID-19 pandemic.

Construction of the new VLR National Innovation Centre is expected to be completed in 2022. ■

Originally published in Inside Track, subscribe via www.railbusinessdaily.com/rbd-publications



Revolution VLR is a development for branch-line applications

Cool Driver - No Sweat !

Over 800 UK Train Cabs Benefit from Retrofitted DC Airco Cab Air Con

Recent Installations
Class 769 TFW
In Progress
Class 769 GWR

On Train are our UK Representatives
klane@on-train.co.uk
07527 811700

© C. B. SA. Gareth James

On track for rail expansion

With a global reputation for engineering excellence, we are now pleased to offer our trusted services to companies operating in the UK rail sector.

From our headquarters near Derby, we can offer manufacturing support for companies involved in both infrastructure projects and the supply of rolling stock.

At manufacturing facilities in Derbyshire, Nottinghamshire and North Wales our multi-skilled team can provide:

- Technical Fabrication Services EN15085 Class 1 Manufacture of Railway Vehicles and components to Certificate Level 1.
- EN 1090-1:2009 + A1:2011 Execution of Steel and Aluminium Structures.
- Manufacture and Assembly Capability.



To find out how the Greenbank Group can help your company, telephone **01283 817200** or email info@greenbankgroup.com



Certified to EN 15085 Manufacturers of Railway Vehicles and Components Certification Level 1.

Protecting your fleet with SET iRCM

See us at Stand no. D6

Remote Condition Monitoring (RCM) has been a boon to the rail industry over the years, giving operators an insight into the changing states of onboard systems and maintenance teams a reasonable steer on the cause of a problem



SET iRCM – superior data collection

SET Intelligent Remote Condition Monitoring (iRCM) not only records onboard system signals and sends them to an offsite database as would be expected, but once in the cloud it makes that data available to end-users via dedicated dashboards on PC or mobile platforms. Algorithms constructed using known cause and effect combinations are in place to identify the root cause of a problem and present a means of mitigation. Add this to geo-positioning and it is possible to see where the fault began and how it developed.

SET iRCM looks for issues that comprise one change in state or several. Such state change combinations can quickly pinpoint the location of a fault and its cause, which means that remedial action can be taken sooner rather than later and can make the difference between a minor and major delay, reducing costs and passenger inconvenience.

iRCM also contributes to the awareness of potential issues where patterns of state change can be indicative of upcoming failures. Being able to take proactive, preventative maintenance can significantly reduce unanticipated problems leading to downtime and unplanned resource use.

SET's expertise in root cause investigation of legacy and contemporary electronics played a significant role in developing the iRCM system. This, and a culture of working with clients to meet their objectives, has produced a system that is flexible, focused, and cost effective. End-users are able to access data that they can use towards ensuring their fleet delivers the highest services to passengers, profitably.



Collaboration between client and supplier is important to ensure that the maximum benefit is achieved, as looking into every aspect of fault behaviour requires commitment. It's worth it though for a tailored system. Consider the benefits: onboard faults identified and located mean that a driver mitigation can be implemented within minutes, early warning enables planning for pre-emptive maintenance, and in the event of a failure, root cause identification can mean a robust solution. SET is on stand D6. Call over if you would like to know more.

Contact: richard.uttley@set-gb.com
Visit us: www.set-gb.com

Things weren't always as efficient as they are today, however. On the original systems, data would need to be manually downloaded from on-train recorders, taken to the office and pored over by experienced analysts to dig out information on possible causes of, and potential, failures. These days onboard systems use wi-fi or mobile networks to deliver data to ever-growing cloud data lakes – making the raw data more readily accessible to the departments that need to keep a watchful eye on operational performance.

Fleets delivered in recent years invariably have RCM already installed by the OEM. Older fleets have some condition-monitoring sensors, analogue and digital, with signals usually written to an onboard recorder to be downloaded once the train is in depot. Fleets built prior to the 90s have few data sensors or the necessary communications infrastructure, making them a difficult proposition for building a business case around installing RCM.

Legacy systems are always going to have problems and require attention, and the degree of attention is where costs can be so variable. Catching issues early can mean the disruption and expense are minimal.

Justifying RCM for an older fleet is going to rest on how well the data might be used to provide early notice of a system that is potentially heading for a failure and how good the system would be in identifying the root cause. It is also going to be influenced by which signals are monitored and whether extra signals (at what cost) may need to be included to bring it to viability. If the savings in time, effort and costs stand above the cost of installing RCM over the remaining life of the fleet, then it should be a 'no-brainer'. However, changing states are not always an accurate pointer to the root cause of the fault and so having data for data's sake could be construed a false economy as a disproportionate amount of additional time may be used for analysis and interpretation.

