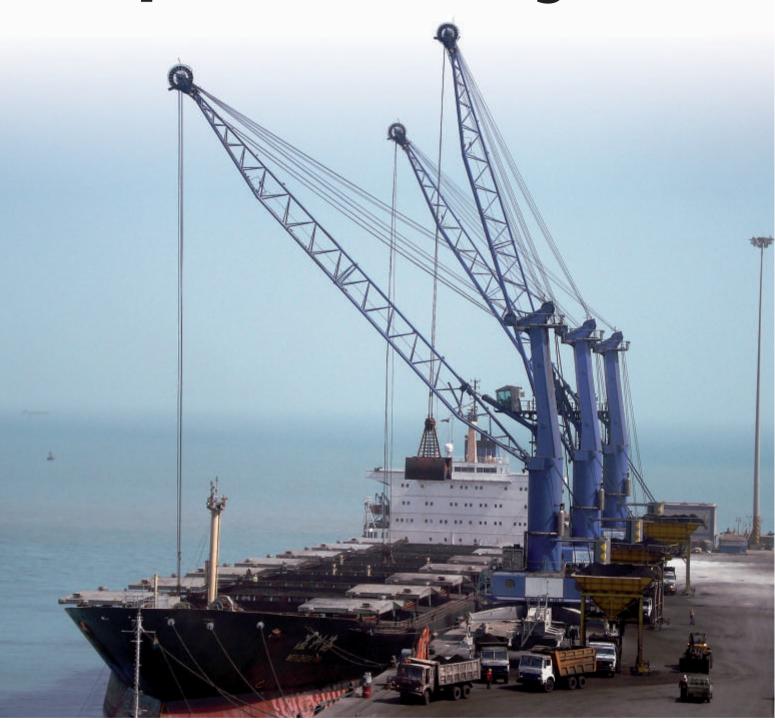
Experience the Progress.

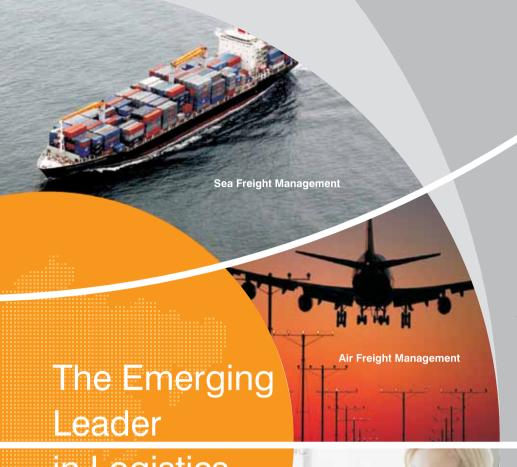


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Right Steps to **Restore Growth**



Finally, the Government of India has woken up from its slumber. Realising the need to restore

foreign investor confidence in India, Prime Minister Manmohan Singh has decided to set up a Project Clearance Board (PCB), for granting speedy clearances to projects in the energy and infrastructure segments.

The new board, chaired by cabinet secretary, will be on the lines of the Foreign Investment Promotion Board (FIPB), where different ministries are represented.

Earlier this month, Prime Minister Manmohan Singh had also instituted a system for monitoring the performance of public-private projects to ensure accountability, efficiency and economy in spending as more and more sectors now rely on this mode for infrastructure development.

If these moves are any indication, the Prime Minister, who is the architect of the 1991 reforms, which paved way for the country's miraculous growth story, is at it again. What makes these efforts all the more significant is that they come at a time when India is struggling with a low growth rate, widening fiscal deficit and high inflation.

These are bold measures taken in the right direction especially considering that many large projects in the infrastructure and energy segments are stuck in red-tapism and callousness.

Financial analysts and rating agencies worldwide were of the opinion that India should take right policy steps to encourage private investments in various sectors to restore its earlier growth momentum. These steps come a bit late than expected. But that can be said about any policy measures taken by all governments in the world. What is important is that the Indian government has finally taken note of the situation and acted on it.

Lack of access to power and infrastructure are perhaps the most basic impediments to economic growth. Remove them and the India growth story will receive a muchneeded shot in the arm.

Best Regards

Mangaraul

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AUGUST 2012 gate

India's premier maritime business magazine



INLAND WATER TRANSPORT TRAPPED IN A DILEMMA

Despite its advantages and immense potential, inland waterways is yet to take off in India. Plagued by policy paralysis and government apathy, the sector has failed to emerge as an alternative means for movement of goods and still remains a poor cousin of rail and road transport.

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Strategically located on the west coast between two major ports Mumbai and Goa, JSW Jaigarh Port aims to become the most modern and mechanised port in the country.



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While cargo volume is the major influencing factor in shipowners' decision to call at a port, the boardroom concerns are many.

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Will PMO's monitoring of the implementation of the dedicated freight project ensure its completion on time?

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Crisis Runs Deep34

Shipping companies across the world are grappling with problems related to Eurozone crisis and Chinese slowdown and experts say there will not be much relief this year.

How to assess the real potential of dry

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Many of the UAE ports are getting into a new avatar to meet the growing needs of the logistics

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It is time that uncertainities in treating ICDs & CFS as infrastructure facilities for availing tax incentives come to an end.

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Bangalore is slowly transforming into a dry port hub, moving cargoes ranging from gizmos to



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Super-post-Panamax cranes
to Baltimore Terminal The
400 foot cranes, scheduled
to begin operations at the
port's new 50-foot-deep
berth, arrived from
China. At a cost of \$40
million, the cranes
will allow the port
to handle the larger
ocean carriers that
will transit the
newly widened
Panama Canal
from 2014.

Japan keen on DMIC-like corridor in South India

A fter pitching in with \$4.5 billion towards seed capital for the Delhi Mumbai Industrial Corridor (DMIC), the Japanese government is now keen on developing a similar corridor in south India. Simultaneously, talks are on at the official level to develop an eastern corridor and connect it to Dadri in Uttar Pradesh as a meeting point with the DMIC.

SCI gets E-procurement portal

The Shipping Corporation of India Ltd. (SCIL), in its drive towards an efficient, effective, fully transparent e-procurement system, launched its SRM Module, as part of its ambitious "SET-IT Project". The module includes within its ambit online receipt of tenders, with maintenance of all related documents in the system. The E-Procurement portal is https://etender.sci.co.in

India's 2011/12 corn exports may rise to 3.5 mn tonnes

orn exports from India could hit a record 3.5 million tonnes in the 2011/12 marketing year to September, spurred by higher global prices and a bumper harvest, the India representative of a major US grains export association. USGC. said.

India is Asia's secondlargest grower of corn after China but it is not a significant global exporter of the grain. It mainly sells to Malaysia, Indonesia and Vietnam, which seek small cargoes for prompt delivery.

India exported about 3.2 million tonnes of corn in 2010/11, traders said. It harvested 21.6 million tonnes in the 2011/12 crop year which ended in June, slightly lower than the record 21.7 million tonnes of the previous year.

Essar's Paradip Coal Berth receives final approval

Paradip Port Trust has received Ministry of Environment & Forests (MoEF) approval for the all-weather deep draft coal berth which had been awarded to Essar Ports on Build Operate and Transfer (BOT) basis on a 30-year concession. Essar Ports will build a mechanised berth of 370 m length which will be one of the most advanced port facilities of its type in India. This would give the facility an effective handling capability of 14 to 18 million tonnes per annum.

Sir Carron Greig passes away

Sir Carron Greig, KCVO, CBE, DL, who was Chairman of Clarksons from 1972 until retiring after 44 years with the company in 1993, died on July 11, aged 87. He was elected Chairman of the Baltic Exchange in 1983.

Vizag Port reports 20% dip in cargo handling in Q1 this year

he Visakhapatnam Port has reported a 20 per cent decline in cargo handling during the first quarter of the current financial vear, as compared to the corresponding period last year. During April-June 2012, the country's secondlargest port has handed 14.89 million tonnes of cargo, as against 18.64 million tonnes during the same period last year.

The decline was primarily on account of the 3 million tonnes of iron ore and petroleum products that the port had lost during the quarter. However, it has registered some growth in handling container cargo, which grew 50 per cent during the quarter.

Goa panel for 20-25 mt cap on iron ore extraction

A committee of experts constituted by the Goa Government has recommended a cap on extraction of iron ore in the coastal state to 20-25 million tonnes (mt), which is almost half the existing exports. Goa, India's biggest iron ore exporting state, shipped 43.5 mt ore during the last fiscal, much less than compared to the 54 mt exports in the earlier financial year.

This is mainly because the mining industry is rigged with several illegalities and irregularities, which has put this trade in a tight spot.

Chinese coastal vessels forced to seek new business

uffering from a slowdown in China's coastal trade, the country's huge fleet of coastal ships has sailed out of the shadows to seek international business. The fleet. previously unnoticed by the global market, is suffering from a slowdown in China's coastal trade amid weaker domestic demand from utilities and steel mills and a growing glut in Chinese coal and iron ore stockpiles have forced the vessels to seek new business such as in the Indonesian coal trade, dealing a further blow to the depressed global dry bulk shipping market.

Vessel management system goes hi-tech at Chennai Port

A vessel traffic management system has been installed at the Chennai Port, which will increase the efficiency of surveillance and tracking vessel movement in the port limits. To begin with, the surveillance is for nearly 2 km but can be extended to 48 nautical miles with advanced software.

Greatship's Global Offshore takes delivery of a Platform/ ROV Support Vessel

reatship Global Offshore Services Pte Ltd (GGOS) has taken delivery of a Platform/ROV Support Vessel, Greatship Roopa, from Colombo Dockyard Plc, Sri Lanka. Greatship Roopa is a DP2 vessel, capable of supporting offshore exploration and production and has been built complying with the SPS Code 2008. With the delivery of the vessel. GIL and its subsidiaries currently own and / or operate four PSVs, nine AHTSVs. three MPSSVs. four ROVSVs and two jack up rigs.

Konecrane uses hybrid power for its RTGs

Monecranes has introduced a Hybrid (diesel/electric) power option for its Rubber Tired Gantry cranes (RTGs). Customers can thus choose either a diesel or electric solution, depending on their business requirements. The Hybrid Power Pack and Diesel Fuel Saver provide the flexibility of diesel power, while the two electric options provide the benefits and convenience of electricity.

The Konecranes Hybrid Power Pack turns a fully-diesel RTG into a diesel/electric hybrid RTG. Like a hybrid car, it takes the energy generated during braking and converts it into electricity to recharge the batteries. The Cable Reel and Busbar options convert the RTG to fully-electric operation, eliminating diesel exhaust emissions, ensuring quiet RTG operation. There is no downtime for refuelling, so the RTG can spend more time in productive operation.

Ennore-Manali road project work apace; may be ready in a year

The Ennore-Manali Road Improvement Project is expected to be completed by June 2013. Till now, 32 per cent of the ₹ 600-crore project has been completed. It is a very unique port-connectivity project, not only for Chennai and Ennore ports, but also for general public of Chennai city.

The Union Shipping Minister, G K Vasan handed over a cheque for ₹50.50 crore to the National Highways Authority of India towards equity share contribution for the project.

FFFAI MEETS PRESIDENT

Delegation of Federation of Freight Forwarders Associations' In India (FFFAI) led by Shantanu Bhadkamkar, Chairman, FFFAI had a meeting with the President of India Her Excellency Shrimati Pratibha Devisingh Patil recently at Rashtrapati Bhavan, New Delhi.

Acknowledging the importance of the role played by the Custom House Agents



Association and International Freight Forwarders in the international trade of the country, President Pratibha Devisingh Patil showed keen interest in the presentation made by FFFAI. She was keen to learn about the newly launched women's wing of FFFAI and the Young Forwarder team of FFFAI.

On behalf of FFFAI, Chairman, Shantanu Bhadkamkar presented a plaque as a memento of Golden Jubilee Celebrations of FFFAI to the President. Other members in the delegation include: A V Vijaya Kumar, Nailesh Gandhi, Amit Kamat, Secretary, Shankar Shinde Treasurer, Raman Raj Sud, mmediate Past President, Radhakrishnan – Advisor & Convenor of Golden Jubilee Committee.

Top 20 shipping lines: Operated fleets as on June 2012 TEU Ships **Operator** Share 1 APM-Maersk 2,661,049 666 16.1% 2 **Mediterranean Shg Co** 2.221.779 472 13.5% 3 **CMA CGM Group** 1,340,342 401 8.1% **COSCO Container L.** 712,855 158 4 3% 5 175 **Evergreen Line** 656,960 4 0% Hapag-Lloyd 6 642,291 146 3.9% 7 APL 615,795 139 3.7% 8 CSCL 582,347 152 3.5% 9 **Hanjin Shipping** 554,568 108 3.4% 10 MOL 487,299 109 3.0% 00CL 424,808 90 11 2.6% Hamburg Süd Group 102 12 411,291 2.5% **NYK Line** 13 409,461 99 2.5% 14 Yang Ming Marine Transport Corp. 364,400 86 2.2% 15 K Line 350,086 75 2.1% Hyundai M.M. 16 343,853 63 2.1% 17 323,258 Zim 86 2.0% PIL (Pacific Int. Line) 294,743 145 18 1.8% 19 **CSAV Group** 276,788 64 1.7% 20 UASC 274,094 46 1.7% Source: alphaliner.com

Top 10 European Container Ports – 2011

| top to European Container to | | | | |
|------------------------------|-------------|-------|--|--|
| Port | Country | TEUs | | |
| Rotterdam | Netherlands | 11.88 | | |
| Hamburg | Germany | 9.01 | | |
| Antwerp | Belgium | 8.67 | | |
| Bremen | Germany | 5.91 | | |
| Valencia | Spain | 4.3 | | |

Source: Port Authorities

| Throughput (Milllion | | |
|----------------------|-------------------------------|--|
| Country | TEUs | |
| Spain | 3.6 | |
| UK | 3.2 | |
| Italy | 3.1 | |
| Turkey | 2.6 | |
| Russia | 2.3 | |
| | Country Spain UK Italy Turkey | |

TOP 10 GLOBAL CONTAINER PORTS – 2011





"Our port members throughout the world have significant concerns about the impact that undeclared overweight containers can have on safety in the supply chain. There needs to be a ways and means to ensure that the correct weight of the containers is declared to the carrier and communicated to the ship's master in order to allow for correct and well-informed handling and stowage."

- **Geraldine Knatz**, President of International Association of Ports and Harbours (IAPH)



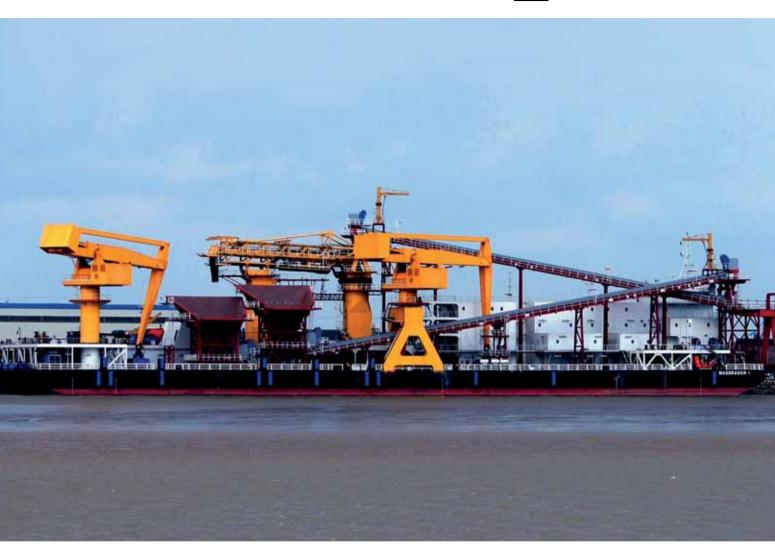
"Piracy's destabilising impact can only be mitigated through collaboration across political, military, financial and legal arenas. The need of the hour is to explore new ways to secure the freedom of those held captive, curb the reach of the pirates, provide comprehensive support to Somalia, and crystalise the unified stance created by our Public-Private Partnership."

- Sultan Ahmed bin Sulayem
DP World Chairman

"We need a reliable supply chain, with low volatility and competitive rates. And why does utilisation need to be near 100 per cent? We need to ensure we have more in the tool box than just short-term utilisation. Why negotiate ocean freight rates down when it is such a small part of supply chain cost?"

- **Jesper Praestensgaard** Chief commercial officer, Hapag-Lloyd





We supply complete cargo handling solutions. Why make life complicated?

MacGregor dry bulk transloading systems are efficient, reliable and clean. They transfer cargo at high rates, and are suitable for conversions and newbuildings. Key components comprise heavy duty grab cranes, hoppers, conveyor systems, ship loaders and hatch covers, and are all available from one supplier: Cargotec.

Through Cargotec's global service network we provide lifetime support for maintenance, service solutions and upgrades, ensuring that the performance of your transloading operation is continuous and efficient

Cargotec improves the efficiency of cargo flows on land and at sea - wherever cargo is on the move. Cargotec's daughter brands, Hiab, Kalmar and MacGregor are recognised leaders in cargo and load handling solutions around the world.

Seagull security training gets NMA Flag State approval

Seagull, a computer-based training (CBT) specialist, has been awarded Norwegian Maritime Authority (NMA) approval for a new, comprehensive ship security training package that is in full compliance with the Manila amendments to the STCW Convention and Code, These new security training courses will be available during September of this year. The revised STCW, which came into force in January this year, introduces more stringent requirements for onboard security training, with particular provisions designed to ensure seafarers are properly trained to handle the pirate attacks.

Marg Karaikal Port attracts equity

C tandard Chartered Private Equity (Mauritius) has invested ₹130 crore in MARG Karaikal Port for a minority stake. The funds will be used for the MARG Karaikal Port expansion plans which will enhance the port's capacity from 21 million metric tonnes per annum (mmtpa) to 28 mmtpa. Commenting on the investment, GRK Reddy, Chairman and Managing Director, MARG Limited said, "Given the planned and existing efforts towards infrastructure development of Karaikal coupled with its healthy business and political environment, location advantage and state-of-the-art facilities. MARG Karaikal port is poised to be the most strategic and efficient port on the South East coast of India that will unleash the economic potential of central Tamil Nadu and Puducherry."

Adani Ports signs pact to develop bulk terminal at Kandla

Adani Kandla Bulk Terminal Pvt Ltd, a subsidiary of Adani Ports and Special Economic Zone (APSEZ), has signed a concession agreement with the Kandla Port Trust, to set up a dry bulk terminal at the Kandla Port on build, operate and transfer basis, thus emerging as the only private sector port operator with presence across six ports in India.

The project, which will be the one of largest bulk terminal on the west coast of India, will have a capacity of over 20 million tonnes a year and will be built at the cost of about ₹1,200 crore and be commissioned within a period of 24 months. The dry bulk terminal will be located off Tekra near Tuna outside Kandla Creek at the Kandla Port, India's number one port by volumes. The terminal, will handle cargo like coal, fertilisers, salt, minerals and other agri-products.



The direct berthing at Tuna would address the present issues at Kandla relating to anchorage/barge operations which led to increased cost per tonne, double handling, loss of cargo and lower productivity. The automated and mechanised processes at the new terminal at Tuna would ensure transparency.

New course on Survey and Examination of Lifting Appliances

The wide range of operational equipment both on board a vessel and dockside can make the job of a surveyor, and indeed anyone responsible for examining equipment, challenging and fraught with pitfalls. With its new Survey and Examination of Lifting Appliances training course, Videotel has made a valuable contribution to this important area, helping to improve the quality of the surveying and examination of lifting appliances and so playing its part in helping to reduce the number of injuries and deaths caused each year by lifting operations.

"When a lifting appliance fails, the consequences can be far-reaching," says Nigel Cleave, CEO of Videotel Marine International. "Serious injuries and deaths can occur, not just to onboard-personnel but to the general public. As a result, legal claims can also arise with the inevitable impact of associated legal costs — and those costs are rising. Likewise, when equipment fails, the costs of disrupted operations and off-hire can also be considerable."

Smit Lamnalco signed up for PNG LNG

Smit Lamnalco has secured a 10-year marine support and towage contract covering ExxonMobil-led LNG export terminal operations in Papua New Guinea, representing the first formal service agreement to be won under the service company's new name and identity. The contract, to provide tugboats and crews to assist berthing and un-berthing of LNG carriers, is worth approximately \$120 million over the

period, which could be extended to 25 years. Shoreside, the project involves the development of liquefaction, storage and handling facilities 20 km northwest of Port Moresby with capacity to export 6.6 tonnes per year from 2014. Over 700 km of pipelines will connect to operations offshore in the Gulf of Papua. Terminal construction is being overseen by the BAMClough, a joint venture between BAM International and Clough Ltd.

Siwertell ship unloader from Cargotec

Dong Energy, one of the leading energy groups in Northern Europe, has placed an order with Cargotec for a Siwertell type ST 790-D ship unloader. The new unloader will be used to ensure the efficient, clean unloading of wood pellets and coal to Dong Energy's combined heat and power station at Avedøre in Denmark, discharging ships of up to 10,000 dwt at a rated capacity of 800 t/h.

Johor Port to embark on modernisation plan

Johor Port, located on the eastern side of Johor, is a key gateway port for the south of Malaysia. Since inception in 1977, Johor Port has developed itself into one of the most successful multipurpose port facilities in Malaysia.

The port has played a prominent role in catalysing the



development and success of the Pasir Gudang industrial estate and its surrounding areas. Today the Pasir Gudang industrial estate is amongst one of the most successful and vibrant industrial estates in Johor.

Datuk Mohd Sidik Shaik Osman, Chairman of Johor Port said, "Industries in Pasir Gudang are growing to the extent that they have now expanded to the Tanjung Langsat industrial area. Therefore, Johor Port needs to gear itself to cater for the growth and expansion of these industries so as to ensure that the port remains as a vibrant gateway for the southern region of Malaysia."

"Due to the large concentration of palm oil refining facilities in the Pasir Gudang industrial area, Johor Port is today the largest palm oil terminal and storage facility in the world."

Further, Sidik noted that the coast line of Southern Johor had been identified by the government under the country's Economic Transformation Program (ETP) to be



developed into an oil & gas hub. In addition Sidik said, Iskandar Malaysia had also been designated as one of the three petrochemical zones in Malaysia, besides the ones in Terengganu and Pahang.

"Part of the plan moving forward is to provide dedicated facilities at the port for off-shore activities and to develop a Maintenance Repair Overhaul (MRO) centre for off-shore activities," Sidik concluded.

UAE's Fujairah to ramp up its petroleum facilities

Sheikh Hamad bin Mohammed Al Sharqi, the ruler of Fujairah and member of United Arab Emirates' supreme council, has directed the Fujairah Port Authority to increase petroleum facilities and berths at the port. The Fujairah Port currently has seven dedicated berths for oil tankers with a total length of 2,340 metres, all boasting the latest equipments for docking and handling.

Maersk's Triple-E vessels included in The Sustania100

Maersk Line's Triple-E vessels have been acknowledged at the UN sustainable development summit in Rio this week as one of the world's top 100 sustainable solutions. Maersk's 18,000-teu capacity vessels, set to become the largest containerships on the world's oceans when they are deployed next year, were presented with The Sustainia100 award at Rio+20.



N | Arctic ship cargoes save on fuel

Cargoes of dry-bulk commodities hauled through Arctic waters are set to rise to a record this year as shipping companies use the route to almost halve journey times compared with Suez Canal shipments.

