

STRATEGIC TRADE ROUTES

Asia to Europe

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Seeking new ways to deliver the goods

Robert Wright on the challenges and opportunities created by surging volumes of trade

One of the best places to appreciate the development of trade between Asia and Europe is aboard a ship in the Gulf of Suez, just south of the entrance to the 163km-long Suez Canal.

Every night a flotilla of huge container ships, some nearly 400m long, gathers in the area. They are ready to depart early the next morning on the daily northbound convoy through the canal from the Red Sea towards the Mediterranean and the vast consumer markets of Europe. Each ship carries goods worth hundreds of millions of euros, making the cargo of the dozen or more container ships heading north on a typical day worth several billion euros.

The ships, bobbing around in the dark just metres from each other and buffeted by the desert wind, are an impressive sight. But it is still more remarkable to consider how many fewer vessels would have been on the same spot as little as a year ago.

According to figures from Global Insight, an economics and trade forecaster, container shipping volumes between Asia and Europe are likely to grow 17.2 per cent this year alone. Traffic this year will approach double its 2003 level – part of the reason why ships deployed on the route now are two-and-a-half times the size of the largest a decade ago.

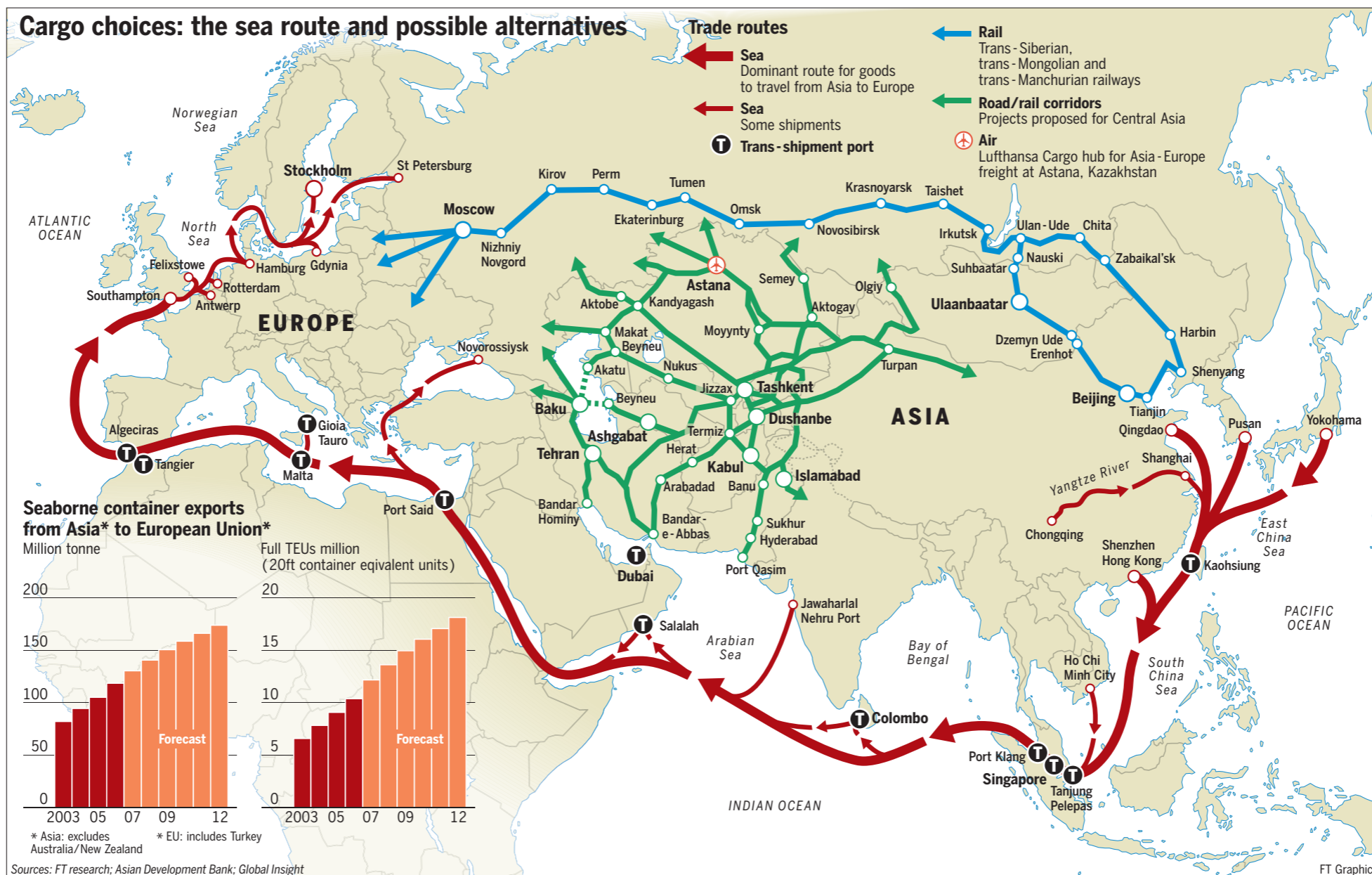
With demand in North America slowing this year, Asia-Europe trades could soon overtake trans-Pacific trades as the world's main long-haul container trade route. Global Insight expects 12.2m 20ft equivalent units (TEUs) – a standard measure of container size – to travel westbound by sea between Asia and Europe this year.

The surge has led to questions all along the route of this remarkable flow of goods about how best to capitalise on the trade and how to cope with it. Operators' strategies are constantly changing as they seek ever-cheaper, faster, more reliable means of moving their goods.

Adolf Adrion, chairman of the Far Eastern Freight Conference (FEFC), a group of shipping lines in the Asia-Europe trade, says volumes this year have taken even shipping lines by surprise.

"When we were saying last year we were counting on a 14 to 15 per cent increase in trade, some people were of the opinion that this was a little bit optimistic," says Mr Adrion, who is also a board member of Hapag-Lloyd, a major line. "Also in the years before, our cargo growth in our trade to Europe was always underestimated. The lines had to react in a very flexible way to cover the market."

One of the most important trends at work is obvious along China's River Yangtze, which links much of inland China to the sea at Shanghai. Local authorities are rushing to build cross-river bridges to reduce the death



Form a queue: container ships in the Suez Canal Robert Wright

toll from collisions between passenger ferries and the fast-growing numbers of other vessels heading up and down the vast waterway's lower reaches.

The traffic is being generated by the gradual move inland from China's highly-developed coastal strip of development and investment. With little other infrastructure developed well enough to handle the inflow of bulk commodities and outflow of finished goods, the river currently takes a great deal of the strain. Growth rates of 35 per cent year-on-year are not uncommon at some river ports.