In this situation, you might need something better.

Intelligent RCM

Remote Condition Monitoring

ONBOARD DATA ACQUISITION, ANALYSIS, & FAULT IDENTIFICATION

Access to data across all on-board systems

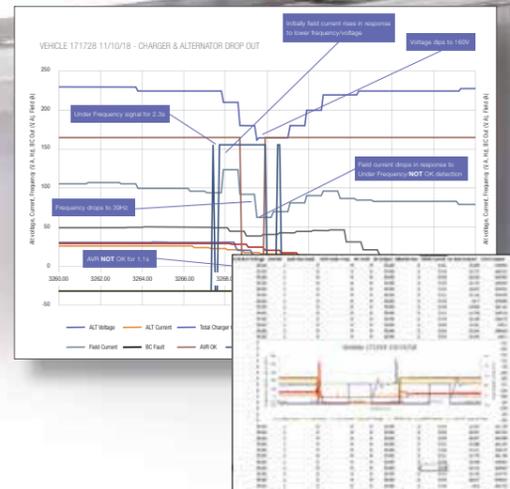
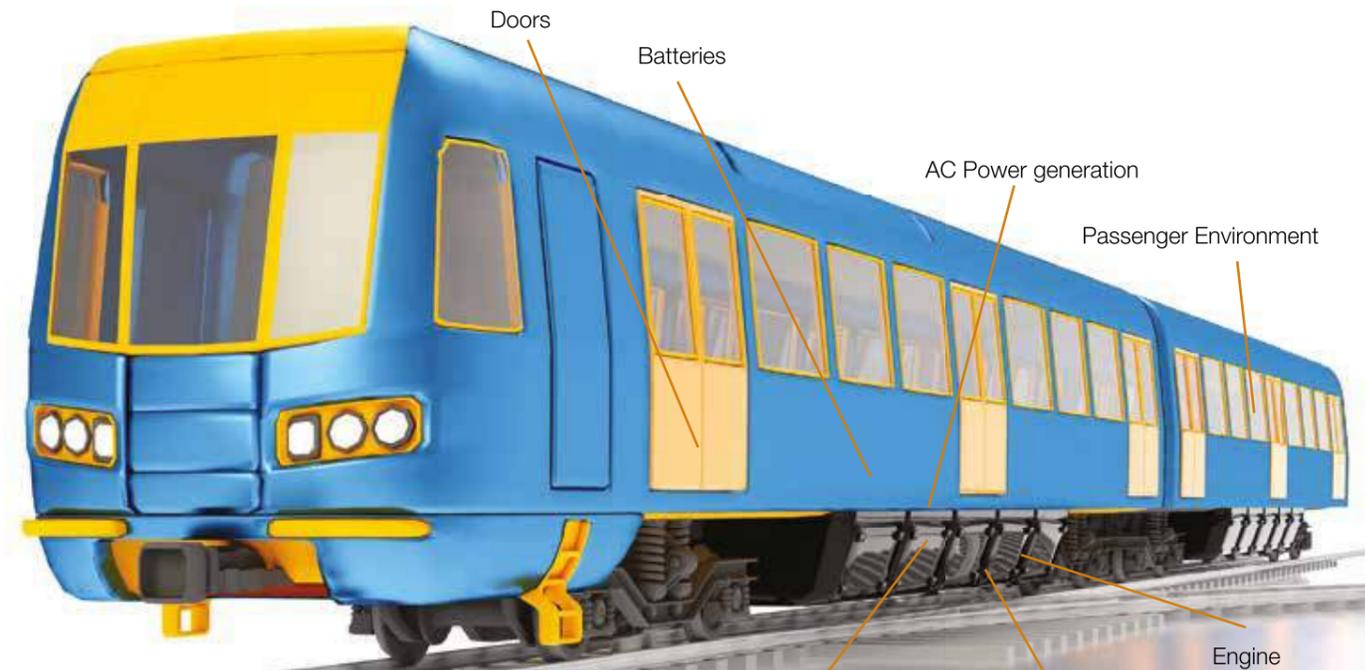
Customised to deliver focused data analysis

Live data delivery, local or remote

Full installation service

Fully safety compliant

SET's expertise in root cause investigation of legacy and contemporary electronics played a significant role in developing the iRCM system. This, and a culture of working with clients to meet their objectives, has produced a system that is flexible, focused, and cost effective. End-users are able to access data that they can use effectively, ensuring their fleet delivers the highest levels of service to passengers.