Using the so-called Northern Sea Route for the journey instead of the canal saves 1,000 tonnes of fuel, or \$650,000. A voyage through Arctic waters is as much as 40 per cent shorter than a journey via the Panama



or Suez canals. The Murmansk-to-China journey takes 23 days using the northern route, compared with 43 for the Suez Canal. Arctic navigation may be limited to as little as four summer months a year.

- Icebreaking fees exceed Suez Canal tolls
- Shortage of specialized ships
- Shippers can avoid elevated insurance costs associated with passing through areas of higher risk for piracy.

New crisis communications network for shipping industry

Tavigate Response – a new global provider of reputation management expertise in times of crisis – was launched at London's Baltic Exchange. The company's round-the-clock services are tailored specifically for the global shipping industry and focus on managing clients' messages across a range of communications channels including mainstream and social media.

Navigate Response is strategically partnered with Admiralty-Helix in Singapore which forms its Asian headquarters. Admiralty-Helix is jointly led by the internationally known maritime crisis management professional Jesse W Lewis Jr, a former American diplomat and a foreign correspondent for The Washington Post; and Edward W Ion, former Asia Editor of Lloyd's List and Managing Partner of Singapore-based Helix Media that specialises in public affairs for the maritime and insurance industries.

Together with a global network of partners, Navigate Response delivers real-time counsel, advice and hands-on support providing emergency media handling, reputation management and training services to companies in the maritime and offshore sectors.

Rotterdam shoreto-ship power switched on

The Netherlands introduced a new **▲** shore-to-ship power system at Rotterdam, part of an international push to reduce pollution from oceangoing ships. The \$3.5-million system at the Port of Rotterdam was activated recently by Dutch Infrastructure and Environment Minister Melanie Schultz van Haegen, who cited it as a landmark in efforts by seaports to operate in a more environmentally friendly way.

"This means that ships that are berthed no longer need to keep their engines running to generate electricity," she said. "The result is that fewer hazardous substances are released so that the air quality in the surrounding area will improve considerably."

ClassNK earns authorisation from Lithuania

lassNK has signed an agreement with the Lithuanian Maritime Safety Administration granting ClassNK the authority to conduct statutory certifications on behalf of the flag administration.

Under the agreement, the Tokyobased classification society is now authorised to perform surveys and issue certificates in accordance with SOLAS, MARPOL, Load Line, TM69 and other international conventions on behalf of the Lithuanian flag.



Japan's KWE invests ₹267.7 crore in Gati-Kintetsu **Express Pvt Ltd**

ATI LIMITED, India's pioneer in **J**express distribution and supply chain solutions, has concluded the joint venture with Japan's Kintetsu World Express to form Gati-Kintetsu Express Pvt Ltd, the new leader in express distribution and supply chain solutions in the country.

Under the JV agreement, Gati will hold 70 per cent stake and 30 per cent will be held by Kintetsu World Express (KWE) in Gati-Kintetsu Express Pvt Ltd (GATI-KWE). KWE received the Foreign Investment Promotion Board approval and invested a total amount of ₹267.7 crore for its 30 per cent stake in the JV and the monetary transaction has been culminated. This fund infusion makes Gati's balance sheet much stronger through a significant deleveraging of the debt and reduction in the interest costs up to 50 per cent. This will in turn help the company reinvest for the growth of the organisation, reflecting a healthy bottom line.

RWG commences construction of Maasylakte II container terminal



notterdam World Gateway (RWG), the DP World-led consortium, has started Rthe first phase of construction of its Maasvlakte II container terminal in Rotterdam. The 108-hectare site with a guay wall of 1,150 metres, a guayside depth of 20 metres and a 550-metre quay has already been built by the Port of Rotterdam.

The terminal, which will open in the second half of 2014, will be a fully automated facility, consisting of a dedicated rail and barge terminal, with an initial handling capacity of 2.35 million teu.

RWG is a joint venture between container shipping lines APL, MOL, HMM and CMA-CGM, and the Dubai-based termianl opeartor DP World.

ACCELERATING YOUR GROWTH, BY BRINGING OPPORTUNITIES CLOSER HOME.







- Deep draught of 14 meters berthing capsize gearless vessels Large back up area for in-transit storage
- All weather 24x7 operations Strategically located between Mumbai and Goa Customized handling solutions
 - Competitive tariff structure Environment friendly mechanised handling Fast turnaround time



Emerald Ace, world's first hybrid car carrier

Missui O.S.K Lines (MOL) announced the completion of the hybrid car carrier *Emerald Ace*, designed to generate zero emissions while berthed, at the Mitsubishi Heavy Industries Kobe shipyard.

The *Emerald Ace* was built as world's first newly built hybrid car carrier, and is equipped with a hybrid electric power supply system that combines a 160-kW solar generation system – jointly developed by MHI, Energy Company

of Panasonic Group and MOL – with lithium-ion batteries that can store some 2.2 MWh of electricity. Conventional power generation systems use diesel-powered generators to supply onboard electricity while berthed. While the vessel is underway, electricity is generated by the solar power generation system and is stored in the lithium-ion batteries. Vessel has a capacity to carry 6,400 vehicles (standard passenger cars).



Morgan Stanley invests in Gateway Distriparks

Torgan Stanley Asia (Singapore) Pte has invested ₹12.45 crore in Gateway Distriparks Ltd for additional 0.88 per cent stake increasing its stake from 2.30 to 3.18 per cent. Incorporated in 1944 and promoted by NTSC, Parameshwara Holdings Ltd, Windmill International Pvt Ltd and Thakral Corporation Ltd as a JV, Gateway Distriparks is into warehousing, container freight stations (CFS), providing handling and clearance of sea-borne exim trade in containerised form. Gateway operates two CFSs at Navi Mumbai, one at Chennai and one at Visakhapatnam with a total capacity of over 600,000 teu.

Navis showcases new STCS 4000 at SMM in Hamburg

L eading dynamic positioning and vessel motion control systems supplier, Navis Engineering Oy, is showcasing STCS 4000, its new multipurpose integrated steering and thruster control system, at SMM in Hamburg from September 4 -7.

STCS4000, based on digital technology, has already been delivered to two AHTS hulls for the MMC 974 project at Grandweld Shipyard in Dubai under the supervision of Lloyd's Register and to a pilot boat for the PI-22 project at Pella Shipyard in St Petersburg.

The system is designed to control the engine start and stop functions, to indicate the status of drive and power

and audio alarms on supply failures, oil levels, drive overloads and other emergency situations.

Renewal of inland water protocol makes Tripura happy

Tripura has expressed satisfaction over renewal of Protocol on Inland Water Transit and Trade with Bangladesh for next two years. Tripura industries and commerce minister Jitendra Choudhury welcomed the move of the ministry of shipping for strengthening goods transportation to northeastern states through Bangladesh from central parts of India. Shipping secretary P K Sinha and his Bangladesh counterpart Abdul Mannan Howlader had signed the letter of exchange agreeing to renew the protocol between the two countries.

This followed Dhaka proposing to open its transshipment facilities to India through the Chittagong and Mongla seaports by what is called coastal shipping. Accordingly, Bangladeshi coastal vessels may be used commercially for transporting cargoes.

Sources said the decision to introduce coastal shipping in the next few months has almost been finalised. However, the issue of customs fees and service charges were not discussed at the meeting. There is also no mention in the proposal as to whether Indian ships will be engaged in carrying goods.

New joint FE-Mumbai service offered by HMM, TSL and GSL

Hyundai Merchant Marine (HMM), TS Lines (TSL) and Gold Star Line (GSL) have organised a joint service linking the Far East to the Mumbai market (CIX/CMX/CNX), connecting Busan, Shanghai, Ningbo, Yantian and Singapore to Nhava Sheva, returning to Busan via Port Klang and Singapore. The new service will turn in five weeks with five ships of between 3,000 and 4,600 teu, of which three will be provided by HMM (Hyundai Commodore, Santa Cruz and Northern Promotion), one by TSL (Mark Twain) and one by GSL.





GMB's conference on ports and shipping



To enlighten the stakeholders on the huge potential the state port sector holds due to its strategic location and astute planning by the state government, Gujarat Maritime Board along with Confederation of Indian Industry organised a conference recently in Ahmedabad. Minister of State for Industries & Mines, Finance, Energy & Petrochemicals, GoG Saurabhbhai Patel inaugurated the conference as the chief guest. A K Joti, IAS, Chief Secretary,

GoG & Chairman, GMB was the Guest of honour in the inaugural session. I P Gautam, IAS, Principal Secretary, Ports & Transport Department, and L Radhakrishnan, IAS, Chairman, JNPT were present in the inaugural session. The conference brought together leading experts from industry, government, academics and institutional worlds, who offered their insights on the challenges faced by the industry, as well as strategies to overcome them.

Bahri and Saudi Aramco to combine merchant fleets

The National Shipping Company 📘 of Saudi Arabia, known as Bahri, and Saudi Aramco agreed to merge their merchant fleets in a \$1.3-billion (Dh4.77-billion) deal. The move willcreate the world's fourth-largest tanker operator. Under a non-binding memorandum of understanding (MOU), both companies will work towards incorporating the ships, workforce and business systems of Vela International Marine, a wholly owned subsidiary of Saudi Aramco, into the Bahri corporate structure. The new company will have 77 vessels in its fleet, which will number 32 of the largest class of tankers – VLCCs (very large crude carriers), 20 chemical tankers, five product tankers and four roll-on roll-off ships. The company will also have 16 vessels under construction.

APM Terminals to open new Asia headquarters

APM Terminals will open a new regional headquarters in Singapore in September to oversee its operations in Southeast Asia and the Indian subcontinent and free its Shanghai office to focus on China and Japan. A.P. Moller-Maersk's port operating arm said the new headquarters will drive its effort to strengthen operations and infrastructure in "underserved" high-growth Asian economies.

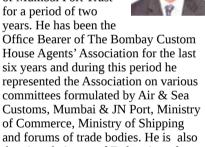
The Asia-Pacific region accounts for nearly a third of containers (by equity share) handled in APM Terminals global port, terminal and inland services network. The new headquarters "will enable us to focus on the terminals that we manage and operate in Southeast Asia and the Indian subcontinent, with the intent of continuing to improve our operational performance," APM Terminals CEO Kim Fejfer said.

James Kidwell appointed as CEO of Braemar

James Kidwell succeeds Alan Marsh as Chief Executive at Braemar Shipping Services PLC. Aged 50, Kidwell is Group Finance Director and has worked for Braemar in that role since 2002. In addition, Quentin Soanes, following his appointment as Chairman of the Baltic Exchange, will also retire from the board on July 31, 2012 but will remain responsible for the Group's Technical, Logistics and Environmental divisions.

BCHAA President on MbPT Board

Nailesh Gandhi, President, BCHAA has been appointed as Trustee on the Board of Mumbai Port Trust for a period of two years. He has been the Office Bearer of The Bo



of Commerce, Ministry of Shipping and forums of trade bodies. He is also the vice-chairman of Federation of Freight Forwarders Association (FFFAI) in India.

Ronald Paul new COO at Port of Rotterdam Authority

On September 1, 2012, Ronald Paul will succeed Thessa Menssen as director of Infrastructure and Maritime Affairs (Chief Operating



Officer) at the Port of Rotterdam Authority. Ronald Paul has spent the last eight years directing the Project Organisation Maasvlakte 2.

Marine engineers passed out from METI

he passing out I function of 27th batch of Marine **Engineering Trainees** of Cochin Shipyard Limited was held recently at Cochin Shipyard. Thirty two cadets have completed their one-year rigorous training in the METI of Cochin Shipyard Limited. Trophies to the cadets were distributed by the chief



guest, K Padmakumar, IPS, Inspector General of Police, Ernakulam. Cmde Kartik Subramaniam, Chairman & Managing Director, CSL gave away the course certificates to the cadets. METI has been imparting marine engineering training to graduate engineers since the year 1993.

CWC turnover rises over 17% to ₹1,210 crore

The turnover of the Central ■ Warehousing Corporation (CWC) rose 17 per cent to ₹1,210 crore in 2011-12, from ₹1,030 crore in the previous fiscal. The public sector undertaking (PSU) plans to create additional storage capacity of 22 lakh tonnes by 2019-20 with an investment of ₹1,395 crore.

CWC today operates 486 warehouses across the country with a total capacity of 10.10 million tonnes. "This will call for the creation of storage capacity of about 2 lakh tonnes per annum during the remaining Plan period and CWC will have total storage capacity of at least 122.50 lakh tonnes assuming that capacity addition is only by way of construction," CWC said on its website.

The PSU plans to diversify into areas such as operating a private freight terminal (PFT) and running a parcel train. It is also looking to enter sectors such as the creation of cold chain infrastructure and undertaking procurement of oilseeds and pulses.

Smit Lamnalco brings Sierra Leone ore to market

mit Lamnalco has played a pivotal Trole in bringing two export projects to fruition that will see Sierra Leone's re-emergence as a key global source of iron ore. Smit Lamnalco has provided the turnkey services to assist African Minerals Limited (AML) in exporting ore from its Tonkolili mine, whose life expectancy is in excess of 60 years, with resources of an estimated 12.8 billion tonnes.

Shoreside, Smit Lamnalco has deployed four Damen-built 3212 terminal and towing tugs to ensure that ships enter and exit the port's challenging approaches safely. AML already plans to develop a new rail spur from the existing railway, connecting Tonkolili to a new large deep water port at Tagrin.

In a second deal, London Mining Plc contracted Smit Lamnalco to provide a complete logistics and marine package to support exports from the upriver Marampa mine. London Mining plans to develop a production rate of 5 mtpa of premium sinter concentrate by the end of 2013; this will further increase to 17 mtpa in Phase 2 developments of the mine's 25-year life.

PTP to invest more than RM 1.4 million on modernisation

The Port of Tanjung Pelepas (PTP) **⊥** is investing RM1.4 billion over the next three years in new cranes, electrifying existing RTGs and building new berths. "The industry is continuously evolving and shipping lines continue to build larger vessels to achieve economies of scale. Ports will therefore need to deploy bigger capacity cranes," said PTP's Chairman Datuk Mohd Sidik Shaik Osman.

As such, PTP along with six other international ports (Felixstowe, Bremerhaven, Rotterdam, Yantian, Shanghai and Ningbo) selected by Maersk Line for their 'Daily Maersk' program will have to build new cranes in order to be able to accommodate these vessels.

"We plan to purchase eight of these cranes at a total cost of RM250 million. We will also invest in 32 additional units of RTG cranes at the total cost of more than RM200 million." "Our plans also include building two new berths" says Sidik. He said that the port was on track to handle 8 million teu for the full year 2012.



Do away with port tariff authority, urges workers' body

he All-India Port and Dock Workers' ■ Federation has demanded that the Shipping Ministry either dispense with the functioning of the Tariff Authority for Major Ports (TAMP) or bring minor ports under its purview. The Federation is of the view that the approach of TAMP has resulted in cargo diversion from major ports to privately-managed minor ports as these ports are not in the ambit of TAMP. Hence, there are no rules to regulate handling charges and protect labour engaged in the minor ports.

MARIS ticks IHO checklist

On the eve of its latest product launch, maritime electronic navigation specialist MARIS has moved to reconfirm that its ECDIS solutions meet performance standards set out by the International Hydrographic Bureau.

MARIS is due to launch its ECDIS900 version 4.5.4.76 this month, with all of its distributors set to be notified when the software is released so that they can download software from MARIS FTP servers. IHO has long expressed concern that some ECDIS may not display certain combinations of chart features and attributes correctly and on rare occasions may fail to display a navigationally significant feature.

ABB: Energy management systems for vessels

ABB, the leading power and automation technology group, recently won an order from Rickmers Group in Germany to supply advisory systems for dynamic trim optimisation and fleet management solutions for five multipurpose vessels. Trim optimisation means ballasting or loading the ship to achieve the floating position that consumes



the least propulsion power. ABB's delivery will help the ship management teams to operate the vessels in the most efficient way to save fuel at maximum level. ABB will supply trim optimisation systems, energy management systems and fleet management solutions. ABB's trim optimisation system dynamically measures the actual trim and advises the crew on optimal floating position of the ship with easy-to-understand and user-friendly displays. All data generated onboard is transferred to a cloud based application for vessel benchmarking. That provides the management onshore with full visibility of the fleet's energy consumption, as all systems are connected together by ABB's solution.



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DO WE NEED TAMP?

TAMP hanging heavy on their neck, major ports are highly unlikely to attract any private investment.

bout five months after the Tariff Authority for Major Ports (TAMP) ordered a rate reduction, the Mumbai High Court has come to the rescue of two private container terminals at Jawaharlal Nehru

(JN) Port. Though the ad-interim stay by the court will allow terminal operators to bill customers on old tariffs till the matter is settled legally, it cannot be considered as a final victory for the private operators who run these terminals, as the case will come up for hearing again on August 6.

In the mean time, terminal operators and port authorities can heave a sigh of relief. Now nobody will force them to implement the TAMP order at the cost of efficiency. And therein lies the crux of the whole problem. The TAMP guidelines imply that if the terminals do well, they will have to bring down their rates. The idea is that if the terminals make more money, they will have to share it with their customers. The two terminals were top performers and handled cargo in excess of their mandated minimum throughput. Taking into account the increase in volume and revenue, TAMP ordered a steep cut in rates.

While TAMP can always justify such steep cuts on the basis of rule book, such a step will discourage private investors from putting their money in the port sector. The rate cut order also comes during a time when the country is making all out efforts to attract private investment to the infrastructure segment, where ports can play a major role.

TAMP fixing the rates, in fact, goes against the ethos of a free market economy. TAMP also lacks the authority to ensure that the rate cut is actually passed on to the port users. And none of the customers were complaining of any steep rates being charged at any of these terminals.

The relevance of such a tariff authority in the country itself is hard to establish especially considering that during TAMP's birth in 1997, it was clear that the tariff regulation would cease once enough competition was generated. Fifteen years since, competition has increased tremendously in the ports sector and capacities too have

grown multifold but the role of TAMP still goes on with little change.

At times like these when capacity seems to outstrip demand and the shipping ministry is targeting a total cargo traffic of about 2,500 MT (including both major and non-major ports) by 2020 TAMP's role needs to be scrutinised. The 13 major ports under the Union government loaded

| | | TAMP RATE CUTS | | | | |
|--------|---|------------------------|---------------------------|--|--|--|
| DATE | TERMINAL | RATE HIKE REQUESTED | RATE REDUCTION BY TAMP | | | |
| FEB 8 | Gateway Terminals | 8.72% | 44.28% | | | |
| FEB 14 | Chennai International Terminals | 15% | 12.23% | | | |
| MAR 1 | Nava Sheva International Container Terminals | 30% | 27.85% | | | |

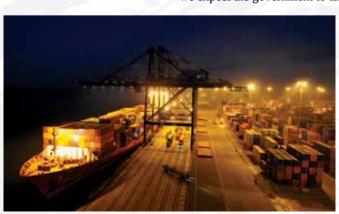
a combined 560 million tonnes (mt) of cargo in 2011-12, accounting for about 65 per cent of India's external cargo by volumes shipped through the sea route.

JN Port loaded 4.32 million standard containers, or 55.6 per cent of India's container cargo shipped through the major ports in 2011-12. Out of this, Gateway Terminals loaded 1.89 million standard containers while NSICT handled 1.4 million standard containers. Evidently, terminal operators and port authorities fear that TAMP's decision to impose a rate cut will only help divert flow of traffic to private ports, which are beyond the purview of the tariff regulator. This also explains their reluctance to implement the TAMP order. With multiple private facilities coming up across the country and competing for the big pie, major ports will not have any level-playing field. TAMP hanging heavy on their neck, major ports are highly unlikely to attract any private investment. This again will hamper the infrastructure facilities.

Another down side of the rate cut is that terminal operators will deliberately bring down cargo volume to avoid any further cut in rates resulting in congestion at ports. They had asked for a hike in rates as they wanted to improve infrastructure facilities amidst rising cost of borrowing.

While any decision on TAMP's order on Chennai International Terminal is yet to come, the Mumbai High Court stay can be considered as a good start. Meanwhile, we expect the government to take note of the situation and

make appropriate changes in the system. Perhaps, the Union Shipping Ministry may address these issues when it takes a final call on the suggestions made by the Energy and Resources Institute, on new tariff-setting norms.



WHAT DO

Should there be any regulation fixing the tariffs? share your views. ramprasad@gatewaymedia.in



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Port of Call: No Easy Way Out

While cargo volume is the major influencing factor in shipowners' decision to call at a port, the boardroom concerns are many.

Sreekala G



ompetition is hotting up on Indian shore lines with port operators vying for shippers to call at their ports. Growing competition has also prompted port authorities to look at new strategies to attract and maintain their port customers. But shipping lines are in no mood to take an easy decision when it comes to choosing their port of call.

Shipping lines look at a number of factors and adopt a careful analysis before making a decision on port of call. "For shipping lines, there are two deciding factors on port of call. One is the cargo availability and the other is the presence of natural hinterland, where it has an industrial base and cargo can be moved through that gateway, which is a suitable hub for the region," says **Capt Deepak Tewari**, Chairman, Container

Shipping Lines Association &CEO, MSC India.

He points out that Cochin Port has no hinterland. "They are scavenging cargo from surrounding areas like Mangalore, Bengaluru and Coimbatore. For cargo like coffee, Mangalore Port should have been the gateway but the coffee containers are moving to Cochin because of the efficiency and services it offers. Mangalore Port is not developed to handle coffee containers. Cochin was originally planned as a gateway either based on land or sea or both and that plan is unlikely to materalise," he says.

Shipping lines have also adopted Nhava Sheva as a port of call. "Other ports cannot match the options that Nhava Sheva offers to an exporter or importer or a logistics operator. It is a question of confidence," says Tewari.

While availability of cargo is the most important factor influencing the decision on calling at a port, shipping lines also carefully study various other conditions. "The factors taken into account for making a port call are: draught, vessel restrictions on length overall beam delays and turn-around time, availability of cargo (exports and imports), geographical port rotation, increase in slot cost, time left in a round voyage to make the port call, prevailing ocean freight rates and handling costs," says **Anthony Beliyil**, country manager (operations), OOCL India.

According to him, a port should be able to handle all types of cargoes as well as provide the husbandry help to the ship. And he is not satisfied with the services in Nhava Sheva. "It does not handle IMDG Class 1 and 7. It does

not have inner anchorage for waiting/ repairs or for an emergency. If there are any 'break-bulk' pieces to be handled, ships will have to take them to another location. All these factors affect the turnaround time of ships. Ships require a lot of husbandry help like lowering lifeboats, fire fighting help which ports are severely restricted in," he said.

He pointed out that a port becomes attractive for a shipping line when freight rates are above 'slot-rates', and turnaround time is good. "The port should be able to handle all cargoes without restriction. It should have low port charges for port dues and should have high productivity levels and efficiency. A good port should have deep draughts and it should not have any restrictions like monsoon delays," he says.

There are other priorities like security and safety, environmental regulations, handling equipment and intermodal connections that also influence a decision on port of call. Like major shipping lines, feeder lines will also look at sufficient cargo volumes and other infrastructure facilities to call at a port.

"As a pure common feeder relying only on shipper's own container (SOC) boxes belonging to the main lines and Non-Vessel Operating Common Carrier (NVOCC), we firstly need to assess whether our clients use such a facility or are physically registered/have an account with the port/terminal. We also need to know if there are sufficient volumes moving via such facility. We need to be guaranteed a berth window and suitable turn rounds / productivity for our anticipated call move count," says **Bill Smart**, managing director, Bengal Tiger Line.