The move inland has inspired hope – particularly among train operators – that the rail route from Asia to Europe, via the trans-Mongolian or trans-Manchurian railways on to Russia's famous trans-Siberian route, might be able to capture a portion of the traffic. Russian and Chinese railway officials argued at an event this year in Brussels that the

faster journey time on the route compared with sea transport gave it a significant competitive advantage – even if costs remain far higher than the typical cost of around \$2,000 per TEU of goods shipped by sea.

The potential of such routes will be a significant theme of the Russian Day

Many parts of Asia are focusing on developing the cargo capabilities of their airports

that will open the Salon International Transport Logistic Asia forum in Shanghai today.

In June, European Rail Shuttle, part of Denmark's AP Møller-Maersk, operated what it said was the first train carrying imports to Europe all the way from China. It brought computer components from Shenzhen,

near Hong Kong, to Pardubice, near Prague in the Czech Republic. The 17-day journey took less than half the time a sea trip would have taken, according to ERS.

There are still more distant hopes that a revived road and rail network across former Soviet Central Asia might again play some of the role in long-distance trade that the great Silk Road once played bringing Asian goods to Europe before the sea route was discovered.

Many parts of Asia are also focusing on developing the cargo capabilities of their airports, in the hope of acting either as hubs or gateways to and from areas producing high-value electronics or other valuable goods that are expensive enough to justify the higher costs involved in air transport.

The Gulf city of Dubai could even position itself as a possible hub in a new sea-air route from Asia to Europe, with seaborne goods unloaded at Dubai's vast Jebel Ali container port for onward transport by air to various European destinations from the new, six-runway Jebel Ali international airport.

However, even if they grow rapidly, such alternatives are unlikely ever to represent more than a tiny fraction of the predominantly maritime traffic between Asia and Europe. Ben Hackett, an analyst for Global Insight, estimates only around 100,000 TEUs of containers travel from China via the trans-Siberian routes annually, nearly all to Russia.

Far Eastern Freight Conference figures suggest at least five times that number travelled from Asia to Russian ports in its members' vessels alone in just the first 10 months this year.

The 104 TEUs of contain-

ers delivered by ERS's train to the Czech Republic represents well under 1 per cent of the capacity of one of Maersk Line's largest con-

tainer ships on the Asia-Europe route, which can carry probably around 13,500 TEUs. Even the well-established air cargo connections

between Asia and Europe are seeing growth rates far below those for the ocean carriers.

Most shippers' focus is

instead on demanding more reliable and efficient sea service from shipping lines. Some lines have recently announced plans to slow down ships between Asia and Europe and add an extra vessel to the service. The change will save expensive fuel and ensure timetables can be met despite congested ports.

Lines can also use different strategies to improve their reliability, using small feeder vessels to call at congested ports such as India's Jawaharlal Nehru Port then picking up the goods from a trans-shipment hub such as Colombo in Sri Lanka or Salalah in Oman.

At the European end, lines are particularly concerned with how to cope with soaring traffic levels at relatively undeveloped ports in the Black and Baltic Seas.

The FEFC says its members handled 44.9 per cent more Asian traffic in the Black Sea in the first 10 months this year than last year, while the figure for the Baltic was up by 47.4 per cent.

Such figures are sending port operators such as Dubai's DP World, Hong Kong's Hutchison Ports and Maersk's APM Terminals division scrambling to build fresh capacity, often in places such as Zeebrugge that have never been significant container ports.

Yet there is little optimism that developments can keep pace with the present, remarkable levels of trade growth.

The nightly queue at Suez is likely to continue growing faster than Europe's ability to cope with it.

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And on FT.com...Supply Chain Management

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Analysis two articles by Sarah Murray on green supply chains and on logistics trends in the global food industry



Strategic Trade Routes: Asia to Europe

\$19bn plan provides new threads for Silk Road

CENTRAL ASIA

Raphael Minder on aims to revive an old trade route with six road and rail corridors

About 150km north of Dushanbe, the capital of Tajikistan, workers were recently putting the final touches to a bridge that is part of a new stretch of road linking the country to Kyrgyzstan.

The construction work, which started in late 2004, is testimony to the efforts under way to upgrade landlocked Tajikistan's poor road system, which still bears the marks of the lengthy civil war that followed the collapse of the Soviet Union.

Indeed, eight countries last month signed a much more ambitious and broader agreement to spend \$18.7bn on roads and railways running through central Asia, thereby reviving and expanding the old Silk Road that connected China and Europe.

Even though the European

Union overtook the US this year as the main destination for Chinese goods, less than 1 per cent of the \$1,000bn-plus of trade between Europe and Asia passes through central Asia, a region once at the heart of trade between the two continents.

The agreement was seen as a political breakthrough in an often splintered region, bringing together the central Asian countries of Kazakhstan, Kyrgyzstan, Tajikistan and Uzbekistan with their eastern neighbours China and Mongolia, Afghanistan to the south, and their fellow former Soviet republic of Azerbaijan to the west. The eight countries are members of the Central Asia Regional Economic Co-operation (Carec) programme.

The economic benefits of the transport project are massive, according to its backers, and having a common political objective will help ensure the money gets channelled where it can bring the highest return.

Azil Gezen, a consultant working on the project for the Asian Development Bank, says: "This is

no longer a patchwork, where you are building or adding something here and there and perhaps wasting money. This [agreement] gives real structure."

The modern version is not an attempt to mirror the old Silk Road, which was itself a series of roads and trails along which caravans carried China's and central Asia's silks by camel towards medieval Europe. Instead, the target is to create six road-rail corridors, due to be finished by 2018 (see map on Page 1).

On the European side, there will be corridors ending in Turkey in the south and Russia in the north. On the eastern side, the corridors will join the improved road and rail network that China is already committed to providing to its poorer, western provinces.

In fact, Beijing is expected to provide a substantial amount of the overall \$19bn financing, since almost a third of the investment is expected to take place on Chinese soil. Russia, meanwhile, has been invited to join the scheme but has yet to do so.

But a large part of the project is also about adding or improving north-south routes that will connect into south Asia and the Middle East. And while the new roads and railways should revive central Asia's importance in the transit of goods, officials say a better transport network is essential for some of the countries to maintain their rate of

The real test is not so much building such infrastructure as managing it efficiently

economic development, which has accelerated on the back of the worldwide commodities boom.

Oil-rich Kazakhstan, for example, has recently averaged annual growth of 10 per cent. Mr Gezen warns: "There is a risk of stifling the growth of some of these

countries if the transport system cannot serve their needs."

The ADB is backing the plan, along with the European Bank for Reconstruction and Development, the Islamic Development Bank, the International Monetary Fund, the United Nations Development Programme, and the World Bank. Such multilateral institutions are expected to fund just under half the project.

