India’s premier maritime business magazine

₹ 100

maritime gateway

JUNE 2015 WWW.MARITIMEGATEWAY.COM

RNI NO: TELENG/2009/30633 POSTAL REGISTRATION NO: LII/RNP/HD/1137/2013-15

DATE OF PUBLICATION: 26/05/2015 DATE OF POSTING: 28/05/2015

FURNITURE IMPORTS: AN UNTOLD STORY

THE NEVER ENDING STORY OF EMPTY CONTAINERS

Empty container repositioning will continue to plague the Indian maritime sector without innovations both from the industry and the government







जवाहरलाल नेहरू पत्तन न्यास
JAWAHARLAL NEHRU PORT TRUST

जनेपन्यास
JNPT

10 solid reasons why JNPT is No. 1


Most Economic Port


Widest Network


Excellent Rail-Road Connectivity


Specialised Handling Equipments

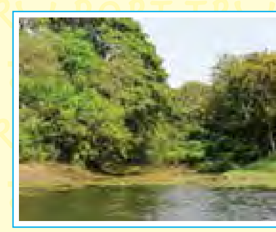

World-class Automated System


Extensive Warehousing


Deepened & Widened Channel


Top-notch Logistics & Service Facilities


Superior Infrastructure


Most Sustainable Port with 800 Hectares Nature Park

Doesn't that all add up to good reasons why JNPT is No. 1?

भारत का नं. 1 कंटेनर पोर्ट
India's No. 1 container port

प्रशासन भवन, शेवा, नवी मुंबई–400 707
Administration Building, Sheva, Navi Mumbai - 400 707
ई–मेल/E-mail : info@jnport.gov.in • वेबसाइट/Website : www.jnport.gov.in

India's premier maritime business magazine
maritime gateway

Editor-in-Chief and Publisher Ramprasad
ramprasad@gatewaymedia.in

Associate Editor Deepika Amirapu
deepika@gatewaymedia.in

Associate Editor Omer Ahmed Siddiqui
omer@gatewaymedia.in

Assistant Editor Itishree Samal
itishree@gatewaymedia.in

Sr Correspondent Mohammed Shareef MP
shareef@gatewaymedia.in

Sub Editor Reshmi Chakravorty
reshmi@gatewaymedia.in

Sr Designer Vijay Masa

Designers Nagaraju N S, Nadeem Ahammad

Marketing & Sales

National Satish Shetti, Manager – Sales
satish@gatewaymedia.in – 099207 05534

East Nikhil Doshi, GM – Sales
nikhil@gatewaymedia.in – 098369 96293

South & International Vinod G, Sr Manager – MarCom
vinod@gatewaymedia.in – 099498 69349

Client Relations
Madhukar – Manager
madhukar@gatewaymedia.in – 093937 68383

Digital Edition Wesley Rajiv

Maritime Gateway is printed by R Ramprasad published by R Ramprasad on behalf of Gateway Media Pvt Ltd, #407, 5th Floor, Pavani Plaza, Khairatabad, Hyderabad – 500 004, Telangana, India and Printed at M/s Kala Jyothi Process Pvt Ltd, 1-1-60/5, RTC Cross Roads, Musheerabad, Hyderabad - 500 020. and Published at Gateway Media Pvt Ltd #407, 5th Floor, Pavani Plaza, Khairatabad, Hyderabad – 500 004, Telangana, India

Regd. Office: H.No. 8-2-293/82/A/379 & 379/A, 2nd Floor, Plot No. 379, Road No. 10, Jubilee Hills, Hyderabad - 500 033.

CIN: U74900AP2007PTC054344

Editor: R Ramprasad

Feedback
Readers are advised to send all feedback and comments to editor@gatewaymedia.in

Impatient India wants more

The much awaited one year period of assessment of Modi's government has led to mixed reaction among social, political and economic circles. While Modi can be credited with a centum in certain areas, he did not score as well in others. The biggest upside of the government completing year is the absence of any scam breaking out. The proof of this lies in the NDA government undoing the practices of their political rivals in allocation of natural resources, such as coal and telecom spectrum, in a fair and transparent manner.

The government's other achievements, including evacuating citizens from Yemen and Nepal, have won many an applause from around the world. Staying on tackling crises overseas, Modi's foreign visits have yielded great fruit with the Premier wooing the countries to invest in India. Sushma Swaraj herself won a thundering applause across the treasury and opposition benches when they came together for an amendment bill to a historic boundary agreement with Bangladesh.

But industrialists say Modi needs to cover ground on tax related issues and improving the ease of business. While the macro-economic stability in the country has improved with inflation figures dipping, the country is yet to garner the benefits of being an attractive financial market. The government is yet to clarify its stance on retrospective tax and make headway in implementing big ticket infrastructure projects. In the shipping sector, a few matters of serious implication have been pushed through in the last one year. The enactment of the central legislation for declaring the 101 additional waterways as national waterways is a significant step in conveying the intent of the government in moving cargo via riverine ways. The special purpose vehicle to provide sufficient rail evacuation systems for major ports to clear cargo is also a step in the right direction. The biggest announcement, however, is the Sagar Mala project which has been envisioned by Modi and his team to connect all ports and waterways for seamless trade.

While there's no doubt that the government's approach to this is sincere, the policy would need tweaking to encourage manufacturing in India across different sectors.

But that said, Modi's most endorsed campaign by his cabinet has been 'Make in India' that is yet to gather steam among industrialists and foreign companies alike. While there's no doubt that the government's approach to this initiative is sincere, the policy would need tweaking to encourage manufacturing in India across sectors. While the legislative changes take time in displaying results, the centre has to work towards reviving the investment appetite in the country.

Ramprasad

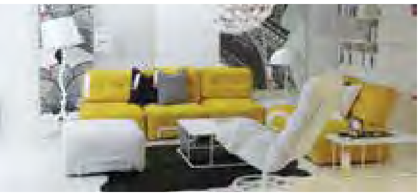
Ramprasad
Editor-in-Chief and Publisher
ramprasad@gatewaymedia.in

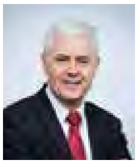
follow us on twitter @maritimegateway

India's premier maritime business magazine
maritime gateway

JUNE 2015

VOLUME 7 ISSUE 09





Corrigendum

- Ms Poroma Rebello is Director, North Central Region, India, at APL India Private Limited. Her designation was incorrectly printed as Director, NCR Region in the previous issue. The editorial team deeply regrets this error.
- In the previous issue of the magazine, the words DIESL and FMCG were incorrectly printed in the story that featured the logistics firm DIESL. The error is deeply regretted.

UASC unveils the world's most environmentally friendly ultra-large container vessel

United Arab Shipping Company (UASC) has unveiled M V 'Barzan' the industry's most eco-efficient container vessel developed at Hyundai Samho Heavy Industries (HSHI), Mokpo South Korea. M V 'Barzan' is a part of the industry's first LNG-ready ultra-large container vessel fleet.

With a loading capacity of 18,800 teu, the DNV GL classed vessel will be the largest in UASC's fleet to date and will set new standards for fuel and energy efficiency, due to optimised vessel design and an array of propulsion and equipment efficiency technologies.

CMA CGM LOG acquires stake in LCL Logistix

The CMA CGM Group has acquired a strategic stake in LCL Logistix, a key player in Indian logistics sector, via its subsidiary CMA CGM LOG that specialises in freight forwarding and logistics solutions.

With the acquisition, CMA CGM LOG reinforces its position in India and will leverage LCL Logistix's Indian network as well as its presence in Canada, the United States and East Africa to accelerate its development. With this strategic stake, CMA CGM LOG expands both its product offering and its geographic coverage, including in emerging countries where logistics solutions demand is high.

Kakinada SEZ to get second port in East Godavari

The Kakinada special economic zone (KSEZ) project will be implemented in the right earnest, revealed N Chandrababu Naidu, Chief Minister, Andhra Pradesh. Industrial units will be developed and a port will be built in the KSEZ area at Perumallapuram in Thondangi mandal. He said the state government would soon announce a comprehensive tourism policy and grant industrial status to tourism projects. The greenfield port at Perumallapuram was originally conceived as a captive port for the KSEZ units, but it would now be developed as a commercial port.

IIFC to finance port infrastructure development

India Infrastructure Finance Company (IIFC) has agreed to provide long-term finance for developing port infrastructure in the public-private partnership mode. Compared to commercial banks, IIFCL will be able to provide longer-term loans at the same interest rates. The shipping ministry will soon sign an agreement with IIFCL for financing important projects at 12 major ports. The agreement will also give the ministry access to IIFCL's advisory services for infrastructure projects. The ministry had awarded 26 projects under the PPP mode, entailing an investment of ₹15,483 crore, in 2012-13 and 2013-14. The shipping ministry also wants to add five new ports to its list. Two of these have been finalised in Sagar Island, West Bengal and Dugarajapatnam in Andhra Pradesh.

L&T inks shipbuilding pact with Hyundai

Larsen & Toubro (L&T) has signed a crucial technology transfer agreement with South Korea's Hyundai Heavy Industries to build LNG carriers at its shipyard at Kattupalli, near Chennai. The agreement was signed with the intention of bagging at least three carriers from the revised nine shipbuilding tenders that GAIL India Ltd is expected to float in the next few weeks. The L&T-Hyundai Heavy agreement comes against the backdrop of a similar pact that was signed last month between state-run Cochin Shipyard and Samsung Heavy Industries. Samsung had been one of the four Korean yards that qualified for GAIL's tender requirements, the others being Hyundai Heavy Industries, Daewoo Shipbuilding & Marine Engineering and STX Offshore & Shipbuilding.

Glander International bunkering comes to Mumbai

Glander International bunkering group, a leader in bunkering and lubricant trading has decided to set up a full-fledged shop in Mumbai by registering its liaison office. The liaison office has been functioning in Mumbai for some time. The bunkering major has now six offices worldwide including Mumbai besides Dubai, Singapore, Florida, Brazil and Geneva. The company has agreements with major ports worldwide. The office in Mumbai will offer comprehensive bunkering and lubricant trading services.

Gojavas expands delivery network

Gojavas has expanded its delivery network to 200 cities across India. The company has expanded its presence in tier-2 and 3 cities like Haldwani, Rudrapur, Muzzafarnagar, Junagarh, Jamnagar, Satara, Navsari and Siwan. It achieved a topline of ₹200 crore during 2014-15.

"Tier-2 and 3 cities are challenging from an execution perspective. But with the passionate team we have and technology, we are confident of providing best in class services to consumers in these cities who are looking for access to wider variety of products and cash on delivery facility," said Vijay Ghadge, chief operating officer of Gojavas.

GAIL bids to buy Dabhol LNG terminal

GAIL India Ltd has put in a bid of ₹24 billion to buy the 5 million tonnes per annum (tpa) capacity LNG terminal associated with the 1,967-mw Dabhol Power Station, operated by Ratnagiri Gas and Power Pvt Ltd (RGPPL). However, the National Thermal Power Corporation (NTPC) has not agreed to this valuation as the total loan and equity on the terminal part is nearly double that, at ₹45 billion.

Railway lines for Central Coalfields Ltd

The Jharkhand government, Coal Ministry and Railways have signed memorandum of understanding for formation of a joint venture to construct railway lines in the command areas of Central Coalfields Ltd, a CIL arm. The Coal Ministry's share in the joint venture company is 64 per cent, the Railway Ministry's contribution is 26 per cent and the state government has a 10 per cent share in the total ₹1,000-crore equity for construction of two railway lines and 10 railway sidings in the command area. The long-pending Tori-Shivpur railway line (44 km) and Shivpur-Kathotia railway line (48 km) are among the lines to be constructed under the project. These railway lines could carry 20 crore tonnes of coal that could help generate 40,000 mw electricity, supplying power to the entire eastern part of the country. In addition to coal there could be freight movement of other materials and passengers as well.

JeevanVikas - new president for Visakhapatnam Container Line Association

JeevanVikas, AVP of Seaways Shipping and Logistics Ltd has taken charge as new President of Visakhapatnam Container Line Association at Waltairs Club, Visakhapatnam. I Venkateswaralu of BTL has been elected as Vice President while Bobby Lawrence took charge as Secretary. P Venkatesh, General Manager of APL is the Treasurer. Prashant Sagi of Mega Sea Shipping, Balakrishnan of 'K' Steamship Agencies, Ramiah of AVBGPR, Ramashankar of Seahorse Shipping and B Purushottam Prasad of Omega Shipping took charge as committee members.

India and Japan to create logistics data bank service

India and Japan will soon together set up a logistics data bank (LDB) service that is expected to pick up the pace for movement of two-way merchandise trade. The service will help in the real-time tracking of container and cargo movement in the Delhi-Mumbai Industrial Corridor (DMIC) region. With shipping line, port terminal operator, owner of rail infrastructure, container train operator, customs agent, truck operator and shipper or consignee included in the LDB, it would be jointly run by India's DMIC Trust and Japan's NEC and operated via a special purpose vehicle (SPV).

The real time tracking of container movement will help save almost $3.2 billion every year by 2017. The data bank will be called DMIC Logistics Data Bank and will try to enhance competition, decrease transportation lead time and cost by dispensing the information among all agencies in the supply chain with the help of an IT-based platform. If the project in the (DMIC) region is a success, the government will consider introducing it to other industrial corridors.

Kochi Port plans SEZ

Leveraging its locational advantage on the international sea route, Kochi Port is emerging as India's top outlet for bunker sales, and the most competitive in the South Asian region. Hoping to build further on these trends, the port is offering a 100-acre special economic zone (SEZ) in Puthuvypeen to accommodate the future growth potential of bunker service to ocean-going ships. The bunker industry has been making strides in Kochi, with the annual growth rate exceeding 20 per cent. The industry is growing further in an ecosystem of streamlined port operations, a supportive customs regime and favourable tax regime that permits floating storage, multiple shipment and rapid supplies at short notice round the clock. The tax rates in vogue at Kochi are the lowest with VAT at 0.5 per cent for ocean-going vessels and 5 per cent for coastal vessels. Apart from that, customer feedback on the quality and pricing of bunkers sourced from Kochi from all major suppliers has been encouraging.

VOICES

The challenge now is still the huge amount of newbuildings that are coming out. In the last few years, some lines who should not be ordering ships are still ordering due to some 'imaginative financing.'

SS Teo
Managing Director, PIL

Many of the items from defence ministry list have been de-listed, export has been opened... During last six-eight months the export NOCs are being granted online, and faster than expected.

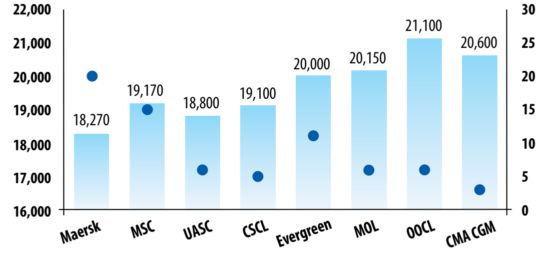
Manohar Parrikar
Minister of Defence, Govt of India

We will see the declining trend in the current year itself and in about two to two-and-a-half years' time thermal coal import will stop while the higher calorific coal (coking coal) needed for steel plants may still continue to get imported.

Piyush Goyal
Minister of State for Power
Coal and New & Renewable Energy

Panama Canal Transit

The "18,000 teu and above" members' club



Sources: KPMG in India analysis

Financial limits of major ports enhanced

The government has issued orders for enhancing the financial limits and also for streamlining the powers exercisable by major port trusts. The areas covered include the powers to execute contracts and deposit works, take temporary loans or overdrafts, incur capital expenditure, sanction works, compound or compromise claims, writing off losses and various housekeeping functions.

Safeguards have been provided so as to ensure due diligence and accountability in the exercise of the financial powers. These enhanced limits are expected to speed up the decision-making process for various activities in the major ports in general and for development works in particular.