In a nut shell, he wants the vessels to be handled (discharged & loaded) at a port without any delays in the minimum realistic time – based on international productivity norms. Although the growing inter-port competition and the presence of private operators have led to significant improvement in efficiency, port in India have a long way to go. Besides, the connectivity and infrastructure development around the ports still require government support and facilitation.



Capt Deepak Tewari

For shipping lines, there are two deciding factors on port of call. One is the cargo availability and the other is the presence of natural hinterland

Port of Norfolk: A different growth story

Presence of natural hinterland can boost cargo volumes to a port. But Port of Norfolk became a preferred destination of shipping lines without any hinterland and no cargo of its own. Norfolk is a hub for the US rail system. So, shipping lines will call at ports of New York, Charleston and Galveston for the hinterland cargo and also call at Norfolk as that is the hub of the inland and intermodal cargo. The railway giants in the US created Norfolk as a seaboard and moved cargo from all over the US through Norfolk. This led to the growth of Port of Norfolk, which otherwise is a naval base.



Bill Smar

44

As a pure common feeder, we need to assess whether our clients use such a facility or are physically registered/have an account with the port/ terminal

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"Both state and central governments should take active interest in port development. They should act like a facilitator and ensure cooperation between various departments," says Tewari. According to him, ports can do nothing to attract shipping lines. "It took many years for Vizag Port to develop and finally Maersk decided to use it a hub for eastern India. So, Vizag Port started cargo hubbing from Kolkata, Haldia region and lower Chennai. After drawing up huge designs, port operations will realise that their hinterland is scavenged into other ports. Ports should invite intermodal connectivity either through sea link or feeders or rail connectivity," he says.

MSC always treated Port of Antwerp as its home terminal due the tremondous support it recieved from the local authorities. "Port of Antwerp invited us and gave MSC a place to build berth. We did a throughput of 3.9 million teu in 2011 and this year it will be about 4.1 million teu. We created our sea and land-based logistics intermodal through Antwerp. The mayor of Antwerp is committed to develop their local port and facilitate it," he says and adds that this kind of a situation is unlikely in India.

Agreeing with him, Bill Smart says, a port alone does not attract business. "Today routing is dictated by trade requirements. Kerala's Vallarpadam is an example of this," he says.

Beliyil opines that India needs to improve infrastructure including road connectivity, rail connections, additional capacity of berths and better cargo handling gear. He wants Indian ports to offer better facilities and take a commercial approach. He pointed out that the ports faced congestion because they did not have any additional capacity and shipping lines will be forced to change routes if there are regular strikes and labour issues, seasonal cargoes, new government regulations and breakdown of infrastructure.

India is also unique in a way that the local infrastructure has not kept pace with containerisation, which reflects the trade in general. "Problems associated with poor road connectivity, limited gate access, container yard space restrictions combined with the usual customs and port bureaucracy frustrations often leave the terminal operators at the mercy of outside factors – not of their own making," Bill Smart points out.

But an attractive element, according to him, in India is a very well connected management team with the backing resource to achieve results both with the 'bureaucracy' and the terminal labour and supporting vendors. "Indian ports should maintain realistic goals and understand operational limitations. They should not overcommit as that will leave the clients dissatisfied," he says.

Then there are the external factors such as old controlling legislation which need to be updated. While Beliyill expects an update on antique regulations as all shipping acts are more than 50 years old, Bill feels the periodic interference by tariff authorities is a disincentive for private terminal operators and will in turn quell the growth.

"With more and more privatisation on the cards, ports will change the way they do business. But it will not be drastic. India does not change so radically," says Beliyil.

n India the wheels of bureaucracy start churning only when there is political intervention, and this fact was yet again underpinned recently when Prime Minister Manmohan Singh took steps to fasttrack the use of the inland waterways by involving the public sector. The move is expected to harness the huge potential of these waterways in transporting bulk cargo such as coal, foodgrains, fertilisers, fly ash, over dimensional cargo and containers at a competitive cost, while also easing the burden on rail and road infrastructure. It is indeed ironical that the Indian waterways to date have faced a policy paralysis, as it is one of the most cost-effective and least environmentally damaging mode of transporting goods worldwide. India has 14,500 km of navigable waterways, including rivers, backwaters and canals. While the entire length of waterways is not available for mechanised transportation, a significant proportion stretching over 5,200 km of rivers and 485 km of canals is suitable for mechanised transportation. However, the sector presently has a meagre share of 0.4 per cent in the total transport sector in India as compared to 42 per cent in Netherlands and 8.7 per cent in China and over 8 per cent in the US. In China, much of the increase has occurred in recent decades, in tandem with its phenomenal industrial-agricultural growth.

In India, as of now, there are five National Waterways (NW) – River Ganga (NW-1), River Brahmaputra (NW-2), West coast canal (NW-3), Kakinada to Puducherry canal system along with rivers Godavari and Krishna (NW-4) and the River Brahmani and Mahanadi delta along with the East Coast canal (NW-5). River Barak is likely to be declared as the sixth NW. The Inland Waterways Authority of India (IWAI), an autonomous organisation of the Union Ministry of Shipping, has the mandate to develop and maintain the infrastructure for these waterways. However, to date it has only been able to develop infrastructure to some extent for NWs 1, 2 and 3. Even on these, there is hardly any cargo movement, and numerous examples such as those in Kerala show that traffic has shifted substantially from the waterways to other modes. The reasons for this are many, but include, most significantly, lack of adequate



INLAND WATER TRANSPORT

TRAPPED

Despite its advantages and immense potential, inland waterways is yet to take off in India. Plagued by policy paralysis and government apathy, the sector has failed to emerge as an alternative means for movement of goods and still remains a poor cousin of rail and road transport.

NA DILEMMA

Ritu Gupta

infrastructure and dearth of barge operators and users. Another key problem is that large parts of these waterways have inadequate depth for commercial cargo movement. Increase in depth helps navigability of larger vessels which makes IWT commercially viable through economies of scale. Due to the low priority accorded for its development, India has so far tried to develop IWT based on the principle of open river navigation wherein least available depth is sought to be provided through dredging, bandalling and other such measures. These prove to be temporary arrangements for rivers like the Ganga and Brahmaputra. Unlike this, China undertakes permanent measures of river training/engineering works such as channelisation and building barrages with locks."Unless the excess flow of the monsoon is tapped and stored, it may be near impossible for India to fully realise its IWT potential," says Philip Matthews, managing director of LOTS Shipping Limited, Kerala. Furthermore, there is also lack of waterway terminals, including those with inter-modal connectivity. IWT terminals on NW-1, 2 and 3 are also not properly linked with roads/railways for the last mile transportation.

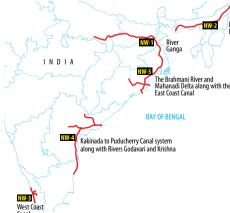
According to experts, the biggest problem plaguing the sector is a shortage of vessels (barges). Vessel building is highly capital intensive and faces difficulties in obtaining project finance from banks/FIs since it does not enjoy infrastructure status currently. "Private sector is reluctant to make investment in barges unless long-term cargo

commitments for onward and return trips are made available from the user industry," says Jaisingh Khurana of JITF Vector. According to him, the private sector's reluctance to enter the sector can also be attributed to the lack of adequate year round and night navigation infrastructure and markings. Indian rivers face severe problems of siltation round the year, and this consequently results in braiding and shallow depths and makes waterways inadequate for commercial cargo movement during non-monsoon months. "Each river basin should be developed with total integration of multiple uses like irrigation, flood control, navigation,

SHARE OF WATERWAYS

0.4% 8.7% China 42% 8% United States

5 NATIONAL WATERWAYS



hydropower, industrial/domestic water use, fishing and tourism," says Khurana.

The sector is also criticised because of lack of maintenance, repair and overhaul facilities. For NW-1 and 2, there are no vessel repair facilities in the North East and River Ganga, except at Kolkata. But considerable time and money is lost in taking the vessels to Kolkata. For NW-3, Kochi has minor repair facilities, but it is dependent on Mumbai and Chennai for critical spare parts. Where Goa is concerned, it has construction yards, but they are overbooked and hardly have spare capacity to undertake the repair works of barges on priority basis. "The government needs to overcome such operational issues. Dry dock repair facilities should be built at Patna and Pandu through public funding. Private sector participation should also be explored," says Atul Jhadhav, President, Goa Barge Owners Association. In Goa, private sector is ready to develop

yards if land is provided by the state
government. Industry players aver
that the Goa government needs
to seriously consider the same.
Furthermore, vessel repair facility
should be given infrastructure status.

But for developing any infrastructure there needs to be public investment, which at present is also not enough. In 2006, the Parliamentary Standing Committee on Transport criticised the government for extending 'step-motherly' treatment to IWT, with inadequate allocations and improper fund utilisation. Since its inception in

1986, IWAI has spent about ₹1.036 crore till 2010-11. It noted that inadequate policy support for investment in the sector is compounding the problems, leading to IWT losing its competitive edge. What's more, there is no levelplaying field between the waterways and roads/railways and experts lament that IWT still appears to be more of a hobby project than a serious alternative transportation option for the government. "There is an urgent need for transport subsidy for industrial units to bring IWT at par with rail and road. The government should also provide inland vessel building subsidy and freight subsidy, which were discontinued in the Eleventh Five Year Plan. Vessel building should be included in priority lending for infrastructure projects and inland vessels should be a part of the tonnage tax regime," says another leading industry player.

The industry has also raised concerns about legal and administrative issues. According to them, though the Inland Vessels Act provides the legislative framework for IWT operations, the administration of the Act vests with the state governments, and therefore the regime varies from state to state. "Since inland waterways invariably run through more than one state, it is important to have uniformity for smoother operations," says R Sushila **Nair**, executive director of Vivada Inland Waterways Limited. Other experts agree with her. They also suggest that for augmentation of IWT vessel fleet, the inland vessel building subsidy scheme should be revised from the Twelfth Five





250-MT SINGLE CARGO BEING TRANSPORTED BY BARGE VIA VASHI BRIDGE TO MUMBAI PORT. THIS IS NOT POSSIABLE TO TRANSPORT BY ROAD DUE TO WEIGHT

Year Plan onwards. It is also suggested to form a special purpose vehicle company the inland vessel leasing company that can procure and lease out vehicles. This will help lower entry barriers for IWT operators. Alternatively, a SPV on the PPP platform may also be created to procure barges and other vessels suitable for IWT and make these available to private operators on lease. Furthermore, extending mandatory intermodal share of cargo movements (currently mandated to all PSUs by PMO) to all public limited companies and creation of a suitable tradable instrument to help monetise the environmental advantages of the IWT sector on lines of renewable energy certificates (REC) can serve as a significant policy support. Most importantly, a well integrated multimodal transport system encompassing road-railwaterway network can add significant value to the logistic efficiency of the country. "Integration of waterways with other modes of transport to form an efficient multimodal transport system with optimum logistic efficiency is the key to achieving sustainable development of IWT sector. Detailed mapping of waterways along with other modes of transport and industrial clusters in the influence area of waterways as well as analysis of origin and destination of cargo shall help in designing appropriate multimodal transport network," says Anand Sheth, president, Association of Multimodal Transport Operators of India.

The government also needs to gets its act together to ensure users exist for the waterways. For this, it can learn a few lessons from its neighbours. For instance, coal is one of the principal commodities being transported through IWT mode in many parts of the US, Europe and China. In India, however, coal is

transported through railways (despite its major congestion problem). Due to such transportation, the coal supplies are always erratic, leading to shortage of power. The government needs to rectify this situation, since as of now, 10 thermal power stations are operational in the proximity of the NW-1. Furthermore, 11 more thermal power plants are expected to come up in Bihar, West Bengal, and Uttar Pradesh in the next five to eight years (with a total installed capacity of 15,000 MW). The total requirement of coal for new the power stations is estimated to be around 70 million metric tonnes per annum (mmtpa), of which around 14 mmtpa would be imported coal. This would need to be carried to these stations from the Haldia port, and due to this the government needs to seriously look at IWT.

Furthermore, two private sector thermal power stations are slated to come in Allahabad, and they alone are looking for transporting 10 million tonnes per year of imported coal also from the Haldia region. Hence, all existing and proposed thermal power plants along River Ganga are potential shippers for IWT. If these power plants provide long-term commitment for transporting coal by IWT mode and IWAI can provide assured channel of 2.5 m depth, more then 25 mmtpa of coal could be transported by IWT mode in the coming years. Furthermore, fly ash – which is a byproduct of coal production – could also be transported through IWT to cement plants, where it is used for cement manufacturing,

Considering the above facts, the need of the day for India is to study the viability and means to attract more investment to the sector, by creating a rational institutional framework. It is said that the government is planning to introduce a subsidy for transporting fertilisers through the waterways. After the PM intervention, the sector has already got a boost with JITF Vector and NTPC entering into a strategic agreement for creating and operating the infrastructure for transportation of coal through the waterways, required for NTPC's power plant located at Farakka. Jindal Vector has made a capital commitment of \$140-170 million to this project, which will bring a paradigm shift in Indian shipping operations. But many more such projects are needed to ensure that India uses this asset most wisely.

The Trailblazers

Despite the challenges, a few enterprising initiatives have shown the way for the sector in India

Coal movement for NTPC power plant at Farakka

In 2011, Jindal ITF and NTPC entered into a strategic alliance for the creation and operation of infrastructure for transportation of coal through inland waterways, required for NTPC's power plant located at Farakka, West Bengal. Considering the current constraints of the Indian port sector, this project brought a paradigm shift in Indian shipping operations. Jindal Vector has made a capital commitment of \$140 to 170 million to this project. This marquee project is

to introduce the concept of a transshipper on the East Coast of India which has a capacity to handle Panamax vessels. The Jindal barges will be specially constructed to fit the width and depth of the waterways to Farakka. Each barge will have a storage capacity at least of 60,000 metric tonnes. NTPC requires around 3 mmtpa of



imported coal for its Farakka TPP. This solution involves using barges in the waterways and transshipment over land. The project includes the use of the largest barge fleet in India along NW-1 and promotion of inland waterways.

Project cargo for Palatana power project in Tripura

The commsioing of a gas-based power project of ONGC at Palatana in Tripura was getting delayed due to problems in transporting project material from Haldia to the project site by road or railways. But things changed with the declaration of Ashuganj in Bangladesh as a port of call under the Indo-Bangladesh Inland Water Transit and Trade Protocol during 2010. It opened a new route and from March to August 2011 about 90 consignments of project cargo were transported from Haldia through IWT. With this development, new possibilities of transporting other cargo, including food grains to Tripura and Mizoram by IWT mode have emerged.





Iron ore transportation in Goa

Goa waterways comprise 50 km stretch each of Mondovi and Zuari rivers and 20 km of the Cambarjua Canal. These waterways provide direct connectivity to Marmugoa and Panaji Port of Goa from iron ore belts, resulting in the transportation of over 50 mmtpa of iron ore through IWT on Goa waterways for export to china and Japan. Over the past 10-15 years, the cargo movement has grown from 15-18 mmtpa to 54 mmtpa, the average barge size from 700 to 1,700 tonnes and the number of barges from about 100 to about 400 and the average loaded draft of barge from 1.8 to 3.2 m, thereby increasing economy of scales by many times.



Container Ro-Ro Service on NW-3

TwAI and Cochin Port have entered into an MoU for the development of Ro-Ro/Lo-Lo IWT terminals at Bolghatty and Willington Islands on NW-3 for providing connectivity to international container transhipment terminal at Vallarpadam in Cochin through the inland waterways. The operations of the project started from February 2011. Around 250 containers are being transported daily between the two terminals. Due to the project, the traffic in the waterway is estimated to increase from the present level of 0.7 to 2.6 mmtpa in the initial years itself.

Ms Bhupinder Prasad,
Chairperson of Inland
Waterways Authority of
India (IWAI), a strong personality
that she is, tries to use every possible
platform for the cause of waterways
and voices her concerns about the
neglect shown towards them. In
this interview with Ritu Gupta, she
talks about the investment climate
in water transport, inadequate
policy support and the potential that
waterways offer.

Could you please throw light on the problems facing the sector?

Our vision for the waterways is that it should become relevant for economic development. We have great endowment of river network, and we have 14,500 km of navigable waterways. Since substantial investment is required for infrastructure development, only 4,500 km of the 14,500 km have been declared as national waterways. Out of the 4,500 km, only NW-1, 2 and 3 are currently navigable; and for NW-4 and 5 no work for development has so far commenced. Some stretches of the latter are critical, and we would like to develop them soon, but so far not even a single penny has been allocated for their development. The PPP mode is being suggested for the development of such upcoming stretches that are commercially viable. But, ideally, it would have been best if government alone could have raised the infrastructure. Though it has taken time, but for all the other waterways, government alone has developed the infrastructure. The inland waterways have immense cargo and they can help move cargo such as cement, fertilisers, coal, food grains and

Why then do you think waterways is not being used extensively in India?

container traffic.

Alt's really the chicken and the egg story. There was always a reluctance to do further investment as the industry was responding by moving cargo and the cargo operators felt that the facility was inadequate. The first critical requirement is that the waterway has to be navigable. But even in NW-3 despite the fact that we had set up terminals in several places, the throughput was not there. It is only now that we have been able to develop a 175 km of throughput on NW3. It is important to have a throughput for the waterways to become commercially more viable.

Why is IWT not accounting much for the total surface transportation?

Awe are still in the stages of development. We have just reached the stage where we are taking off with a commitment from NTPC to transport 3 million tonnes of coal in the next seven years. This itself has brought about ₹650 crore of investment from a private player. NTPC has given a further commitment of another ₹3 million which it requires for its other power plant. Therefore, this story is further going to be repeated. The NTPC commitment would be a trail blazer and it is going to catalyse further development. There will be definitely many more investors and players who will come in and make investment. We don't need commitments from all the PSUs. If cement, coal and fertilisers can be transported, that should be good enough.

What about the lack of night navigational facilities and round-the-year navigability?

AMany of our rivers remain alluvial and even if we have done the capital dredging there is always a maintenance dredging that is required. The authority has 14 dredgers. This is a very recent accomplishment. We are now in a position to dredge wherever shoals come up. We are now guaranteeing a LAD from Haldia to Farraka for

a capacity of up to 2,000 tonnes. The night navigational facilities are there. They may not be the best but we are trying to streamline things. We are now putting a river information system in place. We already have electronically updated navigational charts. We have the DGPS for more precise navigation. We are also planning to install the AIS by this year end and with this we would have a more regulated development.

How do you plan to handle the issue of lack of barges?

So far we haven't had any big players on the national waterways. For NW 1 and 2 we only had one public sector company having that critical mass of vessels. But unfortunately this company didn't do very well. It has been in the red for a very long time. Other than it, there have been very few private players who have invested in vessels, as cargo at that point of time was not assured. Now that we have

assurance of long-term cargo commitments there is no reason to believe that the private sector will not come forward to respond to this requirement.

Why was the vessel building subsidy discontinued in the Eleventh Plan? Are there any plans to renew it?

We are disappointed that it was discontinued, especially because there was such a paucity of vessels. It was a good intervention to encourage smaller investors to invest. With the 30 per cent subsidy, they were able to buy barges that cost anywhere between ₹3-5 crore. It is a substantial amount for any small player to raise on his own and bank loans are also not forthcoming since the sector has not fully developed. This subsidy was not accounting for a very large outgo of the government and it would have provided the right encouragement. As far as its renewal is concerned, so far we have not been given any positive signals. We have repeatedly taken up the matter. Even personally I think we should restart the subsidy. It should be so designed that the large players do not take advantage of it. It should only be for the small players. In India because of the kind of finances required for getting barges, we have not been able to get many players.

Repair and maintainence has been the most neglected area. Are there any plans to improve it?

A Yes, this is a neglected area. We are intending to set up a repair facility In NW-2 next to the Pandu Port. We have already discussed this with the state government and offered them a proposal to run it jointly with a public sector unit of the Ministry of Defence.

There have been allegations that the sector is being given step-motherly treatment with regards to the freight subsidy. Your comments.

Now we have been able to get some parity. We have been championing the cause of IWT knowing its advantages for the economy. Finally, a decision has been taken. To start with the movement of fertilisers through IWT would now be given the same level of subsidy as is the case with rail and road movement. We have also been able to get a service tax abatement for moving goods on IWT. We also have a custom waiver on the import of equipment for vessels in the IWT sector.

Do you think the PPP mode for development would be successful?

At think it would be best for the government to invest its own money. As far as PPP is concerned, we have to see how the private sector responds and whether we are effectively able to take this forward. It would be better if we have government commitment for infrastructure development, as world over there has been public spending for doing so. We don't need a public



sector arm for operations but infrastructure needs to be developed by the government to ensure that operators step in for movement.

How is the investment scenario in IWT?

The funds that have been allocated so far have heen relatively insignificant as compared to the funding for the other sectors of the economy. So far since 1986, only a ₹1,000 crore has gone into the development of waterways. If we are able to get a greater infusion of funds and if we are able to get the right support from the government and the private sector then we can become a very good supplementary mode of transportation. In this plan period, we have requested for ₹4,400 crore of investment only through government budgetary support. In the last plan we had only ₹570 crore. So one can imagine the kind of step up we are looking for. Over and above this ₹4,500 crore, we are expecting a viability gap funding from the government if we have PPP projects in the NW-4 and 5. Without PPP, the funding has to be substantially increased. We are also expecting the private sector to invest. We have forecast that together with the government and private player funding, we may require ₹10,800 crore for the next plan period to meet the investment and infrastructure needs.

What do you think will be future for waterways?

We want that the sector should become relevant Afor all logistics solutions. And the future of transportation is intermodal. It is the mode of transportation which is prevalent in most countries of the west. The potential of IWT is staring at us. But we have to ensure that we have efficient, smooth and safe navigation. I don't think there is any competition for IWT with the railways and roadways, as it is a matter of economics. People have to see that it is a cleaner, cheaper and more fuel-efficient mode of transportation for bulk commodities such as fertilisers, cement and food grains. The basic infrastructure is in place. We need good commitment of cargo and manpower development. There is manpower crunch in the authority itself. It is very important to strengthen the organisation and see that it is empowered to fulfil its development and regulatory functions.

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QWhat are the opportunities that exist in inland waterways segment in Kerala?

A The Inland Waterways Authority of India has been working on the development and maintenance of National Waterway 3 on the west coast of Kerala. The work is not complete. At present, as the draft available in the waterway and the width of the canal and the height of the bridges in some places enroute do not allow bigger barges to operate, the operators of IWT incur higher unit costs. Barges are often under loaded due to these constraints, and we are not able to reap the real benefit of switching over to this mode.

Kerala Shipping and Inland Navigation Corporation (KSINC) is a pioneer in mechanised inland navigation in Kerala. Starting from 1975, it has hauled millions of tonnes of cargo and carried hundreds of thousands of passengers. Now KSINC is also providing an experience of luxurious and quality backwater tourism at Kochi. In an interview, KSINC's chairman and former shipping secretary **K Mohandas** outlines the company's future plans and its efforts to tap the potential of inland waterways in Kerala.