Illustrating the push for more international co-operation, the new road being completed north of Dushanbe draws on expertise and manpower from several countries.

The project has been masterminded by SMEC, an Australian consulting engineering firm, while construction has been in the hands of Sinohydro of China. In fact, 120 Chinese workers have been brought in to build the road. Many are machine operators, working alongside 360 locals who are often assigned more basic tasks.

But over the coming decade, the real challenge could come not so much from building such

infrastructure as from managing it efficiently. Even now, obstacles such as excessive and unpredictable bureaucratic procedures at border crossings can prove more of a deterrent to travelling across central Asia than poor rail or road infrastructure, experts say.

Haruya Koide, an infrastructure finance specialist working for the ADB, says: "Constructing railways can be challenging because of the topography in a region like this, but it is not rocket science. What is really critical is to then have good railway management, which can be a very difficult business."

Similarly, some of the 80 projects already earmarked will require genuine usage commitments from the countries to justify the investment. A case in point cited by Mr Gezen is a rail link crossing Uzbekistan and Kyrgyzstan into China. He says: "This project could become very attractive, provided that China commits the tonnage. The traffic has to come from China. If you don't utilise the asset, it gets very, very expensive."

Furthermore, despite the agreement signed last month, officials remain wary about the possibility of a dogfight when it will come to deciding which of the 80 projects should be given priority. The risks were underlined in the European Union, whose member nations spent years squabbling over how to allocate €20bn to 30 trans-European networks, three-quarters of them involving rail transport.

Mr Gezen recognises that "every country will want their project first" and that political rather than economic considerations might come into play.

But the hope is that, given their huge financial involvement, the multilateral institutions will at least control the overall direction of the transport scheme, even if some governments try to break ranks.

As Mr Gezen says: "We can decide what to do with our money, but we have no way of telling a government what to do with their money."

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Reality yet to match vision

TRANS-SIBERIAN RAILWAY

Miriam Elder on ambitious plans to put cargo on track

Criss-crossing the vast terrain of Russia's heartland lies 9,000km of railway, directly linking the booming Chinese market with producers and consumers in Europe 8-10 time zones away.

Yet the Trans-Siberian Railway, pride of the Tsars who built it and the Soviets who expanded it, suffers from a lack of investment and the bureaucratic tangles that are a hallmark of doing business in Russia.

Even so, private rail operators in Russia are keen to tap into the railway's potential as a strategic alternative to the increasingly crowded shipping lanes that provide the cheapest and most reliable route for goods heading both east and west.

"Rail is something that could be significantly preferable over other types of transport, as it's quite precise," says Izi Karasu, director of logistics at Procter & Gamble in Russia. "If the products get loaded and there are no issues at the border, you get the goods in good time."

Industry analysts estimate that the rail journey from

Asia to Europe through Russia could cut transit time to less than half. It takes an average of 45 days to ferry goods from Asia, through the Suez and Mediterranean and on to European ports. The Trans-Siberian railway could, in theory, cut travel time from Asian ports to Finland down to 15 days.

Boosted by annual GDP growth of 7 per cent, its coffers flush with windfall oil profits, the Kremlin has made infrastructure a priority this election year. President Vladimir Putin has given his political blessing to a huge reform programme by Russian Railways, the state monopoly known by its Russian acronym RZD. This will involve sinking 13,700bn roubles (more than \$500bn) into the ageing rail network to modernise tracks, build 20,000km of lines and buy 1m freight cars by 2030.

And capitalising on the country's situation between Asia and Europe is key.

Vladimir Yakunin, RZD's president and a longtime ally of Mr Putin, said at a recent industry conference that "integration into the global transport system will allow us to use our unique geographic position to build a transcontinental bridge".

Yet that integration is a long way off, analysts say, pointing to a lack of co-ordination along the value chain, bureaucratic inefficiencies, failure to co-ordinate regional authorities inside Russia, and the fact that the much-touted investment programme has yet to be delivered.

"We are of course aware of the fact that the Trans-Siberian Railway might offer an attractive alternative," says Joerg Schreiber, head of Mazda's Russia office. "However, practical implementation meets many obstacles, such as weather conditions

Inside Russia, priority is still given to heavy industry and so-called strategic resources

and the availability of suitable rail carriages." Mazda prefers to use shipping lanes from Asia, and moves goods within Russia by truck, he adds. Tariffs and customs procedures remain cumbersome and unpredictable, with goods waiting for border clearance from two days to up to two weeks and beyond. Co-ordination is lacking between rail operators, ports and regional officials.

A planned joint venture between RZD and Germany's Deutsche Bahn to set up a 50-50 owned logistics company, totalling €1m of

investment, was due to be signed by the end of the year, but may be delayed.

And while plans to extend the Trans-Siberian railway to South and North Korea, and even Japan, have long been mooted, no concrete progress has been made.

"There is a lack of co-ordination for the entire chain," says Eduard Faritov, transport analyst at Renaissance Capital, the Moscow-based investment bank. "If 18m containers are shipped yearly from Asia to Europe, the entire number of containers inside Russia is one-tenth of that."

Inside Russia, priority for cargo and container capacity on the congested rail network is still given to heavy industry and so-called strategic resources, especially coal and metals. "The Trans-Siberian already carries a great deal of freight and it's not clear whether, with the current facilities, it can carry more," says Lou Thompson, a former railways adviser at the World Bank and private industry consultant. "That would involve pushing some traffic aside in order to be a major player in international container traffic to compete with the sea route."

It is Russia's private rail operators who are seizing the opportunities the Trans-Siberian hopes to provide. "Container flow is growing, both in terms of import

and domestically," says Raisa Parshina, chairman of DVTG, Russia's third largest private operator, which ships timber, metals and oil. "Shipping lines are rather full, so customers want to develop all possible routes."