Govt chasing $900-billion export target by 2020

The government seems confident of pulling off the $900-billion export target for 2020, as envisaged in the foreign trade policy, despite missing it in the last fiscal. Exports slumped into the negative zone, recording a decline of 21 per cent in March, the biggest fall in the past six years, pulling down the total shipment for 2014-15 to $310.5 billion and missing the target by 1.23 per cent. The Government had set an exports target of $340 billion for 2014-15. The exports have been in slow lane across the globe, said Joint secretary (commerce) Sudhanshu Pandey. The current initiatives taken by the government will yield results in a year, he added. The government is also working to create a national ecosystem for product standards, he said and asked the industry to provide inputs on standards so that the centre and states can help build exports.

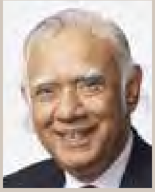
Japan to invest more in India

India and Japan have signed an agreement for doubling of Japanese investment into Indian firms in the next five years and boosting two-way trade between the nations. The signatories were Commerce and Industry Minister Nirmala Sitharaman and Japan's minister for economy, trade and industry Yoichi Miyazawa.

The plan was categorised into five broad areas: development of selected townships in India, promotion of investment and infrastructure development, further development and cooperation in information technology, enhancing cooperation in strategic sectors and Asia-Pacific economic integration. Signing of the action plan is seen as a step further in improving the trade relationship between India and Japan as a follow-up of Prime Minister Narendra Modi's visit to Japan last year.

Japan is the fourth largest FDI contributor to India, with major interests in pharmaceuticals, automobiles, and services sectors accounting for 7.46 per cent of total FDI equity inflows into India. During April 2000-November 2014, FDI from Japan into India stood at $17.55 billion.

Gopinath Pillai steps down. Prem Kishan Gupta new Chairman of Gateway Distriparks



Gopinath Pillai, founder of Gateway Distriparks Ltd, has stepped down from his role as Chairman after 19 years, even as the logistics company plans to enter into new businesses, including e-commerce and coastal shipping.

The company has named Prem Kishan Gupta, who has been the co-founder and Managing Director, as the new Chairman. He is also the managing director of Gateway Rail Freight Ltd, which is considering an initial public offer. Pillai has plans to focus on other business interests in India and Singapore. He will continue to be a director at the subsidiaries of Gateway Distriparks for now.

Gateway Distriparks Limited has posted a 21.1 per cent increase in consolidated net profit to ₹48.8 crore at the end of fourth quarter 2015. The group's net profit encompassing CFS, cold chain & rail saw a 38.2 per cent surge to ₹187.8 crore against the net profit of ₹135.8 crore reported during the last year. The container freight business saw profit after tax but before minority interest increase 29 per cent to ₹18.4 crore. The best performance came from rail operations where Profit before Tax and PAT increased by almost 100 per cent to ₹119.2 crore and ₹104.9 crore respectively.

Snowman Logistics also saw growth but not at the same levels. PBT and PAT grew by 7.6 per cent and 10 per cent respectively. Snowman will be adding 30,000 pallets in FY16 to take the overall pallets to 85,500 nos.

Cabinet clears Merchant Shipping Bill 2015

The Union Cabinet has given its approval for the introduction of the Merchant Shipping (Amendment) Bill 2015, in line with a global convention, to protect environment and human health from ballast water and sediments used in ships.

The convention requires all new ships to implement an approved ballast water and sediments management plan. All new ships will also have to carry a ballast water record book and follow ballast water management procedures to a given standard. Existing ships will be required to do the same but after a phase-in period. Ships are required to be surveyed and certified and may also be inspected by port state control officers who can verify that the ship has a valid certificate.

The merchant shipping amendment bill incorporates into the Merchant Shipping Act, 1958 the enabling provisions required for implementing the convention. Port authorities will be statutorily obliged to provide ballast water sediment reception facilities.

Financial assistance to ports for procuring pollution response equipment

The central government has formulated a new central sector scheme for providing financial assistance to all major ports and 26 oil handling non-major ports under state maritime boards/state governments for procuring pollution response equipment/materials necessary for combating Tier-I oil spills in their waters.

Under the scheme, the ports have been put into categories A, B and C based on the risk of oil spill, in consultation with the Indian Coast Guard. Financial assistance up to 50 per cent of the cost of the equipment/materials, necessary to mitigate pollution due to oil spills, will be provided to the ports.

Modernisation of container terminal at Haldia Dock Complex

With a view to realise the optimum capacity of the container terminal at Haldia Dock Complex by providing integrated container handling service with KoPT-owned infrastructure along with deployment of additional equipment, Kolkata Port Trust had invited a tender for engagement of a service provider having adequate experience in managing and operating full fledged container terminals.

M/s United Liner Agency Private Limited was the successful bidder for award of contract for providing integrated container handling service. ULA will improve and modernise the existing container handling facilities of the terminal with further investments. They would also provide additional equipment like reach-stacker, tractor trailers etc.

They will also provide state-of-the art IT system for yard management. The project upon implementation will not only improve the container handling productivity but will also reduce the logistics cost to the trade and industries.

ULA and KoPT are proposing to undertake joint marketing for increasing the throughput of container at Haldia to about 0.5 million teu per annum. ULA has already operationalised the project from April 15, 2015.

Essar Ports takes over Visakhapatnam Port Trust's iron ore handling complex

Essar Ports Ltd (EPL) has taken over Visakhapatnam Port Trust's iron ore handling complex on a Build-Operate-Transfer (BOT) basis for a period of 30 years. Essar Vizag Terminals Ltd. (EVTL), a wholly owned subsidiary of EPL, will comprise three berths (two outer harbour berths and one inner harbour berth) with a combined capacity of 23 million tonnes per annum (MTPA) which will be developed in two phases.

The project will be developed at a cost of ₹1,200 crore over a period of three years, and will cover the upgradation of outer harbour berths (OB I & II) in phase I and mechanisation of inner harbour berth (WQ-I) in Phase II. With the takeover of the outer berths, the operation and up-gradation of the terminal will be carried out simultaneously.

Coastal shipping to make Rajasthan marble and tiles cheaper in South India

Rajasthan marbles and tiles will soon become cheaper in Chennai and other parts of Tamil Nadu, as the Shipping Corporation of India is planning to introduce regular sailings from the Gujarat port towns of Mundra, Pipavav to Chennai and Kattupalli via Tuticorin. During the return trip, the vessels will sail between Chennai and Colombo, mostly carrying transshipment cargo from eastern ports to the Sri Lankan capital. Two vessels will be deployed for this regular service proposed to be introduced in the coming months.

Granites and marbles from Rajasthan are consumed by the building industry in Southern India in a big way and the product is hitherto moved mostly by road and partly by rail. The decision to move the product through ship will mean freight cost would go down by nearly 30 per cent.

Taking advantage of the building boom in Kerala, the Shipping Corporation of India has already deployed three vessels regularly sailing from the Gujarat ports of Mundra and Pipavav They carry marbles and tiles to Kochi and Tuticorin.

Adani Group, GSPC mull over equity options to finance Mundra terminal

The Adani Group and Gujarat State Petroleum Corporation (GSPC) are looking at various equity options for their ₹4,600-crore, 5-million-tonne-pe-annum (mtpa) liquefied natural gas (LNG) terminal at the Mundra special economic zone in Gujarat. In addition to looking at bringing in an equity partner, the option could include going in for an initial public offering for Mundra. Of the total project cost, GSPC would tie up for 70 per cent from debt and look at the rest in equity from its partner, or an IPO. GSPC and Adani Group have been planning to sell a 25 per cent stake in the terminal for over two years. GSPC holds a 50 per cent stake in the project, while Adani Group holds a 25 per cent. In August 2013, eight players filed an expression of interest for the 25 per cent stake. GSPC and Adani had zeroed in on three – India Gas Solutions (IGS), Oil and Natural Gas Corporation (ONGC) and Indian Oil Corporation (IOC).

Chinese companies come to Kakinada SEZ

GMR Infrastructure Limited (GMR) has entered into an agreement with Guizhou International Investment Corporation (GIIC) to set up an industrial park in its SEZ in Andhra Pradesh with an immediate investment of $500 million for developing infrastructure and other facilities. GIIC is a consortium of three leading Chinese manufacturing companies.

Chinese companies from power equipment, electronics, wind & solar energy, smart technologies and other sectors are planning to set up their manufacturing units in the Kakinada SEZ (KSEZ). These companies will additionally invest $2-3 billion in setting up their operations over next five years. The investing companies will get incentives from the state besides availing benefits under the Make in India campaign.

Road projects for Meghalaya, Nagaland and Arunachal Pradesh

Union Minister for Road Transport, Highways and Shipping Nitin Gadkari announced ₹5,130 crore worth projects for Meghalaya, Nagaland and Arunachal Pradesh, to improve their road network. The 102-km Jowai-Ratacherra road in Meghalaya would be built at an estimated cost of ₹630 crore. It will be the lifeline for the eastern Meghalaya district of East Jaintia Hills and the project is expected to start within three months.

Three projects have been sanctioned in Nagaland – four-laning of 48-km Dimapur-Kohima road, the 35-km-long four lane Dimapur by-pass and the 17-km-long Kohima by-pass. The cost for construction of the 100-km road in Nagaland is estimated to be ₹2,000 crore.

On the East-West corridor in Assam, the Union Minister said the project which is important for Assam, Meghalaya and Nagaland is expected to be completed by December 2015. In Arunachal Pradesh a new road project costing ₹2,500 crore is expected to start within two months.

Indian Register of Shipping celebrates four decades of excellence

Arun Sharma, CMD, IRClass

IRClass has successfully completed 40 years in the service of Maritime industry. In a recent event commemorating this milestone, the Chief Operating Officer Sriramamurthy highlighted the journey of IRClass through humble beginnings. He shared the changes IRClass has gone through and mentioned about its ‘Beyond Class’ services under the newly formed entity IRClass Systems & Solutions Pvt Ltd. The event was attended by a wide spectrum of industries ranging from maritime, oil & gas to engineering firms.

Arun Sharma, the Chairman and MD, in his discourse, accentuated IRClass’s commitment to be “A Class by Choice” while thanking all the stakeholders for their continued support. The event showcased *‘The Journey of four decades of IRClass’* through a presentation that underscored the major contributions made by IRClass including those to offshore, port and naval sectors.

Ennore port gears up to be the deepest on the east coast

Kamarajar Port, Ennore is all set to become the deepest among the government owned major ports on the east coast as the port authorities plan to deepen its draft to 18 metres in the next few years. The proposed deepening project will enable the port to take on board Cape size vessels of 2-lakh dwt capacity. Once the expansion works are completed, the city’s satellite port will be in a position to face the competition from private ports that have come up in the vicinity at Kattupalli and Krishnapatnam.

The feasibility study on deepening of the Ennore Port at a cost of ₹1,000 crore is to start soon and will be completed in a year’s time. The capital dredging work is expected to take nearly two years. Union Shipping Minister Nitin Gadkari has given approval to the ports plan to enhance capacity from 32 to 68 million tonnes by 2017.

Gadkari also ordered the revival of iron ore berth that remained closed down for the past four years following the government’s ban on iron ore exports. The idling berth will be revived soon and will handle coal. Two more berths will be commissioned soon that will enhance coal handling by the port to 42 million tonnes. Another coal berth is under construction with a capacity of 10 million tonnes. The connectivity road from the port to Vallur junction is being expanded from two to four lanes. The work is expected to be completed within a year.

WISTA India organises workshop on "Manage your Customers"

With an aim to enhance the skills of women in the Indian maritime industry, WISTA on April 17 organised a workshop on "Manage your customers" at India's premier Business school SP Jain Institute of Management and Research. Prof Murti from the institute delivered a talk on "How to retain important customers."

WISTA India invited women from other associations such as MANSA, AMTOI, FFFAI and other companies to benefit by this talk. The talk was attended by 41 women from the maritime industry including Tarini Desai from Sylvester and Co, Hansa from All Cargo and Geeta Sheth from DP World Mundra.

15 gas-based power plants bag subsidy for importing LNG

At the conclusion of the first phase of bidding under the new gas mechanism formulated to bail out gas-based power plants not receiving domestic fuel supply, 15 such power plants have qualified for subsidy to purchase imported gas and sell power at lower rates. Leading the pack is Torrent Power from Gujarat, whose three plants have secured imported gas supply, followed by two plants of NTPC and five power plants in Andhra Pradesh of GMR, GVK and Lanco and others. Around 10,000 mw of additional capacity would start firing from June.

Drop in iron ore imports affects Indian ports

A drop of 75 per cent in iron ore imports, followed by a 25 per cent dip in fertilisers, has drastically impacted the total business of the 12 major Indian ports in April 2015, compared with the corresponding period last year. Petroleum, oil and lubricants imports also reported a 9.5 per cent drop due to fluctuating prices in the global arena.

On the other hand, ports handled 58 per cent more thermal and coking coal during April 2015 that helped the dozen major ports record a net increase of 1.06 per cent over the previous year, at 47.88 million tonnes.

Kamarajar (formerly Ennore) Port led the show with an increase of 26.5 per cent in thermal coal and POL. Chennai, JNPT and Kandla also reported a marginal increase in imports of POL. Haldia Dock and V.O. Chidambaranar Port handled more coal and bulk cargoes.

"However, volumes are set to increase over the coming months," said a Chennai port official. "More power projects will be going on stream, and the country will be requiring more coal and iron ore. Also, we are talking here only about the major ports. A lot of export-import business happens through private ports as well."

Promoting low grade iron ore exports

A decision by the Indian government to reduce the export duty on lower grade iron ore from 30 per cent to 10 per cent could potentially unleash some 10 million metric tonnes onto the seaborne market. Finance Minister Arun Jaitely announced the tariff change, which will apply to exports of iron ore grading 58 per cent Fe and below, on April 30. Stocks lying at ports in the western state of Goa, which hosts most of this grade, could be available for immediate export. New supplies could come online after India's monsoon season ends in November, provided the "the price is right."

Sridhar Swaminathan, executive director at the Goa Mineral Ore Exporters Association, said 10 million mt of iron ore was lying idle at Goan ports due to the existing high export duty. According to Harish Melwani, chief executive of local mining firm HLN Goa, numerous taxes and duties add up to 50-60 per cent of the sale price, making exports uneconomic at current global prices. Goan miners have to pay 10 per cent towards research and development, 15 per cent for royalties, 2 per cent for exploration tax, 15 per cent for a district mineral fund, along with logistics costs and port handling charges.

Water transport to be developed in North East

With numerous big and small rivers dotting the North East, promotion of water transport will be pursued in a big way in the region, Transport and Shipping Minister Nitin Gadkari revealed. Of the 101 waterways proposed to be developed in the country, 13 cover various rivers of North East, including Barak, Lohit, Subansiri, Gangadhar, Puthimari, Dikhu, Doyang and Tlawng. Construction of a ship repair facility at Pandu, Guwahati, will commence by October this year and high-level jetty at Pandu, at a cost of ₹45 crore, will be completed by end of this year, along with broad gauge rail sliding. An MoU has been signed with Central Railslide Warehousing Company for operating Pandu warehouse and terminal, revealed Gadkari.

New-generation diesel engines for Liebherr mobile harbour cranes

In order to meet the required emission and fuel consumption targets, Liebherr has enhanced the diesel engines for its mobile harbour crane (LHM) fleet. The smaller crane models LHM 120, 180 and 280 will be equipped with a stage IV / Tier 4final 400 kW engine. The bigger crane models LHM 420, 550, 600 and the new giant LHM 800 are available with a stage IV / Tier 4final 725 kW diesel engine. Both diesel engine versions can be boosted with the Pactronic hybrid drive system for up to 100 per cent extra power. For the latest European Union emission standard stage IV and Tier 4final of the US Environmental Protection Agency respectively, Liebherr has intensively optimised the whole combustion process. Compared with other solutions, Liebherr developed a simple but effective solution that reduces the nitrogen oxides emissions while cutting operating costs.

