

# CONTENTS

Volume 174 No 10 | October 2018



## Examining the future of diesel



Railway operators are coming under increasing pressure from policymakers around the world to reduce their dependency on **diesel traction**. On p26, we ask the supply chain how realistic such ambitions are, and to what extent diesel has a future as a primary option for rail traction.

## CONTACT US

**Railway Gazette International**  
 6th Floor, Chancery House,  
 St Nicholas Way, Sutton,  
 SM1 1JB, UK

Tel +44 20 8652 5200  
 Fax +44 20 8652 5210  
 editor@railwaygazette.com

See p57 for full details

[www.facebook.com/railwaygazette](http://www.facebook.com/railwaygazette)

@railwaygazette

Annual subscription in USA \$292.

Railway Gazette International, ISSN Number 0373-5346, is published monthly by DVV Media International Ltd, 6th Floor, Chancery House, St Nicholas Way, Sutton, SM1 1JB, UK. Airfreight and mailing in the USA by agent named Worldnet Shipping Inc., 156-15, 146th Avenue, 2nd Floor, Jamaica, NY 11434, USA.

Periodicals postage paid at Jamaica NY 11431.

US Postmaster: Send address changes to Railway Gazette International, Worldnet Shipping Inc., 156-15, 146th Avenue, 2nd Floor, Jamaica, NY 11434, USA

Subscription records are maintained at Intermedia Brand Marketing Ltd, Unit 6 The Enterprise Centre, Kelvin Lane, Manor Royal, Crawley, West Sussex, RH10 9PE, UK.

Worldnet is acting as our mailing agent.



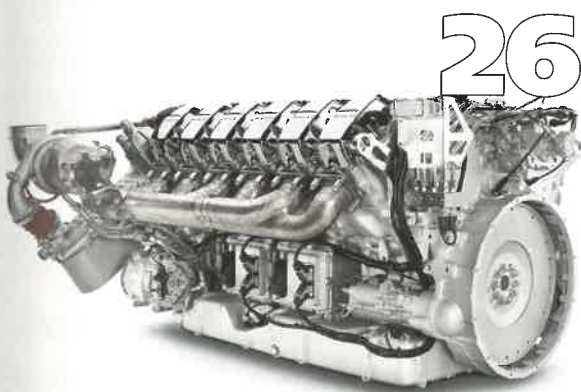
# 46



# 52



# 30



**COMMENT**

**3 Lutz on the tightrope**

**INTELLIGENCE**

**7 Main Line** | UK government commissions 'root and branch' review of rail sector, Hong Kong high speed line opens, first trains run over A1 link to Jerusalem

**12 Urban Rail** | Vancouver funds metro and light rail projects, Washington DC plans metro fleet renewal, Liège tram concession agreed

**16 Market** | Contracts & Tenders

**18 Industry** | CAF completes Solaris purchase, Rock Rail in leasing joint venture

**19 Innovations** | Augmented reality tool seeks to empower passengers with disabilities, information delivered by Facebook Messenger

**21 Analysis** | French industry outlines autonomous trains programme, Canadian government to support Hudson Bay rebuilding, Dutch network running out of capacity

**TRACTION TECHNOLOGY**

**26 Assessing the future of the diesel engine** | With the rail sector under pressure to ditch diesel, we asked engine and powertrain suppliers to assess the outlook for traction technology as alternative fuels gain ground. Nick Kingsley investigates

**30 Charger builds on initial success** | First developed for US inter-city passenger applications, the Siemens Charger diesel locomotive has also found a role in commuter service, and can now be found as far apart as Washington state and Florida. Dave Lustig reports

**SOUTHEAST EUROPE**

**32 Modernisation sparks traffic growth at GySEV** | Electrification and route upgrades have helped cross-border operator GySEV to build up both freight and passenger traffic. Benjámín Zelki reports

**36 Marmaray completion in sight at last** | Five years after trains started running through a tunnel beneath the

Bosporus strait in Istanbul, the 77 km Marmaray suburban rail corridor is approaching completion after a much-delayed modernisation of existing railways on both sides of the water

**38 Tunnel breakthrough marks Koralmbahn milestone** | Due to be completed by the end of 2025, the Koralmbahn project to develop a high capacity rail link between Graz and Klagenfurt will reshape the rail network in southern Austria. Toma Bačić investigates

**44 Competition and investment drive business revival** | Infrastructure investment is running at record levels as Croatia seeks to make up for half a century of underspending; competition has brought a welcome increase in rail freight, but problems remain in the passenger sector

**IN FOCUS**

**46 Time for action** | As Portugal recovers from a decade of macroeconomic austerity, more work is needed to address chronic fleet availability problems and declining asset condition as demand for rail continues to grow. Andre Pires reports

**50 Expanding the Saudi network** | Saudi Railway Company Chief Executive Officer Dr Bashar AlMalik outlines the status of major rail projects that include revival of the landbridge and a long-term Master Plan

**52 King opens Haramain high speed line** | King Salman bin Abdulaziz Al Saud of Saudi Arabia formally inaugurated the Haramain High Speed Railway linking Makkah, Jeddah and Madinah on September 25

**FORUM**

**54 People** | Castelli nominated as Chairman of UIC, Jefferies to take over as AAR President

**55 Research & Skills** | Infrabel launches biggest-ever recruitment campaign, HS2 skills strategy

**56 Sidetrack** | Publications

**57 Diary & Contact**

**58 Viewpoint** | Rolling stock group Transmashholding is now investing in local partners around the world, explains TMH International President Hans Schabert