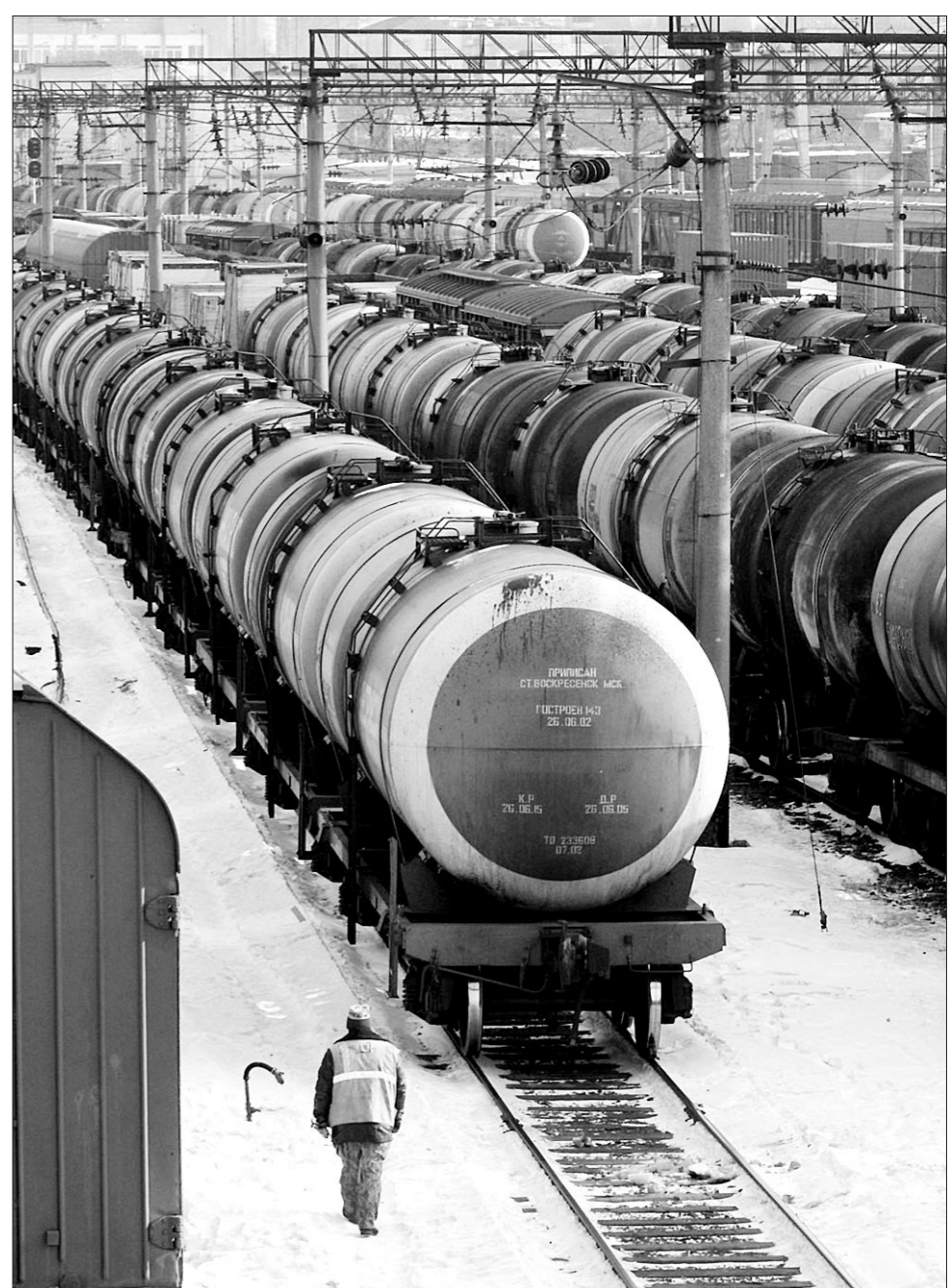
Rather than waiting for supplies from container monopoly TransContainer, which was spun off from RZD this year, the company is building its own container platform at Zabaikalsk-Manzhouli, the largest crossing point on the Sino-Russian border. From start-up next month it will handle 50,000 containers a year.

DVTG is also building extra tracks at its border crossing with China, hoping to cut down on transfer time as the trains switch from Chinese gauges to Russia's traditionally larger ones.

Yet, as Mr Faritov at Renaissance Capital notes: "Among private companies, there is nobody with the same lobbying power as RZD."

Indeed, DVTG has been waiting more than a year to receive permission from the monopoly to build the remaining 30 metres of track that would connect its terminal line to RZD's main link.

"The state understands [the importance of the Trans-Siberian]," says Ms Parshina. "But from understanding to realisation, there are some difficulties."



Heavy load: bulk cargoes are the mainstay of freight traffic on Russia's railways

Iftar/Tass

Ports provider races, as shipping line plods

CORPORATE PROFILE

APM TERMINALS

Robert Wright on the changing relationship between two Maersk sister companies

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The huge container ships of Denmark's Maersk Line have a reason for feeling at home when they dock at several ports on their voyages between Europe and Asia.

APM Terminals, owned along with Maersk Line by Denmark's AP Moller-Maersk, owns at least part of the terminal at five of the eight ports used by the vessels.

The terminals - at Xiamen in China, Tanjung Pelepas in Malaysia, Algeciras in southern Spain, Rotterdam in the Netherlands, and Bremerhaven in Germany - are part of APM Terminals' enviable international collection. Their location reflects Maersk's early recognition that its vessels would need access to good port facilities at key points. The facilities are essential to enabling Maersk to trans-ship goods from its largest vessels to the many destinations lying away from its main east-west routes.

"What we offer is a kind of trade lane," says Kim Fejfer, APM Terminals' chief executive.

However, with Maersk Line set to make a second successive loss this year and the terminals business still highly profitable, there is an increasing push within the Group - which expects to turn over \$50bn this year - to position APM Terminals as an independent business.

It is already the world's third-largest such operator, behind Hong Kong's Hutchison Ports and Singapore's PSA.

The first public sign of the division's repositioning came in 2004, when it moved its

headquarters to The Hague from Copenhagen, where Maersk Line is based.

The terminals operator and Maersk Line put more water between them in June, when APM Terminals began reporting directly to the Maersk Group's chief executive, rather than to an executive closely linked to the shipping business.

Mr Fejfer says his company wants to continue to serve Maersk Line as one of its biggest customers.

But he adds: "We want at the same time to develop similar relationships with other carriers. Today, we have what we could call strategic relationships with

"The decision-making processes in Europe take somewhat longer than in other places in the world"

other carriers." Such protestations provoke sceptical responses from those outside the Maersk family, some of whom point out that many of APM Terminals' facilities continue to be used exclusively by Maersk Line.

Among them is the terminal at Algeciras, which is a vital trans-shipment port for Maersk's Asia-Europe services.

Mr Fejfer concedes that the line remains a strategic customer and partner.

"We obviously like Maersk Line's opinion on where they will need terminal capacity, as



Fejfer: "trade lane"

we do with other carriers," he says.

However, he rejects suggestions that recent developments by the division in northern Europe have been driven mainly by Maersk Line's requirements.

APM Terminals has opened facilities at Le Havre and Dunkirk in France and Zeebrugge in Belgium and is developing one at Wilhelmshaven, on Germany's North Sea coast.

All could be seen as especially useful to Maersk Line because they are close to the sea, rather than up rivers, and accordingly are especially well-suited to Maersk's unusually large ships.

Mr Fejfer prefers to portray the developments as part of a strategy of expanding capacity in Europe in any suitable location that becomes available, including some away from traditional trade centres. Many of the continent's container ports are nearly full to capacity.

