management of stations will remain with the train operator.

New provisions on debt control and railway finances will form the basis of performance contracts for both the operator and infrastructure manager, and the government is required to draw up a National Transport Master Plan every five years. Rail regulator ARAF gains additional powers and increased independence, including a requirement to submit annual infrastructure spending and ensure that it is in line with the performance contract.

Part II of the bill includes various specific or transitional provisions. The three new entities will be legally established with effect from December 31, 2014, ready for the revised Transport Code to enter into force from January 1, 2015. Further articles provide continuity of employment for existing railway staff, including measures to create a common framework for all workers in the rail industry and ensure the rights of rail unions to negotiate collective agreements on terms and conditions of employment.

**EUROPE**

**On the Horizon**

Following its formal adoption by the European Union's Council of Ministers on June 16, the Shift2Rail Joint Technology Initiative was formally launched at a conference in Brussels on July 9 alongside six other JTIs under the European Commission's Horizon 2020 research programme.

The conference marked the start of calls for proposals for research to be supported under each JTI. In his keynote address, outgoing Commission President Jose Manuel Barroso 'particularly welcomed' the expanded focus on air and rail transport, which account for three of the seven JTIs, reflecting transport's role at the heart of Europe's industrial base and in mitigating the effects of climate change.

Currently being co-ordinated by UNIFE on behalf of eight founding members and 130 other organisations, Shift2Rail is intended to create a 'step change in rail technology', which would enhance the capacity of Europe's railways to cope with rising demand, increase the reliability and quality of rail services, and reduce significantly the lifecycle cost of the railway system.

The Shift2Rail programme is focused on five workstreams:

**IP1:** Cost-efficient and reliable high capacity trains;

**IP2:** Advanced traffic management & control systems;

**IP3:** Cost-efficient and reliable high capacity infrastructure;

**IP4:** IT solutions for attractive railway services;

**IP5:** Technologies for sustainable and attractive European freight.

Around €920m will be invested over the six years, of which €645m will come from the Horizon 2020 budget, and the remainder from the industry partners. Around 40% of the spending is expected to be allocated for the founding members, with 30% for associated companies and academic institutions in consortia, and the remaining 30% reserved for open calls.

According to interim project leader Josef Doppelbauer, Chief Technology Officer at Bombardier Transportation, the Shift2Rail Joint Undertaking should be functionally independent by the end of the first quarter of 2015. Several locations are being assessed for the headquarters, and an Executive Director is being recruited.

With UNIFE having co-ordinated the rail industry's involvement so far, the European Commission is now to launch its own call for membership. The joint undertaking structure also includes a Regulation & Standardisation Council, which will include input from the European Railway Agency to ensure the Shift2Rail innovations are compatible with broader technical and policy themes.

'We will work to ensure that barriers to innovation are overcome,' commented Keir Fitch, Head of Research & Innovative Transport Systems at the European Commission's Directorate-General for Mobility & Transport. 'We expect to get input from potential end users at the outset of each Shift2Rail workstream to make sure the results fit in with wider objectives around certification and acceptance.'

**TAIWAN**

**Traffic up, but debts too**

Ridership on the 339 km Taipei - Kaohsiung high speed line is expected to top 50 million passengers this year, according to the new Chairman of Taiwan High Speed Rail Corp Tony Pan.

Addressing the annual shareholder meeting on June 26, he reported that traffic on the world's first privately-financed high speed line had increased by 6.65% to 47.5 million passengers in 2013. The higher ridership contributed to a 6.2% increase in revenue to NT$83.1bn, allowing THSRC to report a pre-tax net profit of NT$2.7bn.

But although the company has been in profit since 2011, it remains burdened by accumulated losses, which totalled NT$52.1bn at the end of December. Pan warned that THSRC faced the threat of bankruptcy by the end of this year unless it could restructure its finances in the next few months. A board member at the government-backed China Aviation Development Foundation, he was appointed Chairman following the resignation of Dr Ou Chin-der in March, with a remit to turn the business around.

THSRC has already been through one restructuring in 2009, when the government encouraged local banks to inject additional funds (RG 8.09 p21). Construction of the Taipei - Nangang extension was put on hold, although it is now nearing completion.

In May, the Ministry of Transport & Communications put the company's total liabilities at NT$457.4bn against assets of NT$500bn. Annual outgoings in the next five years would include NT$23.2bn in depreciation and NT$19.2bn for loan repayments. Transport Minister Yeh Kuang-shih suggested that the company's capital should be reduced by 60% through the redemption of preferred shares, followed by a NT$30bn capital injection which would allow the government to become the controlling shareholder. The concession period could also be extended from 35 to 65 or 75 years, he said, giving more time to recoup the initial outlay.

Pan confirmed to the shareholders that 'we are working to reduce the capital first and then raise more capital to remove the debt. Then we will request an extension of the concession period.' However, he felt that a state buyout would not be the best option, as the government 'could name its own price.'