India's coffee exports up by over 7.22 per cent in April

Coffee exports from India have increased by 7.22 per cent to 31,060 tonnes in April this year compared to the same month in 2014, but value realisation was lower due to sluggish global prices. The country had shipped 28,966 tonnes of coffee in the same period last year. Export value realisation was ₹1,64,078.56 per tonne in the period under review as against ₹1,69,561.48 per tonne in the said period last year.

Coffee shipments in value terms stood at ₹509.63 crore during April of FY 2015-16 as against ₹491.17 crore previous year. Coffee prices in international markets are under pressure due to production surplus in Brazil, the world's leading producer. Also, Brazil's currency is ruling weak against the US dollar. Major export destinations for Indian coffee are Italy, Germany, Turkey, Russian Federation and Belgium among others.

Bangladesh cabinet approves coastal shipping bill

The Bangladesh cabinet has approved a draft agreement, a draft bill, and a proposal involving coastal shipping between Bangladesh and India and installation of Rooppur nuclear power plant in Pabna. Coastal shipping will save time and cost of transportation of cargo through sea and river routes between the two neighbours, Cabinet Secretary, M Musharraf Hossain Bhuiyan said. The agreement, which was formally initiated by the two sides on April 20, will be signed during the upcoming visit of Indian Prime Minister Narendra Modi to Bangladesh. Currently both Bangladesh and India have to transport goods between them via Colombo or Singapore but the agreement will facilitate cargo vessels of both countries to travel directly to the ports of each other.

Bangladeshi cargo ship would need four to five days to reach India instead of two to three weeks, the current travel time. War ships, and vessels of research, scientific or oceanographic, and of paramilitary forces will remain outside the purview of the agreement.

Tirupur looks at boosting garment export

With Comprehensive Economic Partnership Agreement (CEPA) expected in September, exports from the knitwear hub of Tirupur is likely to grow by 20 to 50 per cent in a few years. Exports of readymade garments, which were ₹12,500 crore three years ago have almost touched ₹21,000 crore in 2014-15, witnessing 17 per cent growth over last year, Tirupur Exporters' Association president, A Shaktivel revealed. Though exports to Canada from Tirupur was nil, despite India's exports of ₹650 crore, CEPA would boost exports from Tirupur, which can register at least ₹200 crore in the initial year, with major markets still being the US and European Union. Moreover, garment manufacturers were now concentrating more on polyester and viscose material, to compete with China and at least 15 to 25 per cent market can be captured in the long run, Shaktivel said, adding, compared to China, India has also labour advantage, to give that nation a run for its money.

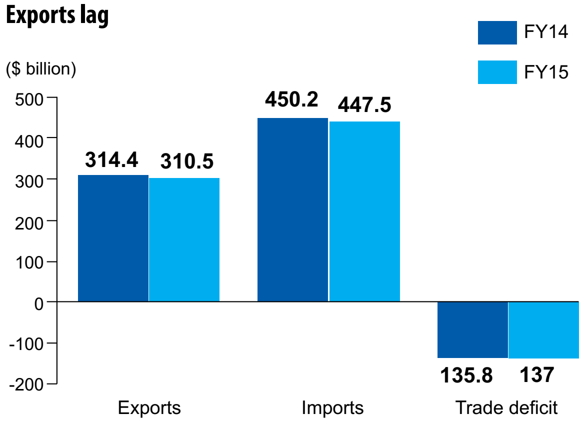
From Sagar Mala to Bharat Mala

An ambitious 5,000-km border and coastal road scheme called the Bharat Mala to be constructed at a cost of ₹50,000 crore was submitted to Prime Minister Narendra Modi by the officials of the union transport ministry. This includes development of road in border areas adjoining Nepal, Bangladesh, China, Pakistan as well as ports in the country. The project is expected to be taken up this year and is expected to be completed in five years according to official sources.

Rajasthan which has a long border stretch with Pakistan and Tamil Nadu’s port connectivity projects are expected to benefit most from the Bharat Mala scheme. Tamil Nadu’s 600 km roads on the east coast will be developed into four-lane roads. Once this project is completed Chennai, Ennore and Tuticorin ports will have better connectivity with their hinterland.

Global headwinds drag India's exports

Exports lag



The slowdown in global growth has hit India's exports. In FY15, India registered $310.5 billion of goods shipment, down 1.2 per cent from $314.4 billion the year before, and far lower than the government's $340 billion target. Despite the depreciation in the rupee – from 60.5 to a Dollar in FY14 to 61.1 in FY15 – India's merchandise trade could not get the edge.

Imports too declined to $447.5 billion in FY15 from $450 billion in FY14, thanks to the over 16 per cent drop in the oil import bill as crude prices crashed globally. Gold imports were up 22 per cent year-on-year as quantitative restrictions on the metal's imports were lifted by November last year. Non-oil, non-gold imports picked up 7 per cent in FY15, reflecting stronger domestic demand of goods.

In terms of the country's export destinations, the slowdown was more visible in Asian nations such as China (minus 19 per cent) and Singapore (minus 20 per cent), while exports to the US and the UAE were stronger.

Will the LNG terminal planned at Ennore see the daylight?

Will the LNG Terminal planned at Kamarajar Port be jinxed for the second time in two decades? The latest proposal for a 5-million-tonne LNG terminal under consideration for the past four years has not made any head way forcing port authorities to think in terms of setting up a floating regassification terminal on offshore like the one planned off Mumbai Port. Indian Oil Corporation had put up a proposal for setting up the LNG terminal at Ennore Port four years ago but it is yet to identify the source for the LNG. It is scouting for sources in US, Iran, Russia and Malaysia with no success so far. Having failed to identify the strategic partner, IOC has failed to float a special purpose vehicle to construct the project. As IOC is dragging its feet on the project, the Kamarajar Port authorities are toying with an idea to set up a floating regassification terminal off Ennore Port.

'K' Line makes profit amid freight rate pressures

The containership business of Kawasaki Kisen Kaisha ('K' Line) is back in the black, benefiting from falling fuel oil prices although the Japanese carrier is concerned about the year ahead.

Income in the shipping line's container segment increased to JPY20.6 billion ($172.0 million) in the fiscal year ending March 31, 2015 after a JPY0.1 billion ($0.8 million) loss last year. However, while cargo volumes showed a steady year-on-year improvement of 4 per cent, the positive results were tempered by lingering uncertainties over freight rates on the Asia-Europe service.

A company statement said: "The Group expects severe conditions in the freight rates market to continue owing to a strong sense of uncertainty hanging over the economies of Europe as well as increasing tonnage supply pressure due to deliveries of a large volume of new large-sized vessels."

Ponneri is the only industrial node for Tamil Nadu in CBIC

Ponneri may be the lone industrial node in Tamil Nadu in Commerce ministry's ambitious Chennai Bengaluru industrial corridor (CBIC) because of the major changes in the alignment of the corridor. The three industrial nodes in the corridor are Krishnapatnam (AP), Tumkur (Karnataka) and Ponneri (TN).

The scope for creating fresh industrial nodes in Tamil Nadu has been constrained due to realignment of the corridor at the instance of the AP government. Though Chennai is where the corridor originates, it crisscrosses the state for hardly 100 km before it takes off to AP and then on to Karnataka.

While Andhra Pradesh will be the almost exclusive beneficiary in the Vizag-Chennai Corridor, the Chennai Bengaluru corridor provides maximum benefits to both Karnataka and AP. Moreover the Chennai Bengaluru corridor is being extended to Mumbai, covering entire Karnataka. With the completion of these corridors, Tamil Nadu stands to lose its status as leader in manufacturing sector among the southern states.

2014 Maritime Innovation Award for Subsea Industries

The 2014 Maritime Innovation Award, given jointly by the Royal Institution of Naval Architects and QinetiQ, has been presented to Subsea Industries for the product Ecolock. Ecolock provides a hard, impermeable coating which even the toughest barnacle will not penetrate. Barnacles, coral and other fouling organisms can be removed completely by divers, leaving no trace and restoring the coating to its original condition. And because it is non-toxic, it is sensitive to the environment. The Award was presented to Manuel Hof, Subsea Industries' Production Executive, by Sarah Kennedy, Managing Director of QinetiQ Maritime, at the Institution's 2015 annual dinner.

Maiden voyage of *YM WISH*

Yang Ming Marine Transport Corp. President Herman Yu, Yang Ming Line (India) Pvt Ltd Chairman Capt Somesh Batra, Yang Ming Marine Transport Corp Chairman DR Frank Lu, Yang Ming Marine Transport Corp Europe MD C H YEH

A maiden voyage ceremony for *YM WISH*, Yang Ming's first 14,000-teu full-container vessel, was held at Kao Ming Container Terminal in Kaohsiung. Dr Frank Lu, Chairman of Yang Ming presided over the ceremony that was attended by key industry leaders. With lower operational costs and more efficient use of energy the new vessel will give Yang Ming an edge in the highly competitive ultra-large vessel market.

Adani Ports consolidated PAT increases by 33 per cent for the year ended March 2015

Consolidated cargo across all ports handled by the company was 144 MMT in FY15, an increase of 28 per cent, over corresponding period last year. Adani Ports at Mundra handled 111 MMT cargo in FY15 thereby continuing its leadership as the largest commercial port business in India. The Mundra Port registered a 10 per cent growth in FY15 compared to 5 per cent aggregate cargo growth at all major ports.

Also, in case of containers, the Mundra Port handled 2.72 million teu in FY15 as against 2.39 million teu in corresponding to same period last year resulting in a 14 per cent growth as compared to 7 per cent aggregate growth in container volumes at all the major ports.

Consolidated cargo handled by the company was 36 MMT in Q4FY15, an increase of 26 per cent over corresponding quarter last year. Adani Ports at Mundra handled 27 MMT cargo in Q4FY15 thereby continuing its leadership as the single largest commercial port in India.

Japan's 'big three' post mixed full-year results

Japan's 'Big Three' shipping companies – Mitsui OSK Lines (MOL), Nippon Yusen Kabushiki Kaisha (NYK Line), and Kawasaki Kisen Kaisha (K Line) – posted mixed results for their full-year earnings.

MOL's profit fell 26 per cent year on year (y/y) to JPY42.356 billion ($352.47 million). NYK Line's profit rose 44 per cent y/y to JPY47.59 billion, as profits at all its shipping divisions were up y/y. K Line's profit was up 61 per cent y/y to JPY26.82 billion.

While Japan's biggest shipping company had lower profits, NYK and K Line increased their earnings. MOL's lower earnings were mainly due to the widening loss at its container shipping division, which has been struggling to turn in a profit for the last three years. MOL's container shipping division had a JPY24.1 billion loss for FY2014, compared to a JPY14.5 billion loss for FY2013.

Stable earnings in MOL's dry bulk shipping, tanker, LNG, LPG, and car-carrier businesses, which are built on long-term affreightment contracts, kept the company in the black.

Simrad HALO Pulse Compression Radar

Navico Commercial Marine Division released Simrad HALO Pulse Compression Radar, the world's most affordable solid-state, open-array radar system with pulse compression technology for non-SOLAS applications aboard commercial vessels. Combining the advantages of Simrad FMCW Broadband Radar and traditional pulse radar systems, HALO radar detects targets as close as 20 feet (6 metres) – well within pulse radar's short-range "blind spot" – while delivering exceptional long-range performance up to 72 nautical miles. HALO radar provides unmatched target resolution, with Beam Sharpening for enhanced target separation control.

Oil from Mexico and Colombia

The economic and demographic growth of India has caused a spurt in its energy requirements necessitating increased imports and energy partnerships with important hydrocarbon producing countries. India is planning to boost its trade relations with Mexico and Colombia to enhance energy security. A delegation led by Dharmendra Pradhan, Minister of State for Petroleum & Natural Gas, visited Mexico and Colombia to foster mutual cooperation in the area of hydrocarbons and to seek long-term trade agreements. ONGC Videsh has 7 oil and gas blocks in Colombia and India imports about 10 MMT of crude oil from these two countries.

Gateway SpotLight, a special feature by *Maritime Gateway*, showcases the unique initiatives of business groups across maritime sectors in their products, services and processes that helps them achieve and sustain better productivity, efficiency, environment conservation and above all judicious business practices. **Gateway SpotLight** provides an opportunity for businesses to bring to light their best practices at work and thereby such a **FOCUS**.

Presenting Goodrich expanding horizons under this feature.

Rising Star of Logistics

With a wide basket of services across segments and enjoying a leadership status in many offerings, Goodrich is positioned to be a dominant player in the shipping and logistics solutions sector.

Goodrich Maritime, founded in the year 1997, has its star on the ascendant and is registering year on year growth not only in volume terms but also clocking revenue increases. One of the prime reasons for such growth is the variety in their logistics services that they offer. Not for nothing have they been awarded recognition as the most versatile logistics company and as the fastest growing logistics company in India.

In the unitised system of carriage of international cargo, their equipment profile is so comprehensive that no other logistics group in India has reached this level yet. Whether it is Dry Vans, ISO Tanks, Reefers, Specials such as Flat Racks, Open Tops, Swap Bodies, they have it all and that too in good number. And with a very small number that is leased.

A very robust business model they have of operating with owned assets creating not only healthy asset value but also bringing down the cost of operations by so doing.

They have their presence in the bulk segment as well. More than two million tonnes of cargo have been carried so far. Goodrich's active Chartering and Vessel Operating Department frequently caters to carriage of coal, fertilisers, grain, steel etc on global basis.

Rarely do you find a services provider with such a wide range of services. Goodrich sometimes proudly put up a slogan "we carry it all from a CBM to a Post Panamax fixture"

Their zeal to forever excel and their ability to have a vision in the ever changing and dynamic Shipping and Logistics arena, Goodrich Management has the uncanny knack to predict themselves adroitly for the future.

All through the 18 years of their existence, the Goodrich Management have been successful in not only identifying the areas to expand but also to call upon resources to speedily implement the growth plans.

Very appropriately their slogan beautifully states:

"Our versatility in the sphere of Shipping and Logistics is limitless. Unexplored horizons still beckon us".

The think tank at Goodrich is like a relentless machine churning out one good product after the other. Quite a few of them are unique in nature. For e.g. Goodrich is one of the first to set up a third party chemical storage facility at Jebel Ali and along with this it is to also set up a tank cleaning station, a dry chemical warehouse and an ISO tank storage facility. It is an ambitious project which will be kick started during the course of this year and will be in full readiness in the later part of 2016.

Goodrich plans to expand its overseas office network during the course of the year 2015 into Saudi Arabia, Thailand, and China and towards the west Goodrich is well on its way to establish offices in UK and Europe.

It is expected during the course of this year the plan to establish an office in the CIS will be fully implemented.

Another area of activity which is expected to see perceptible growth during the course of this year will be the Goodrich NVOCC business. Herein, a re-organization is on the anvil supported by a sizeable fleet expansion. During the course of this year it is also expected that the Goodrich NVOCC business will reach into every corner of Asia.

In the Bulk Liquid segment Goodrich ISO tank operation is expected to increase its presence both in the International as well as the Indian domestic scene. Here again fleet expansion plans are in process and order placement is expected to be done soon. Similar will be the case as far as reefer container business is concerned.

With the strategic takeovers, the custom broking as well as air cargo logistics companies and dedicated manpower already in place both these activities are expected to have multitudinal growth during the course of this year.

License extension and other statutory permissions have been carried out extensively into various locations in India.

The accent on US bound sea and air cargo business is expected to multiply during the course of this year and to achieve the purpose, various offices in India are fully geared and so does the Goodrich office in USA.