"It's vitally important in securing the efficient flow of cargo and containers that sufficient port capacity is built," Mr Fejfer says.

"There are also locations in Asia where port infrastructure has to be expanded, but decision-making processes in Europe take somewhat longer than in other places in the world."

Clouds on the horizon

AIR FREIGHT FROM CHINA

Jamil Anderlini on worrying signs in the so-called Silk Road in the Sky from China

"Build it and they will come" is the Chinese motto, but things do not always work out as planned.

In 2004, the Communist Party secretary in a poor rural county in the landlocked eastern province of Anhui decided to put his district on the map by building an airport. The county town of around 30,000 people is located 130km from Hefei, the nearest major city, and is endowed with unremarkable scenery, very little industry and limited economic prospects.

The local officials invited a developer from the prosperous eastern city of Hangzhou, wined and dined him and agreed to build an airport in a place where not even China's extensive rail network reaches.

The original budget of Rmb30m ballooned into Rmb100m but finally the airport was completed and the party secretary and the developer flew into town, to great fanfare and a hero's welcome. That was the last flight in or out of the new airport, which was marked on Chinese maps for a couple of years but has now been removed.

The international aviation industry estimates that 48 new airports will be built in China over the next decade, increasing the number from the current 130 or so.

The supposed proliferation of inland airports has led to optimism among some analysts and international airlines offering freight services. They argue that rising costs of transporting goods overland to ports on China's

coast will make air cargo from these airports much more viable, particularly to destinations such as Europe.

Intel's investment in the western Chinese city of Chengdu is an often cited example of air freight customers utilising newly-added facilities and services to send their goods to market along the new "Silk Road in the Sky".

But it is still a relatively rare example and at present only Korean Air flies a cargo route from Chengdu directly to Europe, after Air China Cargo cancelled its all-freight route from Chengdu to Frankfurt because of lack of demand.

"Exporting industries remain weak in China's underdeveloped west and most products are still carried to coastal cities and transported by sea," according to Li Lei, an analyst at Citic Jiantou Securities.

The optimism in the sector has been fuelled by double-digit growth in air freight demand from China's coastal boomtowns in recent years. Unfortunately, many analysts believe the export bonanza is past its peak, leaving huge overcapacity in its wake.

"The air freight business is not growing as rapidly as it has in the past few years, when export growth exceeded capacity and companies were able to charge decent prices," says Mr Li.

"Airlines saw the chance and rushed into the sector but now there is overcapacity and with fierce competition, high oil prices and a global export slowdown, prices are falling and air freight operators are making much less profit or even losing money."

Lufthansa Cargo recently issued a report with a similar message, predicting that annual air freight growth in China will be about 7.7 per cent until 2012, whereas the capacity to carry this freight is expected to

expand significantly faster. "This will have further downward pressure on yield," says Derek Sadubin, chief operating officer at the Centre for Asia Pacific Aviation.

"Just like the Japan boom-bust of the late 1980s, where markets such as Osaka saw massive declines in cargo yields, the signs could be looking ominous for the China market."

Between 2007 and 2012 Lufthansa expects air freight volumes from China to Europe to grow 6.3 per cent a year but imports coming the other way will rise just 5.5 per cent, exacerbating trade imbalances and further undermining the economics for air freight carriers flying into China.

The clouds are gathering just as many airlines are ramping up their capacity, and Lufthansa now predicts possible overcapacity of 70 aircraft by 2012.

China Eastern Cargo Airlines says it plans to expand freight capacity by a large amount next year, even though it admits that it and most of its competitors are losing money on freight and that competition is based on undercutting rivals on price.

Jade Cargo, a joint venture between Lufthansa and Shenzhen Airlines, also says it has big expansion plans.

"Not long ago all the companies in China were converting passenger aircraft or ordering new freight aircraft," says Su Xiufeng of Jade Cargo. "These aircraft will begin operating over the next two to three years, which will make this market even more crowded."

Of course, this profusion of new routes should provide air freight customers with more options and better prices over the next few years. It is also likely to lead to consolidation within the industry itself.

Rising tide lifts port neighbours

MALAYSIA AND SINGAPORE

John Burton on the impact of prosperity on the peninsula

In the early 2000s, there were predictions of a three-way struggle to attract shipping among the Malay peninsula's main ports of Singapore, Port Klang and newcomer Tanjung Pelepas.

But the predictions proved wrong and all three have prospered because of increased traffic between Europe and Asia.

Singapore remains the world's largest container trans-shipment hub because of its position on the shipping routes that link Asia with Europe.

Its main port facilities, operated by wholly state-owned PSA, handled nearly 24m twenty-foot equivalent units (TEUs) of containers in 2006, accounting for a fifth of the world's total container transshipment throughput. PSA reported a 13 per cent annual rise in TEU volume to 22.4m to October this year.

Singapore's supremacy rests on its nearly 200-year history of handling international shipping traffic, which has made its operations among the most efficient in the world.

Nonetheless, it has to keep a wary eye on its competitors to the east – Hong Kong and Shanghai – which hope to wrest the leadership crown from the city-state. Although PSA's rates are not publically available, industry insiders say it has been able to remain competitive because its fees are lower than those charged in Hong Kong, its biggest rival.

PSA has adopted a more pragmatic attitude to attracting shipping in recent years, after its two biggest customers – Denmark's Maersk and Taiwan's Evergreen Marine – defected to the new nearby Port of Tanjung Pelepas (PTP) in Malaysia in the early 2000s.

PTP, which opened in 1999, was established by the government of Mahathir Mohamad, the former Malaysian prime minister, to challenge Singapore's dominance.

The defections led to a shake-up in the PSA management and the hiring of Eddie Teh from Hutchison Port Holdings, the Hong Kong port operator, as its new chief executive. Mr Teh has been credited with adopting a more flexible approach towards shipping lines.

The biggest challenge facing PSA now is a product of its success: dealing with increased congestion around the port.

PTP is south-east Asia's fastest-growing container port, but whether it poses a long-term threat to Singapore remains uncertain. Its 4.7m TEU volume last year was only a fifth of that of Singapore. Although shipping analysts say its operations are less efficient than Singapore's, its rates are lower.

"PTP has picked up business because shipping lines are spreading risk instead of depending on a single port in a locale. It's happening all over the world because it increases their bargaining power when negotiating with port operators," says a Singapore-based shipping consultant.

PTP is seen as being hampered by the fact that its supporting transport infrastructure is less extensive than that in neighbouring Singapore. But that may change. The Malaysian government is planning to transform the southern tip of Johor state, where PTP is located, into a special economic zone, the Iskandar Development Region.

However, similar efforts to boost the business of Port Klang, Malaysia's biggest container port with a 6.3m TEU volume last year, have encountered problems. A year ago, the government opened an industrial and trading zone for the port, which is located near the Malaysian capital of Kuala Lumpur.