DC Power generation

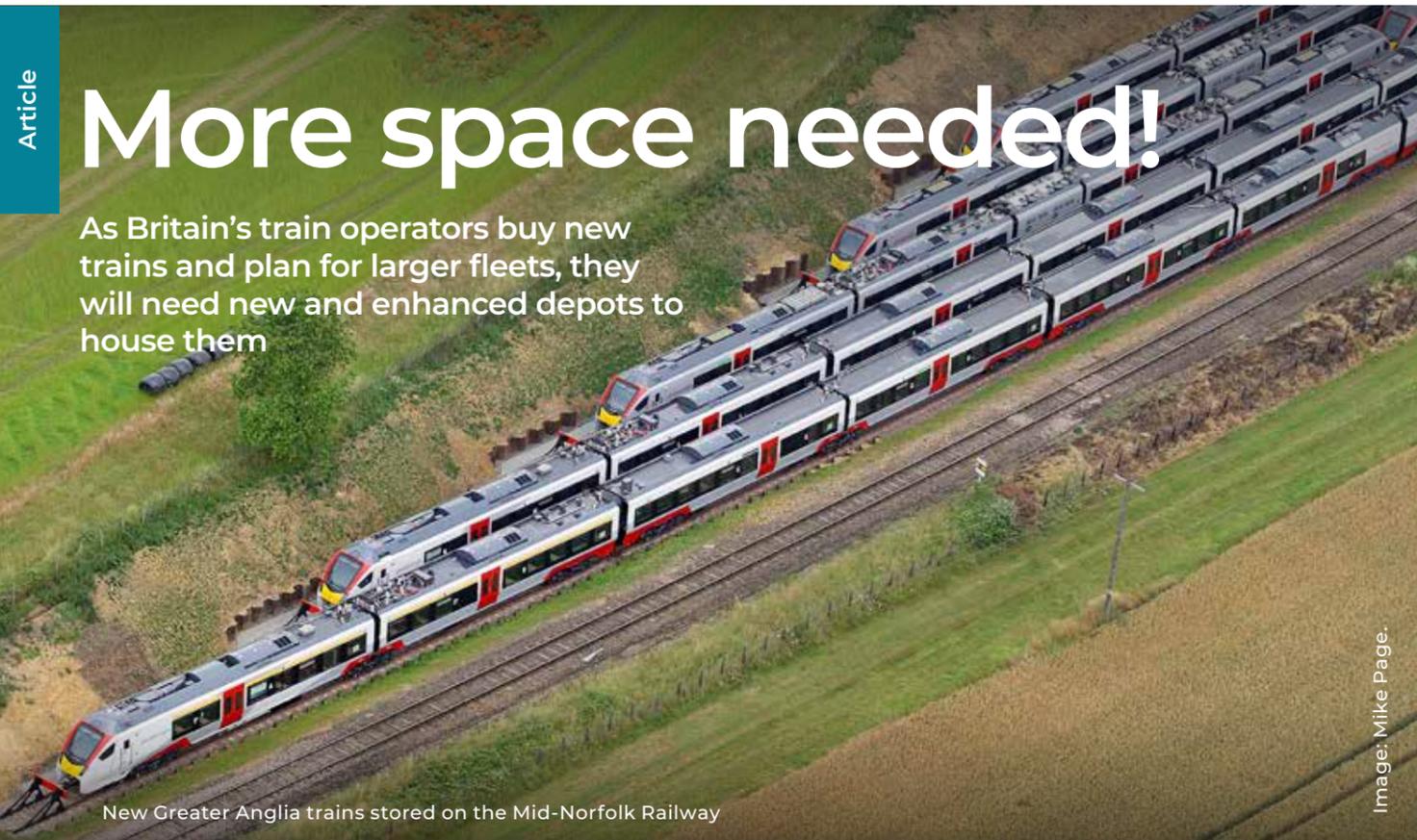


SET LIMITED

Atlas Works
Litchurch Lane
Derby
DE24 8AQ
Tel: +44 (0) 1332 346 035
info@set-gb.com
www.set-gb.com

More space needed!

As Britain's train operators buy new trains and plan for larger fleets, they will need new and enhanced depots to house them



New Greater Anglia trains stored on the Mid-Norfolk Railway

Image: Mike Page.

Passengers around the country are already benefitting from a host of new trains, as operators look to improve performance and reliability, enhance the passenger experience and meet government targets.

However, more trains take up more space, and already-stretched depot capacity is struggling to meet the demand.

In addition, when a new fleet arrives before the old one is retired from service, where do operators park them all? And where do they store the retired ones before they are sold on or scrapped?

Different operators have differing solutions. Here are a few examples.

Temporary depot

Tyne and Wear Metro has been open since 1980 and has run its fleet of Class 994 Metros ever since. To replace them, Nexus, the Tyne and Wear Passenger Transport Executive, has ordered a fleet of 46 five-car units from Stadler, which were due to start arriving at the end of 2021 and enter service in 2023.

