

CONTENTS

Volume 174 No 4 | April 2018



Chinese metros keep expanding



A wave of inaugurations during December and January (p34) saw the number of Chinese cities with metro networks in operation increase to 31. Guangzhou opened three new lines and another extension on December 28, taking the country's third-largest network to 390.6 km. A locally-built trainset nears Kengkou at the western end of Line 1.


Photo: Andrew Benton

CONTACT US

Railway Gazette International
7th Floor, Chancery House,
St Nicholas Way, Sutton,
SM1 1JB, Great Britain

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

See p53 for full details

 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, Chancery House, St Nicholas Way, Sutton, SM1 1JB, United Kingdom. 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 DVV Media International Ltd, Chancery House, St Nicholas Way, Sutton, SM1 1JB, United Kingdom.

Worldnet is acting as our mailing agent.





COMMENT

3 Moving with the times

INTELLIGENCE

6 Main Line | JR Central unveils next-generation N700S Shinkansen trainset, Canadian government to fund VIA Rail fleet replacement, FlixTrain launches open access service on the Hamburg – Köln corridor

12 Urban Rail | Jakarta metro trainset rolled out in Japan, St Petersburg fast tram route opens, second driverless line launched in Delhi

16 Market | Contracts & Tenders

18 Industry | Vossloh Locomotives transfers production to new factory, Talgo reports buoyant orders in 2017

19 Innovations | Siemens offers Smartron locomotive to German customers, F1 technology to be deployed on metro trains

21 Analysis | Russia and Austria sign accord supporting a broad gauge line to Wien, Australia's federal government backs multiple rail proposals, California's high speed rail programme revises its cost estimates and delivery plan

RESEARCH

26 SNCF to develop autonomous trains | Next year should see the first 'drone train' operating in France as part of a five-year strategy to develop driverless freight and passenger trains, SNCF's Project Director Luc Laroche tells Jean-Paul Masse

28 Rethinking tomorrow's freight train | European rail freight needs a paradigm shift to support future economic competitiveness, believes the German Aerospace Centre. The NGT-Cargo concept envisages a combination of innovative logistics services with highly automated high speed trains, as project manager Joachim Winter explains to Reinhard Christeller

32 Generating value through 'engineering as a service' | Through-life engineering is an emerging philosophy that sees value created through the use of assets rather than their ownership. Prof Andrew Starr of Cranfield University explains how the

rail sector might benefit from such an approach

CHINA

34 Metro expansion continues apace | Following a wave of new lines and extensions opened in December and January, metros are now operating in 31 Chinese cities, along with several light rail lines and the country's first urban maglev

38 In search of a smoother ride | New regulations are to be introduced this year to facilitate high speed rail grinding in China. These build on five years' experience with preventive grinding to manage rail life on the country's expanding high speed network

43 Making more use of permanent-magnet motors | Thanks to their light weight and high power density, permanent-magnet synchronous traction motors are becoming increasingly popular for Chinese rail applications. CRRC Zhuzhou Institute Co has been working to optimise the design of both the motors and the related control systems

IN FOCUS

46 SBB's FV-Dosto EMUs enter service | Four years later than intended, Swiss Federal Railways has put into service the first of its fleet of double-deck EMUs designed for long-distance routes. Bernhard Studer reports

FORUM

50 People | Canadian National seeks Chief Executive as Jobin departs, Rinaldi to lead MTA's Metro-North commuter rail operation

51 Research & Skills | Researchers explore using commercially available cameras to assess switch component damage, UK research network established

52 Publications | Dieter | Sidetrack

53 Diary | Contact

54 Viewpoint | Recently appointed UITP Secretary-General Mohamed Mezghani outlines the priorities for his tenure, arguing that the public transport sector must focus more on economics when making the case for political support