But the project's Dubai partners pulled out, citing excessive government interference in the zone's management, while its construction costs more than doubled to \$1.3bn from the original estimate.

The government has said it will provide a loan to the Port Klang Authority, which has debts of \$1bn, to save the project.



Going with the flow: a cargo ship transports cars on the Yangtze river between Fengjie and Wushan

Getty Images

Logistics is key to inland shift

CHINA

Geoff Dyer looks at transport issues in the more deprived regions

China's spectacular economic development record has largely been concentrated in two areas – the so-called Pearl River Delta just north of Hong Kong and the immediate hinterland of Shanghai.

That process is starting to change, however. Over the past few years, labour costs have started to rise sharply in these coastal areas, threatening the competitiveness of lower-margin operators. Meanwhile, as these regions have prospered, they have become less tolerant of the pollution rapid industrialisation has created.

Although a few companies have started to shift operations overseas, most of the companies under pressure are looking to move elsewhere in China. "I would say 90 per cent of Chinese companies would rather move inland than move offshore," says Stephen Green, economist at Standard Chartered in Shanghai.

The big question for the development of China is where the companies move to. Many would prefer to inch further inland from their coastal operations to the next provinces such as Anhui, near Shanghai, and Jiangxi in the south so they can take advantage of the better logistics available on the coast. However, the government would prefer a large number of companies jump further inland to more deprived areas.

The key will be the quality of logistics available to them in those more inland areas.

To encourage such investments, the government has been spending heavily on new road infrastructure in recent years. China has just over 45,000km of highways and the authorities plan to nearly double the total to 85,000km by 2010. "It is very similar to the expansion of the US road system in the 1950s," says Chris Lofgren, chief executive of Schneider National, the US trucking company that is establishing an operation in China and recently acquired the operating assets of a Chinese logistics company.

Yet companies wishing to move goods around by road quickly face the dilemma that

there are no national trucking networks. Instead most of the country is dominated by small trucking operations, often with old and inefficient vehicles, that cover only limited regions. Transportation costs are around 16 per cent of total product costs in China, compared with around 5 per cent in developed economies.

The weak road logistics infrastructure is particularly difficult for the retailers that are trying to establish hypermarkets and supermarkets in some of China's inland cities and require sophisticated, refrigerated trucks to bring food to their stores. Carrefour, for instance, has three stores in Urumqi in the far west of China, a five day drive from Beijing. The consultancy AT Kearney estimates China will need to invest \$100bn to build an efficient and safe food distribution system.

In the eastern region of China – the area that has Shanghai as its bridgehead – companies are becoming increasingly interested in the Yangtze river as a means of transport.

Between 2000 and 2005, the amount of cargo travelling on the river nearly trebled and in 2006 it surged a further 25 per cent to

900m tonnes. The authorities have announced plans to invest Rmb 16bn by 2010 on port construction, dredging and other infrastructure improvements on the river.

The Yangtze has developed into a particularly strong logistics platform for the transport of bulk commodities. If you stand on the margins of the river or its many tributaries of the lower Yangtze region these days, you will see a constant procession of barges carrying coal, iron ore and cement – the building blocks for the country's rapid industrialisation.

It is also becoming increasingly important to the auto industry. Ford has its China manufacturing base in Chongqing, 2,500km from Shanghai, and several auto companies have factories in Wuhan, another important Yangtze city. Components from overseas and the Chinese coast travel up the river to the factories and completed cars travel down – on barges that carry 200 vehicles, compared with the eight cars a truck can carry.

"The government's plan to develop the Yangtze for transport will greatly improve the links between the inland logistics system and the ports along the river

with international shipping routes," says Xu Maozeng at Chongqing Jiaotong University.

However, users of the river are not without their complaints. Traffic can suffer from regulatory delays, with several different local governments and shipping departments competing for jurisdiction, while on certain stretches local state-owned companies exert a near-monopoly. Some experts believe the planned investment will not be enough to prevent future problems. "The inland ports and their facilities are becoming a bottleneck," says Liang Haicheng, a professor at Wuhan Technical College of Communications.

Railways are the transport branch that companies in China are least optimistic about. The sector is not short of investment – the government plans to spend Rmb 1,500bn from 2006 to 2010 on locomotives and other rail investments.

But the sector is dominated by the Ministry of Railways, which is viewed as one of the most bureaucratic in the country. Companies say the huge numbers of passengers who use rail travel to get around the country mean that freight is often considered a lesser priority.



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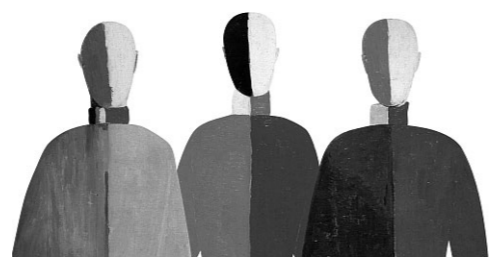
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Strategic Trade Routes: Asia to Europe

New milestones on the old Silk Road

Guest Column
DOMINIC BARTON

Baron Ferdinand von Richthofen, the German historian and geographer, coined the expression "Silk Road", or "Silk Route", (*Seidenstrasse*) 130 years ago to designate the well-worn path between China and "the west" via Damascus.

He chose silk as symbolic of the exotic and highly prized goods China allowed to flow from its centres to barbarian lands.

Today, no single commodity could claim exclusive naming rights. The "new Silk Road" – shorthand for the revitalised trade between the Middle East and China – carries steel, telecoms equipment, oil, humans and financial capital, and more besides.

The trade flows both ways are driven by the Gulf's appetite for infrastructure, agriculture, education, healthcare and information technology, as well as China's thirst for Middle Eastern oil and capital.

How wide is this metaphorical roadway? Trade flows between the Middle East and China last year totalled \$69bn, up from \$6bn in 1995. In 2000, there were only seven direct flights a week from the six Arab states in the Gulf Co-operation Council to China. Today, there are 50.

Trade and investment between the two regions receives considerable coverage in newspaper columns: China's Sinopec invests as much as \$100bn in Iran to help secure an energy supply; Damac Holding is building a \$2.7bn residential, office and leisure complex in Tianjin, China.

These are long-term

strategic investments, not mere portfolio plays.

There is more to come. China is expected to account for 50 per cent of the total increase in global demand over the next 15 years and is predicted to have \$1,000bn of infrastructure needs over the next five years.

Saudi Arabia's infrastructure needs over the next 10 years are put at \$650bn.

Whereas the old Silk Road traditionally ended at Damascus, its new namesake is beginning to break trail into North Africa and beyond, a relationship known as Mena (Middle East and North Africa). Again, the growth of direct flights between the regions is a tell-tale sign. In 2000, there were 293 direct flights a week from the Middle East to Africa; today there are 554.