A Kerala with a high density of population will derive the huge social benefit of reduced pollution if the truck traffic is reduced. Also, the Kerala highways are congested and accident-prone. A 1,000-tonne barge can replace a hundred 10-tonne trucks. Some of

What kind of market and growth potential do you foresee in the segment in Kerala?

hundred 10-tonne trucks. Some of the opportunities for IW movement (as also for coastal shipping), which have been discussed often, but need to be followed up are:

 Movement of petroleum products from Kochi to southern districts.

- Transport of finished products from rare earth industries in Kollam District for shipment at Kochi
- Transportation of Furnace oil, Hydrochloric Acid and Chlorine from Kochi to Kollam
- Transportation of containerised coir/cashew etc from Kollam and Alappuzha (KSINC has already initiated a study through Cochin University for transporting container cargo using the ro-ro concept).
- Movement of containers from the Inland Container Depot (ICD) set up at Kottayam to Cochin Port.
- · Operation of better boats for tourist services

What are the future plans and strategies taken by the KSINC to develop the segment?

KSINC is exploring the possibilities of utilising the waterway by introducing container transport through inland waterways. KSINC has already entered into the business of bunkers for ships passing Cochin Port through the international ship channel. The Corporation is looking at proposals to start coastal shipping connecting the minor Ports of Kerala. For this we need the infrastructure developed at these minor ports to accommodate barges of optimum capacity. Coastal shipping for the movement of cargo from north India is also to be explored.

Does the state government or KSNIC plan to make any major investment to expand its presence in the segment?

ASINC as an operator will invest mainly on acquisition of new vessels for commencing the new services after conducting feasibility study etc. The infrastructure investments are to be done by the government – central or state, as the case may be. Any investment plan or commercial decisions cannot be taken till the waterway is ready.

What is the current share of inland waterways in Kerala on cargo movement and the growth expected in the near future?

The actual data is not available; it may be less than 2 per cent. The sector will grow as the waterways become fully navigable and the governments come up with necessary regulations and incentives to enforce/entice the customers to accept the modal shift.

Is company planning to forge any new partnerships or tie-ups to increase the use of inland waterways?

KSINC has not so far attempted such a tie-up.



Opportunities for public-private partnerships will have to be developed to bring in more investment and develop the business.

Qurrently, how many barges does the company have and are there any plans to expand your fleet?

AKSINC is currently operating only seven barges. These include a bulk barge, three oil tanker barges, two Phosphoric Acid barges (liquid) and one outer bunker barge (tanker). There are also two bulk barges in dry dock. The corporation also operates seagoing tourist vessels, which are extremely popular. It also has a building and repair yard.

QWhat are the measures taken by KSNIC to ensure cargo support?

There is no system of cargo support. Business comes only through competitive bidding, although the customers are mostly in the public sector. There is no rate preference or purchase preference in such tenders. It is actually necessary to have long-term contracts for transportation of cargo, so that the bidders can make necessary capital investments.

What are the challenges the company faces in the segment and how do you plan to overcome them?

The big constraint is the deficiency in the infrastructural facilities. NW-3 between Kollam and Kottapuram is not fully developed. It is also necessary to extend the waterway both towards the north and towards the south.

There is need for a clear national policy which would provide incentives for use of the waterways (instead of collecting user fee from the operators on the reason of investment so far made in the National Waterway!). The incentives should be both fiscal and others like carbon credits. Europe achieved a



KSINC is currently operating



- 1 Bulk Barge
- 3 Oil Tanker barges
- 2 Phosphoric Acid Barges (Liquid)
- 1 Outer Bunker barge (tanker)

There are also two bulk barges in dry dock

large-scale modal shift to water transport with the Marco Polo programme.

KSINC has to operate in the given environment. It has to go in for long-term contracts for cargo movement, consider some pioneering efforts in coastal shipping, expand the existing activities, explore innovative activities in the waterways and water bodies in different parts of the State both in respect of cargo movement and tourism development, and also look at training and capacity development.

What in your opinion are the steps that need to be taken to promote inland waterways?

A The IWAI authorities and Shipping Secretary in the various workshops organised at Kochi were urging utilisation of the existing waterway as a condition to make further investments on this waterway. This is not practical as long as IWAI is not taking any initiative to induce the customers alongside the waterway to utilise the facilities by offering the necessary infrastructure provided at their sites for loading and unloading of the various raw materials transported in barges through waterway.

One of the main obstacles in the development of waterway is the presence of fishing stake nets erected in the channel. The rehabilitation of the stake net holdings is not possible unless the adequate compensation is given by the Government of India to the fishermen for shifting their stake nets away from the channel. The rehabilitation scheme for the fishermen who are displaced due to the removal of fishing nets be made more liberal to enable easy execution and clear the waterway for navigation. A political decision may be required to work out a suitable formula for the rehabilitation.

Another promotional scheme hitherto available was 30 per cent subsidy for inland vessels constructed in India. This scheme has been discontinued since 2008. This has to be reinstated in NW3, until the waterway is made fully navigable and the operators are able to run optimum capacity vessels. KSINC has made a request to IWAI to re-introduce the scheme. This may be brought to the notice of the Hon'ble Members of Parliament to raise the issue in parliament, for continuance of the scheme.

KSINC is the major operator in the government sector which can assist IWAI for executing the various developmental works in the waterway, including bank protection works, dredging, construction of the required water crafts, and installation of navigational aids etc. As most of the officers of IWAI are from different parts of India, they are not very keen in developing the waterway in Kerala.



oyal HaskoningDHV, part of a consortium led by Panteia/ NEA, was appointed by the Dutch Government under a government-to-government programme to study the

feasibility of coal transport via deep sea vessels in the Bay of Bengal to the NTPC power plant in Farakka. Inland Water Transport (IWT) needs to be considered as part of the entire bulk handling and shipping logistic chain.

Transfer to/from deep sea vessels

To reduce the overall supply chain costs, it is preferred to ship bulk quantities in large vessels. Available water depth at the location of the transfer terminal is therefore very important. In our study we looked at different locations and forms of transhipment, like an onshore terminal, lighterage or direct transhipment via floating crane, floating transfer stations and complete floating terminals. These options were combined into various logistic scenarios with locations like Haldia Docks, Sagar Island, Sandheads and even Kanika Sands. For the volume of coal required for Farakka a floating terminal is preferred; this minimises investment costs as well as environmental impact. Finding the optimal location is generally the main challenge and needs to be a trade-off between the calm conditions required for transshipment and river barges and the deep water required to achieve economies of scale in shipping.

River transport and inland terminal

The main challenge faced is achieving year-round navigability and avoidance of often expensive river training requirements. Choosing the right vessel is a trade off between navigability, depth and height restrictions versus the economies offered by large vessels. Various options are possible like river barges, tugs and dumb barges or pushboats and dumb barges. The high sediment transport and the significant fluctuation in seasonality definitely pose a major challenge for the Indian authorities, which will need a range of measures and investments.

River information services (RIS) contribute to facilitate safe and low-cost navigations in highly dynamic river systems. They combine on one hand the transport statistics, planning and logistics information with the actual river information based on real-time information. The design of the

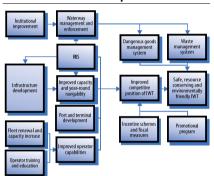


inland terminal depends on the volumes of cargo; high volumes require high capacity cranes like continuous screw or chain bucket unloaders and in case of low volumes fixed slewing and luffing cranes are preferred.

Way forward

The above considerations are of a technical and logistical nature. As indicated in the general IWT Sector development plan (see flowchart), IWT can only become commercially viable when the appropriate framework is in place. This should be based on commitments by the public sector to make ongoing investments in institutional improvements and waterway development and management,

IWT Sector Development Plan



WHAT MAKES A WATERWAY WORK?

An appropriate framework where public sector commits to ongoing investments and private sector coming forward to invest in supporting infrastructure, will help in making a waterway viable.



Niek Van Der Sluijs

supplemented by incentives for private investments in the various supporting infrastructure like ship repair, operator training, waste management and terminal developments.

Dutch experience

In The Netherlands, situated in the Rhine delta, Inland Water Transport (IWT) has been an integral part of trade with its neighbours. A wide network of infrastructure and support facilities has been developed over centuries and the waterways are now one of the busiest in the world; relieving road congestion and reducing environmental impact. Royal HaskoningDHV, a Dutch engineering consultancy firm, is exporting their knowledge to countries all around the world to enhance transport systems in a sustainable and cost effective manner. 🚾

Author is Maritime Consultant with Royal Haskoning specialised in ports and terminal operations and planning. He is currently heading the Advisory Group in New Delhi.

ndian Railways is always appreciated for the efficiency that it shows despite its mammoth size, and now it seems that this efficiency is slowly beginning to surface on its much talked about project - the dedicated freight corridors (DFC). For the project, which is running behind its schedule, the vear 2012 came as a breath of fresh air – firstly, this year's railway budget gave it a major push through an equity injection of ₹2,000 crore. "This was much needed to keep the project going, as the investment will help match the equity infusion levels with the ever rising loan component," said R K Gupta, managing director of the New Delhi-based Dedicated Freight Corridor Corporation of India Ltd (DFCCIL), the nodal agency to implement the project under the aegis of the Union Railways Ministry. The second blessing for the project came when it was decided that the project will now be monitored by the Prime Minister's Office, as the PM felt that it has been considerably delayed. The Chief Secretaries of the States were directed by the PMO to accord highest priority to the high-speed railway tracks project due to its economic importance.

Indeed, the project would prove to be a vital backbone of the economy. The 3,278-km long dedicated freight corridor was conceived by the government in 2005. The eastern corridor, with a route length of 1,839 km, will start from Ludhiana in Punjab, runs through the states of Haryana, Uttar Pradesh, Bihar and ends at Dankuni in West Bengal. The western corridor will cover about 1,483 km from Dadri to Mumbai, through the states of Delhi, Haryana, Rajasthan, Gujarat and Maharashtra. It involves construction of a double electrified rail track with two 25 kV AC 50Hz overhead catenary systems, which will increase the axle-load limit from 22.9 to 25 tonnes as well as allow trains to ply at a speed of 100 kmph. The dedicated freight corridors will ease congestion and reduce travel time for passenger trains as well as increase rail transport capacity, improve service quality and create higher freight capacity. Traffic studies carried out by Indian Railways revealed that the existing routes on the western corridor carry 25 to 35 freight trains a day on the



Light at the End of the Corridor?

Will PMO's monitoring of the implementation of the dedicated freight project ensure its completion on time?

Ritu Gupta

different sections, are already saturated and are incapable of meeting future transit needs. By providing higher speeds of 100 kmph and higher per train throughput capacity, a high axle load of 25-tonnes per axle, the western DFC is expected to generate additional capacity to handle about 120 freight trains in each direction each day. Furthermore, as trains running on the DFC will not be overtaken by other passenger trains, they will have uninterrupted runs and be able to achieve average commercial speeds of 60 kmph or more.

Progress so far

The government aims to complete the project by 2017. Different revenue

sharing models involving the investors have been worked out. For the western corridor, the Japan International Cooperation Agency (JICA) has sanctioned a 667-billion yen loan. For the eastern corridor, the World Bank has sanctioned a loan of \$975 million for the first phase. "The good part is that funds have been tied up phase I for both the corridors which runs into 1,000 km. We just have to now award the contracts which would only take up to a few months," said Gupta. According to the organisation, land acquisition has mainly caused the delay in construction. Besides, there are environmental clearances and other prerequisites that have been stipulated by the JICA and



R K Gupta, Managing Director of DFC explains how the advance transport infrastructure will multiply the frieght traffic.

QWhy was the dedicated freight corridor project conceived?

The existing trunk routes of Howrah-Delhi on the Eastern Corridor and Mumbai-Delhi on the Western Corridor are highly saturated, with line capacity utilisation being as high as 115 to 150 per cent. Moreover, surging power needs requiring very heavy coal movement, booming infrastructure construction and growing international trade also required better freight movement. Therefore, the government decided to build the Dedicated Freight Corridors to fulfil the demand of additional capacity of rail freight transportation. The Indian Railways is already so saturated that new lines were required for moving additional traffic. The freight corridor is so designed that it improves speeds of cargo and enables long haul train operator to enhance capacity by 4-5 times.

QHas the funding for the two corridors been tied up fully?

More or less the funding is in place. The Eastern Corridor (Ludhiana-

Mughalsarai) to a large extent is being funded by the World Bank under its Adaptable Lending Programme (APL). Loan agreement has been signed with the World Bank for APL 1. Negotiations are on for signing the loan agreement for APL 2 and 3, for which certain pre-decided triggers as mutually agreed by the World Bank and Ministry of Railways are required to be achieved. The details of the funding are as follows:

APL 1 (Bhaupur-Khurja) – 343 km

APL 2 (Mughalsarai-Bhaupur) -395 km

APL3 (Khurja-Ludhiana & Khurja-Dadri) – 452 km

(For the above three the World Bank funding amounts to \$2.75 billion.)

The stretch between Mughalsarai to Son Nagar (122 km) is being funded by the Railway equity and the one between Son Nagar and Dankuni (540 km) will be funded through the PPP mode.

The Western Corridor is being funded by JICA in two phases; and the amount will be 667 billion yen. Loan agreement has been signed for Phase 1. Negotiations are on for signing loan agreement for phase 2 of the project.

The details of the two phases are as follows:

Phase 1 (Rewari-Vadodara) – 920 km Phase 2 (Vadodara- JNPT & Rewari-Dadri) – 579 km

When is the first stretch of DFC expected to be commissioned? What are the main hindrances which are leading to the slow pace of work?

A The Eastern Corridor is to be commissioned by December 2016 whereas the Western corridor is expected to be commissioned by March 2017. Phased commissioning has been planned and accordingly a 66-km section (from New Karwandia to Durgawati) on the eastern corridor is targeted for commissioning by December 2013.

The project entails acquisition of land to the tune of more than 10,000 hectare, covering Delhi, Haryana, Rajasthan, UP, Bihar, Jharkhand, West Bengal, Rajasthan, Gujarat and Maharashtra. Land acquisition has been a big hindrance for the project. To date, we have been able to achieve 70 per cent land acquisition in a period of about three years.

Furthermore, since the project affects a number of people, various social issues need to be addressed in compliance to statutory provisions and other compulsory requirements of the lending agency. This too has led to unforeseen delays.

However, we have been able to fulfil almost all the requirements and now we are expecting to award contacts for Mughalsarai-Son Nagar section and Bhaupur-Khurja section (APL-1) of the Eastern Corridor and Rewari-Palanpur section of the Western Corridor. Delays can also be attributed to environmental clearances.

Despite our best efforts to avoid important wildlife areas and forests, the DFC alignment is passing through some green zones. Therefore, as per law, we are bound to seek environmental clearances for such areas.

How much freight capacity will be added through the project? How will it benefit the economy on the whole?

The freight capacity on each corridor will go up to 400 million tonnes and

carriage of 12 million teu of exim traffic on the Western Corridor, which is five times the present traffic level. The project will create an advanced transport and logistics infrastructure which will enable huge investment in various industrial sectors of the states covered under the project. The opportunities created by the corridors can be exploited by states and trade communities for the development of their businesses.

Apart from coal, what other commodities would be transported through the corridor?

Apart from coal, other commodities moving on the corridor would be cement, steel, petroleum products, raw materials for the industry, fertilisers, food grain etc. The new traffic expected is packed food products through refrigerated vans, white goods like electronic goods and automobiles.

What will be the arrangement for movement of goods between existing tracks and DFC?

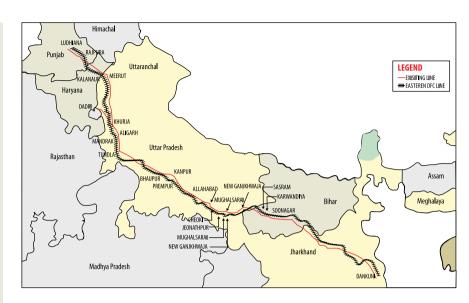
The traffic transfers between DFC and the present rail system will take place at 120-150 km at junction stations. The design of each junction station is special for seamless transfer of trains between the two systems.

How will the ports of coastal states benefit from the corridors?

At present the average speed of freight movement over Indian railways is around 25 kmph. With the implementation of this project, the average freight movement speed will increase to 70-75 kmph, and this will surely improve port connectivity.

Will private rail operators be allowed on the routes?

The commercial operations on the infrastructure created by DFCCIL will be solely with the Indian Railways. However, modalities are being decided for participation of private rail operators on DFC route.



the World Bank. All this have taken time and therefore added to the project cost. "Despite all the problems we are not shifting the deadlines," said Gupta. While presenting this year's railway budget, the then Railway Minister Dinesh Trivedi had informed the parliament that "Contract for civil and track works for 1,000 km on eastern and western DFCs would be awarded during 2012-13." DFCCIL is said to be in the midst of opening the technical bids for the 300-km Kanpur-Khurja section on the eastern DFC. This will be followed by finalising the financial bids in four months. Construction on the stretch is expected to begin in August 2012 if all goes well.

The works listed above may give an impression that all is well, but this may not be the case. Like any other mammoth infrastructure project in India, DFC project is also delayed by thousands of man hours and has been beset by numerous problems, including the Central Vigilance Commission (CVC) investigating three large contracts awarded by DFCCIL for corruption. It specifically looked at whether DFCCIL tampered with contract documents, and conducted improper negotiations with bidders. The investigation report shows that it had cause to believe these had happened.

According to an industry analyst, such happenings are not proving to be good for the financial health of the project. "Inflationary cost overruns have ensured that the total project cost is likely to cross ₹1 trillion. The original

cost was about ₹27,000-28,000 crore," he added. According to DFCCIL, the cost of the project had increased because of several factors, including the fact that the scope of the network had not been finalised when the earlier estimate was announced. Such explanations notwithstanding, it is crucial for the government to ensure that the corridors get constructed on time, as the project is essential for growth. Industry organisations, like the ASSOCHAM, have repeatedly expressed concerns about the sad state of affairs. "India's level of containersation is about 30-35 per cent, as against the international standard of 70 per cent. Hence, there is a lot of scope for growth of container traffic in the country. The delay in implementation of Dedicated Freight Corridor and increase in haulage charges by the railways remains a cause of concern to the private operators," ASSOCHAM officials said. A recent New York Times report rightly described India's sad freight corridor movement: it takes goods four days to travel 4,500 nautical miles from Singapore to Mumbai, but it takes two weeks then to travel 870 km to New Delhi by rail. According to ASSOCHAM, any delay in the project would cost the economy dear.

It is imperative that all parties work in tandem to ensure the timely completion of the project. It is a viable business option capable of attracting capital investment needed for its growth, but what is required is the impetus from the government.







Navayuga is fulfilling the dream of its visionary founder and making contributions to the emergence of India as a global super power. Navayuga has been making big strides in developing world class infrastructure - Highways and Bridges, Ports, Irrigation, Urban Transportation, Power Plants, SEZ and Special Foundations.

We are proud to have contributed significantly to the development of key infrastructure in the National Capital Region

even as we build several other projects across the country and in select international locations. We are excited about the opportunities the New Year will open to us as we make strong progress in our journey to be amongst the top infrastructure conglomerates.

Our efforts to 'Engineer the New Era' took us to the Middle East in 2008, China in 2009 and now we step forward into newer territories.

We remain steadfast on our commitment to create world class infrastructure, adopting latest technology solutions that provide an optimum blend of quality, speed and safety. The strong foundation of our corporate values coupled with our team's dedicated efforts will ensure we earn the trust of society and of clients, and will bring pride to our team, our associates and all our stake holders.

Piling work - Qatar

Navayuga Engineering Company Ltd.



SHIPPING COMPANIES ACROSS THE WORLD ARE GRAPPLING WITH PROBLEMS RELATED TO EUROZONE CRISIS AND CHINESE SLOWDOWN AND EXPERTS SAY THERE WILL NOT BE MUCH RELIEF THIS YEAR.

Sreekala G

ith the global economic crisis wreaking havoc on shipping, companies in this segment are faced with mounting losses, slowdown in demand and a feeble growth prospects in the near future. While the cost of operations is on the rise, shipping lines are under pressure to cut freight rates as there is no sufficient demand for cargo due to over transportation capacity created during the heydays of a cheap credit fuelled economic boom in 2007.

The crisis has triggered cut-throat competition and experts believe not all companies are likely to survive – signals of which are already coming from across the globe. The industry, which has been growing rapidly from year to year, ever since China became the world's factory, is now staring at a shrinking growth and trade volume.

According to their annual financial results, many leading shipping companies, including Neptune Orient Lines, Maersk Line, Pacific Basin Shipping, CMA CGM, COFCO, and China Shipping Container Lines, have witnessed significantly worse business performance and incurred losses. Medium and small-sized shipping companies are faring worse than these major lines.

One of Japan's oldest shipping firms. Sanko Steamship, filed for bankruptcy in July, holding an estimated \$2 billion in debt amid a severe downturn in the dry bulk, tanker and container markets.

The company said it gave up the out-of-court settlement process it had pursued since March, and chose to seek protection from its creditors. It faced a severe cash flow problem as multiple shipowners retaliated to the rescheduling of charter fee payments by seizing Sanko-owned ships among others.

Another big shipping group in Japan, Mitsui O.S.K. Lines is planning to scrap or lay up 10 to 20 of its large capesize vessels as conditions in the dry

freight market worsen.

Estimates suggest that average daily earningsfor

capesizes, which usually transport 150,000-tonne cargoes such as iron ore and coal, have slumped to \$4,135 this week, a level not seen since December 2008.

"Based on the current capesize market conditions, MOL believes that the cold lay-up of approximately 10 ships for six months to a year will help restore an appropriate vessel supplydemand balance in the future," the company said.

A lay-up is when a ship is taken out of service, with some or all of the crew taken off. In a cold lay-up, a ship is mothballed, with only dehumidifiers to keep it from deteriorating.

MOL said that until now the company had scrapped capesize ships that were at least 23 years old and that it would reduce the cut-off age to 15 years or older. It has plans to scrap five vessels by the end of March 2013 and is considering the disposal of others.

However, analysts say the MOL's plans to lay up ships are not likely to make much of a difference. "The capesize sector has been on a downward slope due to weak iron ore demand in China. Although a positive in terms of limiting supply, the capesize fleet stands at 1,450 vessels, and 10 to 20 vessels make up a fractional 0.5-1 per cent of supply. This is hardly any comfort to the market," says an analyst. In fact, he expects more lay-ups and scrapping as the near-term fundamentals remain weak due to the current global economic situation.

In Europe, bankers are seizing ships to protect the value of their loans to struggling shipowners. Faced with a double whammy of Eurozone crisis and rising cost of capital, the banks are recruiting management companies to take over and operate defaulting owners' ships to avoid write down on their loan books.

Earlier in June, Credit

> Suisse and a group of Chinese banks seized seven tankers from Singapore's

Dongfang Shipbuilding to pay outstanding debts of around \$250 million after the Singapore Supreme Court ruled in favour of the creditors.

Though bankers are no experts in running a ship, they are unable to sell the seized ships due to lowering valuations. The nominal resale value of a supertanker, used to transport crude oil, has fallen to around the \$90 million level from \$162 million in 2008. The value of a capesize ship, one of the largest carriers of dry bulk commodities such as iron and coal, has slumped to \$44 million from just under \$100 million in 2008.

Japan's oldest shipping firm, Sanko Steamship, filed for bankruptcy in July, holding an estimated **52 billion** in debt

Mitsui O.S.K. Lines is planning to scrap or lay

up 10 to 20
of its large capesize
vessels

In Europe, bankers are seizing ships to protect the value of their loans to struggling shipowners. Global syndicated lending slumped to \$245 million from over \$1.6 billion in the first quarter and over \$3.9 billion in the second quarter of 2011.