The current fleet is maintained at South Gosforth, the Metro's only depot. With the new fleet ordered, the decision was taken to refurbish the old depot using the simple process of knocking it down and then completely rebuilding it. But how would the existing fleet be maintained and stabled in the meantime?

As a result, a contract was awarded to Buckingham Group Contracting to build a temporary depot at Howdon in North Tyneside. Located on a former landfill site, this would be used as a maintenance facility for the cleaning and preparation of up to 10 Metro trains while the main Metro depot in South Gosforth was rebuilt.

Tobyn Hughes, managing director of Nexus, said: "We need a temporary Metro depot while we transition to permanent new maintenance facilities and the new Metro train fleet."

"The site in North Tyneside is ideal for us"

"Our main depot in Gosforth is going to be completely rebuilt and this work will happen in stages, so we must have a bespoke location to store and maintain our trains while that project is delivered over the next few years.

"The site in North Tyneside is ideal for us, and it can also be used as the delivery point when the Metro new trains start arriving."

To fund the project, Nexus secured a government grant of £337 million towards the projected £362 million cost of designing and building a new train fleet and depot.

This and the ongoing maintenance of the fleet over 35 years makes the total budget about £500 million. The Howdon depot was completed in October 2020, when demolition of South Gosforth began. VolkerFitzpatrick was contracted to build the new depot by Stadler, which not only has an order for the new trains but also a contract to service and maintain them for 35 years. »



Tyne and Wear Metro's temporary depot at Howdon.

Image: Nexus

Visit us on stand K7



Award-winning retrofit diesel train emissions-reducing technologies



Eminox
Retrofit Solutions

- Achieve **Stage 5 equivalent** emissions standards
- **Cost-effective solution** extending asset-life
- Directly applicable to a **wide range** of DMUs in service across the UK
- Proven retrofit exhaust **aftertreatment solution**
- **NOx emissions reduced by over 80%** in normal operations



THE QUEEN'S AWARDS FOR ENTERPRISE: INTERNATIONAL TRADE 2020

enquiries@eminox.com

retrofit.eminox.com

EMx Powered





Inside the new Tyne and Wear Metro depot at Gosforth

Image: Nexus

The project involves the safe demolition of the old depot, clearing the site and rebuilding the new depot. Work is scheduled to be completed by 2025 and is being undertaken in stages, to enable the legacy fleet to continue operating from the depot while the construction work takes place.

Although planned to be temporary, the depot at Howdon may end up being permanent, as Nexus is planning to use more government funding to double some of its track and increase services.

Storage

With three fleets of new trains on order, Abellio Greater Anglia had a storage problem once they all started to arrive. Driver training wasn't complete, nor was the rebuild of Norwich Crown Point depot.

The company turned to the nearby Mid-Norfolk railway, a popular heritage attraction, and arranged to reopen the Wensum sidings, close to the depot, which gained them almost 5km of storage space.

Northern had the opposite problem during the first COVID lockdown. It had agreed to withdraw its unpopular 'Pacer' fleet and replace it with more-modern trains. But, as the pandemic hit, and the number of services that Northern ran was dramatically reduced, the opportunity came to withdraw them early. Which meant they had to be stored somewhere.

Northern came to the same decision that Greater Anglia had, and arranged to park them on the Keighley and Worth Valley

railway, solving the problem and also providing the heritage line with welcome funding while it was closed due to COVID-19.

Enlarged facilities

GWR's depot at Exeter St David's could take a pair of two-car diesel multiple units, and another single car in the heavy maintenance shed.

Then electric trains were introduced on the GW main line, along with plans to bring the new five-car Class 802 bi-mode (diesel-electric) trains down into Devon and Cornwall. The depot at Exeter couldn't take them, so the only option was to knock it down and rebuild. But the site was also very restricted, so a lot of ingenuity had to be used to get the new depot to fit into the space available.

A new three-road depot opened in earlier in 2021. Two roads can take a full five-car train, while the third can take three cars but is fitted with lifting jacks and an overhead crane. The site also includes stabling sidings, a carriage wash and refuelling points. All in the space originally taken up by a small shed and some abandoned sidings.

These are the answers that four train operators came up with when faced with the arrival of new trains and the disposal of old ones, demonstrating the innovative outcomes that can be achieved with a little creative thinking. ■

Originally published in Inside Track, subscribe via www.railbusinessdaily.com/rbd-publications



Aerial view of the new Tyne and Wear Metro depot at Gosforth

Image: Nexus

warringtonfire
Proud to be part of element

firainternational
Proud to be part of element



WORLD CLASS TESTING HELPING YOU TO ACHIEVE COMPLIANCE

Warringtonfire and FIRA International, part of the Element group, have been supporting the rail industry for over 30 years and provide a comprehensive range of independently accredited testing services to a global market as well as ergonomic assessments.