As global demand for commodities continues to rise, the world has awoken to Africa's rich natural resources.

Private capital flows to sub-Saharan Africa are still dwarfed by those to regions such as Asia, but have trebled since 2003.

According to International Monetary Fund statistics, total gross private flows in 2006 amounted to about \$45bn – almost 6 per cent of Africa's gross domestic product – up from about \$9bn in 2000.

Dubai, which was never part of the old Silk Road, is today hard at work positioning itself as the key junction of the new version. The opening of the Jebel Ali freeport in 1979, followed by the diversification of Dubai's economy into such areas as tourism and telecoms, has made many, if not all, roads lead to Dubai.

The desire for a concrete overland route between

Asia and Europe (and Africa) is very real. Overland options, such as the Trans-Siberian Railway (TSR), have existed for many years, but still move only a tiny fraction of cargo.

A much-discussed "Iron Silk Road", running from Korea through North Korea to link up with the TSR, could, it is argued, make good advantage of South Korea's ports.

Meanwhile, China is constructing 12 highways to link its western Xinjiang Province with Central Asia. These could one day link up with the UN's Asian Highway Network, connecting 32 Asian countries with Europe.

Last month, members of the Central Asia Regional Economic Co-operation (Carec) programme agreed to an \$18.7bn plan, supported by the Asian Development Bank, to improve Central Asia's network of roads, airports and railway lines, with the hope of creating a route for trade between Europe and Asia.

Even in the days of the old Silk Road, some goods were too bulky or heavy to transport overland. So it is today. Until container ships are replaced by direct oil pipelines, or equivalents, there will always be a role for shipping routes.

Whether these will continue to run through Singapore and the Straits of Malacca and the Suez Canal or new, shorter routes through an ice-free Arctic Sea that would link north-east Asia with northern Europe, only time and climate change will tell.

In the meantime, the flow of human and financial capital will continue to reshape the economic world.

Dominic Barton is chairman of McKinsey, Asia



Full to bursting: a worker watches a container being loaded at the bustling Jawaharlal Nehru port near Mumbai

Bloomberg

Hubs are nub of the issue

INDIA
Joe Leahy on the choices facing shippers delivering containers to overloaded ports

For a direct indication of the premium attached to efficiently-run ports in India, one need look no further than the recent stock market listing of Mundra Port and Special Economic Zone.

The port, India's largest privately-owned facility, is being developed in Gujarat, western India by the Adani group. Shares in the port more than doubled on their trading debut in Mumbai, and the company's initial public offering was more than 100 times subscribed.

The reason for the investor enthusiasm is simple. India's ports are chronically overloaded and there is not enough new capacity of the type being built at Mundra to alleviate the problem in the foreseeable future.

Shipping lines delivering containers to India are forced to choose whether potentially to spend days waiting at its main congested deep draft ports or to opt for trans-shipment hubs, such as Colombo or Singapore. From these hubs, cargo can be loaded on to feeder vessels, which attract lower port fees and can dock at smaller facilities.

"In about six years, the capacity of India's ports needs to double and that, I think, is a big challenge," says Amit Desai, executive director of Mundra Port. "The new capacity currently being tendered is...a tiny part of this total."

India's bigger ports han-

dled 5.4m containers in the financial year to March, with total volume rising at a compound annual rate of 14 per cent over the past five years.

Efficiency has improved radically from the bad old days of the mid-1980s, when a ship could wallow for an average 12 days in an Indian harbour waiting to be unloaded. But India, with an average ship turnaround time today of 3.5 days, still badly lags east Asia's average of 13 hours. In Hong Kong, the figure is as low as 10 hours.

The main port is the bustling Jawaharlal Nehru Port (JNP), a short boat ride across the bay from Mumbai, India's financial capital. The port is a showcase of foreign investment – the two container terminals at the port are operated by mainly foreign-owned companies and are fitted out with modern equipment and are as efficient as that in many European ports.

But JNP, which handled 3.3m 20ft equivalent units (TEUs) last year, is operating at overcapacity, meaning it takes only one hitch to cause significant delays. Mr Desai says ports in India on average operate at 91 to 92 per cent capacity. Being a seasonal business, ports should operate at closer to 70 per cent so that they do not become overloaded during peak times.

"Capacity utilisation of more than 70 per cent will lead to either ships waiting

at anchorage or choked backyards on ports, which is what we are in fact seeing at most ports," says Mr Desai.

He says the country is likely to handle 750m tonnes of cargo this year. This implies that it needs 125m to 150m tonnes of new capacity just to bring the utilisation rate down to levels that would reduce the risk of congestion.

To reduce capacity utilisation to acceptable levels and to cater for future growth, some discussion papers postulate that India will need a total of 1.5bn tonnes of han-

Trans-shipment to Indian ports from Colombo, Dubai and Singapore is likely to continue

dling capacity by 2013-14, double today's level.

Yet new capacity being tendered for construction is only a fraction of what is expected to be needed. A fourth terminal at JNP, that was meant to increase capacity by an estimated 50 per cent, has been affected by delays.

The consequence for shipping lines is that trans-shipment to Indian ports from hubs such as Colombo, Dubai and Singapore is likely to continue. Indeed, Colombo, in anticipation of

this trend, is adding new trans-shipment capacity.

An estimated 30 per cent of India's container traffic is moved through trans-shipment, either from international hubs such as Colombo or from mainline ships docking at large Indian ports and using feeder ships to distribute their cargo elsewhere.

Anil Devii, chief executive officer of Shreyas Shipping and Logistics, says cost is a key issue in transshipping. A mainline vessel faces port costs of up to about \$140,000 a day in India while a feeder vessel costs about 10 per cent of this.

Typically, a mainline vessel might stop off at Colombo or a big Indian port and then offload on to feeder vessels smaller loads of cargo bound for other destinations in the country.

Colombo is convenient for trans-shipment to India because of its location on the significant shipping global routes while Singapore is often preferred because of its role as a large low-cost hub. But Mr Devii says Mundra is also helping to change the picture.

As the port completes its expansion, it will become a trans-shipment point for more cargo, helping to relieve some of the pressure on JNP and giving shipping lines more options.

"Mundra has definitely helped. We are doing a lot of trans-shipment of Karachi cargo into Mundra," he says.

After two decades, freight link receives green light

BETUWE ROUTE
Robert Wright on the complicated birth of a 160km rail project linking Rotterdam with Germany

The occasional freight train clanks over a new bridge over the main railway line to Antwerp at the northern end of the Netherlands' largest rail yard, at Kijfhoek near Rotterdam, before entering a tunnel that leads to Germany.