Summarising the future, Goodrich is well on its way to achieve their goal of being a $ 500 million company by 2020. mg

RIGHT MOVES AT SLOW PACE

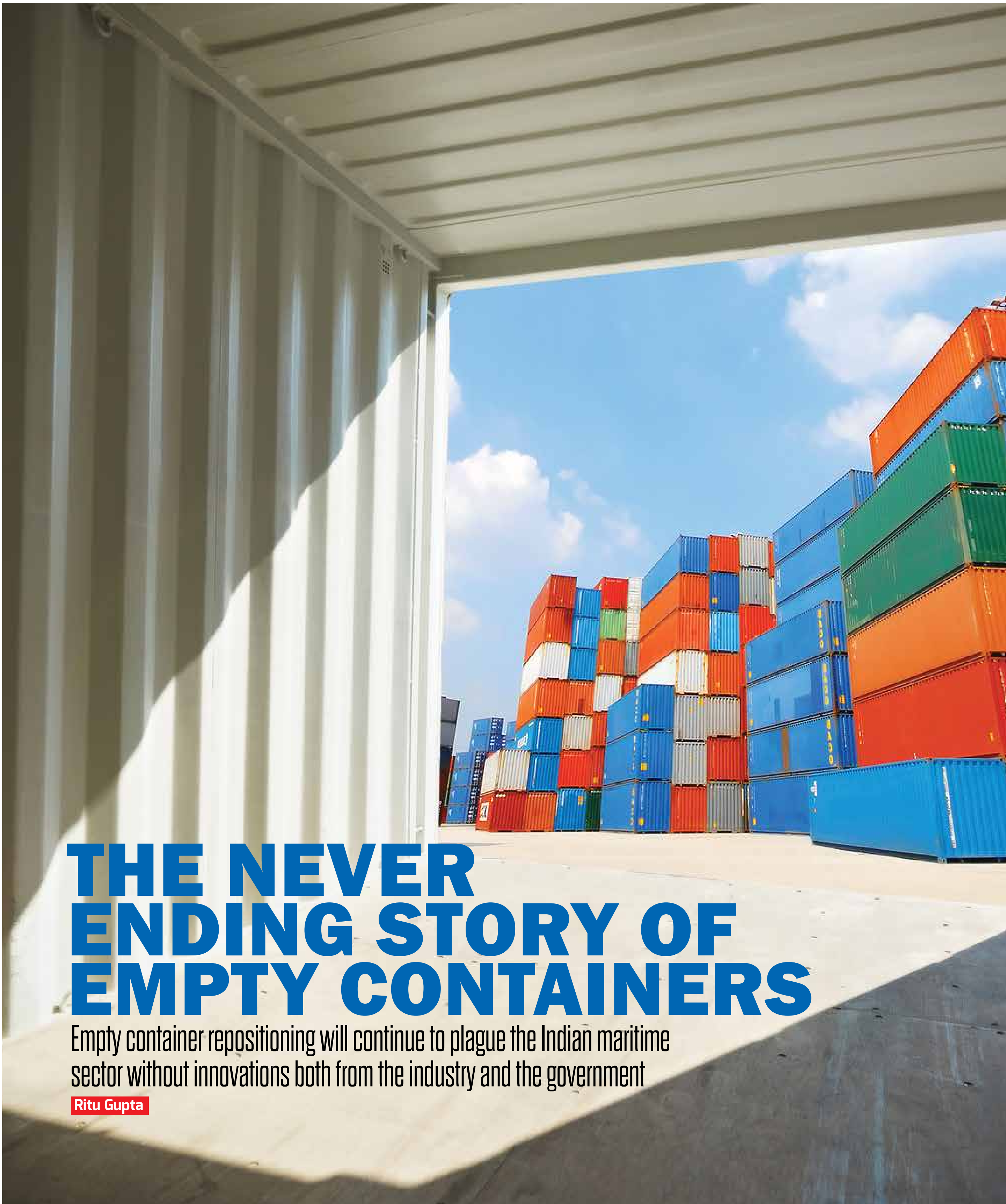
Ritu Gupta

A government elected for a term of five years can be reasonably judged within its first 12 months in office. This is also true for the shipping ministry which is spearheaded by Nitin Gadkari. "We will modernise existing ports on one hand, and develop new ones on the other – stringing together our Sagar Mala (ocean necklace) project. Public Private Partnership would be encouraged to tap into private sector resources as well as expertise. An institutional framework would be established for the same; while regulators would be given greater autonomy as well as accountability," the BJP had said in its election manifesto. The Modi government is trying to fulfill these election promises, and the shipping and ports sector is witnessing quite a hustle bustle. Gadkari has ensured that the Union Cabinet has taken three much awaited decisions for the sector- the enactment of Central legislation for declaring 101 additional inland waterways as National Waterways for navigation, approval of the formation of a Special Purpose Vehicle to provide efficient rail evacuation systems to major ports, thereby enhancing their handling capacity and efficiency, and lastly and most importantly, giving 'in-principle' approval to the concept and institutional framework of the Sagarmala project.

Indeed, according to many observers such Cabinet decisions are a result of the dynamic leadership of the ministry. Few who heard Gadkari's plans for road transport and ports at the World Hindu Congress in November 2014 could have failed to be inspired by his enthusiasm and innovative thinking. Almost during all his public speeches, Gadkari has been pointing out that transportation through waterways is much more cost-effective compared to road and rail, and a lot of potential still remained to be tapped in this area. Gadkari is no novice to transport sector. He was the public works department (PWD) and ports minister for Maharashtra between 1995 and 1999 during which he demonstrated a penchant for building a series of roads, highways and flyovers in Maharashtra, and also did a lot for ports like JNPT. Gadkari as the minister for shipping, road transport and highways broke the decade-long stranglehold over this ministry by lawmakers from Tamil Nadu.

From the beginning Gadkari has had his task cut out. Several issues awaited him, the most important among them being tariff reforms, restructuring the 12 ports owned by Indian government into corporate entities from a trustee set-up, development of coastal shipping and inland water transport, road linkages to ports and allowing Indian fleet owners to register their ships overseas. Though most of these issues still remain unresolved, the ministry is trying to evolve an economic model of port-led development. Another important issue facing the new ministry relates to a July 2013 decision of migrating old cargo handlers to a new market-linked rate regime for new projects. A critical issue in this exercise is how to deal with the surplus earned by these terminal operators that is ₹2,000 crore more than what is permitted. The 2013 decision had led to demand from old private cargo handling firms to migrate to the new regime to create a level-playing field. The new ministry has been discussing the migration terms with the private terminal operators for many months now, but it is yet to reach a conclusion. Furthermore, though the ministry has also spent a lot of time and energy to remove the discrepancy in the tariff regulations that has been stifling efficiency and growth in government ports, but it is yet to succeed. TAMP, the tariff regulator, continues to follow the same old guidelines to fix the rates.

Industry players hope that these contentious issues will soon be resolved and Gadkari will be able to keep his word, with 2015 seeing solid policy support to the shipping and port sector. Their hopes and demands for this year include tax exemption to seafarers, cargo support to Indian flag-carriers, duty free-bunker to coastal shipping, incentives to shipyards and de-regulation of port tariff. An announcement on relaxing the Cabotage rules is also much wanted by many industry players, especially the foreign shipping lines. Expectations are that some of these measures may see the light of the day during the coming months. Indeed, the captains of the industry are pinning many hopes on policy support at home, as this could ease their life in the current challenging global market environment.



THE NEVER ENDING STORY OF EMPTY CONTAINERS

Empty container repositioning will continue to plague the Indian maritime sector without innovations both from the industry and the government

Ritu Gupta

In January 2015, the Pacific Maritime Association warned that the US west coast ports have reached a gridlock, with little space available for additional import containers arriving and no space for export and empty containers returning to the docks. Indeed improper repositioning of containers poses a big problem not just for ports in the United States, but also for shipping lines and logistics industries worldwide. Containers arriving in a market must be returned to liners that brought them either empty or full, but ironically this is not happening in an efficient and cost-effective manner at present. Trade imbalances are leading to the accumulation of empty containers in countries where imports are more than exports. Until 1996 there was a clear declining trend in the ratio of empty to full containers, as increasingly sophisticated container logistics gradually reduced the number of empty container movements. But in 1998 the ratio increased to well over 20 per cent worldwide due to the emergence of very pronounced imbalance in the Asian trade with Europe and North America caused by the Asian currency crisis. This imbalance continues to persist to date and the repositioning of empty containers has become a major concern for carriers, with the proportion of empty containers increasing to nearly 23 per cent in 2015. According to various sources, more than 2.5 million teu are being stored empty in different container terminals worldwide at any moment, and about 20.5 per cent of the world total port turnover refers to empty container handling. Furthermore, according to an investigation carried out by the International Asset System, an intermodal transport information network, a container spends more than 50 per cent of its total life span lying empty or waiting for the availability of cargo, or being repositioned to the point of demand. According to estimates, empty container repositioning costs are about $20 billion on the global level. During a recent study, Maersk group said that because of imbalances in worldwide trade its vessels were forced to carry 4 million empty containers every year. Since Maersk has an estimated 2.2 million containers in use, it would suffice to say that empty containers are travelling the globe doing nothing at least twice a year. As per media reports, Maersk spends around $1 billion on shipping empty containers from point A to point B. Costs of empty container repositioning include inland transport charges, terminal dues (storage and handling charges) and carriage by sea to the market/port where empty containers required for export cargoes are in short supply.

" The total throughput of containers in India was 11.3 million teus for FY ending 2015. Out of this about 1.2m teus were empties (for FY 2014-15). Imports increased during FY 2014-15 and came to around 55 per cent as compared to exports that were about 45 per cent; this resulted in more empties." "

Capt Dinesh Gautama
President, Navkar Corporation Limited
Navi Mumbai.

Empty thinking in India

Repositioning of empties – shifting an empty container to where it is required – is also a mammoth problem in India, and mainly three segments – container train operators, inland container depots (ICDs) and the Ports are impacted by this adverse trend. The container movement in India is said to be derailed in a big way because of the empties. Many container train operators are carrying cargo to the hinterland but they don't have enough export cargo while returning to the ports. Due to this, more and more container rakes are returning empty, thereby increasing the operational costs of the operators. "With the imbalance in trade, empty running is bound to increase further," said an official of the Container Corporation of India (Concor). **Sankalp Shukla, managing director of Innovative B2B logistics** (Inlogistics), also concedes that the empty rakes repositioning adversely impacts operations. The haulage cost for running an empty rake in the most active Mumbai-Delhi sector is about 15-20 per cent of the total cost. According to the industry players, empty running has a severe impact on the net operating margins on a per-train per-month basis. "Every per cent of empty running has an equal and negative impact on the margins," avers Shukla. Smaller companies are hit more by this phenomenon than giants like Concor, which has more than 250 trains running and has about 58 terminals. "Unlike the smaller players, we can optimise deployment of rakes by getting flexibility to operate trains based on the availability of cargo," says the Concor official. The company has also increased terminal usage charges at few of its terminals to pass on a percentage cost of the empties to its customers.

Apart from the container train companies, ports too are badly hit by empties due to the congestion effect. In India, around 0.5 million teu of empties spread over the various depots can be found at any given point of time. "The total throughput of containers in India was 11.3 million teu for FY ending 2015. Out of this about 1.2m teu were empties (for FY 2014-15). Imports increased during FY 2014-15 and came to around 55 per cent as compared to exports that were about 45 per cent; this resulted in more empties," says **Capt. Dinesh Gautama, President, Navkar Corporation Limited, Navi Mumbai.**

Apart from the trade imbalances, the problem of empties in India is compounded by the fact that rail and road connections are challenging due to non-availability of dedicated services, which implies that moving empties when most required becomes difficult. "We continuously thus experience high pendencies of laden boxes at either port or ICD locations. Most of the ICDs also apply royalty charges on shipping lines or high handling cost, to deter them to move empties out from one ICD to another competing ICDs for export

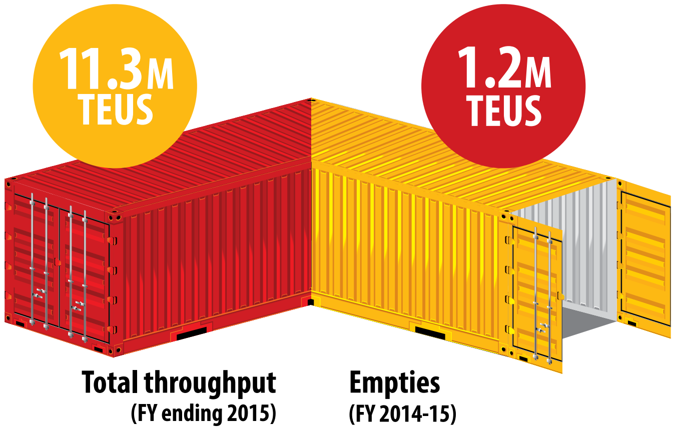
> For a carrier it is a double whammy because on the one hand he has to evacuate his surplus, and on the other hand he has to re-position empties to cater to trades demand. This situation is having a cascading effect on the transaction cost and which resultantly is overpricing both import and exports,
>
> **Capt. Sanjeev Rishi**
> Advisor, Worlds Window Infrastructure ICD Loni

stuffing," says **Capt. Deepak Tewari, President of Container Shipping Lines Association (CSLA).** The problem of empties is more conspicuous in India as the port handling charges for empty containers at the Indian ports are generally lower than those levied by nearby ports of Singapore and Colombo thereby providing a built-in incentive for storing empties in India. "The government should increase port handling charges to be at par with neighbouring ports, which will not only result in higher revenue to the ports but also lead to decongestion of the ports from empties," says an official of the Indian Freight Container Manufacturers Association.

There is another dimension to the problem – containerised imports into India generally are of white goods which utilise 40ft containers, whereas the dominant exports out of India are agricultural products which require 20ft containers. Thus in most areas there is a surplus of 40ft equipment and deficit of 20ft equipment which is required for exports. "For a carrier it is a double whammy because on the one hand he has to evacuate his surplus, and on the other hand he has to re-position empties to cater to trades demand. This situation is having a cascading effect on the transaction cost and which resultantly is overpricing both import and exports," says **Sanjeev Rishi, advisor, Worlds Window Infrastructure ICD Loni**. He adds that the carriers are increasing their freight costs to include some element of empty evacuation or repositioning. The situation is more profound at hinterland destinations, where the carriers are reluctant to dispatch imports due high empty evacuation cost and accept exports from hinterland due high empty repositioning cost.

According to industry players, one of the ways to bring down the repositioning costs is to have a consortium and sub-lease empty containers to the consortium partners. "This is now just starting as many shipping lines have seen the benefits of following this methodology," says Gautama. According to Tewari, relaxation of cabotage laws can also play a role in repositioning of empties from one Indian port to another. "This will reduce costs considerably," he avers. The cabotage provisions in the Indian Merchant Shipping Act do not allow foreign flag vessels to carry local cargo from one Indian port to another. According to industry players, if foreign flagged ships are allowed for coastal cargo movement, overseas cargo ships can carry costal cargo and the issue of empty return can get addressed.

Other solutions to effectively reposition empties include conversion of ICDs/CFSs to PFTs or make them eligible to cater to both EXIM and domestic cargo movement by rail or road services. Free movement of cargo between the PFTs and/ or terminals would help bringing down the transportation cost significantly and improve the supply chain. "Lack of adequate infrastructure also demands for dedicated freight corridor by road and rail, so that cargo movement is not disturbed. Improving domestic cargo movement on containers to cover the exim imbalance is also an effective strategy," says Tewari.



Innovation to combat the problem of empties

Considering the high costs of repositioning of empties, the question that is frequently brought up in international shipping circles is whether the shipping companies can coordinate their container transport so that they can draw on each other's empty containers, instead of transporting empty containers thousands of kilometers. This could be in the form of a portal, which the companies would operate together, keeping their containers together, or it could happen by creating a global market for so-called "grey boxes," meaning that all containers would be similar, without a logo and owned by everyone.