We aim to help our customers achieve a holistic view of rail testing standards through the provision of a full service offering that includes: developing fire safety design strategies, through rail fire testing and certification of fire protection products, to inspection, commissioning and certification of completed projects: we can help with all aspects of your rail fire safety.

TESTING SERVICES:

- Fire resistance testing
- Reaction to fire testing
- Strength and durability testing of passenger and driver seats
- Testing of upholstery performance of passenger seats
- Station seat testing
- Ergonomic assessment of key station infrastructure

SCAN THE QR CODE TO READ ABOUT OUR SERVICES:



CONTACT: INFO.WARRINGTON@WARRINGTONFIRE.COM

21st Century / Journeo **Stand O3**

Abloy UK **Stand D2**

Achilles **Stand A2**



Our range of online tools and reports help your procurement, sustainability and risk teams quickly see a supplier's pre-qualification status, and view critical documents and information relating to their standards and capabilities.

Contact us:
50 Lothian Road, Festival Square, Edinburgh, EH3 9WJ
Web: www.achilles.com

Acres Engineering Ltd **Stand N2**

AD Comms **Stand J7**

AEGIS **Stand A4**

AESYS **Stand C2**

Airquick (Newark) Ltd **Stand G8**

Alfatronix Ltd **Stand G10**



Alfatronix is one of the world's leading manufacturers of rail approved USB chargers, wireless charging and DC to DC voltage converters. Our products carry a no quibble warranty and are built to world standards designed for use in harsh environments including rolling stock, buses, trucks, mobile plant, diesel engines or any application where electrical equipment is powered by a DC voltage which differs from that of the vehicle's system.

Contact us:
Web: www.alfatronix.com
Telephone: 01202 715517

Alstom UK and Ireland **Stand M8**

Antonics **Stand L7**

Astute Electronics **Stand B4**

Aura Brand Solutions **Stand G9**

Belvoir Rail Ltd **Stand A1**



Belvoir Rail Ltd offers the rail industry a comprehensive range of engineering solutions and products, with a focus on passenger and infrastructure rolling stock.

Contact us:
Belvoir Rail Ltd
Unit 13, High Hazles Road, Manvers Business Park, Cotgrave, Nottingham NG12 3GZ
Web: www.belvoir-rail.com
Telephone: 0115 9892760
Email: enquiries@belvoir-rail.com

Bio-Circle Surface Technology Ltd **Stand D1**

Briben Products **Stand D7**

Brodie Engineering **Stand J3**

CAF **Stand K2**

Cairn Cross **Stand N7 & O7**

Capgemini Engineering **Stand P7**

Capitol Industrial Batteries Ltd **Stand A6**



Capitol Industry Batteries Ltd offers a range of new batteries, chargers and repair and refurbishment services to the UK rail industry. Our manufacturing, design and testing processes all meet the highest standards upheld by the sector.

Contact us:
Capitol Industrial Batteries Ltd
22 Napier Court - Wardpark North Industrial Estate, Cumbernauld G68 0LG
Telephone: 01236 731 982
Email: info@capitolbatteries.com

CB Frost **Stand P4**

Channel Compliance **Stand F7**



Channel Compliance provides a broad range of services including Health and Safety consultation; T&RS technical training and assessment services to meet competency standards; employee upskilling; and competency management system services.

Contact us:
Telephone: 0117 3251 119
Email: sales@channelcompliance.com

Charcroft Electronics	Stand H3
Chrysalis Rail	Stand E8
CMCA(UK)	Stand M4
CoMech Metrology	Stand K6
Composite Braiding	Stand K10
Composites UK	Stand L6
Craig & Derricott	Stand A7
Creactive Design Transport	Stand D9
CTM Powered by Sopra Steria	Stand C6
Custom Insulation	Stand B1
Dartford Composites Ltd	Stand H5
Datum – Composite Products	Stand H10
DC Airco	Stand H2
Dellner Polymer & Glass Solutions	Stand K4
Depot Rail	Stand E4
Design & Analysis	Stand A5
dormakaba	Stand B10
EBC Brakes	Stand J9
Eminox Ltd	Stand K7
ENAG	Stand K9