The trains are among the first commercial services on the Betuwe Route, a 160km-long freight route that is intended to transform the ability of the Port of Rotterdam, the world's third-busiest port and Europe's busiest recipient of Asian trade, to handle onward movements by rail.

Betuwe is the most significant of many projects under way in northern Europe to help ports to cope with the rapid surge in import traffic created by Asia's trade boom. Kijfhoek marks the start of the new section of the line, where it crosses the main line and joins the existing tracks into the Port of Rotterdam.

However, the route is some way off handling the 10 trains an hour in each direction for which it was designed. Since its opening in June, the route has been battling with problems created by its signalling system, the new Euro-

pean Rail Traffic Management System (ERTMS), intended eventually to become a pan-European standard.

Locomotives equipped to use the system have yet to receive full safety clearance from the Dutch authorities and, at present, the main part of the route from Kijfhoek to Zevenaar on the German border is allowed to handle only one train in each direction at a time.

The signalling problem is only the latest in the two-decade history of the Betuwe Route project, which has weathered public opposition, soaring costs and multiple delays to reach the threshold of being fully operational.

There remain concerns that the line may never be able to earn back the €4.7bn it has cost to build – particularly because it competes with the heavily-used waterway system, which is free to use.

However, Cees Tommel and Sjoerd Sjoerdsma, joint chief executives of Keyrail, the Dutch company in charge of the route, remain confident. The route can soon capture 80 per cent of the Netherlands' east-west rail freight traffic, according to Mr Sjoerdsma.

Capacity on the neighbouring mixed-traffic routes, where freight trains have to share track with a growing number of passenger trains, is already tight.

Booming container trade with Asia will be an important driver for the line, Mr Tommel says, although it will also carry cars, dry bulk products such as iron ore from South America and oil.

Keyrail is 50 per cent-owned by Pro-rail, the state-owned owner of the Netherlands' rail network, 35 per cent by the Port of Rotterdam and 15 per cent by the Port of Amsterdam.

The line, which has been under planning or construction since 1990, was originally conceived as an upgraded, freight-only alternative to the existing rail line through the Netherlands' Betuwe region. The modest costs originally projected have doubled, largely because of the effects of public opposition, which forced the builders to put 18km of the line in expensive tunnels.

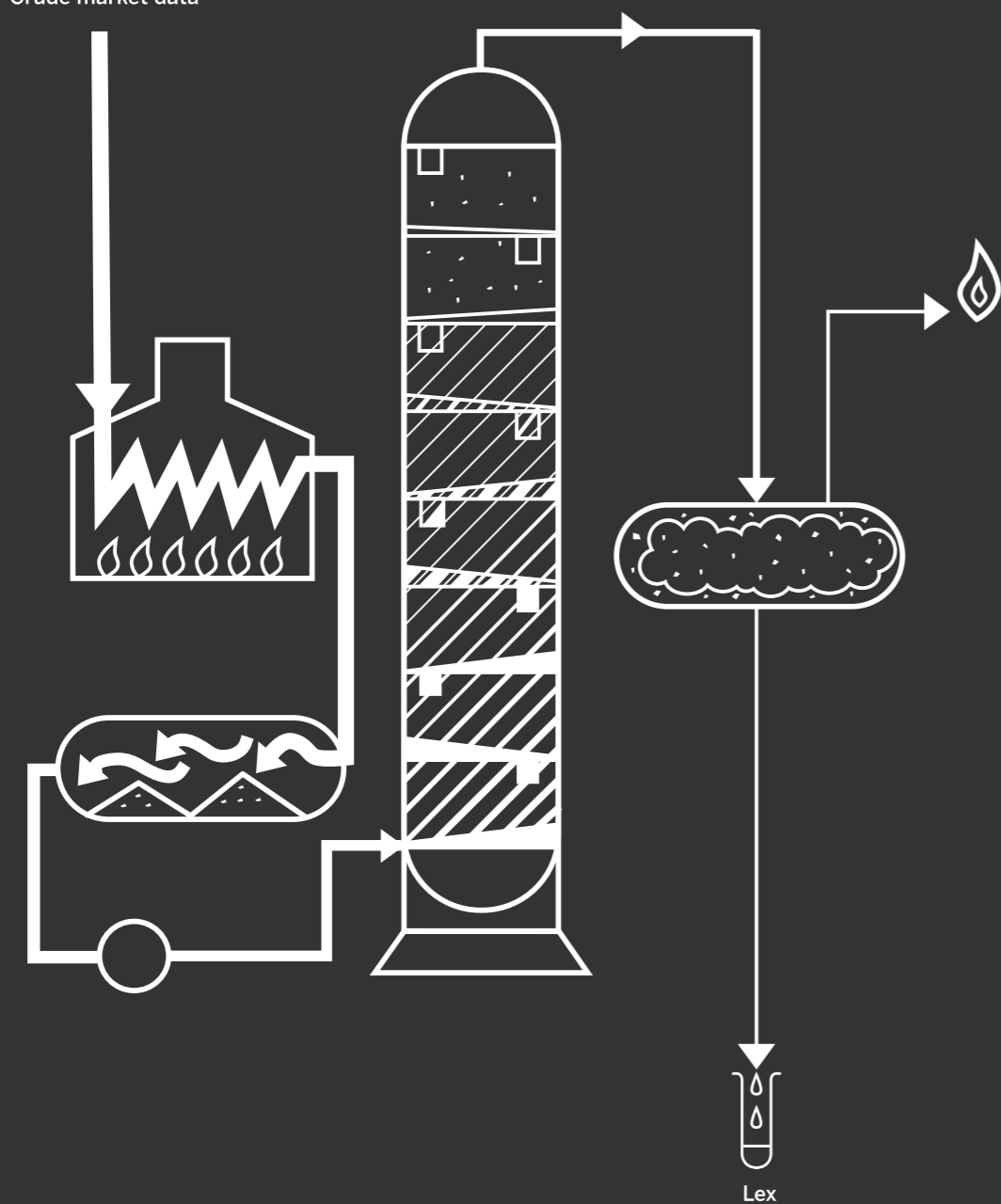
ERTMS has exacerbated the problems. Unlike traditional signalling systems designed and fitted by a single company, ERTMS is based on a specification drawn up by the European Railways Agency, a European Union body.

While the open specification prevents a single manufacturer from having a stranglehold over the technology, there have been problems proving that different manufacturers' equipment will work safely together.

The line will be able to work at full capacity only once ERTMS equipment has been approved for use on all the necessary types of locomotive – around mid-2008.

Mr Tommel says the ERTMS system will eventually give the Betuwe Route advantages, when it is operating Europe-wide. But he admits: "It's very hard to implement it when you're the first mover and user and you have to solve all the problems."

Crude market data



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