There have been some attempts in the industry to use the grey boxes, but the problem has not yet been resolved to a great extent. Some other innovative ideas that are being used in developed countries include the use of foldable containers and 20ft containers that can join together to form a 40ft container (so-called "tworty" boxes). Even with the additional handling costs, the large reduction in transport costs means that both options provide the possibility of significant cost savings. This is particularly the case with the foldable containers, whereas the tworty depends heavily on the equipment type requirements on a specific route. However, neither of these are realistic options at present.

Different ICT solutions, including electronic markets to find free slot capacities for empty containers, are also being used. Such virtual platforms between consignees and consignors focusing on container unit exchange have been deployed in some developed countries. They are called virtual container yards. An example of such an ICT tool is the InlandLinks the port of Rotterdam's online intermodal platform. The online application shows, per connected shipping company, the inland terminals where shippers and logistical service providers can pick up and deposit empty containers, and later reuse these containers for a new load. As a result of the tool, it is no longer necessary to always return the empty containers to Rotterdam. InlandLinks enables the shipping lines to give shippers and freight forwarders more insight into their intermodal services to and from Rotterdam's hinterland. "From the very start we listened to the needs of all market parties, from shippers to inland terminals, shipping lines and logistical service providers. In collaboration with these parties, we developed the empty depot tool, and the positive cooperation has allowed us to grow into an international platform of this size," says **Donald Baan, Project Manager at InlandLinks.**

Companies like Maersk Line have also come up with other interesting solutions through more strategic use of its equipment. The solution called 'NOR', for 'Non-Operating Reefers, is headed by Moshe Loberant. A NOR is a reefer container that is used to ship dry cargo. That simple versatility is proving quite powerful in reefer heavy trading corridors. For instance, Brazil exports thousands of tonnes of fresh produce and meat all over the world. And because of its rapidly growing economy, it also imports a lot of dry commodities for infrastructure and development, leaving Brazil with too many dry containers and too few reefers. If a customer shipping dry cargo to Brazil uses a NOR instead of a dry container, the balance is corrected. Brazil receives the reefer it needs, and Maersk Line removes the cost and time of moving two empty containers – one empty dry container out of Brazil and one empty reefer back into Brazil. The NOR project has been under way since 2009 and the success so far is encouraging. In 2011, Loberant says approximately 85,000 NORs were utilised by customers, up 30 per cent from 60,000 in 2009 when the strategy was put in place. The associated cost savings were approximately $50 million in 2011. In Santos, Brazil, where reefer containers facilitate the country's massive reefer commodity exports, NORs help improve port productivity.

"We continuously thus experience high pendencies of laden boxes at either port or ICD locations. Most of the ICDs also apply royalty charges on shipping lines or high handling cost, to deter them to move empties out from one ICD to another competing ICDs for export stuffing."

Capt. Deepak Tewari
President of Container Shipping Lines Association (CSLA).

Indeed, the strategy of using domestic cargo is already being used by the container train operators to combat the situation. Both Concor and private companies like Gateway Rail have been switching between exim and domestic cargo to reduce the losses of empties. "Combining the volumes at our various terminals, we can mix cargo," says **Sachin Bhanushali, President of Gateway Rail Freight Limited**. Concor too has started using the shipping lines' containers for transporting cargo of the domestic customers to combat the problem of empties. Concor nudged the shipping lines with its offer to reposition the empty boxes in ports at a lower cost. For instance, if a shipping line wanted a bulk of containers moved to Western ports on a particular date, then Concor offered that it would move the containers to the port at some discounted freight charge for the shipping line, but, the discount was in lieu of the shipping line allowing Concor to drop the boxes at the port after some days.

According to CONCOR, giving a discount to the shipping lines is worth the effort, as running empties means a bigger dent on its profits. If it is running empties on a certain route and it uses this for domestic traffic, then its net profit ratio fares better in most cases. Due to this, CONCOR has strategised to pick domestic traffic, even if it means taking some route deviation. According to CONCOR officials, the domestic cargo includes goods which were moving by road. "They get a rate advantage vis-à-vis road. Plus, they get an advantage of volumes moving together. In road transportation, they were unable to move all the volumes together and faced uncertainty on account of daily varying of truck rates. There are customers, for whom we have done mass evacuation and have also managed the deliveries at the other end. We relieve them when we pick cargo from their warehouse. We take their cargo to Concor's other terminal on the route, hold the cargo in our terminal at the other end, for 10-15 days and deliver as per their schedule. We have tied up with road transporters for last mile delivery. This has helped us combat the problem of empties till a large extent," said the official. Indeed, the trains of Concor are running fuller now. "With this strategy, we were able to increase our domestic throughput. The expenses remained same and earnings went up," the official added.

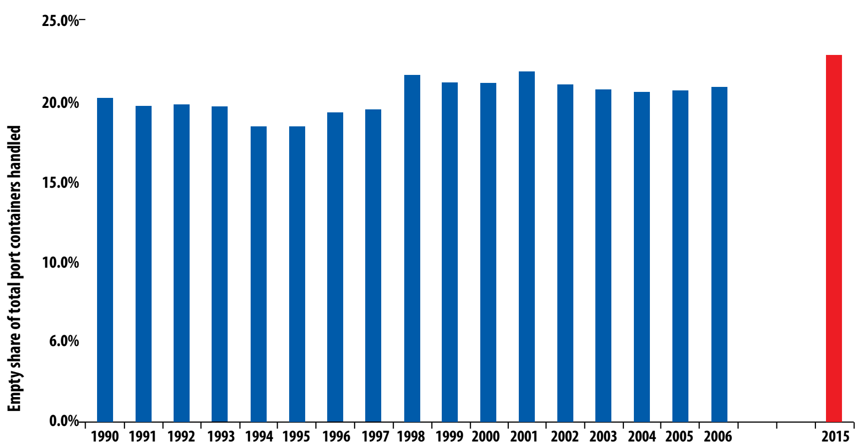
The classic case of Northeast

Using domestic cargo is not the only strategy that has been used by Concor. Its work in the Northeast region shows that innovative marketing strategy can also help in repositioning empties in a cost-effective manner. When it had started operations in the region to handle containers for domestic movement, there too it had encountered the problem of empties in a big way. There was a mismatch between the supply of and demand for containers, with the supply far exceeding the demand. There was hardly any demand for boxes to move goods, as most were being transported mainly by trucks and lorries. Concor decided to resolve the problem, as the goods of the region were amenable to containerisation. For example, the major commodity moved out was jute, which could be sent by railway containers. But that did not happen because of several factors, such as the lack of awareness among traders on the benefits of containerised movement. To rectify the problem, Concor launched Contrack, a scheduled container freight train launched between Kolkata and Chennai, and Kolkata and Delhi. Thereafter, large volumes of jute goods started being moved by railway containers to the western and southern regions where sugar mills needed them for packaging. In addition, cast iron goods were also transported in Concor's containers from the East to other regions. The commissioning of Haldia Petrochemicals and the Mitsubishi PTA plant also helped. Hindustan Lever Limited's chemicals plant at Haldia also started using the Contrack service for movement of its materials to the southern region. Soon Concor became the undisputed leader in cargo transportation from the Eastern region. Its strong positioning in handling the region's domestic cargo is largely based on its ability to offer customised transport solutions to the trade. Industry experts aver that in the face of adversity, CONCOR became 'dynamic' and entered into value added businesses, and due to this it may have not resolved the problem of empties completely, but its strategy has helped minimise the losses to a great extent.

Indeed, Concor should be a role model for others in the industry to cost-effectively reposition the empties. But effective repositioning of empty containers demands a multi-tiered response both from the industry and the law makers. According to Rishi, the situation of trade imbalance will continue, and therefore in order to ensure repositioning of empties without burdening the trade, the government as an interim measure should announce some incentives to carriers such as tax wavier on transportation of empty containers or permitting terminals/ ports to use containers as temporary warehouses. The government can also consider increasing the duration of container bond with the Customs from six months to two years and allow carriers to use boxes for domestic cargo movement.

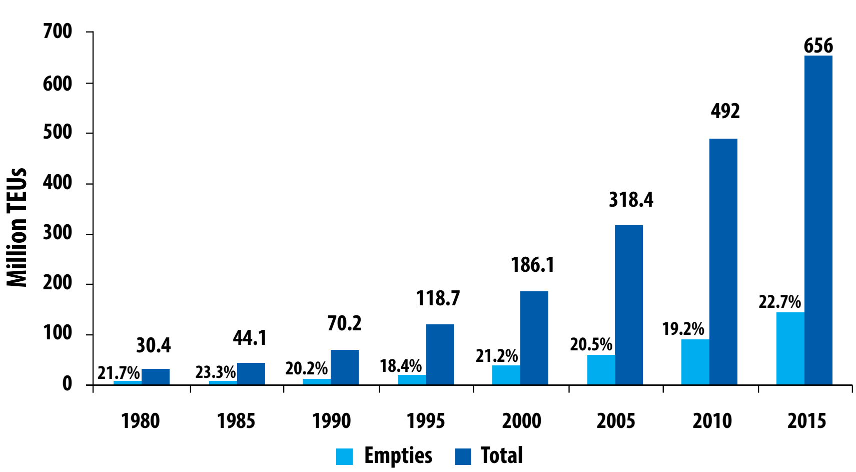
Transport of empty containers

Empty share of container movements (1990-2006, 2015)



Sources: Drewry Shipping Consultants, Study estimates

Volume of empties as against total containers shipped



Source: Drewry Shipping Consultants, Institute of Shipping Economics & Logistics (ISL) and Global Insight projections

AIDING NEPAL LOGISTICALLY

The ground level activities of the international logistics companies that continue even a month after the earthquake and its recurring aftershocks, have brought in much needed relief to the terrain where life had come to a standstill

Mohammed Shareef MP

The 7.9 Richter scale jolt that shook Nepal on April 25 was followed by outflow of much needed relief from across the world. A small but significant share of the humanitarian aid was supported by international logistics companies whose corporate teams responded quickly to set right logistical challenges that crippled relief efforts. Even as the earthquake had devastating effects on the country's infrastructure including roads and airports, ground level activities of these companies that continue even a month after the earthquake and its recurring aftershocks, have brought in much needed relief to the terrain where life had come to a standstill.

Firms including DHL, UPS and Fedex Corp are still on the ground mitigating relief efforts, their efficient teams said, while speaking from Nepal. Among the logistic champions aiding Nepal is Deutsche Post DHL (DPDHL) group, the world´s leading logistics provider which has deployed its Disaster Response Team (DRT) in Kathmandu, Nepal, following earthquake that claimed thousands of lives. DPDHL group's DRT has been providing logistics support to help manage the incoming international aid that includes technical equipment, water and food at Tribhuvan Kathmandu International Airport for further distribution through local and international organisations that engage in relief activities.

Gauging the magnitude of the situation, **Frank Appel, CEO of Deutsche Post DHL** Group in a statement wrote, "The massive scale of destruction from the Nepal earthquake has hugely crippled infrastructure and damaged roads and local airports, posing a great logistical challenge towards relief efforts." For most companies it was a race against time to rescue those still captured in the debris as well as those in urgent need for critical assistance and amenities like medical help, food and water. The sudden influx of relief goods at Kathmandu airport challenges the local capacities to distribute these goods in a timely manner to reach beneficiaries. And DHL has been providing help with logistics at the airport, Appel explained.

Talking to *Maritime Gateway* from **Kathmandu, Chris Weeks, DHL Director for Humanitarian Affairs** said, "Our team comprises highly trained volunteers who provide logistical expertise to help coordinate the relief aid at the airport for further distribution to the victims in the speediest manner possible." And why is good logistic support important in disaster relief? In the aftermath of a disaster, airports can become bottlenecks that delay the distribution of emergency relief supplies. In these situations, logistics expertise can make a huge difference in coordinating the incoming supplies, and so save lives by ensuring a swift and organised handling of all aid," he explained. DHL has already dispatched 12 members of its DRT to the disaster stricken country. They are part of a squad of 400 logistics professionals who are waiting to be deployed worldwide within 72 hours of a disaster to help manage the incoming flood of international aid. DHL workers are till date working at the Katmandu's Tribhuvan International Airport to support the United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA).

In yet another move that has reduced the challenge of importing goods to the region with damaged infrastructure, the US Marine Corps planners, had dispatched four MV-22 Osprey aircraft from their base in Okinawa, Japan, to Nepal. Designed to fly like airplanes and take off and land like helicopters, the tilt-rotor aircraft allowed marine aid workers to land on the damaged runway and then fly local missions to reach remote areas, Chris Weeks said detailing the broad picture to 'MG'. And these teams have been putting their life at risk to bring in aid, corporates said. One such US Marine Chopper intending to distribute relief aid to a marooned hinterland had crashed in an unfortunate incident claiming eight US marines on May 14.

FedEx Corp has also been following a similar strategy in dispensing its humanitarian support to Nepal. The Memphis-based company's $1-million aid commitment included cash and transportation support – vital ingredients for clearing these unique logistics hurdles – in addition to donating a chartered flight for delivering life-saving medical supplies and medicines, shelter, and water treatment systems. Also, UPS Inc, another company of FedEx's chief rival made a $5,00,000 donation. "The devastation in Nepal is heartbreaking, and our condolences go out to all of the people impacted by this terrible tragedy," President, UPS Foundation, Eduardo Martinez said in a statement. The company has been working with the United Nations Logistics Cluster and the UN Office for the Coordination of Humanitarian Affairs to find additional logistics support in Nepal. A relief charter flight to Nepal in support of humanitarian organisations in Dubai will also make it to Nepal, UPS has committed in a statement. Another group providing expertise is the American Logistics Aid Network (ALAN), which is using its website

"After Kathmandu airport Kolkata Port is where we receive maximum relief cargo. From Kolkata it moves through rail till Birgunj Inland Container Depot of Nepal and from there it goes via road using trucks."

Surendra Thapa
Deputy Consul General,
Consulate General of Nepal

"Other than the normal trade cargo, relief cargo is also being moved on a regular basis and we had given instructions to give clearance of relief materials with topmost priority and the mode of transit as whole is both rail and road."

Sharad Verma
Chief General Manager, CONCOR

as a hub to post requests for logistics services and coordinate response from aid providers. ALAN's mission has been towards supporting disaster recovery by engaging industry to address the unmet needs of relief organisations, communities, and people.

Relief cargo through Kolkata Port

While Nepal's only international airport has stopped large relief planes from landing because its sole runway that had developed cracks after the earthquake can no longer bear the weight of large aircrafts, Indian seaports at Kolkata and also Indian Railway has been helping in moving international relief aids.

"Indian port in Kolkata has been the international gateway for Nepal in the export and import since long. And now even for the relief flow Kolkata port is crucial for Nepal. After Kathmandu airport Kolkata port is where we receive maximum relief cargo. From Kolkata it

moves through rail till Birgunj Inland Container Depot of Nepal and from there it goes via road using trucks," said **Surendra Thapa, Deputy Consul General** to MG from Kolkata.

Container Corporation of India Limited has been helping Nepal in moving inbound and outbound cargo through dedicated rakes from Kolkata Port to Birgunj ICD in Nepal and vice versa. According to officials from CONCOR, the Nepal disaster hasn't hampered the continous movement of the cargo. **Sharad Verma, Chief General Manager, CONCOR**, East said that containerized cargo is in continuous transit from Kolkata Port to the ICD at Birgunj through the CONCOR rakes. "Other than the normal trade cargo, relief cargo is also being moved on a regular basis and we had given instructions to give clearance of relief materials with topmost priority and the mode of transit as whole is both rail and road. In the Financial Year 2014-15 CONCOR have moved over 22000 teu of Import containerized traffic to Nepal," Sharad Verma informed MG.