EnPro Group	Stand F10
First Class Safety & Control	Stand D4
	<p>FirstClass Safety & Control designs and supplies Rail Depot Protection and Control Systems and industrial automation systems offering bespoke, innovative and integrated solutions along with 24/7 support and maintenance packages.</p> <p>Contact us: Web: www.firstclass-safety-control.co.uk Telephone: 01621 743743 Email: info@firstclass-safety-control.co.uk</p>
FISA Fabbrica Italiana Sedili Autoferroviari	Stand L5
Flexicon	Stand K1
FliteTrak Ltd	Stand E1
Flotec	Stand J2
	<p>Loughborough-based Flotec is committed to being a trusted and leading supplier of reliable hose and engineering solutions to the rail market. One of the company's various core values is 'innovation'.</p> <p>Contact us: Web: www.flotecindustrial.co.uk Telephone: 01509 230 100 Email: rail@floteconline.com</p> <p>Visit Flotec on Stand J2.</p>
Ganymede Solutions	Stand K8
GBR-Rail Ltd	Stand F4
	<p>GBR-Rail is a leading UK supplier of specialist rail depot equipment, required for the routine daily maintenance of passenger trains. Cleartrak, our novel train toilet waste processing system is the fully digital and sustainable alternative to conventional CET and is currently being tested in passenger service with Chiltern Railways.</p> <p>Contact us: GBR-Rail Ltd Dartmouth House, Bawtry Road, Wickersley, Rotherham, S66 2BL Web: www.gbr-rail.com Telephone: +44 (0) 7876 224300 Telephone: +44 (0) 800 949 9575 Email: ginny.truslove@gbr-rail.com</p>
Gemini Rail Group	Stand E6
Greenbank Group UK	Stand N8
Harmill Systems	Stand C4

Harry Needle Railroad Company **Stand E7**



Harry Needle Railroad Company (HNRC) provides a train care facility and the leasing and maintenance of locomotives. The company is based in Worksop (train care facility) and Barrow Hill (locomotives). The train care facility is based over two sites in Worksop covering 35 acres and can provide rolling stock storage (700 vehicles), shed facilities for modification and maintenance work, fuelling, CET, Adblue etc.

Contact us:
Harry Needle Railroad Company (HNRC)
Rail Maintenance Depot
Babbage Way (off Sandy Lane), Worksop
S80 1UJ
Telephone: +44 (0)1909 509671
Email: harrycneedle@aol.com

The company serves a wealth of customers and rail sites across the UK.

HARTING Ltd **Stand C1**



Pushing Performance

HARTING Ltd is experienced in the fields of electrical, electronic, and optical connection, transmission and networking and has been established in the UK for 40 years.

For the digital railway, we produce the latest in rail-approved connectivity and cabling solutions.

This includes the design and manufacture of bespoke cable assemblies, including intercar jumpers, at our custom-built facility in Northampton.

Contact us:
Web: www.harting.com/UK/en-gb/
Telephone: 01604 827500
Email: salesuk@harting.com

Hepworth Rail **Stand G7**

HJS Emission Technology **Stand N6**

Holbro Engineering **Stand F3**

Hoppecke **Stand F9**

Hydram **Stand L3**

ICP Datatec **Stand L7**

IM Kelly Rail & Aerospace **Stand G4**

Infodev EDI **Stand H2**

Jewers Doors **Stand M2**

Jobson James Rail – The Rail Broker **Stand F2**

Jones Nuttall **Stand F6**

LAPP Group **Stand C8**

LEM International SA **Stand H6**

Leoni UK **Stand H4**

Liebherr **Stand C9**

LJA Miers **Stand C7**

LORAM UK **Stand C3**

LPA Group **Stand M3**

Lumier Ltd **Stand B9**



Lumier has been designing / manufacturing and supplying the rail industry for over 20 years. Our LED products are RIA and EN approved. Lumier is also ISO9001:2015 ISO14000, RoHS, WEEE compliant.

Contact us:
Web: www.lumierled.co.uk
Telephone: +44 (0)1229 432414
Email: info@lumier.co.uk

Luso Electronics **Stand M5**

Mattei Rail & Transportation **Stand F8**

Millenium Site Services Ltd **Stand A9**

Mott MacDonald **Stand D8**

mpro5 **Stand H9**

MTAG Composites **Stand E10**

Muirhead **Stand B5**

Multi-Mover UK **Stand G6**

netwiss **Stand M6**

Nord-Lock Group **Stand L9**

Northwest Transport Supplies (NTS) **Stand H7**

Nubold Group	Stand E2
On Train	Stand H2
One PLM	Stand E3
Orange Train Wash Ltd	Stand J5
 <p>The Orange Train Wash is an innovative and fast way of maintaining a train fleet – giving operators the chance to wash rolling stock every day.</p> <p>Our solution recycles 90 per cent of water, maintains good temperature and is completely chemical free.</p> <p>Contact us: Web: www.theorangetrainwash.com Email: sales@theorangetrainwash.com</p>	
Paintbox Transportation Services	Stand L8
Plastic Coatings	Stand J6
PremCal	Stand B3
Premier Rail Pits	Stand B6
PROVERTHA	Stand M7
PSL Assemblies Ltd	Stand D3
PTM Design	Stand N3
Pullman Rail	Stand G2
Qualitrain Ltd	Stand O8
Rail Forum Midlands	Stand P5
Rail Freight Group	Stand J8
Rail Installations & Technical Services Ltd	Stand N9
Rail Vehicle Components (UK) Ltd	Stand C2