China's 12 publicly listed shipping companies lost a total of RMB

5.02 billion
Yuan in the first
quarter

According to Thomson Reuters LPC data, global syndicated lending to the shipping sector slumped to \$245 million in the second quarter of this year, down from over \$1.6 billion in the first quarter and over \$3.9 billion in the second quarter of 2011.

Though banks try avoiding ship seizures, the worsening conditions and growing frustration is expected to lead to more vessel arrests. Greece-based Newlead Holdings in May had admitted that four vessels in its fleet were seized by lenders to pay for debt as part of restructuring efforts. In June, the company had entered into an agreement with Piraeus Bank S.A. to sell two tanker vessels, to release itself from all obligations under the Piraeus Bank credit facility.

In June, Standrad & Poor, a leading credit has rating agency, downgraded the world's third biggest carrier CMA CGM to B++. The agency's outlook for the French shipping giant turned negative due to its deteriorating profitability and the declining value of its bonds.

"We now believe that CMA CGM will report weaker operating results for full-year 2011 than we originally expected, leading to a further deterioration in cash flow protection measures and financial covenant headroom," said S&P in a statement.

The agency firmly believes container carriers are suffering from higher operating costs but lower freight rates, particularly on Asia-Europe routes. There were also reports of warning that CMA

CGM has a 90 per cent chance to default on its debt repayment within five years.

Besides, German economy, once considered to be immune to the Eurozone crisis, has also started showing signs of distress and this may not be a good sign for the shipping industry.

In Asia too, tremors are being felt with shipping industry leaders in China expressing uncertainty over how long the slump will continue. According

to a report, China's 12 publicly listed shipping companies lost a total of RMB 5.02 billion Yuan in the first guarter of this year, whereas their loss of last in the same period 280 year was only RMB million Yuan. According to a Chinese government official, presently the

overall trends of the shipping industry are 'demands slowdown, over transportation capacity, rising cost, falling freight rates, and expanding loss.'

The China government is now expected to introduce policies that promote the sustainable development of the shipping industry.

In Vietnam, its leading shipping line Vinalines has now synonymous with all that has gone wrong: a bloated behemoth with 18,000 workers, a fleet of lossmaking ships and \$2.1 billion in debt. Besides, its senior executives are on the run on charges of mismanagement.

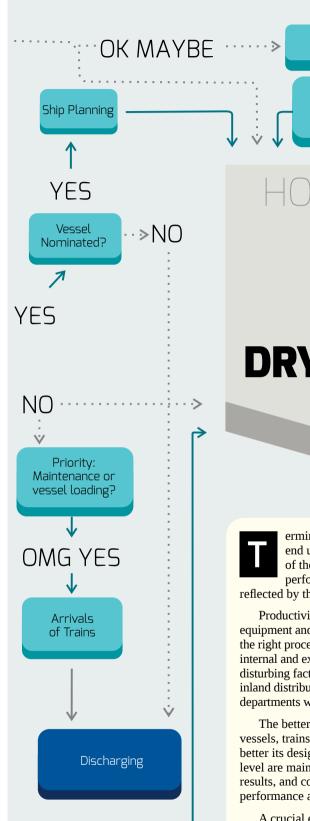
Back home in India, shippers have one more worry to deal with – plunging rupee. For many of the country's many small and medium-sized firm owners, their only way to hedge foreign currency risk is hope. For instance, Anil Jain, chairman of Atam Manohar Ship Breakers, bought a ship in February for \$6 million when rupee was 40 against dollar, now faces installment payments in July and August, with the local currency tumbling to 57.32 to the dollar. And, he is worried about high forward premiums. He expects to book a foreign exchange loss of ₹15 million in the April-June quarter. For a company with a turnover of only ₹1 billion, that is not a good news.

Meanwhile, Shipping Corporation of India Ltd (SCI) has increased freight rates on the Indian subcontinent to Europe and Mediterranean trade routes 'to meet the overall operation costs' from July 1.

The situation is not good for SCI either. In fiscal 2012, the company posted a loss of ₹428 crore against a net profit of ₹567 crore in the previous fiscal. The company's profitability last year was also affected on account of massive finance costs. As on March 31, 2012, the company's long-term borrowings stood at ₹5,525 crore,

representing a 36 per cent increase from a year ago. Higher interest costs along with higher depreciation are expected to affect the company's financials going forward as well.

Though analysts consider it the freight rate increase as positive development, they do not believe the scenario is going to reverse dramatically. And worse, nobody knows how long will it take for the shipping companies worldwide to tide over the crisis, which has entered its fourth year.



HOW TO ASSESS THE

 $< \cdot NO$

→YES→

STORAGE PLANNING

Control of Arrival

and Departures

Formation of

Personnel

REAL POTENTIAL OF DRY BULK TERMINAL

BY

DICK VAN DOORN AND JOSE DE MARTINS
DRY BULK EXPERTS GROUP

erminals play an essential role in the logistical chain between mine and end user. They determine for a great part the efficiency and thus the cost of the chain. They are the buffer, the safety valve. If a terminal is not performing well, it has exponential consequences. In most cases that is reflected by the demurrage generated at that specific terminal.

Productivity of bulk terminals is determined by its infrastructure, its movable equipment and the organisation put into practise by well-trained operators following the right procedures and a management that is able to find the right balance between internal and external factors. Planning is the main issue and often the biggest disturbing factor. The planning process comprises ships planning, storage and inland distribution. For bigger terminals these elements are organised in separate departments whereby communication among each other is of prime importance.

The better a terminal is able to control the interfaces between sea going vessels, trains, barges and connecting belts and the terminal operation itself, the better its design capacity will be met. Demurrage, and throughputs below design level are main indicators that a terminal is not performing well. Poor financial results, and consequential delayed maintenance will further deteriorate the performance and risk a downward spiral.

A crucial external factor is vessel nominations. And although each terminal likes a line of vessels waiting to be loaded or discharged, it will push the cost of the chain drastically upwards. Therefore, nomination systems have been

introduced that give some relief. Or the terminal and ship agree a shift of vessels with different nomination dates. Suitability of vessels remains an issue; a ship with sticky coal between the ribs, or vessels that cannot cope with the terminals' loading speed have quite an impact on the terminal operation and generates extra cost and demurrage.

Another one is the inland distribution, in particular complications with the railways in obtaining timely information on arrival of the trains. For proper planning, monthly schemes are required that are updated regularly resulting in fixed weekly nominations. Trains that arrive outside the planning disturb the operation and cause exponential cost. Therefore, communication with customers and the railway authorities is vital.

The storage plan is derived from incoming and outgoing cargoes. Given the terminal infrastructure, those flows must be planned on the available machines. This is complex because frequently the pile for a waiting train is along the same belt on which the stacker/reclaimer is discharging a vessel.

Of further impact we can highlight maintenance schemes that hamper the operation. Should the maintenance be delayed in order to give priority to loading a vessel? Or is it necessary to allow seperation of grades on customers demands even if the same grade is on stock already?

Design: Theory and reality

Terminals are designed by technical engineers, built by engineers and delivered by engineers. Technically the terminal will perform and in theory the balance between the capacities of the machines will look fine. The proof of the pudding, however, is the real operation. Theory and practice can be completely different phenomena. The consequences might be a design capacity that cannot be reached, the anticipated turnaround time of vessels that cannot be met, the storage area that proves to be insufficient, resulting in financially poor results. Much could have been prevented if people who have operated such terminals themselves would have been involved in the design phase already.

Dry bulk terminals play a vital role in the chain of transportation linking producers with end users. Their efficiency is influenced by a range of internal and external factors, not least initial design. Evaluation of a new built or exisiting facility's performance by independent experts with hands-on terminal management experience frequently results in enhanced operational efficiency.

This is important not only with new building terminals but also for existing facilities. Outside experience can help to install the right equipment or assist in improving productivity.

Generally speaking, terminals evolve very quickly during the first stages after their start up, however, after a certain period they tend to accept that their obtained performances, results, etc., are the best achievable and become the norm for the terminals' performance. Operation teams at the terminals are generally overburdened with work, and focussed on the operation itself. They hardly have the time to analyse problems in a structured way, since they are immersed in the day-to-day business. Evaluation should be done by an experienced independent third party who knows what can be expected from the terminal with regard to the flows handled by that terminal.

Independent evaluation

Such analyses, restricted to a more general investigation, comprises the terminal concept, installed equipment, actual performance and an assessment of the quality and working methods of the terminal personnel. The study can be executed in a short period of time and focus on:

- · Adequate design of the terminal
- · Correct equipment capacity
- Balance between the different components of the terminal
- Adequate planning and execution of operations
- Finetuning of planning and control of arrivals and departures of the vessels
- Training and formation of personnel
- · Adequate maintenance planning, both preventive and regular.

After a general analyses of the terminal as a whole, the next step is to study each component of the terminal individually, taking into consideration its adequacy as awhole.

To give an example; the intake capacity of a receiving terminal is not determined by the design rate of the unloaders but only by approximately 47 per cent of this. A 50-tonne unloader is said to have a lifting capacity of 2.200 t product per hour. Yes, in ideal working conditions during "freedigging" it would. But based on general practise this will be reduced to about 1.000 t/h, taking into account full discharge of the hold including cleaning.

Or two unloaders of 2,500 t/hr that discharge onto a jetty belt rated only at 2,500 t/hr and hence all advantages of free digging completely disappear. Or where material of 1.8 density is excavated by a 2.4 density grab, thus losing 25 per cent of the capacity. Numerous other examples can be given of potential improvements that can be realised with relatively low investment in assets or with changing working methods.

The value of inviting experienced managers to evaluate the terminals' performance and look at specific issues will be the generation of recommendations based on their experience. Such evaluation need not take much time, typically a quick scan of the operation executed in close cooperation with the management during an on-going operation would take about one week at the site.

The Dry Bulk Experts Group, grown from the International Dry Bulk Terminals Group – with 250 member terminals – is capable to provide such knowledge. Its members have long standing experience in running coal and iron-ore terminals and focus on quick scan analyses.

Dry Bulk Experts Group (DBEG): http://www.drybulkterminals.org

Finding Fortune in the Hinterland

Strategically located on the west coast between two major ports Mumbai and Goa, JSW Jaigarh Port aims to become the most modern and mechanised port in the country.

SW Jaigarh Port (JSWJPL) is gearing up to become the most preferred gateway destination to coastal and central Maharshtra and northern Karnataka regions. The port, owned and operated by JSW Infrastructure, a subsidiary of JSW Group, has witnessed a steady growth in cargo volumes during the last three years.

In 2011-12, the port handled 5 million tonnes (mt) of cargo as against 1.26 mt in 2010-11. "This was facilitated because the power plant set by another group company in Jaigarh, commenced operations in full capacity. In addition to group cargo, we also widened our cargo

Current facilities

- · Total storage area 200 Hectares
- · Coal yard capacity **7,00,000 MT**
- Mechanised coal handling with 2 Ship Unloaders of 2,000 TPH each
- Conveyor, stacker cum reclaimer of 4,000 TPH
- Dust suppression and fire fighting systems for coal storage yard
- · Dedicated handling equipments
- Permanent warehouse (6,700 m² + 20,000 m²)
- Liquid tanks (Capacity 20,000 mt + 20,000 mt)

base by offering iron ore, limestone and molasses, which helped in elevating the performance of the port," says an official of JSW Jaigarh Port.

During the initial year of its operations in 2009-10, the port handled 0.27 mt of cargo. This went up to 1.26 mt next year. JSWJPL aims to handle 10 mt of cargo in 2012-13.

The effort, according to the official, is to emerge as one of the most modern and mechanised ports in India benchmarked to international standards with the help of state-of-the-art technology and well-qualified manpower.



THE PORT IS EMERGING AS PREFERRED DESTINATION IN COASTAL AND CENTRAL MAHARASHTRA

JSW Group is one of the fastest growing business conglomerates with a strong presence in the core economic sector. This Sajjan Jindal led enterprise has grown from a steel rolling mill in 1982 to a multi-business conglomerate worth \$9 billion within a short span of time. As part of the \$15-billion O.P. Jindal Group, JSW Group has diversified interests in steel, energy, minerals and mining, aluminium, infrastructure and logistics, cement and information technology.

Besides JSW Jaigarh Port, the group subsidiary JSW Infrastructure has two other operational units – South West Port Ltd, which runs two terminals at Mormugao in Goa, and JSW Shipyard in Dabhol in Maharashtra.

JSW Infrastructure Limited is committed to the development of infrastructure for ports, ship repair, shipyard, township, roads and rail connectivity, inland waterways, water treatment plant and pipelines. Inaugurated in August 2009, JSW Jaigarh Port's draft is 14 metres deep, making it the deepest private port in Maharshtra. The masterplan is to increase the draft to 19.8 metres, which will enable berthing of capesize vessel of the size of 180,000 dead weight tonnage (dwt).

The port has planned to add eight more berths to its existing two berths. This in turn will enable it to add 35 mt of handling capacity. "Once the expansion work is completed, the port will have 10 berths with a capacity to handle 50 mt of cargo," says the official.

Containers: After successful handling of Bulk & Break Bulk cargo JSW Jaigarh Port is planning to commence containerised shipping operations from August 2012. Port will be equipped with two mobile harbour cranes with necessary container fitments by August. The Service will connect Jaigarh to Gulf and Far East thereby providing international Container services to the trade.

The connectivity will ensure competitiveness for sugar mills, engineering industries, agro and food processing industries, sea food exports and textile and allied machinery in the international markets. One, it will bring down the total logistic cost and secondly, it will ensure guaranteed connections and transit times for the export cargoes.



AFTER THE EXPANSION, 10 BERTHS WILL HANDLE 50 MT OF CARGO

After successfully handling bulk and break bulk, JSW Jaigarh Port is now planning to commence containerised shipping operations this month (August 2012). Port will be equipped with two mobile harbour cranes with necessary container fitments. There will be two dedicated berths for the container terminal, which will house a 1-million teu (twenty-foot-equivalent unit) per annum facility. The service will connect Jaigarh to Gulf and Far East thereby providing international container services to the trade.

"The connectivity will ensure competitiveness for sugar mills, engineering industries, agro and food processing industries, sea food exports and textile and allied machinery in the international markets. It will also bring down the total logistic cost besides ensuring guaranteed connections and transit times for the export cargoes," says the official.

There will also be a liquid handling LNG, Ro-Ro terminal and multipurpose cargo berths. The port will also look at installing pre-delivery inspection (PDI) facility and a dust-proof parking area for the Ro-Ro berth. As part of the

liquid handling berth, the port is looking at expanding the storage capacity from 1 lakh kilolitres to 5 lakh kilolitres.

"Our operations will

be enhanced by mechanised wagon loading and unloading systems. This will be done on the visibility of adequate demand as it involves a mere four-month activity," says a company statement.

The port is planning to set up free trade & warehousing zones (FTWZ), a special economic zone (SEZ), container freight station (CFS) and logistics parks to give a competitive advantage to establish food processing zones, edible oil refineries and other port-related industries.

The port management is looking at developing road and rail connectivity to the port, the work for which is going on in full swing. Nearest railway link to the port is at Ratnagiri, which is 55 km away and is on the Konkan Railway network. The rake handling will be further enhanced by the mechanised wagon loading and unloading system.

JSWJPL has plans to link the port with the existing railway network of Konkan Railway and wider Indian Railway network to enhance the port's connectivity. It is expected to be completed in the next three years. The new rail link (227.18 km) will connect Jaigarh to Kolhapur.

Currently, Jaigarh Port handles 80 per cent captive and 20 per cent commercial cargo. The final plan is to handle 20 per cent captive and 80 per cent commercial cargo.

ROAD

JSW Jaigach Port O

RAIL

Road Distan

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Place

Ratnagiri

Bijapur

Hospet

Kolhapur

Dharwad

214

365

532

230

383

559

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406

559

250

446

567

279

467

633

327

494

690

Nashik

Sangli

Latur

Satara

Daund

Redi

Solapur

Bellary

Raigarh

Raichur

Belgaum

Jalna

Pune

Gulbarga

Parbhani

Osmanabad

Ahmednagar

Aurangabad

Bagalkot



JSW Infrastructure is exploring various opportunities to develop ports and port-related infrastructure in various parts of the country in order to meet the cargo requirements of the JSW Group and external clients.

"Plans are being charted out to develop ports on both western and eastern coasts. Currently, we are evaluating ports in northern Maharashtra, Karnataka and Orissa. Our forte is ports and connectivity to ports," says the company official.

The company has prepared a road map to develop 5-6 ports in the country in the long term. This will help the company increase the total cargo handling capacity to 180 mt.

In 2010, JSW
Infrastructure had raised \$125 million from US-based Eton Park Capital Management for funding its port expansion plans. The aim, according to the port official, is to manage all activities at the port mechanically to achieve high discharge rates and do away with any manual operations.

"For that, we have adopted the most advanced technology and have adhered to all the environment-friendly norms.

| ces To nations | |
|-------------------|-------------------|
| | Distance in km |
| | 60 |
| | 340 |
| | 496 |
| | 166 |
| | 352 |
| | 505 |
| | |

Maharashtra, with its vast coastline of 720 km, is an attractive destination for investors to develop various water-front projects; be it port development, port-related infrastructure, inland waterways, or for setting up water sports complex. The state is home to two major ports and 48 minor ports.

JSWJPL, the Greenfield port is located on Damakhol Bay, Jaigarh in Maharashtra. The port is developed and operated on a 50-year concession from the Maharashtra government on a BOOST basis. The port is located at about 110 nautical miles south of Mumbai. The port was developed within a record time of 20 months after signing the concession agreement with the state

in June 2008. It is in fact the first deep water, all-weather 24x7 private port in Maharshtra.

In fact, the port occupies a strategic position on the west coast as it is

located in the protected surroundings of Jaigarh Head, between two major ports namely Mumbai (356 km) and Goa (250 km). It is 42 km from the NH-17. The hinterland covers Kolhapur, Satara, Sangli, Solapur, Pune, Ahmednagar, Latur, Beed, Goa, Hubli, Ankola, Belgaum, Bagalkot and other parts of northern and central Karnataka. It is well located to take care of the export-import and coastal movement requirements of the industries in the hinterland.

The port's primary hinterland, which is spread up to 200 km, includes Ratnagiri, Kolhapur, Satara and Sangli. The cargo needs of the industries such as cement, sugar, bauxite and power are handled through this port.

Its secondary hinterland includes Pune, Solapur, Ahmednagar, Beed, Bagalkot, Bijapur, Hubli, Belgaum and caters to the cargo needs of industries like automobiles, heavy engineering, steel, coke, cement, sugar, manufacturing and power.

The tertiary hinterland includes Aurangabad, Jalna, Raichur, Hospet, Bellary districts. The related cargo to and from the region caters to the needs of industries like cement, iron ore, steel, power, heavy engineering and manufacturing.

The port has a total dry cargo storage area of 200 hectares. It has a coal yard with a capacity of 700,000 metric tonnes and stacker cum reclaimer of 4,000/2,000 TPH. It offers two weigh bridges of 60 metric tonnes capacity and plans to install 4 more weigh bridges of 60 & 100 metric tonnes capacity. It has dust-suppression and fire-fighting systems for the coal stack yard. It also offers closed warehouses for handling fertilisers, fertiliser raw material, bagged cement, refined sugar and other cargo.

The port is close to the agriculture belt of Kolhapur, Solapur, Sangli, Satara and Pune and has a huge potential for export of molasses and import of edible oil and other cargo that comes under International Maritime Dangerous Goods (IMDG) code.

To handle different types of cargo, JSWJPL has chalked out a detailed strategy.

Liquid

In order to diversify the port's product portfolio and cater to the requirement of local industries for export of molasses, JSWJPL has constructed a tank farm with an initial capacity of 40,000 metric tonnes. These tanks equipped with automatic gauging systems, enhanced pumping and piping capabilities, enable quick and efficient transfer of cargo from the road tankers to the tanks and from the tanks to the vessel.

The port has achieved loading rates of up to 10,000 tonnes per day. With many entities showing interest in setting up refining and other processing industries in the vicinity of Jaigarh, the port is finalising plans for the expansion of the tank farm and associated terminal structures.

Coated steel pipes

JSWJPL has achieved a major feat in disembarking cargo from vessel *MV Bulk Paraiso*. The vessel called on JSW Jaigarh Port in March last year, laden with 13,900 metric tonnes of coated steel pipes. The port has planned the discharge sequence and cargo evacuation and prepared stack yard well before the vessel arrived.

| Cargo | Discharge / Loading | Avg. Discharging / Loading rate / day (in metric tonnes) |
|-----------|----------------------------------|---|
| Coal | Import / Discharge | 40,000 |
| Limestone | Import / Discharge | 25,000 |
| Bauxite | Export / Loading Vessel Gears | 15,000 |
| Iron Ore | Import / Discharge | 35,000 |





CARGO HANDLING FACILITIES AT THE PORT ARE A DELIGHT TO CUSTOMERS

All the infrastructure requirements were created in consultation with the receivers. The vessel was berthed directly on arrival and discharge commenced as per the plan and in accordance with the stiff requirements of the receivers. This was the first time coated pipes had been discharged at Jaigarh Port and were evacuated efficiently, thanks to the coordinated operations. The receivers as well as the pipe manufacturers were highly impressed with the port's performance.

Sugar

The potential for handling agricultural products meant for exports, is huge with India being among the top producers of wheat, rice, sugar, maize, cotton etc. Lack of port capacity has been one of the factors for hampering the growth of this sector. With the JSW group developing a Greenfield port in the vicinity of one of the largest sugar producing areas of the country, these constraints have been alleviated to a certain extent.

While Brazil and India account for 40 per cent of the world's sugar produce, Maharashtra is the country's largest producer of sugar. In 2012-13, the state is expected to produce 80 lakh tonnes of the commodity. With the state busy developing strategies to become the hub of global sugar exports, it will be huge to JSW Jaigarh Port.

The port has been the gateway for exporting 50,000 mt of sugar in the

recent times. The cargo was loaded expeditiously without any contamination or staining on a round-the-clock basis with trained manpower and strict quality control.

All the stakeholders involved in the trade – the shipper, the carrier and the consignee – were extremely satisfied with the arrangements made by the port to facilitate efficient cargo loading. Port has demonstrated its flexibility to go the extra mile to meet its customers' requirements and open a new avenue for routing the export of agricultural products from the country.

Coal, iron ore, limestone, bauxite

JSWJPL has successfully handled coal, limestone, bauxite, and metallurgical coke and has established benchmarks comparable to the best ports in the world.

In June last year, the port set a record by discharging 71,740 tonnes of steam coal in the first 24 hours from the Panamax vessel *MV Marina*.

The vessel, which berthed on May 31, carried a total parcel size of 83,909 tonnes of South African coal. While the discharge rate achieved in the first 24 hours was 71,740 tonnes, the overall rate of 61,386 tonnes PWWD was achieved for the complete discharge of the vessel.

JSWJPL's stated vision is to develop, adopt latest technology and offer port related services, in a way that ensures enduring value to our customers, community and the environment.