Other than the international logistics companies, Indian companies also have stretched their share of help to the disaster hit Nepal which are being mostly done via road through Indian entry point to Nepal like Raxaul in Bihar state of India. "All the relief materials that we are sending to Nepal, are being sent to Raxaul. There we have contacted some officers at the army base who are informed of all details of all the trucks sent to Nepal. The army checks the trucks as soon as it reaches there and takes these forward to Kathmandu under its supervision to later distribute the aid further to hinterlands," told **Deepak Baid, Director at Siddhi Vinayak Logistic Limited,** India. mg

Self-regulation: Building block to quality service

The government is encouraging logistic players to self-regulate themselves. The idea is to upgrade the quality of service offered to importers and exporters and bridge the gap between service providers and receivers, without actually intervening to regulate either

Sailesh Bhatia
Managing Director
Bhatia Shipping Agencies

Shipping and logistics is in a very exciting phase of transformation. Our Prime Minister Narendra Modi and Shipping Minister Nitin Gadkari are very clear that to make "Make in India" successful, efficient logistics and simplification of procedures will play a key role in the success of this initiative. With this in mind, government has announced the following programs which support "Make in India" initiative:

1. Sagarmala.
2. Interlinking of waterways.
3. "Ease of doing Business"

In addition to this, the government has planned logistic parks, smart cities and port cities. In the coming years, it is the target of the government to double India's exports, as such there is a huge growth opportunity available for all logistics and exim players. GST implementation will also change the pattern of logistics.

With respect to multimodalism, the government is seized of the fact that less than 1 per cent of multimodal traffic is handled by registered multimodal traffic operators. Rather than making restrictions and taking punitive steps to get the balance operators registered with them, they are of the view that all operators should be freed from registration by making them form their own "Self Regulatory Organisation" (SRO) and licence themselves, rather than the government licensing them. This will enable all players to come under one umbrella with the least involvement of the government. To enable the above, the government is also amending MMTG Act 1993, draft of which is on the website of the Ministry of Shipping for comments from trade. The objective of these amendments is to encourage logistic players to self-regulate themselves, with least amount of government interference. Government has taken this initiative at the request of importers and exporters, who felt that their grievances were not being addressed by service providers. The concept of SROs will have following ingredients:

1. Code of conduct.
2. Standard business practice conditions.
3. Grievance redressal forum.

With the above initiative, the government wishes to bridge the gap between service providers and receivers, without actually intervening to regulate either. All the above initiatives will support the "Make in India" initiative, helping the business community to grow rapidly with ease. However, the road ahead whilst offering a lot of opportunities has many challenges. Some of them are:

1. Creation of infrastructure should keep pace with growth of trade.
2. Simplification of bureaucratic processes.
3. Attitudinal change by dealing officers.
4. Misuse of powers vested in dealing officers.

All above initiatives and resolution of challenges would take time to be delivered, and it is to be seen whether it will keep pace with the aspirations of business community and help in the growth of our nation or be impediments for growth.

As an optimist, I hope, and I am sure that our government and bureaucracy will not let us down and will seize the golden opportunity which we as Indians have on our hands to become world leaders in all what we do. mg

SURAJ INFORMATICS PVT. LTD

Inspiring Networks

Your IT Infrastructure and Automation Partner to support all of business application requirements

Corporate Office:

G-61 Gautam Complex, Sector 11 ,CBD Navi Mumbai: 400614

Tel: +9122 40309800 ,Email: sales@surajinformatics.com

Branches : Delhi, Gujrat,

Support Location: Hazira, Chennai, Cochin, Bangalore, Kolkata, Dehradun and Pune

FURNITURE IMPORTS: AN UNTOLD STORY

Despite the humongous potential furniture industry has, it largely depends upon imports to meet the ever-increasing demand on the domestic front, which is rising at a rate of 30 to 40 per cent year-on-year

Itishree Samal

Royaloak Furniture India LLP, a leading furniture importer in South India which has nine exclusive retail showrooms in Bengaluru and more than 800 dealers spread across south India, meets all its domestic furniture requirements through imports. The company imports about 50 containers in a month from several countries such as China, Malaysia, Indonesia and Taiwan.

Reason: The company claims, importing furniture is comparatively cheaper and cost-effective than manufacturing them in India. For instance, according to **Naresh L, Product Manager, Royaloak Furniture India**, China with its cheap labour and low material cost offers good-designed and quality products at a very low price. "Furniture from China costs us approximately 50 per cent less compared to the same being manufactured here," he quips. The company imports around 450 SKUs.

"Royaloak sees growth in imports year-on-year, mainly backed by the growing demand in the domestic market. Consumption has increased domestically, the demand for furniture is increasing at a rate of 30 to 40 per cent every year," Naresh tells *Maritime Gateway.* The company has 30 warehouses spread across south India.

Similarly, Damro Furniture, which has 66 retail showrooms in India, neither has a manufacturing plant in India nor it sells locally-made furniture. To meet the demand, it imports about 150 containers every month from Damro's manufacturing plant in Sri Lanka to sell it here. Damro entered Indian furniture market in 1986 and has grown to 66 showrooms at present, however, it chooses to import to meet the rising demand.

Like Royaloak and Damro, there are many furniture players in India including big retailers as well as small-scale furniture stores who prefer imported products over locally-manufactured ones for better design, quality and less expensive nature.

India's imports

India's total furniture imports are worth $736 million and surging at the rate of around 27 per cent annually, according to a recent Associated Chambers of Commerce and Industry of India (ASSOCHAM) study. In the year 2004-05, India was world's top furniture importer accounting for 17 per cent of the total imports worldwide. During the year, the organised furniture industry imports accounted for ₹800 crore, with the overall furniture market growing at 12-15 per cent.

There is a gap in availability and desirability in the furniture industry in India. Customers want modern designs, but the traditional stores do not offer that variety. So, the dependency on imported furniture is on the rise. According to **Jyothi Jain, CEO of Samaavesh**, a leading furniture store catering to the luxury furniture and home décor segment, "Growth is majorly backed by boom in office space and real estate, and increasing awareness on hygienic and smart living. The furniture industry is further going to see a huge growth."

"

Growth is majorly backed by boom in office space and real estate, and increasing awareness on hygienic and smart living. The furniture industry is further going to see a huge growth.

"

Jyothi Jain
CEO of Samaavesh

Lack of modernisation and innovative design, dearth of skilled labour, limited market access and lack of quality control in the domestic furniture industry are the key issues restricting the growth of India's furniture manufacturing industry and increasing dependency upon imports.

Talking on the similar lines, **Amal Priyantha, Zonal Manager (Andhra Pradesh & Telangana), Damro Furniture India,** says, "Most of the times, the quality of locally-manufactured furniture fails to meet global standards in terms of design and quality of raw material. It also happens at times that refurbished products are sold in the market as brand-new products," adding that "several other factors include the additional tax which a person is required to pay to cut trees, use of cheap and locally-grown woods from guava or mango tree instead of teakwood or sandalwood by Indian manufacturers fail to produce export-worthy furniture."

Another factor that drives the dependency upon imports is the non-operation of furniture manufacturing factories in India. As of 2011-12, around 262 (19 per cent) of the total 1,419 registered furniture factories in India were non-operational due to several factors, as per the ASSOCHAM report.

Export Scenario

The export of furniture from the country is seeing a growth rate of 18 per cent. Australia, France, Germany, UK and USA are the leading destinations for India's furniture exports. Growing real estate sector in Saudi Arabia is also helping India's furniture exports grow, according ASSOCHAM report.

In 2000, India ranked 48th among furniture exporters and 49th among importers globally. This was due to the high import duty and low technical level of Indian companies and local tastes and traditions that influence the style of the products offered, making them difficult to export.

Currently, India exports only artistic work of wood and handicraft furniture. According to Naresh of Royaloak, India exports specially designed, classic furniture products that are exquisite and antique in nature, along with furniture made out of expensive and rare woods such as Seesham wood. One such exporter is Maharaja Furniture.

Among the factors responsible for low demand for India-made furniture could possibly be the less participation of Indian furniture manufacturers in the international furniture trade fairs and shows. "At present, the participation is not even 10 per cent," he says.

"

Royaloak sees growth in imports year-on-year, mainly backed by the growing demand in the domestic market. Consumption has increased domestically, the demand for furniture is increasing at a rate of 30 to 40 per cent every year.

"

Naresh L
Product Manager, Royaloak Furniture India,

As per the data, the top five registered factories constitute almost 55 per cent of registered furniture factories in India, which includes Maharashtra that leads with 222 units followed by Tamil Nadu (201), Rajasthan (124), Andhra Pradesh (119) and Karnataka (112). And among the non-operative units Punjab has about 62 per cent followed by Haryana, Tamil Nadu and Karnataka.

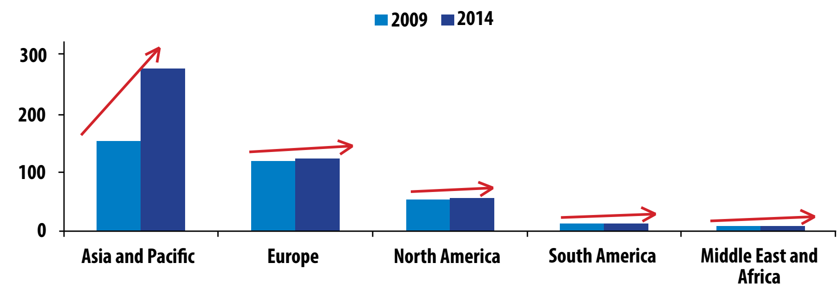
Market opportunities

The overall furniture industry in India is currently estimated at $15-20 billion (₹93,000-1,24,000 crore) and seeing a double-digit growth every year. Between the financial year 2008 and 2013, the segment recorded growth rate of 17.2 per cent CAGR. And according to a recent report, "India Furniture Market Forecast & Opportunities – 2019," published by TechSci Research, the overall furniture industry is further going to grow and projected to cross $32 billion by the year 2019.

While the projections are enormous, growth will be majorly driven by rising disposable income, increasing urban households and real estate boom. Further, growth in institutional and hospitality sector, rising demand for office space and expansion of organised retail stores will spur the demand for quality furniture in the coming years.

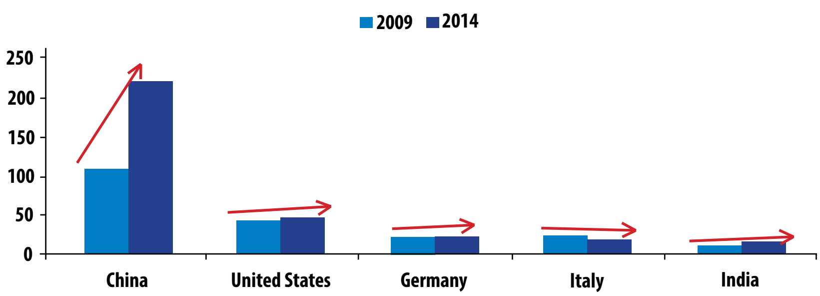
Despite the huge market size, however, the industry was predominantly unorganised, covering more than 90 per cent of the market run by standalone stores and individual carpenters. However, it was only when organised players like Home centre, Style Spa, Godrej Interio, Featherlite, Durian, Wipro, Nilkamal, Evok, Home

Furniture production by geographical region, 2009 - 2014.
$ billion



Source: CSIL
2014: preliminary estimate

Major furniture producing countries, 2009 - 2014.
$ billion



Source: CSIL
2014: preliminary estimate

Stop and HomeTown started setting up furniture showrooms across the country, it changed the face of the organised market. Also, many online players such as Urbanladder, Fabfurnish and Pepperfry have emerged in the last two and half years.

The organised furniture retail industry is now growing at the rate of 20 per cent year-on-year, **Pulin Shah, President of the Association of Furniture Manufacturers and Traders,** said in a media report.

"Until a few years ago, buying furniture used to be a daunting task. Taking time out, visiting a furniture market or calling local carpenter used to stop one from having the desired furniture product. But the way Indians buy furniture seems to be changing with the availability of multiple retail furniture stores and convenience of online shopping," Jain of Samaavesh says.

According to reports, the Indian furniture sector is expected to become one of the largest category in the rapidly growing e-commerce market in India. Many traditional organised players are planning to go online as well. For instance, Future Group has tied up with Pepperfry to sell some of their products online and Home Stop also sells through own online store.

"Despite the volatile nature of the sector, the demand on the domestic front is expected to see a minimum 20 per cent growth over the next five years," Priyantha of Damro Furniture, says. Damro Furniture India mainly caters to the home furniture segment and imports via ports on the east-coast.

It's not just on the domestic front; the furniture industry globally is also expected to see a huge growth along with rise in trade of furniture between countries. The world trade of furniture, which amounted at $94 billion in 2009, grew to reach $106 billion in 2010 and $134 billion in 2014. It is further likely to grow to $141 billion in 2015.

While world production of furniture is valued at $480 billion, around 30 per cent of it is exported whereas 70 per cent is consumed in the countries where the production takes place, according to CSIL data, that studied 70 most important countries. The furniture production of all high income countries combined covers 39 per cent of the world total. The middle and low income countries, with 61 per cent have exceeded for the first time in 2010 the level of one half of total world furniture production.

On the larger aspect, the furniture sector is becoming more and more globalised. At present, the major furniture manufacturing as well as exporting countries are China, Germany, Italy and USA.

When it comes to furniture imports into India, China tops the chart. According to the ASSOCHAM report, China largely dominates the furniture imports into India annually with nearly 60 per cent of share in India's total furniture imports worth $447 million, thereby giving severe competition to the domestic industry.

Port-wise imports in India

Between the 10th of April and May this year, India imported furniture worth $14,017,464, according to the latest India import shipment data by India Customs. The average value per shipment of furniture imports during the period stood at $368,881. Among the sea ports, JNPT accounted for 48 per cent of the total imports, followed by Madras Sea and Delhi TKD ICD (ICD Tughlakabad) which accounted for 11 per cent and 9 per cent respectively. Shipping lines including APL, Hanjin, Wan Hai and Maersk Line are importing furniture to India.

Ports on the east coast including Chennai, Vizag and Kolkata Port have been doing imports of furniture for quite some time now, whereas, the Krishnapatnam Port has recently entered the segment.

The process of importing of furniture starts with placing the order, paying the deposit amount for consignment to nominating the freight forwarder and brining the cargo. It takes anywhere between 60 to 90 days to import furniture into India. mg

Lui Tuck Yew, Singapore Transport Minister addressing the opening ceremony

Charting Asia's future growth

"Platforms that gather leading industry voices are valuable in allowing the exchange and cross-pollination of ideas. Such exchanges can help in charting future growth plans and generate solutions that will bring the maritime sector to new heights," says **Lui Tuck Yew**, Singapore Transport Minister

The Sea Asia 2015 conference brought into focus the growing role of Asia both as a consumer and supplier of goods in the global scenario. Asia supplies about half of the goods consumed worldwide, and the growing purchasing power of the people in the region has created an insatiable demand for goods which are mostly transported through the seas. Today, about a third of the global middle-class population lives in Asia, which is expected to increase to two-third by 2030. These facts indicate at the huge business opportunities the region will offer and also underscore the theme of the event "Charting Asia's Future Growth."

At the opening ceremony, **Lui Tuck Yew, Singapore Transport Minister and Second Minister for Defence**, indicated at the growth of shipping in Asia and the need for the maritime community to respond and capitalise the many opportunities it offers. To take part in this growth Singapore is preparing by developing infrastructure and technology, pursuing growth in a sustainable and responsible manner, and improving the quality of maritime workforce.

At the Sea Asia Global Forum, **BW Group Chairman, Andreas Sohmen-Pao,** pointed at the troubling trend of public equity markets demanding very specific pure play offerings from shipping companies. But there are investors interested in companies involved not only in particular sectors but also in specific segments such as only suezmax tankers for example. From an investor's point of view it becomes easy to assess the market and allocate capital, but it makes running the business very difficult due to the cyclical nature of shipping where diversification helps to even out the peaks and troughs.