railbusinessdaily.com	Stand Cycle B
 <p>railbusinessdaily.com (RBD) is the UK's leading rail daily news and profile-raising platform.</p> <p>RBD's website receives c8,500,000 visitors a year and has more than 50,000 daily subscribers. Their LinkedIn network contains more than 14,500 connections, all organically grown with the highest engagement rates of any rail industry media outlet in the UK.</p> <p>Contact us: Web: www.railbusinessdaily.com Telephone: 0800 046 7320 Email: hello@railbusinessdaily.com</p>	
Rail Director	Stand Cycle B
 <p>Rail Director Bringing Companies and Customers Together. Published 12 times a year, Rail Director is a printed and online magazine that is distributed exclusively to rail industry directors and government leaders, covering everything from track to train.</p> <p>Contact us: Web: www.railbusinessdaily.com/rbd-publications Telephone: 0800 046 7320 Email: hello@railbusinessdaily.com</p>	
Railway Children	Foyer
Railway Industry Association	Stand M10
 <p>RIA is the voice of the UK rail supply community; the national trade association for UK-based suppliers to the railway industry.</p> <p>We represent more than 300 member companies from across the supply chain, over 60 per cent of which are small or medium sized enterprises.</p> <p>Contact us: Kings Buildings, 16 Smith Square, London SW1P 3HQ Website: www.riagb.org.uk Telephone: +44 (0)20 7201 0777 Email: ria@riagb.org.uk</p>	
Railway Support Services	Stand M9
 <p>Since incorporation in 2008, Railway Support Services has become a leading complete services provider within both the rail and heavy haulage industries and boasts market-leading experience in: Locomotive breakdown and recovery, wheel-skating of locomotives and rolling stock, heavy and abnormal load haulage, locomotive hire and maintenance, permanent way services, heavy installation and lifting services, general road haulage, rolling stock storage, management and overhaul, fabrication and machining services.</p> <p>Contact us: Railway Support Services Unit 15, Rye Farm, Dunton Lane, Wishaw, Sutton Coldfield, B76 9QA Telephone: 01675 475 590 Email: info@railwaysupportservices.co.uk</p>	
Replin by Hainsworth	Stand B2
 <p>Replin by Hainsworth is one of the UK's leading designers and manufacturers of supreme quality fabric for rail interiors. Applications include seating, curtains, dado panel and sleeper cabin fabrics.</p> <p>Contact us: Web: https://www.replinbyhainsworth.co.uk/ Web: https://www.linkedin.com/company/replinbyhainsworth Or contact Key Account Manager Stuart Allen at Telephone: 07808771789 or email: stuartallen@awhainsworth.co.uk</p>	

Rowe Hankins Ltd **Stand H1**



Rowe Hankins Ltd.

Rowe Hankins Ltd. specialises in innovative trainborne and wayside products; as well as having service capabilities in engineering and design to overhaul and repair.

Contact us:
Address: Power House, Mason Street, Bury, Lancashire, BL9 0RH, UK
Website: www.rowehankins.com
Telephone: +44(0) 161 765 3000
Email: sales@rowehankins.com

RSG Engineering **Stand H8**

Sabre Rail **Stand F5**

Schaltbau **Stand J4**

Segula Technologies **Stand D5**

Sella Controls **Stand L10**



Leading provider of ASDO/CSDE systems. Provider of TCMS, Vehicle Control units, Vehicle Speed Management and Vigilance Systems. Latest innovations include Level Crossing and Depot Control Systems using COTS PLCs.

Contact us:
Web: www.sellacontrols.com
Telephone: 0161 429 4500
Email: sales@sellacontrols.com

Semcon Product Information UK Ltd. **Stand N4**

Serco RTS **Stand E5**

SET Limited **Stand D6**



SET is a leading resolution provider for faults presenting in ageing and obsolete electronic and electromechanical assemblies. The new SET IRCM has been designed to deliver signal state and fault diagnostics.