Recession-proof Growth

ransport and logistics is an important sector in the UAE economy, comprising more than 10 per cent of the region's non-oil GDP. Considering its strategic geographical position between East and West, the UAE's ports, like its airports, are an essential tool for driving economic growth, particularly economic diversification. The region's ports export mainly oil and gas, but also raw materials and finished goods. Imports consist of intermediary and consumer goods, as well as a significant re-export trade to other economies particularly in the Gulf region, India and Eastern Africa. The UAE has over 20 ports, ranging from state-ofthe-art oil terminals, industrial ports and container-handling facilities to dhow and wooden-boat wharfs. Ports in Dubai and Abu Dhabi are the critical ones, and in both the places the port sector is seeing a phase of modernisation and regularisation. For instance, the Mina Zayed Port in the Abu Dhabi City, the emirate's main general cargo port to date, is being replaced by Khalifa Port, a massive new 417-square-kilometre port and industrial development at Al Taweelah. It is estimated that Khalifa Port and the surrounding industrial zone, Kizad, will contribute 15 per cent of the capital's non-oil GDP by 2030. It is expected to be opened by the end of this year.

Dubai's Jebel Ali Port, the biggest in the Middle East, and the busiest container terminal between Asia and Europe, has also seen a number of new improvements after becoming Many of the UAE ports are getting into a new avatar to meet the growing needs of the logistics sector



KHALIFA PORT WILL CONTRIBUTE 15% OF THE GDP BY 2030

a victim of its own success, with heavy queues and long wait times for vessels recorded in late 2008. Its operator, DP World, brought in new giant tandem lift gantry cranes, the largest in the world and offering twice the handling capacity of traditional cranes. Rail-mounted gantry cranes were also introduced as part of the second phase of Jebel Ali's Container Terminal 2, which now boasts 29 tandem lift cranes and 60 rail-mounted gantry cranes. The port also expanded its workforce and trained new staff. With the new equipment, capacity at Jebel Ali now stands at more than 14 million teu per year. As it foresees continued growth, DP World has outlined expansive plans to expand its capacity to up to 80 million teu by 2030, by extending the port out to a reclaimed island. Such expansion plans are of no surprise as the port is the first stop in the Middle East

for most of the cargoes that come from Asia, Europe and the US. About half of Dubai's exports go through Jebel Ali, which accounts for a quarter of the emirate's GDP. And about 20 per cent of total foreign investment in the UAE passes through the port and its connected industrial zone.

As a major logistics player, Sharjah too is investing in its ports in the Gulf and on the east coast. Khor Fakkan, bordering the Indian Ocean, increased its capacity by 33 per cent to 4 million teu in 2009, while it also expanded the size of its quays and increased the number of gantry cranes by a third. In Ras al-Khaimah, the emirate is embarking on a plan to attract new cargo and passenger airlines to its airport and to introduce new feeder services to regional cities. The plans involve significant investments over the next 20 years, including

new airport aprons and taxiway system, as well as two new terminals that will be built in phases. Existing terminals will also be improved. The emirate also continues to improve Mina Sagr, the first deepwater port in the Gulf. The port is being expanded to handle 3 million teu by 2012 to boost its transshipment potential, as well as to improve the capacity to handle bulk cement and aggregate. The port of Fujairah, the second largest oil-bunkering facility in the world, is also expanding, and sometime back was awarded contracts to add additional berthing capacity for oil tankers, at the Oil Terminal 2.

According to industry experts, during the next few years, UAE ports will see a sharp rebound in their throughput, thereby helping the country to remain the largest exporter in the Gulf. Abu Dhabi's Mina Zayed Port is expected to grow by 20.6 per cent to 5.91 million tonnes, while throughput at ports in Dubai could exceed 150 million tonnes. A recent study by Business Monitor International (BMI) showed that the real trade growth in the UAE, which had been just under 15 per cent in 2007, fell to 12.2 per cent in 2008, and then went into reverse, contracting by an estimated 2.7 per cent in 2009.

This showed that these ports are averse to the impacts of the recession in the West. According to BMI, these ports will continue to flourish in the future, as the world cannot do without their services.





'Accelerating implementation of infrastructure projects'



Shri G K Vasan

Hon'ble Minister for Shipping
Government of India

Focus Areas

Promoting private participation in infrastructure development
Policy measures for speedy implementation of projects
Accelerating road-rail connectivity of ports
Challenges in financing of infrastructure projects
Building capacity to handle critical infrastructure projects

EMINENT SPEAKERS*

Mr Pradeep K Sinha, Secretary, Ministry of Shipping, Government of India
 Mr R P Singh, Chairman, National Highways Authority of India
 Mr Amitabh Kant, Chief Executive Officer & Managing Director, DMICDC
 Mr Ravi Parthasarathy, Chairman, IL&FS

Mr Hemant Kanoria, Chairman & Managing Director, Srei Infrastructure Finance Ltd
Mr Pratyush Kumar, President & CEO, GE Infrastructure India
Mr Rajiv Agarwal, Chief Executive Officer & Managing Director, Essar Ports Limited
Capt BVJK Sharma, Joint Managing Director & CEO, JSW Infrastructure Limited
Mr K Venkatesh, Chief Executive & Managing Director, L&T Infrastructure Development Projects Ltd

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INTERVIEW

Headquartered in Singapore, DNV Petroleum Services offers commercial fuel testing services. The company has been advising shipowners and port operators on the procurement and use of marine fuels since 1981. A subsidiary of Det Norske Veritas, DNVPS employs 220 people worldwide and is also a major provider of Bunker Quantity Surveys. In an interview with Maritime Gateway, Capt Rahul Choudhuri, DNVPS regional manager for Asia Pacific, talks about the company's services, strengths and the quality practices governing bunker fuels.

Where Every Drop Matters

Tell us about DNV Petroleum and its services

DNVPS fulfills the requirements of an independent international testing service, which is credible to both shipowners and suppliers alike. We operate five wholly owned and accredited laboratories, strategically located in Singapore, Rotterdam, Fujairah, Houston and Oslo. This laboratory network ensures that fuel samples from ships reach DNVPS in the shortest possible time, which in turn facilitates faster test results and prompt technical advice.

DNVPS has tested more than 1.3 million marine fuel samples since its establishment in 1981. We have about 10,000 ships in our programme from 950 international customers. Our 65 per cent market share is well supported by an extensive monitoring network allowing us to spot fuel quality problems in bunkering ports around the world. Shipowners will be immediately notified of these problems through our Bunker Alert Service, exclusively available to members of the **DNV Fuel Quality Testing** (FQT) Programme.

Apart from quality, does the company also check quantity?

Yes, we call it Bunker Quantity Survey. We deploy surveyors in over 100 bunkering locations, including key ports such as Singapore, Fujairah and Rotterdam. The demand for DNVPS bunker quantity surveys has grown significantly in the last few years. With the physical transfer of fuel often taking place thousands of miles away from the contracting offices, bunkers are typically the largest contributor to the operational costs of a ship. As neither the buyer nor the seller is present to witness

the bunker quantity transfer and sampling procedures on board, any post-delivery investigation on quantity shortages is usually futile and inconclusive. Ship operators need to ensure the quantities of fuel received by their vessels are accurate.

As bunker fuel is becoming costlier, every drop matters. Unfortunately, it is not uncommon to witness 'tricks of trade' during bunker deliveries; for example, 'cappuccino' bunkers.

Can usage of flow meters solve this problem?

Yes and no. Mass flow meters provide



a sophisticated, quick and accurate method of measuring the amount of fuel oil that is transferred during the bunkering process. However, this technology has limitations and the procedure for ensuring and verifying its accuracy is different from the manual measurements currently in use. Singapore is taking the lead in developing a new operating standard on flow meters, especially to improve efficiency. A lot of good work has already been done. I am a member of the technical committee looking into this.

With the number of Greenfield modern ports coming up and a spurt in cargo volumes, many feel that India has a chance to play a key role in bunker business. What is your view?

A If India aspires to become a leader in bunkering, it needs to adopt the international standards. Singapore is actually raising the bar. From July 1 this year the Maritime and Port Authority of Singapore is making it mandatory for all supplies in Singapore to meet the new ISO 8217:2010 fuel standard, whereas India is still using the 2005 version, or even the one before that.

India has to scale up to be a global player and that will not be easy. Last year, Singapore sold over 43 million tonnes of bunker fuel, compared to one million tonnes sold in India. The gap is huge. India will have to demonstrate that it is better, cheaper and can meet global fuel standards. In this mature and competitive market, India has to set a benchmark 'beyond compliance' in order to become a top bunkering destination.

What is the Jimpact of environmental regulations on bunker business?

Environmental A Environment getting stricter, especially on the sulphur content. It still needs to be understood how the lowering of sulphur content will impact global shipping. From August 1 this year, the United States will

implement the North American Emission Control Area, which imposes a 200-mile zone restriction where ships can burn fuel with no more than 1.00 per cent sulphur content. This poses two challenges for the industry-product availability and the ability to meet this requirement. Looking at the experiences of the Baltic Sea and North Sea/ **English Channel Emission**

Control Areas enforced earlier. we know ship operators will face compliance challenges.

When fuels are blended to meet the lower sulphur standards, they can result in some other problems, such as an increase in catalytic fines content. Ship operators are also under pressure to carry different set of fuels for use in different areas.

Do we have some global norms for bunker fuel and sulphur content?

IMO is heading towards Ait. There is a 3.50 per cent global sulphur cap under MARPOL Annex VI. The 1.00 per cent sulphur limit on fuel oil is also mandated by IMO for use in the Emission Control Areas. Eventually, we may have one sulphur limit for all areas.

What is DNVPS' strength in marine fuel management?

As far as marine fuels are concerned, we have the largest bunker quality database in the world. We are able to pinpoint problems that are occurring or likely to occur. We test more than 100,000 bunker samples a year. On a regular basis we provide professional inputs to IMO and ISO for some of their studies on fuels and global sulphur levels.

DNVPS has conducted more than 70,000 bunker quantity surveys so far. We provide advisory services on fuelrelated trouble-shooting and fuel efficiency improvement, as well as specialised fuel management training.

Finally, in all that we do, DNVPS upholds the DNV values of not compromising on integrity and quality absolutely.

Fighting the "Cappuccino Effect'

A big concern for the bunkering industry has been entrained air, or air bubbles that can create a froth some call the "cappuccino effect." Because some bunker fuels are so thick, air bubbles can remain trapped for hours. Entrained air is encouraged by the practice of "tank stripping," in which pumping from the bottom of a fuel tank can produce froth and bubbles.

The result is what fuel chemists call a two-phase flow (fuel and air). Some types of flow meters, including older versions of Coriolis meters, proved not to accurately measure such flows, leaving the way open for disputes over fuel loading, since the bubbles or foam show up as "noise" in measurements.

Of course, the cappuccino effect can also be deliberately induced to make a delivery appear to be a greater volume than it is. Since most vessel operators manually strap tanks to obtain a volume, then convert that to mass, dishonesty can be hard to detect immediately. This is a particular concern in some overseas ports.

A ship takes on what appears to be 1,000 metric tonnes of fuel, leaves port and then two days later when the bubbles are gone, realise that they have been shorted.

But apart from deliberate dishonesty, PD meters themselves can make "cappuccino"; that's why they require air eliminators and fuel screens - which must also be cleaned and recertified, along with the meters themselves.



Compilation: Maritime Gateway

BROMMA 'Green Equipment' Gains Ground



Vikram Raman VP & Commercial Director

he container handling industry has witnessed many advances in recent years. One such advancement - terminal automation and the growth of 'green terminals' operated with 'green equipment' – has resulted in enhanced productivity. Stockholm-based Bromma Group, which pioneered green container handling equipment with the all-electric spreader, is all set to take advantage of this opportunity. It also sees a huge potential for its equipments in the Indian container market.

The company has over 2,000 ell-electric spreaders in service across the globe including India. It also has about 400 crane spreaders operating in automated terminals, where the highest levels of reliability is required. Bromma's spreader uses highly advanced spreader diagnostics and offer real-time monitoring of its functions. The company also uses the crane spreader as a tool to ensure better information and safer performance.

Advantages

- Reduces energy consumption 90%
- Fliminates the risk of oil leaks in to groundwater
- Due to lower spreader weight, crane power consumption reduced by 15%
- Lifetime reduction of 150,000 kWh means reduction corresponding to 113 tonnes of CO₂ emissions per spreader
- Through lower spreader weight, lifetime reduction in crane power consumption equal to 94 tonnes of CO₂ emissions per spreader
- Simplified maintenance requirements (fewer service points) due to the elimination of spreader hydraulics, thus reducing lifetime maintenance cost, and producing higher availability since required "out of service" time is
- Inherently greater reliability due to the elimination of potential hydraulics-related fault areas (hoses, etc.)

Container weight verification, for instance, can now be performed from Bromma twist locks within an accuracy of 1 per cent. This not only makes better operational planning, but also provides key benefits helping extend the life of the spreader fleet. Besides, container weight verification reduces safety risk from overloaded and eccentrically loaded containers.



According to the company, Indian ports follow the trends that are reshaping container handling on a global basis. As a result, more and more terminals choose to rely on a few suppliers and standradise on 'best-inbreed' equipment. "The terminals no longer purchase a fleet of equipment in a haphazard manner based on the lowest available price at a particular time. They are trying to identify the 'best-in-breed' company in each product category," says Vikram Raman, Vice-President and Commercial Director, Bromma Group.

In order to determine the best-inbreed solution, terminals have to look at a spreader's performance indicators. Though it is harder to calculate, lifetime return on spreader investment is the best measure of spreader 'value' than the initial purchasing price.

The productivity of a spreader fleet depends on various indicators. These include - frequency of downtime events, and the duration of unplanned downtime events; overall spreader availability; the simplicity or complexity of spreader maintenance requirements and the cost of maintenance in manpower and



materials; spreader weight and the financial correlation between spreader weight and crane power consumption; and the lifetime environmental emissions of the equipment and environmental emissions.

"Bromma managed to become one of the leading providers of 'green' container handling equipments, due to its ability to develop R&D solutions that customers want. The company's all-electric spreader could achieve enormous commercial traction because it is widely recognised to possess 'best-in-breed' quality. As a result, ports such as Gujarat Pipavav and Visakhapatnam have chosen it. Besides, Indian container handling organisations such as Arshiya, Container Corporation of India, All Cargo Mumbai and All Cargo Chennai use them," says Raman.

The company claims that its Greenline spreaders can reduce energy consumption by 90 per cent. "It eliminates the risk of oil leaks to groundwater. Due to lower spreader weight, it can bring down crane power reduction of 15 per cent," says the company.

This in turn will lead to lifetime reduction of 150,000 kilowatthour (kWh) – corresponding to 113 tonnes of CO₂ emissions per spreader and lifetime reduction in crane power consumption equal to 94 tonnes of CO₂ emissions per spreader. It also offers simplified maintenance requirements by eliminating spreader hydraulics. While deciding on equipments, terminals will also look at the supplier's ability to unload and load ships faster and operate flexibly.

To cater to these needs, Bromma has decided to separate twin-lift shipto-shore spreaders and twin-lift yard spreaders. The company's industry-leading STS45 separating twin-lift spreader is used at terminals including JNPT India, Adani Hazira, Gujarat Pipavav, and Visakhapatnam. Similarly, the YTS45 separating twin-lift yard spreader is used by JNPT India and Gujarat Pipavav.

Bromma R&D has also focussed in recent years on developing advanced spreader information tools that terminal managers can use to maximise spreader fleet productivity. This new spreader fleet optimisation strategy called operating in the 'Green Zone.' The company has released three new Green Zone productivity tools – Feelt Doctor, road map and Work Order – since June 2011.

While Fleet Doctor helps terminals take the guesswork out of diagnostics and repair, road map analyses the past performance of the spreader, giving maintenance and operations managers a spreader function history, a fleet status evaluation based on spreader key performance indicator, and an overall framework for understanding and tracking fleet improvement. Its other tool 'Work Order' offers terminals a living service plan that adapts in real time to activity levels in the fleet.

Bromma has experienced growing momentum in India in recent years, with over 170 crane spreaders in locations like Krishnapatnam, Mumbai, Cochin, Chennai, Gujarat Pipavav and Visakhapatnam due to its ability to help Indian terminals achieve stronger operating performance.

NEWS BRIEFS

HONG KONG-HEADQUARTERED OOCL has reported a generally good operating performance in Q2 12, with cargo volumes and revenues on most tradelanes up on both the previous quarter and the corresponding period of 2011.

CHINA'S ECONOMY grew at its slowest pace in over three years in the second quarter of 2012, slowing to 7.6 per cent, down from 8.1 per cent in the first three months, raising fears that the export-dependent nation may yet face an economic hard landing.

COSCON, K LINE, Yang Ming and Hanjin intend to withdraw vessel capacity from Asia to Europe between the end of July and middle of August at the same time as some other carriers are imposing peak season surcharges.

GUJARAT PIPAVAV PORT (GPPL) has raised ₹2.0bn through a QIP and intends to raise an additional ₹1.5bn through promoter allotment. The funds are for expanding capacity and reducing debt.

UNITED AGAINST NUCLEAR IRAN (UANI) called on the Korean Register of Shipping (KRS) to stop certifying Iranian shipping vessels, specifically those of the Islamic Republic of Iran Shipping Lines (IRISL) and National Iranian Tanker Company (NITC).

KRS is one of the only classification societies in the world that continues to provide Iranian vessels with safety certificates. The prominent European shipping services Bureau Veritas and Germanischer Lloyd recently stopped certifying Iranian vessels in response to UANI.

Whereas KRS defended its stand saying it was concerned that vessel safety and marine environment protection could be compromised by political issues.

Cargo throughput growth at Indian Major Ports

| APRIL-JUNE 2012 | | | | | |
|-----------------------|--|--|--|--|--|
| -20% | | | | | |
| -20% | | | | | |
| -20% | | | | | |
| +35% | | | | | |
| -12% | | | | | |
| -16% | | | | | |
| -10% | | | | | |
| +2% | | | | | |
| +13% | | | | | |
| +13% | | | | | |
| + 3.81 | | | | | |
| + 1% | | | | | |
| +1% | | | | | |
| VOLUMES IN SOME CARGO | | | | | |
| - 6% | | | | | |
| -30% | | | | | |
| -30% | | | | | |
| -20% | | | | | |
| | | | | | |



It is time that uncertainities in treating ICDs & CFS as infrastructure facilities for availing tax incentives come to an end.

be places where containers are stuffed, de-stuffed and aggregation/ segregation of export/import cargo take place. ICDS and CFS being notified customs area are considered at par with the Customs Port as the place identified and demarcated for unloading / loading of goods.

ICDs and CFS may not be functionally different as both are transit facilities, however, an ICD is generally located in the interiors (outside the port towns) away from the servicing ports, while CFS, is an off-dock facility located near the servicing ports.

A see-saw of legislation

To foster the investment in infrastructure, the government has

Income tax Act, 1961 ("the IT Act") for investments in eligible infrastructure facilities. These tax incentives are either in form of profit-linked or investment based deduction. There has been ambiguity in past as to whether the companies developing, operating and/or maintaining ICDs and CFS facilities are considered as port-related infrastructure facilities eligible for tax incentives.

In this context, the ICDs & CFS were considered to be infrastructure facilities prior to the Finance Act 2001 and hence they were eligible to claim Section 80-IA benefit. An ambiguity was created due to some amendment in 2001 and a clarification was issued as lately as 2011 (after 10 years). Now we have proposed amendment in Finance Bill 2012 which seeks to provide the status of infrastructure to the ICDs and CFS.

Prior to Finance Act 2001 scenario

The definition of infrastructure facility under Section 80-IA of the IT Act as it stood prior to FY 2001-02 included among other things road, bridge, airport,

GIRISH MISTRY



He is Partner - Tax and Regulatory servies at KPMG, India with vast experience in the field of direct tax consulting practice. He provides advice in domestic and cross border tax issues.

port, inland waterways and inland ports, rail system or any other public facility of similar nature as may be notified by the board in this behalf in the in official gazette. By the virtue this definition ICDs and CFSs were notified as the eligible infrastructure facility for the purpose of Section 80-IA within the extended meaning.

Amendment by Finance Act 2011

The Finance Act, 2001 wef AY 2002-03 amended the definition of the infrastructure facility under Section 80-IA to exclude the phrase 'any other public facility of similar nature as may be notified by the Board in this behalf in the Official Gazette'. The CBDT clarified that by virtue of such amendment only those infrastructure facilities falling under this phrase notified before March 31, 2001 shall continue to claim benefit of Section 80-IA.

This created ambiguity as to the availability of the deduction under Section 80-IA to the ICDs and CFS developed after March 31, 2001. The industry however felt that the amendment in the definition would not impact its claim of considering ICDs / CFS as part of port and more so in the nature of inland port for the purpose of claiming benefits. For this, reliance was placed on CBDT Circulars No 793 dated June 23, 2000 as amended by Circular No 10/2005 dated December 16, 2005 which clarified that the term 'port' for the purpose of Section 80-IA includes structures at ports for storage, loading and unloading etc. if the concerned port authority issues a certificate that said structures (i.e. ICDs / CFS) forms part of the port. Accordingly, it was believed that since the ICDs / CFS as duly approved by the Ministry of Commerce as providing all port related activities, it is an extended arm of port / inland port. The meaning of the term 'port' cannot undergo a change merely on account of exclusion of the phrase.

However, the aforesaid contention received a major setback when the Delhi Tribunal in the case of Container Corporation of India Ltd held that after the amendment in the definition of term 'infrastructure facility', ICDs/ CFS are separate infrastructure facilities and cannot be treated as part of port / inland port. The Tribunal held that had the 'inland port' included these structures, CBDT would not have notified these



The fact that proposed amendment in Finance Bill 2012 seeks to treat the ICDs/CFS as an infrastructure facility, which was the position before 2002-03, one needs to understand as to why and how the same does not remain so during the interim period. This is creating unnecessary ambiguity, leading to increase in litigation.



as a separate infrastructure facility. The Tribunal, however, overlooked the provisions of Customs law which provides that custom port would include notified ICDs / CFS.

The decision has resulted in significant concerns and protest; the Department has been denying Section 80-IA benefits to the ICDs / CFS structures set up outside the port area. There are several cases pending before the Tribunal. However, Delhi High Court has held that ICDs / CFS are eligible to Section 80IA benefits. Recently, Special bench of Mumbai Tribunal in the case of All Cargo Global Logistics, relying on High Court decision in case of Container Corporation of India, has held that CFS is inland port and therefore, income thereof would be entitled to 80-IA deduction.

Clarification by various ministries

The above situation led to a bewildered situation propelling the industry to seek clarifications as to the availability of tax benefit to the ICD and CFS by virtue of it being an inland port. In this regard, various ministries including the Ministry of Shipping, Ministry of Commerce and Industry, Central Board of Excise and Customs have clarified that ICDs and CFS (i.e. custom area of port) are classified as inland port and recommended CBDT to appropriately consider granting 80-IA benefits to these structures (even after the amendment in 2001-02).

However, inspite of specific provisions under the Customs law and the clarification given by all the other ministries, CBDT has issued a clarification vide letter dated January 6, 2011 that ICDs/CFC not located in port area or any inland water, river or canal cannot be considered as port or inland port and hence, not an infrastructure facility for the purpose of claiming Section 80-IA benefits.

Proposed tax benefit under Section 35AD

Having issued the above clarification, Finance Bill 2012 proposes an amendment to Section 35AD of the IT Act whereby it is proposed to consider the ICDs / CFS notified under the Customs Act as a specified business eligible for investment-linked tax deductions (whether or not such structures are located in port / inland waterways area).