Coinciding on the views, **Nordea Bank President and Group CEO, Christian Clausen** said pure play shipping is unsustainable because of the nature of shipping business. Clausen emphasised on the need for companies to diversify and bring down the risk. While financing projects, the problem right now is getting the balance of capital allocation right, and existing issues with loan portfolios and legacy assets further add to it, said Clausen.

Another interesting topic discussed at the event was 'the outlook for shipping.' Inspite of the optimism in the air, industry leaders appeared to diverge in their opinions on the future of the global shipping market due to the continued problem of over capacity. There is a rush to order new tankers as crude prices have declined, but this could be dangerous, leading to excessive tonnage, warned **Andreas Sohmen-Pao, Chairman of BW Group.**

Teo Siong Seng, MD of Pacific International Lines pointed at the challenges posed by newbuildings and the impact of big ships on the intra-Asia region where most of the ports are not equipped to handle mega box ships.

However, **Claus V Hemmingsen, CEO of Maersk Drilling** differed as he said short-term supply-demand imbalance may deter optimism but the long-term efficiencies offered by megaships would provide a more sustainable growth to world trade.

Key trends and issues such as dry bulk shipping being battered by low freight rates; impact of low oil prices; terminal and intermodal costs creeping up on boxship owners were discussed at the three-day event that saw a participation of 16,185 members from 85 countries, a 23 per cent increase in attendence over the previous year which reflects at Sea Asia's growing importance in the maritime sector.

A blooming opportunity

Indian maritime trade is unable to tap the exponentially expanding floriculture cargo despite headways being made by international counterparts

Ritu Gupta

Can you believe that men and women armed with gunny bags sifting through mountains of dried floral waste strewn in some of the dense forests of our country can account for exports worth crores of rupees? Indeed, what seems like trash collection is actually the first step in the business of dried flower exports which is said to be worth ₹200 crore annually. At a time when corporate houses like Essar are invading the ₹72,000-crore global fresh flower market, a handful of exporters in India are quietly making a killing out of dried floral waste. Dried flowers and plants have been exported from India for the last 40 years, and today India is one of the leading countries in the field. The industry exports to more than 20 countries and Indian products are highly in demand in Germany, Holland, USA and the UK. According to the Agricultural and Processed Food Products Export Development Authority (APEDA), India's floriculture industry is growing at the rate of 30 to 40 per cent and dried flowers account for 70 per cent of India's floriculture exports, followed by cut flowers. The government has identified floriculture as a sunrise industry and accorded it 100 per cent export oriented status.

For dried flower exports, the name of the game is to churn out the best designer waste: after the dry flowers, leaves, pods and grasses are collected, exporters grade, heat, dye, bleach and sometimes lacquer them for that chic look. It's value addition from the outset: the flowers and their parts suddenly acquire exotic hues in moss greens, baltic blues, soft pinks, antique mauve, fuchsia or burgundy. And they are non-perishable. "In the West, eco-friendly and recyclable products are now in demand. Dry flowers fit in nicely here," says **Vimal Saraogi, who owns the Kolkata-based Natural Products Export Corporation.** The prices of these flowers range from ₹20 per pine cone to ₹80 per kg for lily petals to ₹400 per kg for golden mushrooms. The flowers sell for five to eight times their export price in the shops abroad. The strategy is to sell finished products – bouquets, floral arrangements and pot pourri. Tuticorin is one of the key hubs of the industry. Tuticorin's dry weather is ideal for dry flower processing, prompting a large number of big and small players to make it their base. Some of the main companies involved in this business in Tuticorin are Ramesh Flowers (Private) Limited, Fauna International and Sibaflor Natural Decorations. Other leading players of the industry include Chennai-based Natural Products Export Corporation and Kolkata-based Singhvi International.

For making the dried plant arrangements, dried plant material and agricultural waste, sourced from all over the country, are transported to the manufacturing base on a daily basis. However, transporting both the raw materials and the finished products is a task for the industry, even in places like Tuticorin which is a port city. "Most of the exporters prefer Tuticorin as the export hub because this port, operated by the Indian subsidiary of PSA Singapore, has some infrastructure support for our cargo. But congestion is a major impediment," says an exporter. The story is no different for the other sea ports being used, with the main ones being Chennai and Kolkata. All the ports are mostly choked, and it takes many days before a dried flowers container is shipped. This has several adverse impacts on the industry which is very seasonal in nature. "Port officials don't take such delays very seriously, saying it's the case all over the country," avers **Russell Motha, Managing Director of Sibaflor Natural Decorations.** Mainly due to the logistics constraints, the Indian share in export of dried flowers in Europe is less than five per cent and less

Apart from providing space, transporting flowers through air demands quality. To ensure quality, Indian carriers still need to adapt effective technology to match up the international standards.

Amber Dubey
Partner and Head
Aviation and Defence, KPMG

With air cargo companies currently accounting for as much as 99 per cent of the intercontinental shipments, and the cost of air fuelling rising with each passing day, the industry has started swinging towards the sea route.

Christo van der Meer
Senior Consultant, FloraHolland

than 10 per cent of the world dry flower market, estimated at ₹2,000 crore.

Considering the apathy of ports towards the floriculture industry, it is not surprising that air continues to be the preferred mode of transporting cut flowers which have a very small shelf life. "Most Indian airports are organised to the extent that the paperwork is done within 24 hours. The challenge with sea corridors comes initially in getting the paperwork done, which can at times take up to three days. The ports are also badly organised and are unplanned. It can sometimes take many days to ship from India to other countries – a transit time that might be OK for frozen meat but is impossible for products like roses, as at the right temperatures roses could last only for four weeks, before quality is seriously affected," says Motha. According to other industry players, it is imperative for seaports to become user friendly for their product, as Indian air carriers lack the network and belly space for exporting their products. "Apart from providing space, transporting flowers through air demands quality. To ensure quality, Indian carriers still need to adapt effective technology to match up the international standards," says **Amber Dubey, Partner and Head, Aviation and Defence, KPMG.**

According to industry players, the best way out is to make India's sea route friendly for handling floriculture exports, as it will not only ensure space but also bring down cost considerably. Apart from dried flowers, transportation of cut flowers by sea containers has become an unstoppable development worldwide. For instance, about 15 per cent of total cut flower exports from Columbia are already shipped by sea. **Augusto Solano, President of Asocolflores,** a trade group for Colombian flower exporters, said ocean shipping could rise to 10 per cent of the country's flower exports over the next few years from three per cent. Columbia is not the only one on the bandwagon around 300 containers of primarily cut foliage go from Israel to Europe each year. Tulips from the Netherlands are also sent to the US by sea containers. Cost is the main factor driving these developments – ocean transports costs are nearly half of airfreight. This is an important consideration for price-conscious European and US markets. "Right now, customers want to pay less for their flowers. With air cargo companies currently accounting for as much as 99 per cent of the intercontinental shipments, and the cost of air fuelling rising with each passing day, the industry has started swinging towards the sea route," **Christo van der Meer, Senior Consultant at the Netherlands-based FloraHolland**, the world's largest floral wholesaler, was quoted as saying by the media. Other factors which have contributed to the use of sea containers is the advancement in the ability to control temperature in the containers, growing facilities at ports and reefers and the growing knowledge for more sustainable forms of transportation, which will lead to less emissions of carbon dioxide per tonne of cargo.

MAJOR IMPORTERS OF INDIAN FLOWERS

The advantages of the sea corridor notwithstanding, industry experts caution that the shift needs to be made carefully, as transporting flowers by containers takes significant cooperation among growers, shippers and wholesalers, and technology plays the most crucial role – blooms must be chilled to near freezing temperature shortly after harvest, and then put in a kind of suspended animation to slow down the respiration rate. They also need to be maintained at the same temperature in refrigerated shipping containers for a sea transit that can take up to two weeks. "Better insulated, fully welded steel containers are among the improvements in refrigeration equipment over the past decade that have made the procedure possible. Flowers sent by cargo plane undergo a one or two day transit. They are cooled after harvest, but not to near-freezing, and they can experience temperature changes inside air-cargo holds or during loading. But with sea transport one needs to be very cautious about maintaining constant temperatures," an official of TransFresh Corporation, which specialises in controlled-atmosphere containers, was quoted as saying by the media.

It is very challenging for the Indian maritime industry to cater to the needs of the floriculture industry, especially for cut flowers. But it is imperative that a step is taken in the direction as dedicated and modern supply chains will become even more important as the industry expands. According to industry players, within the next decade, dedicated floriculture supply chains will be required, which can match supply and demand in an efficient way, take care of bulk flows, and handle quality control. The need of the day is for the port officials to understand the nature and intricacies of the industry, and ensure that consignments of the floriculture industry are given priority over dry and bulk cargo. mg

GRID LOCKED!

The upcoming dry port and logistics park can bring in some respite enabling smooth flow of EXIM cargo to this landlocked state

Mohammed Shareef MP

The bifurcation of Andhra Pradesh in June, 2014 has brought in an array of concerns for the landlocked Telangana terrain that has no direct access to coastline. This handicap has caused congestion and hurdles in the state's export-import (EXIM) trade movement. Experts reckon that it is time the state boosts its logistics requirement and provide a way for cargo to move to the coastline. While what has brought in some relief to Telangana is the state government's plan to set up dry ports, not much has moved in this direction, raising concerns among authorities dealing with logistics.

Hyderabad, the state capital that boasts of being the second largest Metropolitan City in the country with an area of 7,100 sq.km and a population of about 8 million, has not contributed much to the growing need for logistics infrastructure. Logistics experts feel the city which is a fast growing hub of pharmaceutical, textiles, IT, biotechnology, leisure and entertainment, hospitality, education, retail and other manufacturing services, is in need of a viable plan in terms of policy and execution to meet the logistic needs to create a thriving, hassle-free export-import environment. If state-of-the-art facilities in logistic hubs and industrial corridors that have integrated facilities like well connected road-rail network are developed, Hyderabad and Telangana can easily tap its EXIM potential to the maximum, those in the export industry aver.

Hitherto, the state and its capital lacked a clear plan to manage its massive logistic infrastructure. The already available Inland Container Depots (ICDs), Container Freight Stations (CFS) and warehouses in the state are not adequate to cater to the growing demands of cargo inflow and out flow, experts rue. **M Nayeemuddin, President, Customs House Agents' Association,** Hyderabad says, "The biggest ICD available now in the city at Sanathnagar is not sufficient to cater to the needs of the freight forwarders. While the lack of the efficient

> The biggest ICD in the city at Sanathnagar is not sufficient to cater to the needs of the freight forwarders. Its location creates further glitches as access to the ICD via road, especially during the heavy traffic hit day time becomes difficult.

M Nayeemuddin
President
Customs House Agents' Association, Hyderabad

equipments and labour issues cause troubles at the ICD, the location of it at the heart of the city creates further glitches as access to the ICD via road, especially during the heavy traffic hit day time becomes difficult. Traffic situation in the city is so congested that there is already a ban on plying trucks during the day time," he says.

More than 50,000 freight vehicles ply on Hyderabad roads daily and as per traffic surveys the number is fast increasing by the year even as no organised terminal facilities are in place. This apparent lack of planning has led to inefficient supply chain management, traffic chaos, pollution, ineffective services and price hike of commodities for end users. More than 1 lakh tonnes of cargo is exclusively bound to and from Hyderabad daily even as the warehousing demand is to accommodate about 10 Lakh tonnes of cargo.

Plans in the pipeline

Though Telangana is still in an infant state, the government has a plan to bring in better logistics infrastructure. According to **Jayesh Ranjan, Commissioner Industries**, plans are afoot to set up a dry port in the state. Though the proposal is still at the nascent stage, two huge chunks of land are already identified towards the proposal, officials say. A 750-acre plot was identified at Vattinagulapally, near Shankarapally of Ranga Reddy district of Telangana. The earmarked land is located just 9 km from the NH 9 to Mumbai and has rail connectivity towards Mumbai. Another plot identified to set up the proposed dry port is at Bibinagar of Mahaboobnagar district of the state. "Of the 750 acres of land identified, about 200 acres were earmarked for the setting up of the dry port. The rest will be developed as a logistics hub with different ICDs, warehouses, pack houses and cold storage among others. The total project is estimated to be worth ₹1,000 crore out of which ₹250 crore will be used to develop the dry port alone," said **B Srinivas from ILFS, Consultant for Government of Telangana.**

The dry port is not the only plan that the state government has. About 60 acres of land is already identified to set up logistic park at Batasingaram and Mangalapally of RR district of Telangana where facilities including truck parking, warehousing, cold storages service centres, driver dormitories and restaurants will be developed.

However, the traders in the state are not too enthusiastic about the current plans in Telangana. According to them rather than concentrating only on the state capital the government should set up cargo logistic infrastructure in other districts so that resources from these places get tapped properly. "Rather than concentrating on Hyderabad alone, the government should look at other districts and provide adequate support in getting them to contribute towards the EXIM trade. Districts like Khammam, Warangal and Nizamabad have huge untapped granite reserves and agricultural resources that could be tapped if government put adequate logistic infrastructure in place," says **Ch Hariharan, MD, Cargomen Logistics.**

It is not that the city has a locational disadvantage, experts say. Hyderabad is located in the North-Western side of the erstwhile AP and is equidistant from the three major ports of the country namely JNPT, Vizag and Chennai. Hyderabad is the leading cargo generating center in southern India that has good rail and road connectivity with various ports in the East and West coast of India. Hyderabad also serves as an aggregation point for the cargo originating from neighbouring districts like Warangal and Raichur. Due to its strategic location and good road connectivity, the city is also able to attract traffic from northern districts of Karnataka and southern districts of Chhattisgarh. However for the bettering EXIM trade the government has to set up designated logistics hubs in strategically located pockets, traders point out.

> Hyderabad has three ICDs together having a throughput of around 1,00,000 teu per annum. Around 65 per cent of the traffic moves through JNPT, 33 per cent through the Chennai Port and the rest from East-coast ports.

EXIM Trade in Hyderabad

The state's EXIM trade moves at a slow pace due to lack of planning and connectivity troubles. However, the city has been contributing its share to the trade, despite logistic difficulties. Experts point out that Hyderabad has three ICDs operated by CONCOR, CWC and BATCO together having a throughput of around 1,00,000 teu per annum. Around 65 per cent of the traffic moves through JNPT and 33 per cent through the Chennai Port and the rest from other East-coast ports such as Vizag and Kakinada. As per current estimates, around 60 per cent of Hyderabad traffic moves on rail and the rest via road. Although Chennai has a slight distance advantage, JNPT is able to attract significant share of traffic from Hyderabad because it offers efficient direct sailing to North America and Europe. In addition to this, most of the major shipping line companies are operating their scheduled services from JNPT and other ports of West coast including Mundra and Pipavav. Consequently, there is no requirement of transshipment resulting in lower ocean freight from JNPT as compared to Chennai which is largely driven by feeder services.

Most of the cargo that gets exported from Hyderabad takes off from the city and surrounding regions like Rangareddy, Nalgonda, Secunderabad and Medak. Major export commodities originating from Hyderabad region are granite, electrical products like transformers, paper and paper board, agro products, metal ore, sanitary wares and rubber and plastics products. Similarly, the commodities that are imported at ICDs are asbestos, newsprints, electronic products, granites and stones, soda ash and electrical products.