Contact us:
Stored Energy Technology Ltd
Atlas Works, Litchurch Lane, Derby DE24 8AQ
Web: www.set-gb.com
Telephone: 01332 653099
Email: richard.uttley@set-gb.com

Shorterm Group **Stand O8**

Silicone Engineering Ltd **Stand C10**



Silicone Engineering specialises in silicone sealing, insulating and dampening solutions for Mass Transit interiors. kSil® materials are tested and approved to industry fire safety standards – EN45545-2, NFPA 130 and UL94V0.

Contact us:
Web: silicone.co.uk
Telephone: 0845 674 4747
Email: enquiries@silicone.co.uk

Silver Fox Labelling **Stand A3**

SLC Operations **Stand D10**

SOLO Rail Solutions **Stand B8**

Stadler **Stand O4**

STAUFF UK Ltd. **Stand G5**

Staytite **Stand L1**

Strukton Rolling Stock B.V. **Stand K5**

TBAT Innovation Ltd. **Stand B7**

Telemecanique Sensors **Stand J1**

Ten 47 Ltd **Stand M1**

Time 24 Ltd **Stand K3**

Totalkare HDWS Ltd **Stand L4**



Totalkare is a leading supplier of workshop equipment into rail depots and workshops, specialising in railway lifting jacks and rail inspection pits, backed up by UK-wide service coverage.

Contact us:
Totalkare HDWS Ltd
Dandy Bank Road, Pensnett Trading Estate Kingswinford, West Midlands DY6 7TD
Web: www.totalkare.co.uk
Telephone: 0121 585 2724
Email: sales@totalkare.co.uk

TP Group plc	Stand E1
Train Bits and More Ltd	Stand O5
TT Electronics	Stand G6
Tufcoat	Stand P6
TVS Supply Chain Solutions	Stand C5
 <p>TVS Supply Chain Solutions addresses organisations' supply chain challenges. It is a global business that offers clients a wide range of tailor-made solutions to meet their exacting requirements. Our technologyed ethos allows us to transform supply chains, building resilience and growth-ready solutions that scale with any organisation.</p>	<p>Contact us: Andy Lawrence Telephone: 07342999504 Email: andy.lawrence@tvsscs.com</p>
TXM Group	Stand A10
Tyneside Safety Glass	Stand J10
Vintage Trains	Stand A8
Vivarail	Stand E9
 <p>Vivarail is the leading designer and manufacturer of battery traction and charging systems. Vivarail's next generation batteries deliver trains capable of travelling for circa 100km and recharge in 10 minutes.</p>	<p>Contact us: Web: https://vivarail.co.uk Telephone: +44 (0)1789 532230 Email: info@vivarail.co.uk</p>
Warringtonfire	Stand G3
Welfare Vans 4 Less	Stand O6
 <p>Welfare Vans 4 less is a welfare van and cabin hire company based in the centre of the UK and offering no deposit and zero excess hire of quality vans throughout the UK.</p>	<p>Contact us: Royal Oak Garage, City Rd, Fenton, Stoke-on-Trent ST4 2PX Telephone: 01782 848855 Email: info@welfarevans4less.co.uk</p>
Westermo Data Communications	Stand L2
Winslow Adaptics	Stand N5



**A better way to buy.
A simpler way to sell.**



Link-Up gives suppliers of all sizes an equal opportunity to demonstrate their capabilities and market their products and services whilst ensuring compliance to industry standards, like Sentinel or the Common Assessment Standard. With one simple questionnaire you can pre-qualify to work with buyers in multiple sectors across rail, construction, utilities, oil and gas and services – saving you time and money on admin tasks.

Once suppliers are registered, you can become eligible for a whole world of contract opportunities – without going through multiple pre-qualification processes. The more networks you join, the more visible you become to buyers. And because of the data we make available, you're more transparent too. That means buyers can make quicker, better-informed purchasing decisions.

 **CALL US**
+44 (0) 1235 861118

 **EMAIL US**
enquiries@achilles.com

 **VISIT US**
www.achilles.com



MILLENIUM

SITE SERVICES UK

KEEPING YOUR BUSINESS ON TRACK, ON TIME AND ON BUDGET

Industry experts in paint & surface coatings,
crash damage & fibreglass, vehicle repairs,
refurbishments, modifications & overhauls.



CRASH REPAIRS &
MODIFICATIONS



GLASS INSTALLATION



OVERHAUL &
REFURBISHMENT



ENGINEERING
SOLUTIONS



BODY SHOP



SPECIALIST
COATINGS



MOBILE/ONSITE



BEAD BLASTING



FIBREGLASS REPAIR



POWDER COATING



PAINT SPRAYING

For more information:

sales@milleniumsiteservices.co.uk

milleniumsiteservices.co.uk