It is clear that ICDs and CFS do constitute an important segment of the infrastructure facility. Such a segment would always be infrastructure facility for any economy. As the proposed amendment in Finance Bill 2012 seeks to treat the ICDs/ CFS as an infrastructure facility, which was the position before 2002-03, one needs to understand as to why and how the same does not remain so during the interim period. This is creating unnecessary ambiguity, leading to increase in litigation.

To sum up, ICDs / CFS play an important role in the development of the port infrastructure and hence the economy. These are considered as a custom port and shall be eligible for investment-linked deduction under Section 35AD after April 2012. However, the question still prevails as to the availability of 80 IA benefit after the amendment in 2001-02 especially in light of the clarification given by CBDT vide letter dated January 6, 2011. While it is a settled position that the CBDT circulars are not binding on the assesses, one has to keep a close watch on how the Courts / Tribunal consider the issue in light of the proposed amendment. It is imperative that the position on the ambiguity regarding availability of tax benefits for the period 2001 to 2012 is cleared as soon as possible to put an end to litigation and avoid Vodafone type situation.

Falling Demolition Prices

emolition prices for elderly ships have fallen by a quarter in 2012 to date, and owners are encouraged to dispose of recycling candidates sooner rather than later, says Mark Williams of Braemar Seascope.

Addressing a Ship Recycling Conference in London recently, the Braemar Seascope Research Director told delegates that deflating international steel prices were likely to translate into lower offers for recycling tonnage in the coming quarters.

Meanwhile, rapid reductions in the value of the Indian, Pakistani and Bangladeshi currencies against the US dollar are causing difficulties for cash buyers and end users struggling to pass on cost increases to their own customers, despite long-term strong recycled steel demand growth prospects in the subcontinent.

Forex risk for recyclers has been compounded by intermittent limited availability of credit. Buyers' banks have been challenged by "sight LC's" – letters of credit that must be honoured on sight, which can be hampered by a shortage of hard currency. Meanwhile cash buyers paying hard currency for recycling candidates are bearing the forex and credit risk of selling in local currency to the recycling facilities.

Falling demolition price assessments, as published by the Baltic

Exchange, are likely to influence second hand vessel prices, says Williams: "For example, it could be argued that overage oil tankers are now priced off scrap, which will lead to increased numbers of younger ships being sucked into the recycling markets."

Williams also presented the hypothesis that spikes in scrapping are driven not only by low freight rates, or high scrapping prices, but by credit crunches. "Credit crunches coincided with peaks in recycling in 1986 (the year the Biffex bottomed out at 550 points and banks had stopped supporting technically bankrupt owners following the savings and loan crisis), 1998 (the Asian financial crisis which led to an Asia-wide credit crunch and high scrapping despite relatively low values per LDT) and 2008/09 (the global financial crisis)".

IMO to consider proposal for mandatory container weighing

ive leading maritime associations along with the Danish, Dutch and the US governments have submitted a proposal to the International Maritime Organisation (IMO) to make it mandatory for port terminal operators and ships to have a verified container weight before a box is stowed aboard ship. IMO's Subcommittee on Dangerous Goods, Solid Cargoes and Containers is expected to consider the proposal at its next meeting in September.

"Misdeclared container weights are a recurring safety problem on shore, on ships, and on roadways. It is time to fix that problem," said Torben Skaanild, Secretary General of the Baltic and International Maritime Council (BIMCO), one of the signatories to the proposal.

Besides BIMCO, the International Association of Ports and Harbors (IAPH), the International Chamber of Shipping (ICS), the International Transport Workers' Federation (ITF) and the World Shipping Council (WSC) have urged the IMO to consider the proposal.

"The co-sponsors of this proposal are recommending a legal requirement

that port terminal operators and ships must have a verified container weight in order to export a loaded container. This will protect workers in the port, on the ship, and other cargo owners against the various risks created by misdeclared containers," said Peter Hinchliffe, Secretary General of ICS.

Though the International Convention for Safety of Life at Sea (SOLAS) requires shippers to declare accurate container weights, it is not enforced by SOLAS parties. As a result, there is no requirement to actually weigh a loaded container. The US Occupational Safety and Health Administration also insist on export containers to be weighed before loading but other nations have no similar requirements.

According to Dr Geraldine Knatz, president of IAPH and executive director of the Port of Los Angeles, for years, the US has required all its export containers to be weighed. "This has not impaired supply chain efficiency, and it has improved safety. The technology exists to weigh containers accurately and efficiently, and it should be a universal, required practice." he said.

To solve the co-sponsors of the proposal urge to make it a legal

requirement that not only the shipper provides an accurate weight declaration, but that the port facility and the ship also have weight verification certificate obtained by weighing the container. According to the proposal, this will ensure the actual weight of all loaded containers is received prior to stowing the container onto a vessel for export.

However, the European Shippers' Council (ESC) has criticised the proposal and termed it as 'a false remedy for an ill-defined disease.' While ESC agreed that something needs to be done about container safety standards, it called misdeclared container weights 'a relatively small risk factor' compared to procedures for lashing, ship maintenance and stowage.

"We admit that misdeclaration of weights needs our attention but oppose the idea that it's the biggest threat to the safety of workers in the supply chain. If the sector is truly looking for a safer supply chain, all parties should take their responsibility." ESC said.

Meanwhile, Christopher Koch, president and CEO of the World Shipping Council, said, "The governments that have co-sponsored this proposal have been leaders at the IMO on the issue of maritime safety. Industry and labour are very pleased to have their support in the efforts to amend the Safety of Life at Sea (SOLAS) Convention and establish an effective solution to this safety issue."

Turbocharging boosts fuel efficiency on smaller ships

ABB Turbo Systems Ltd has played a key role in bringing the benefits of Wärtsilä's RT-flex technology to two-stroke engine installation onboard smaller ships.

Increasingly, owners of smaller merchant vessels prefer two-stroke, low speed engines over their four-stroke counterparts, in light of fuel savings, lower operating costs and lower emissions. To meet this need, Wärtsilä has reconfigured the layout

of the widely specified RTflex50 version-D engine to overcome width limitations that preclude installation of an engine with an exhaustside turbocharger attached. The new layout sees the A170-L unit from ABB Turbo Systems positioned directly above the fly wheel at the driving end of the engine.

The space-saving step opens the way for the fuel-saving engine type to be offered for ship designs with slim stern

ship designs with slim stern

RT-Flex50 Version-D Engine

sections, including smaller tankers, bulk carriers and 'handysize' container vessels.

According to Alexander Mutter, ABB Turbo Systems Ltd. Manager Sales Engineering Marine: "The D version engine is one of Wärtsilä's latest generation 'high efficiency' RT-flex models, and is designed for optimised performance over the full load range."

"'High efficiency' here means consuming 1 g/kWh less fuel over the whole engine load range when compared to the previous standard engine version, in line with fulfilling the International Maritime Organization's TIER II NOx requirements.

For derated engines and special tunings, efficiency gains are even greater. Depending on the engine load, efficiency gains of up to 4.5 g/kWh are possible according to the Wärtsilä layout data for this engine. Lower fuel consumption always reduces CO₂ emissions."

Mr Mutter said that the A170-L needed to

accommodate pressure ratios of up to 4.8, and achieve efficiency as high as 68 per cent at full load, and as much as 3 per cent more at part load. "Due to the high requirements for pressure ratio and efficiency in general, the A170-L unit has proved itself as the best solution for these types of engine."

For ABB Turbocharging, the shop tests focussed on achieving the correct scavenging air pressure and confirming efficiency over the whole engine load range. Stability against surging was also verified, as was turbocharger's ability to operate below set speed and temperature limits.

Mr Mutter said that, as well as confirming the configuration's fuel saving and NOx emissions reducing attributes, the shop tests confirmed that the D engine working with the A170 unit achieved smokeless operation, especially at low loads. He added that the new lay-out conferred more space to service on the turbocharger.

GL Releases GL Crew Manager

The recent announcement of Sweden's ratification of the Maritime Labour Convention, 2006 (MLC 2006) means that only two International Labour Organisations member ratifications are required before the Convention's entry into force. With only 12 months between final ratification by the 30th ILO member and the Convention coming into effect, shipowners, operators and manning agencies should be preparing for the wide ranging impact of the Convention. Germanischer Lloyd (GL) recommends combining the adjustments that the MLC 2006 will require to crewing processes with the implementation of an electronic system to support these processes and provide evidence of compliance. To support the maritime industry in this process GL has developed the GL Crew Manager software system.

Designed to ensure that seafarers are provided with fair, safe and decent working and living conditions, the MLC 2006 Convention requires the documentation of many crewing processes including: checking that all required positions on board filled, that the seafarers are medically fit, well trained and qualified for the duties they are assigned to, and that records are maintained of the seafarers' daily hours of work and rest.

GL Crew Manager helps shipowners, operators and crewing agencies to meet these requirements, by enabling the standardisation and optimisation of many tasks, including: recruitment, planning, safe manning, management of personal data, hiring, vacation and leave management. An optional on-board system also supports on-board management of crew data, certificates and licences, registration of resting hours

and wage calculations - smoothing the process of proving compliance in on-board audits. The system can also aid in the preparations for MLC audits by generating a pre-audit checklist, the required documentary evidence, while also highlighting items of non-compliance which need to be addressed.

For each individual crew member there may be hundreds of associated pieces of data - qualifications, certificates, licenses, contract data, and training needs. GL Crew Manager allows for the efficient management of large crew pools through a graphical view of the current and planned assignments for each individual vessel, and automatic matching of crew availability and suitability with vessel manning requirements.

The data generated by the system can be accessed anywhere, through a

remotely managed server, with role based users access levels determined by the user's login. An intelligent data transfer routine allows synchronisation of the data between office and any vessels using the optional onboard system.

The MLC 2006 will bring together and update more than 60 existing ILO conventions and recommendations, with enforceable requirements for crew managers and manning agencies. Over 55,000 seagoing vessels will have to be inspected and certified before the MLC 2006 enters into force as is expected to take place in 2013 "Statements of Compliance" are currently being issued by some of the Flag States, who have already ratified the MLC 2006. Once the Convention finally enters into force, ships that hold a Statement of Compliance can obtain final certificate (MLC).mg/



We have grown and evolved from being a mere provider of transportation services to an integrated solutions provider. Today, we offer our customers IT-enabled solutions which span planning, optimisation, tracking, safety systems,



emergency response, ad-hoc requirements and actual vehicle operations. Our operational capabilities include hatchbacks, sedans, Sports Utility Vehicles (SUVs), mini vans and various types of buses. The focus has always been on three critical aspects: safety, on time performance and transparency. We see these three aspects as the value pillars of the solutions we design and operate.



Pirojshaw Sarkari CEO - Mahindra Logistics

Mahindra **Moving People** Around

Mahindra People Transport Solutions (MPTS), a division of Mahindra Logistics, has been in the business of offering customised people transport solutions to large and medium businesses across the country for the last 10 years.

Anuradha

tarting with a focus on providing solutions to companies in the IT, ITeS and BPO space, MPTS today has expanded its scope to include industries like banking and financial services, consulting and manufacturing.

MPTS has also been organising events for their business partners in several cities. These events, targeted at small and medium transport business owners, are an initiative to engage with, reward and recognise

business partners who are fundamental to their operations. The success of such initiatives will allow MPTS to better source vehicles and support its operations. Selvan Dasaraj, Vice President - Mahindra People Transport Solutions, in an interview with *Maritime Gateway* said, "It is such instances of truly engaging with our community of business partners and offering opportunities for growth and success to those who work with us which defines our success. Our people transport solutions business has been growing robustly and it is our objective to not only operate successful people transport solutions for our customers, but also to grow inclusively and offer opportunities to business owners who would like to invest and partner with us.

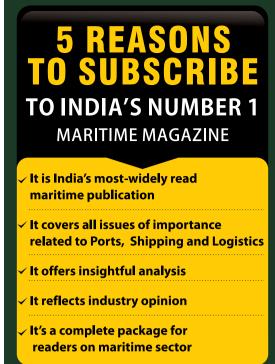
Our growing community of business partners is the embodiment of Mahindra RISE. We would like to have many more small business owners partner with us in the future."

Mahindra People **Transport Solutions** (MPTS), a division of Mahindra Logistics, offers customised, technologyenabled people transport solutions to the IT, ITeS, BPO, financial service and manufacturing industries. MPTS safely and securely transports more than 60,000 employees per day for its customers, performing more than 20,000 trips and deploying over 6,000 vehicles.

Mahindra Logistics, a part of the \$15.4-billion Mahindra Group, is an integrated third-party logistics service provider specializing in both supply chain management and people transport solutions.







Yes, Maritime Gateway, is one-of-its kind maritime business magazine in the country that has become a vital source of information for all ports, shipping and logistics players in the maritime industry. This Magazine addresses key issues and provides insights through analytical articles, comments and features. News, Port Scan, Interviews, Region Update, Technology, Policy, Equipment, Education are some of the regular incisive sections.

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maritime gateway

Dry, but Happening!

A city known for its IT industry, Bangalore is now slowly transforming into a dry port hub, moving cargoes ranging from gizmos to gherkins.

Anuradha

hile cities like Chennai, Visakhapatnam and Mumbai are immediately identified as sea ports, for many, Bangalore is hardly viewed as the focal point of brisk export and import activity. Ask around and most will tell you that they associate Bangalore with the IT industry. However, the fact is, Bangalore, as a dry port, is a hub for cargo movement with brisk activity happening around the year. Indian Railway's decision to move inland container to Bangalore only goes to prove the fact that containerisation of exports and imports does not really have to begin and end at the ports. With transport linkages between ports and the hinterland, regular container trains are run to and from ports to Container Corporation of India's terminals in the hinterland and some of these terminals are also served by road.

When it all began

Travelling back in time, it was in the vear 1981 that the first ISO container was moved inland by the Indian Railways and this was to Bangalore, which became India's first Inland Container Depot (ICD). Today, the Government even allows consolidation of LCC, in Bangalore, with respect to shipping lines, to help small importers / exporters who deal with cargo which is small in volume. Bangalore, India's first dry port, is a city of choice for cargo being shipped out of Chennai Port which is a mere 327.6 km from Bangalore – an overnight journey by train or a six hour drive by road. Inland Container

Depot (ICD), Bangalore, has the power to clear goods of imports received in containers by sea to Chennai & Cochin. These containers arrive by rail or road and are custom bonded by the Container Corporation of India.

A happening place

ICD is spread over 54 hectares of which nearly 27,720 sq m is fully protected and allotted for stacking of international containers. IDC handles

| COMMODITY-WISE REVENUE GEN AT ICD BANGALORE | ERATED (₹CRORE) |
|--|--------------------|
| Commodity | 2011-12 |
| Electrical machinery | 203.42 |
| Machinery excluding machine tools & their parts & accessories ball or roller bearing | 131.33 |
| Plastic | 84.77 |
| Iron & steel | 33.16 |
| Mica, articles of stone, plaster cement, asbesto | s 33.03 |
| Copper | 12.91 |
| Optical, photographic, cinematographic, measuring, medical and surgical instruments | 17.83 |
| Dyes, colours, paints & varnishes | 9.74 |
| Aluminium | 26.41 |
| Man-made staple fibres | 8.09 |
| Motor vehicles & parts | 15.59 |
| Base metals | 9.74 |
| Pulp paper, paper-board | 10.21 |
| Rubber | 12.13 |
| Glass & glassware | 8.31 |
| MM fibre & yarn | 6.09 |
| Misc. chemical products | 8.45 |
| Organic chemicals | 6.65 |
| Ceramic products | 6.54 |



50,000 teu per annum and there are three rail lines capable of reception and dispatch of these containers. Apart from two container stacking vards, one international and another domestic yard with a handling capacity of 1,000 containers coming from Chennai and Cochin by rail, ICD also has sophisticated handling equipment like top lift trucks, terminals, tractors and forklifts for complete stuffing and de-stuffing of cargo. There is a 2x2 lane gate/inspection complex for the Customs to examine the goods and ensure smooth clearance of the goods. There is a pitless weigh bridge with a capacity of 60 tonnes. Air-conditioned storage of cargo and multi stack warehousing are available at Bangalore.

ICD Bangalore has six bonded warehouses spread over 14,000 sq m for warehousing export and import cargo. There is one exclusive warehouse for storing export coffee beans. With bonded trucking being initiated from Chennai, goods that arrive by flight to Chennai are brought by road to Bangalore and then bonded at ICD. Growing at a steady rate, ICD Bangalore today handles 21,000 loaded containers and 12,500 empty containers per annum.



Its Customs revenue for the year 2009-10 was ₹613.95 crore.

In order to combat delays, highspeed, heavy-duty Volvo trucks are used extensively in the region to provide an alternate road connection between the ICD at Bangalore and gateway port of Chennai. While ICD's container terminal handling is managed by B.Ghose and Co Pvt Ltd, its transportation needs are





Machinery, garments, vegetables, granite, pharmaceutical products, coffee seeds, are some of the

commodities being exported from Bangalore.

77

K Adisesh, Vice President, Bangalore Custom Agents' Association

ICD Bangalore's top exports over the last five years

BGA parts of heavy South Korea duty automax actuators

Garments and textiles Poland

Articles made of Saudi Arabia polypropylene binder tapes

Ball nut Spain (flange nut & flange nut)

Automobile components Germany

Aluminum, transformer United Arab Emirates ms tanks/clamps cover plate assembly

Wiring harness for Japan automobiles

Electrical items, Rosewood United States furniture, textiles, gherkins & vinegar in jars

Plain paper Sri Lanka

Dimensionally cut and Germany dressed granite finished goods

Ferric oxide powder Japan

Aluminium oxide / silicon Thailand carbide wheels, turned & forged automotive parts

Ready to use machine Japan parts/carbon/steel



Bangalore sees a lot of export and import activity happening around the year. With granite, gherkins and electronic items taking the lead, Bangalore also sees a lot of cargo related to steel, rice, incense sticks, textile, shoes, leather, chemicals and mango pulp passing through the port.



J Shivakumar, Partner, SMR Services, a sub-contractor of B.Ghose. Calcutta.

compensated by Vikram Logistics & Maritime Services, both contracted by CONCOR in Bangalore. But it is import which is pushing the warehousing facilities' corners for ICD.

Tech savvy!

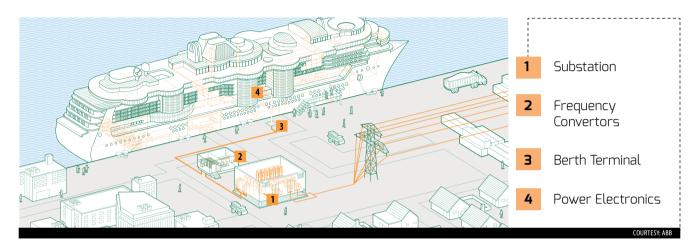
Giving Information Technology, exports in ICD have been brought under the EDI system which enables processing of duty-free shipping bills and DEEC/DFRC/DEPB/EPCG Scheme shipping bills immediately. ICD also boasts of a Message Exchange Server.

Managing customer deadlines remains challenging!

In spite of all the activity, there is a general feeling echoed by logistics solution providers, transportation companies and even by ICD contractors that keeping up the commitment on delivery continues to be their single biggest challenge. Even as they strive hard to send goods to ports, completing custom formalities and connecting to airliners/vessels at ports remains unpredictable making on-time delivery their personal nightmare.

For some like **K** Adisesh, Vice President, Bangalore Custom Agents' Association, "If recession continues growth is likely to slow down even more. However, if monsoons are good, there is stability in foreign currency and industries worldwide start importing more, then exports will also improve and growth will be good in the future.

Ports Opt for AMP to Reduce Emissions



Iternative Maritime Power (AMP) is gaining momentum in the US with two of the country's largest ports placing multiple orders for Cavotec's shore-to-ship electrical system. The AMP system is expected to help the Port of Long Beach and the Port of Oakland in improving safety and environmental performance. The orders with Cavotec involves the supply of shore power systems built into the quayside that enable ships to switch off their engines while docked and connect to gridgenerated electrical power. Power supply for reefer containers, lighting, heating, food preparation and cargo handling then can be run directly from the port.

"These projects are the latest stage in our on-going work to meet the growing safety and environmental demands of our partners in the ports industry on the west coast of the US.

With legislation regulating emissions at ports set to tighten in the years ahead, we anticipate continuing to work with our partners worldwide to maintain their position as leading environmental performers," said Ottonel Popesco, CEO, Cavotec.

Supply of power to a ship is a critical and a crucial issue. It acquires greater significance in light of air pollution caused while the ship is moored. A ship while moored turns its engines off but it still requires power to run its various equipments like refrigeration, heating, lightning and emergency



MOBILE AMP UNIT

equipment. High consumption of diesel is required to keep the engines functioning for these functions. It is also not considered to be a costeffective option to keep the engines running while the ship is moored. This noise and presence of pollutants is harmful for the crew members and the entire environment.

Cold ironing or AMP is an alternative and a better method for providing electricity to the ship to carry out its daily and necessary functions. When the ship meets its energy demands from the shore while it is moored is called cold ironing

> or AMP. It allows shifting the function of generating power from the engine room to more environmentfriendly power plants.

A heavy wire, resembling an extension

cord, is extended from the pier, plugged into the ship's receptacle and power is supplied to the ship to operate its machinery, but not its main engines. This allows the ship to shut down the diesel engines and reduce emissions.

Most ships need to be retrofitted to use the AMP system and the port area infrastructure must be in place to provide the additional electricity. But some ships like tankers are not readily adaptable to AMP because they need the ship's machinery to unload their cargo.

Prevalent in the US, cold ironing has been used by the US Navv and is considered standard at its ports including the Port of Los Angeles, Port of Long Beach and the Port of Seattle. Besides, Lübeck Port and the ports of Kemi and Oulu in the Gulf of Bothnia, Zeebrügge and Gothenburg in Germany and the port of Antwerp in Belgium have a provision of cold ironing.

Policy Debate on Infrastructure

nfrastructure segment in the country is poised for accelerated growth in the coming years. Investment in the sector has already witnessed a rapid rise in the last few years with estimates suggesting that as a percentage of GDP it has increased to 8 per cent in 2010-11 from 4.9 per cent in 2002-03. It is likely to grow to 10 per cent of the GDP in the Twelfth Five Year



Plan (2012-17). The success in garnering private sector investment in infrastructure through the public-private partnership (PPP) route during the Eleventh Plan is also set to continue. PPPs are expected to augment resource availability as well as improve the efficiency of infrastructure service delivery.

It is expected that at least 50 per cent of the projected investment requirement of over \$1 trillion during the Twelfth Plan will come from the private segment as against 36 per cent anticipated in the Eleventh Plan.

Some of the investment opportunities for building transport infrastructure in India include around \$55 billion (₹2,77,000 crore) worth investments planned in major and non-major ports by 2020; private sector is expected to contribute \$10 billion (₹50,000 crore) of the total \$13 billion (₹65,600 crore) investment required by the Indian airports in five years; Highways sector is expected to attract investments worth \$123 billion in five years and \$300 billion is planned to be spent on upgrading rail infrastructure (including new rail lines, double/ multiple lines, high-speed rail) by 2020.

Event: India Infrastructure Summit 2012

Organisation: FICCI

Theme: Accelerating Implementation of Infrastructure Projects

Date: August 31, 2012

Venue: Federation House, Tansen

Marg, New Delhi

Inauguration: G K Vasan, Minister for Shipping, Government of India

This event will bring together the government, policy makers, regulatory authorities, infrastructure developers, construction companies, financial institutions and other stakeholders to deliberate and share their experiences for building world class infrastructure.

The Summit will also provide an opportunity to interact with policy makers, senior government officials, and leading infrastructure developers, get insights from global experts and get first-hand information on upcoming



infrastructure projects in different states and deliberate on diverse topics relating to policy and regulatory regime, issues & challenges, global best practices.

The summit is aimed at policy makers, infrastructure developers (Public/ Private, government & public sector undertakings, consultants, private equity investors, engineering companies, logistics /supply chain companies, academic & research bodies, trade publication/ media and allied industries.

BETWEEN THE COVERS



Bunker Fuel for Marine Engines –

A Technical Introduction

By Nigel Draffin M.I.Mar.E.S.T.

First Edition : 2012

: 140 pp plus 22 prelims Pages Published by : Petrospot Limited Price : £75 / €90 / US\$125 + carriage

Bunker Fuel for Marine Engines - A Technical Introduction focusses on the complicated relationship between ships' engines and the marine fuels that power them.

Complete with extensive glossary and full of photographs and technical illustrations, the book has been hailed by the highly respected industry veteran of Exxon and DNV Petroleum Servicés, Dr Rudolph Kassinger, as 'a comprehensive seguel to John Lamb's seminal treatise *Petroleum and its Combustion* in Diesel Engines. That book was first published in December 1955, and is long out of print. According to Dr Kassinger in his Foreword to Bunker Fuel for Marine Engines, Lamb's book, 'now has a worthy successor'.

According to Nigel Draffin, the book provides the reader with a solid introduction to a subject which every supplier or user of marine fuels would do well to understand.

Draffin believes that 'a ship's engine room is a place of refuge for engineers but a place of mysteries to most others' and uses the thoroughly researched book to take the reader on a technical tour around the equipment that will be found there, from main and auxiliary engines to generators, refrigerating plant and other fuel-using machines.

For many readers, this highly illustrated book is a chance to look underneath the hood and, perhaps for the first time, to recognise what makes this equipment work and why some fuel problems are more significant than others'

Draffin takes the reader through the complete process of burning fuel onboard, from storage of fuel to dealing with the exhaust, before looking at the different types of diesel engine and their specific fuel requirements. He also looks at gas turbines, fuel cells and developments in shore power, and covers boilers, fuel and accommodation heating and incinerators, before also looking at waste heat recovery systems.



About Nigel Draffin

Nigel has been involved in shipping for almost 50 years and with the commerciál bunker market for over 25 years. He is a founder member of the International Bunker Industry Association (IBIA)

and has served several times on its council of management and executive board. In April 2012 he became Chairman of IBIA.

VAT Dampens Bunker Demand

Despite the huge demand for bunker supply at Indian ports, volumes remain sluggish due to tax issues.

Basheer Ahmed, CEO, Chemoil Adani, highlights the need for state governments to realise the

multiplier effect that competitive bunker fuel can have on economy.



Basheer Ahmed CEO, Chemoil Adani

What are your current operations in bunkering?

We are supplying bunker fuel at Mundra. Recently we have added Goa. Now, we are in discussions with Haldia for taking up storage. Once the permission to load barges is accorded, we will commence physical operations in Haldia as well. In addition to these operations, we take oil from oil companies and supply to ships by taking the credit risk of the shipowners because oil companies neither take risk nor extend any logistic support. They just give oil. But bunker supply means much more than that.

What are the global trends in bunker market today? How is the demand-supply scenario?

Bunker demand hinges on pricing structure. Bunker fuel price fluctuates dynamically. In view of the current economic scenario, we are acting diligent in our supplies. We do not know when the shipping companies could come up with payment issues. Our risk management division advises us from time to time on the market movements.

Demand wise, the requirement of bunker fuel varies according to the size of the ship. It can be as low as 200-300 tonnes and as high as 3,000 tonnes. Because of the high cost of oil, many ships would not like to hold inventory of oil for long time. Earlier, ships used to plan their fuel requirement for 20-40 days sailing. Now they have become price sensitive and are trying to buy wherever it is cheaper keeping inventory for short duration of 7-8 days journey.

Slow steaming is another practice ships have adopted to save fuel. Shipowners are also trying to experiment on whether engines can burn high viscosity fuel. The higher the viscosity, oil becomes cheaper. So it is not consumption but cost which is influencing the decision.

Container ships started burning 700 viscosity fuel. But the challenge is it is not available at all ports as storing it is quite difficult.

How much of bunker fuel is sold in India and what could be the future demand?

At Mundra we are selling about 700,000 tonnes per annum. When we started operations, we envisaged the demand to be more. But due to the ambiguity on VAT in Gujarat, things were moving pretty slow in spite of the tremendous potential that exists. Other than Mundra, the volumes are close to 350,000 tonnes per annum. We want to expand our operations to literally every port in India.

Assuming that there is no VAT or with 1 per cent VAT, the volume could easily begin at 3 million tonnes and can go up to 5 million tonnes per annum. As it progresses by 2020 we can see the

demand at 8-9 million tonnes. But to meet this kind of demand, infrastructure like barges, storage tanks, good pumping facilities should be in place.

Is it only VAT or there are any more challenges coming in the way of creating bunker fuel demand?

Mainly it is VAT. Let me cite a classic example. Visakhpatnam is actually an attractive destination for bunker trade. But the existing VAT of 14 per cent is killing the business. Another irony is that Hindustan Petroleum Refinery in Visakhapatnam sells about 30,000 tonnes of fuel oil to Singapore where it is sold as bunker fuel at prices cheaper than Vizag.

Other than tax, infrastructure is another major issue. All the private terminals do not have proper facilities to handle fuel oil. Ideally fuel oil should be supplied to ships through pipeline. As laving pipeline to every berth being a capital

| AXATION | | |
|-----------|--------|-----------|
| | BONDED | DUTY PAID |
| Mumbai | 0 | 12.5 |
| Chennai | 4 | 5 |
| Vizag | 14.5 | 14.5 |
| Cochin | 0.505 | 12.63 |
| Goa | 1 | 12.5 |
| Tuticorn | 4 | 5 |
| Kakinada | 14.5 | 14.5 |
| Mangalore | 14 | 14 |
| Kolkata | 1.2 | 4 |
| Paradip | _ | 12.5 |
| Haldia | 1.2 | 4 |

CHALLENGES AT INDIAN PORTS

- Non-availability of pipelines
- No dedicated bunkering terminal / jetties
- Shortage of storage tank capacities
- Short supply of bunkering borges along coast
- Non-availability of ISO spec compliant fuels at all ports

investment, it has become a practice to supply the fuel through barges. Some of the ports do not have facilities even to load barges through pipelines. It is done by tankers. Kandla is one such example.

Why do you think the issue of VAT is not addressed so far?

State governments seem to be least bothered about encouraging bunker facilities. Actually the governments should realise that by providing bunker fuel at competitive rates, states can attract more ships to call their ports there by having multiplier effect on the economy. When bunker facilities are provided, ancillary businesses will also grow as ships tend to spend more time at ports.

Bunker suppliers who were fragmented till now also realised the need to come together and sensitise the governments through dialogue. It might take some more time to see any positive momentum.

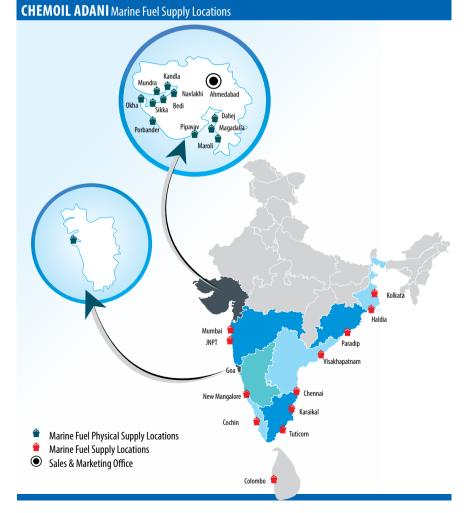
With environmental regulations getting stringent, what is their impact on bunker trade?

We are guided by IMO regulations. The current guideline recommends supply of 3.5 per cent sulphur grade oil in Asia-Pacific region. We have to meet environmental regulations and without any doubt we will meet them. But how these guidelines impact bunker supply will be known in 2020. By then guidelines will insist on fuel supply with 0.5 per cent sulphur levels which is next to impossible. It will become equivalent to the cost of diesel, making it unviable. And with recent guidelines form US asking ships to burn 0.5 per cent sulphur grade oil within 200 nautical miles, now ships hereafter are forced to carry three grades of oil.

Though LNG is the cleanest fuel, its active use is a long way. First, ships suitable to use LNG as fuel need to be built. Even then LNG becomes only 5 per cent of the total fuel consumption of the vessels.

What is the vision for Chemoil Adani?

To grow as a leading bunker supplier in India and service all our clients whenever and wherever they need fuel at globally competitive prices.





In an effort to build a comprehensive logistics chain, Arshiya International is integrating all the verticals it operates in - rail, rail infrastructure, Free Trade and Warehousing Zones (FTWZ), industrial and distribution hubs, forwarding, transport and management solutions. In April 2008, Arshiya acquired a ₹50-crore license from the Railways to operate a pan-India rail service, giving rise to Arshiya Rail Infrastructure. Arshiya Rail has substantial number of modern rakes, customised containers, new sidings, pan-India network, and superior connectivity. With capability of large-scale evacuation of cargo from ports, domestic distriparks, free trade warehousing zones, customer sidings, it promises to save time and cost significantly boosting profitability. The company has 20 trains at present, and is operating from 22 locations. In this interview, Sajjal Mitra, CEO, Arshiya Rial Infrastructure, talks about challenges in private train operations and company's expanssion plans. Ritu Gupta

Today most private rail Container Train Operators (CTO) are facing losses. What about Arshiya?

AI do not want to speak for other train container operators. Our rail business has been positive right since inception due to the unique business model we have adopted. Arshiya has focussed on building long-term strategic relationships with customers. By providing them with dedicated railway rakes as well as customised containers. This has led to higher efficiency, lower overheads, and faster turnaround times, enabling customers to enjoy smooth and debottlenecked operations. This reinforces Arshiya's image as one of the more serious players in this space.

We believe in this space, and are willing to invest huge amounts of capital. For instance, we are building a mega terminal at Khurja, and another few will follow suit very soon. Our approach to the entire business of container trains operation has been to provide solutions to our clients, unlike many others. Our USP is that we offer total supply solutions, from transport and handling, to software to manage freight running, to supply chain solutions, and FTWZ. This enables the entire package to be cheaper for the client. The kind of infrastructure we have developed is unparallel.

We have been able to achieve success as we didn't restrict ourselves to twothree trains, because we looked at the logistics sector from a future perspective. Secondly, we don't only cater to exim and domestic businesses but also to free trade warehousing. We started with the domestic market, as the infrastructure available showed that it was better to first get into that segment first. What's more, in 2008-09, exim was in a bad shape and domestic sector was growing; so we capitalised on that. We approached major companies and gave them our long-term commitments. For example, we went to Vedanta and they initially took time in understanding our approach. Its factory in Jaduguda in Odisha was exporting out of Visakhapatnam. The monthly export was about 10-12,000 tonnes, and it was using 100 trucks a day for moving the goods, which meant dealing it about more than 10-15 operators. Since their cargo was meant for export, they were looking for door-to-door solutions, which railways could not provide. Then we stepped in, and took its products from the factory, and got it loaded on the ships in Visakhapatnam, thereby providing end-to-end solutions. They were happy with this arrangement. Initially we operated on an ad hoc basis, and then signed an agreement for three years. We have done with other clients also. The concept of agreements was never there till the time we came in. Now people are looking at it.

Tell us how infrastructure problems affect your business.

We have problems in terms of our Arunning. The line capacity is minimal. Barring the JNPT and Delhi route, all routes are congested and one gets priority as per the running, leading to lot of delays. As we went along the way, the railways thought that the container train operators were their competitors. Which is not the right approach. Railways interpretations of concessional agreement, and these interpretations are not good for our business. For instance, they enhanced the rates of 126 commodities, making them unviable to move. Moreover, we had taken a licence for a pan-India network, but they do not allow us to get into private sidings, though their trains are going there. There are so restrictive. From time to time, we had to tell the railways that they needed to interpret the rules as per the spirit of the agreement. We also represented to the competition commission of India, and we believe in a positive approach to the whole thing. But all these things do affect profits, as today we need to rethink our strategy. We cannot move 126 commodities freely. We have to seek permission from the railways which takes a lot of time. At times, it refuses also. I don't think it is right for the railways to create problems for our small business segment.

Arshiya made some pioneering moves in FTWZ space. How are the current operations?

Arshiya International has developed India's first FTWZ with an area of 165 acres at Panvel, Mumbai, 24 km from JNPT Port. This FTWZ has enabled India to compete in regional hubbing and also process cargo in and out of India more efficiently, thereby improving logistics connectivity of India. Arshiya



SAJJAL MITRA, CEO

is developing five FTWZs in the north, south, east, west and central India. Our FTWZs are doing excellent. Initial hiccups were there but we realised that the whole of the Indian subcontinent was either being fed from Singapore or Jebel Ali. So we said why not India have its own FTW, and allow all the profits to stay in the country. Arshiya rail is going to benefit in terms of the intra FTWZ movement. It will also benefit from the exim movement.

Arshiya FTWZ in Panvel has been operational since December 2010. Today we have more than 200 companies operating out of the FTWZ and every month we are adding around 20-25 clients. As a part of Phase 1, we have four warehouses operating at more than 100 per cent efficiency. The companies currently operating through the FTWZ are from various sectors like automotive, oil & gas, electronics, beverages, retail etc. A lot of trading units and freight forwarding companies are also operating out of the FTWZ. The FTWZ at Khurja was recently launched in January 2012. With this, our clients will also have the option of storage, value addition, consolidation and distribution of EXIM cargo in the north. There will be a bonded movement of cargo between FTWZ at Panvel and FTWZ at Khurja. This North-West route is a major corridor for exim cargo movement. Arshiva will also run its railway rakes on this route between the two FTWZs, which will enable efficient movement of goods. Arshiya's infrastructure in North will also have a domestic warehousing hub and a rail siding. Once the FTWZs in Central, South and East are also operational, we will have pan-India connectivity. With this unique model coupled with Arshiva's integrated services, we are confident to provide customised solutions to our clients based on their logistics requirements and bring about a significant improvement in their profitability.

What are your future expansion plans in rail operations?

Our clients want us to give more Aservices. For instance, Vedanta wants us to take its cargo to Mumbai. We have just acquired 10 more rail rakes on a 10 year lease from GATX Corp, a USbased company. The Indian Railways had launched the wagon leasing scheme in the rail budget of 2008. The agreement will enable us to free-up capital and we will use the money to fund other investments like building rail terminals. The 10 rakes would be coming from August, 2012 onwards. In next phase of our expansion plans, we would add another 30 rakes. Preference would be leasing. By mid-2012, we would develop another terminal. Funding is not an issue.

Given the problems in private rail business, what is your outlook for the industry?

Right now, the industry Adisheartened because of various problems whether it is because of the railways, business at large, or future projections. Anybody in this business has to first believe in logistics and rail space, and the fact that the country is growing. If one does not believe in these things then there is no point investing so much money. Secondly, business should be done in such a manner that scalability of infrastructure should not be a problem. One should not be discouraged by the present scenario, because if sectors like telecom can grow, so will the logistics industry.

Equity share contribution for Ennore-Manali road project

G K Vasan, Union Minister for Shipping, handing over a replica of a cheque to S R Tholia (extreme right), General Manager (PC), NHAI. PK Sinha (extreme left), Secretary, Ministry of Shipping, and Atulya Misra, Chairman, Chennai Port Trust, are also seen.



CFBA conducts 74th AGM

CFBA Calcutta Freight Brokers Association (CFBA) recently had its 74th Annual General Meeting. Capt Deepak Tewari, CEO, MSC Agency (India) Pvt Ltd, M L Chopra, President and Bharat Jain, Vice-Chairman of CFBA are in the picture. The meeting discussed causes of concern in a riverine port like Kolkata in the face of Infrastructural constraints such as paucity of berths at Haldia accompanied by limited Drafts and shortage of cargo handling equipments.





00CL Green Week 2012

Green Week has become an institution at OOCL, in which all colleagues participate, make and commit to new goals in environmental care. With numerous environmental care (EC) initiatives going on throughout the year, OOCL Green Week remains the occasion where we see most number of colleagues participating in various activities. This year the Green Week was scheduled from 01-July-12 to 7-July-12. The theme, this year was "Going Green for Sustainability" to reaffirm the focus and efforts we have made together over the years on Environment Care. To anchor further on those efforts with more sustainable impact to local communities, most regions have designated a day during 2012 Green Week as their 'OOCL Employee Volunteering Day'.



Konecranes' Smarter Cabin wins award

Konecranes' Smarter Cabin, has received the Fennia Prize 2012 award. The Smarter Cabin provides crane operators with an ergonomic and comfortable work place with improved visibility of the work area. The new cabin can be used for container handling with rail mounted gantry cranes (RMG), rubber tired gantry cranes (RTG) and straddle carriers

agenda



It's time for trade shows, exhibitions and conferences in the maritime sector. Here are a few events lined up for the coming months.



SEP 04-07

SMM 2012

Venue: Hamburg Messe Fairground - Hamburg, Germany

Attend for: The 25th SMM (shipbuilding, machinery & marine technology international trade fair Hamburg) from September 4-7, 2012 will once again be fully booked. "This puts us ahead of the 2010 SMM, which was already very successful," says Peter Bergleiter, Business Unit Director at Hamburg Messe und Congress GmbH (HMC). "In particular, demand from major Asian shipbuilding nations has increased once again," he adds. Apart from numerous other Chinese companies, China's two leading shipyard associations, CSIC and CSSC, will also be sending delegations. More than 30 countries will set up national pavilions and, for the first time, Argentina will be among them. Over 2,000 exhibitors from 60-plus countries will be represented at SMM, some 150 of them for the first time ever.

Wide Spectrum "Green Shipping" will again be one of the focal points of this SMM. Apart from recent dramatic bunker cost increases, it is mainly stricter international environmental regulations that force the industry to take action in areas such as ballast water management.

Financing is becoming an ever-more difficult aspect of ship new building projects, a fact owed at least in part to stricter legal requirements for financing banks. This will be one of the key topics on the agenda of the SMM Ship Finance Forum (title: "Tomorrow's Champions") held jointly by HMC and Financial Times Germany for the fourth time

At the MS&D international conference on maritime security and defence Hamburg to be held in conjunction with SMM, high-level international naval representatives and security experts will discuss current challenges and proposed solutions.

More information: www.smm-hamburg.de

SEP 21-22



Venue: Novotel Varun Beach, Visakhapatnam

Attend for: Ports on India's east coast, which were lagging behind those on the west coast in terms of cargo movement, are now garnering a greater share of the business as the nation's trade with China and other East Asian economies surges. The cargo shift will likely to spur the development of not just port and allied infrastructure on the east coast, but also that of special export zones and the industry in general. Besides rising trade with China, the

demand for coal to fuel power projects in eastern India has also led to growth in the east coast ports. With the increase in rail connectivity, a lot of the coal imported through western ports will be routed through eastern ports and moved by train to meet demand in the hinterland. The profile of the east coast is changing with the creation of additional cargo-handling facilities. Coastal shipping and inland water transportation, though long neglected, are now poised to play a vital role.

In three business sessions, this conference will discuss:

- · SWOT analysis of east coast ports
- Cargo forecast; trends in shifting cargoes;
- Increase in throughput
- PPP projects in major ports; improving
- · Infrastructure; solving the capacity issues
- Container cargo handling and terminal development
- Shipper's perspective of east coast ports LNG terminals and bunkering opportunities
- Coastal Shipping: opportunities and challenges

More information: www.gatewayecmbs.com

SEP 26-28

Intermodal India

Venue: Bombay Exhibition Center, Mumbai

Attend for: An integrated exhibition and conference event for international trade, logistics, transport and cargo handling in India, the event offers exhibitors from all over the world new products, latest equipment and technology innovation and a vast conference programme.

More information: www.intermodalindia.com

OCT 08-10

India Shipping Summit

Venue: Trident Hotel, Nariman Point, Mumbai

Attend for: The summit will take a prescriptive look at the unique challenges facing India's maritime industry, its ambitions and what's realistically achievable – a reality check for India shipping – through high-level participants, blend of panel discussions, debate and social networking.

More information: www.indiashippingsummit.com

DEC 05-07

6th Automotive Logistics India

Venue: Hilton/Janakpuri Hotel, New Delhi

Attend for: The event will focus on how the transportation infrastructure is coping with sales growth, examine the latest developments and strategies, including multi-modal and answer questions like how is India developing the customer service side and is there an intelligent after-sales parts strategy.

More information: www.automotivelogisticsindia.com



OPINION



No Easy Recourse

Dr.-Ing. Herbert Aly, President and CEO, Blohm + Voss Shipyards, talks about rough times facing German shipyards, need for maintaining product excellence through innovation and need for major investments through state support.

he marine equipment industry is passing through rough times with Asian shipyards making efforts to increase local content. Triggered by the growing overcapacity in shipbuilding, shipyards in Asia especially China found it difficult to market most of their new ships. However, the localisation of ship content is no good news for exportdriven European, especially German, marine equipment suppliers.

In order to tide over the crisis, they need to maintain product excellence through innovation. It is still the German and European marine equipment companies that set international standards with their development capabilities, based on outstanding problem solving expertise.

With innovation gaining ground, 'Green Shipping' will also become very relevant and it needs to be supported for ecological reasons. It gives growth potentials for the German marine equipment industry. Though there are opportunities in development of reliable ballast water treatment systems and scrubbers, it has to be considered on a differentiated basis to see whether it will also benefit German shipyards.

While shore power connection to ships naturally reduces emissions in terms of the overall environmental footprint, it is replacing one evil with another, depending on which energy

resources are used. LNG, for example, gives enormous innovation potential in view of the CO₂ emission situation. The obstacles to rapid market introduction are not so much in the technology, but infrastructure problems. German engineering expertise is well placed to provide technological solutions to these problems.

There will also be a need for major investments, and they are hard to obtain in an energy policy framework which looks uncertain. Perhaps, an area where we need state support. But that would inevitably involve an acknowledgement from politicians that energy has a price

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that is likely to rise rather than fall. Until that happens, people will just want to enjoy the harvest without sowing the seeds.

And then, of course, there is business in the offshore wind sector. While wind turbines, with their relatively high efficiency will be the fastest way into competitive market positions, the pace of development in this sector has been greatly overestimated. We have to make use of the cost disadvantages we have in building vessels for installation and servicing of these wind farms.

A problem area for German shipyards in dedication to specialpurpose shipbuilding is competitiveness. It would not only be presumptuous to say we have a technology lead on a broad front, but it would also prevent us from seeing the action we need to take.

What is vital in special-purpose shipbuilding is not just to be technically superior. A shipyard needs other qualifications, too. It needs to be capable of rapidly solving complex, project-related problems, with strong project management and a high level of expertise among the shipyard engineers. It has to maintain design capacities and it has to realise that up to 80 per cent of the work in building such ships may have to come from subcontractors. All of this calls for very different structural approaches.

CARGO SHIFT IS TAKING PLACE... ARE YOU THERE TO MEET THE DEMAND?



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The profile of the east coast maritime trade is changing!



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