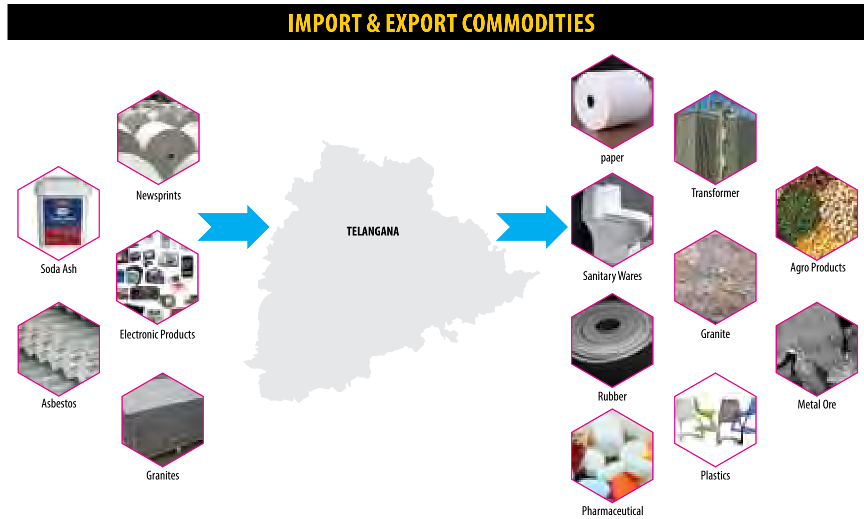
According to officials, CONCOR's Sanathnagar ICD is the only major player in transportation of export and import cargo in Hyderabad. The other two ICDs namely CWC and BATCO are presently handling very little of cargo when compared to ICD Sanathnagar. CWC's Kukatpally CFS is handling less than 30 teu per month and mainly using the rail siding facility of CONCOR ICD for sending and receiving the cargo containers. Most of CONCOR ICD's traffic moves by rail as this is a preferred option for cargo transport that has to take place over a distance of 500 km. However, around 5 per cent of the traffic that is supported by pharmaceutical and frozen food companies is moving by road even as time constraint is a major negative factor that affected the same. Similarly, road movement that had shown great potential in the past has been disappointing because of restrictions slapped against overweight.

Existing logistics infrastructure - Hyderabad

Container Corporation of India Ltd (CONCOR) is operating the biggest ICD at Sanathnagar, which is about 12 km from Secunderabad railway station on NH-7 (Hyderabad-Mumbai). The ICD spread over an area of 22.57 acres comprises of two warehouses of 44,000 sq ft area. With a container yard area of 66,000 sq m for stacking 3,000 teu at any time, the ICD caters to the catchment areas of Maharashtra, Telangana, Andhra Pradesh and Karnataka. Major imports include rough blocks of granite whereas the exports include pharmaceuticals, granite, engineering goods, pre-fabricated sheets and transformers.

Central Warehousing Corporation (CWC)

CWC is operating an ICD at Kukatpally with a CY area of 2,758 sq m and office space area of 9,300 sq m. It also has warehouses at Mehbatnagar of 4000 MT capacity. CWC also operates two bonded warehouses at Nampally and Kukatpally with capacities of 834 MT and 12027 MT, respectively.



"Rather than concentrating on Hyderabad alone, the government should look at other districts and provide adequate support in getting them to contribute towards the EXIM trade."

Ch Hariharan
MD, Cargomen Logistics.

Private ICDs / CFSs

BATCO Integrated Logistics Pvt Ltd is operating an ICD at Patancheru on NH-9 (towards Mumbai). Another ICD facility is proposed to be developed by All Cargo at Patancheru even as its development is yet to be started. The company has already acquired land for the project, even as no operations have begun till date.

Other than the above, various manufacturing units and local players have their small warehouses on NH-7 and NH-9 towards Nagpur and Mumbai. The Auto Nagar ICD situated along the NH-9 towards Vijaywada is also a hub for all transport companies where cargo consolidation and warehousing of stocks takes place in a limited scale. The hub also provides ample truck parking facilities along the Vijayawada route.

Cargo potential

Hyderabad houses a number of major industries in its hinterland, which caters to the domestic as well as international demand for products and commodities. The primary catchment area includes the industrial area falling within 100 km radius from the heart of Hyderabad. The secondary catchment areas include the industrial areas of Bellary, Sholapur and Vijayawada. These industrial areas house a number of major manufacturing units catering to both domestic as well as in the international market. Likewise, for its own consumption, these industries as well as the location's retail market import various commodities and products. Thus from Hyderabad, a number of commodities are imported and exported to myriad locations. Apart from this, Hyderabad acts as a major domestic transshipment hub for the commodities originating and destined for other districts in Andhra Pradesh. Hyderabad district has large and medium scale industries involved in cigarette manufacturing, chemical manufacturing, bulk drugs and pharmaceuticals, light engineering and agri-based industries.

Telangana is home to many manufacturing industries such as bulk drugs & pharmaceuticals, agro processing; mineral based Industries, engineering industries, textiles, leather goods, gems and jewellery and service industries such as information technology. The Hyderabad region is fast emerging as a major production, consumption as well as transshipment center for the entire state of Telangana. This is likely to result into more cargo flows, both inbound as well as outbound and the proposed logistics hub will prove to serve the increasing logistic requirement of Telangana. mg

Sprinting to growth

"If Dhamra Port in Odisha becomes fully operational, then we may either initiate their freight forwarding business or create ICDs/CFS depending on how favourable is the government policy," says Siddhartha Singh, Director, Speedways Logistics

Reshmi Chakravorty

Kolkata-based Speedways Logistics is now a familiar name in the eastern region with a gamut of services such as transportation, warehousing, packaging, stuffing / de stuffing, ship chartering under its belt. They are vying for a pole position in the logistics sector on the west coast after creating a niche for themselves in the east. Only four years into containerised cargo handling and project sea freight consultancy and forwarding, they have successfully created a distinguished loyal clientele who the firm has pocketed offering reliable services.

With its current set of services restricted to Kolkata, Haldia and Visakhapatnam; Speedways is firming up plans to foray into the west coast in a few years time. Eastern India has a myriad business outlook when compared with rest of the country. The trade can benefit immensely if government takes the initiative to do away with these small taxes attracting more cargo movement.

Overcoming all the glitches in the way, Speedways in the next five years, will move towards moving cargo in Mumbai and Mundra ports. Initially they had planned to create a ring from Kolkata-Haldia-Vizag-Chennai to get a better control over the logistics industry in India. Last year, a freight forwarding volume of 700-800 teu was handled on the east coast alone. "If Dhamra Port in Odisha becomes fully operational, then we may either initiate their freight forwarding business or create ICDs/CFs depending on how favourable is the government policy," said **Siddhartha Singh, Director, Speedways Logistics.** The group might also opt to set up an ICD in the state, he said. Their first priority is to set their foot in the west coast.

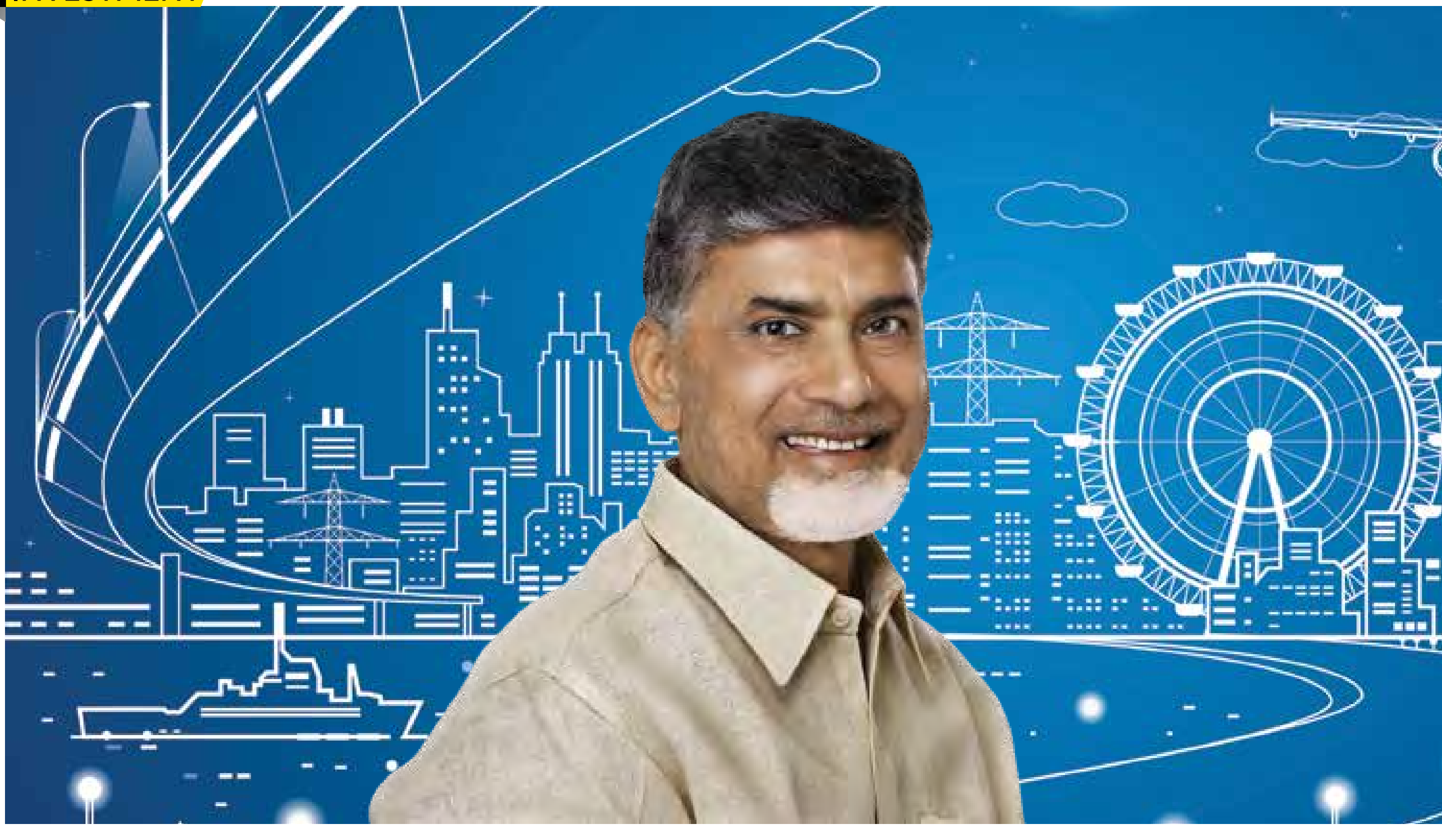
> "Presently, customers are willing to pay a premium amount to ensure a hassle-free process and if we can deliver, then profit margins will soar for sure."
>
> **Siddhartha Singh**
> Director, Speedways Logistics

According to Singh, "Speedways has effectively tried to find out solution to all the logistics hurdles pertaining to the east coast." Four years ago Speedways took baby steps into the freight forwarding world as it was the sole missing link to fill in the gaps to ensure a smooth service. Now they are concentrating to expand their freight forwarding service in different cities of India and abroad. The only hurdle they face to complete a task-in-hand is to deal with the time taken for custom clearance. "If one needs to perform well at all fronts, then the time taken to clear cargo for customs should be at par with all the other ports in India. For example, custom clearance is happening 24 hours at other ports, whereas, in Kolkata only 2-3 times people come to do the work in a day, delaying the total process," expressed Singh.

"Presently, customers are willing to pay a premium amount to ensure a hassle-free process and if we can deliver, then profit margins will soar for sure," said Singh. "It is not possible for any singular company to look after the entire operation from exporting to distribution. It is here, that a third-party logistics company like ours comes into play. The concept of third-party logistics is very much in here at Kolkata and booming. It reduces the extra overheads which the traders would have to look into if they were operating the whole process on their own," further explained Singh.

For a third-party logistics company to thrive, containerised cargo movement should be given priority as it decreases many overheads at a same time. "Nowadays, everyone is adapting to the concept of containerisation for safe cargo passage and saving money at the same time. Eastern India too is not an exception and has warmed up to the concept of containerisation. Though recently the figures of containerised cargo have gone down due to global changes and demands. But the container yards at Kolkata should be open 24 hours as against the existing 7 hours timeframe," added Singh.

The success of a logistics company depends with the government. The government should always consider improving the existing port infrastructure. The modernising of the PSA terminal has smoothened operations at Kolkata Port by reducing the time taken. The East coast is in no matter behind in terms of exporters operating from its ports. But the challenge lies to get the governments involved to iron out the hurdles.



Destination Andhra Pradesh

It is time the state government replicates success stories of other countries to create a highly efficient business environment and make Andhra Pradesh a favourite destination for investors

Omer Ahmed

The Andhra Pradesh government is all set to make the state the best business destination in India by 2050. The state chief minister has set an ambitious target to prepare the state's industry sector to contribute about 25 per cent to the GSDP in the next five years. H.E. Saed Al Mheiri, Charge D'affaires, Embassy of UAE, New Delhi, recently pointed out two areas that needed improvement to facilitate investment in Andhra Pradesh. First was 'Ease of Doing Business' as several companies who wanted to start and signed MOU`s were taking two to three years to get the required permissions and this was causing as detriment to new business. UAE has a time frame of 24 hours to 72 hours for granting permissions depending on the size of the business he said. Second was 'Better Connectivity.' UAE, with its four carriers (especially Etihad and Emirates), would be interested in making a direct call to Vizag, thereby use Dubai as hub to travel to and from anywhere in the world. Highlighting the immense development potential the vast coastline of the state offers, he opined that UAE can offer to build a Free Zone to encourage manufacturing and trading as seen by the success of the Dubai free zone. With the long coastline, Vizag has the potential and the UAE has the expertise.

Wayback in January 2003, Visakhapatnam Export Processing Zone (VEPZ) was converted into a SEZ as part of the SEZ Policy 2000. This was mainly because of the two strong ports (Visakhapatnam and Gangavaram) with a natural harbour and large industrial base, which formed the prime antecedents for attracting significant investments including FDI. Set up on a sprawling 360 acres, VSEZ is proximately connected to all units and has really come a long way in that. The units belong to wide array of sectors from electronics, engineering, chemicals and pharmaceuticals to textiles, leather, trading and non-conventional energy. The zone is internationally renowned for its gems and jewellery units whose diamonds are famous as "Visage Cut" in the global market. Some prominent companies here are Dr Reddy's Laboratories, MDL Technologies, Nitin Cylinders, HBL Power systems, Worldwide Diamond Manufacturers, Oilfield Warehousing, Opto Circuits, Biomax Fuels and Encore Cements to name a few. From ₹436 crores in 2003-2004, VSEZ exports registered a manifold growth and reached ₹3,123 crores in the last fiscal. With private SEZs having commenced after 2006, the overall exports of

Visakhapatnam SEZs registered an eight-fold increase and commands a significant 20 per cent share in overall SEZ exports of Andhra Pradesh. Major private sector specific SEZs under the jurisdiction of VSEZ are Brandix SEZ – textiles & apparels, Ramky Pharma City SEZ, Divis Labs SEZ, Dr Reddy's Labs SEZ in Srikakulam and APSEZ in Achuthapuram as major multi-product SEZ.

Prevailing issues for SEZ development in Andhra Pradesh

MAT with retrospective effect requires immediate attention of policy makers as it has drawn huge attention from all the SEZ investors and operators. Dwindling confidence of SEZ investors is another major issue that can be addressed by close monitoring and quick acknowledgement of entrepreneurial problems. Acquisition of land is a major challenge. This can be overcome by following the business model adopted by Phoenix SEZ and Magarpatta SEZ. Understanding the issues and concerns behind opposition to Land Acquisition Bill is required and an immediate action is sought.

Investment and tax: FDI has potential to provide spillover benefits and create vertical linkages in the host nation. SEZs in India unlike those in other emerging countries such as China, UAE, Philippines and Mexico have failed to attract expected FDI. This is a matter of grave concern which requires re-structuring of investment strategy. SEZ investments can be encouraged by rolling back incentives such as, income tax exemption, tax holiday and turnover incentives like in other industries.

Logistics and physical infrastructure: Logistics support remains inadequate and needs improvement. This requires setting up more ports on the lines of Gujarat to cater to the large hinterlands. Multiproduct SEZs may be kept in place outside SEZs as well for an integrated network of logistics activities to facilitate smooth operations. Efficient multi-modal transport system is required to enable exports from hinterland. Supply chain infrastructure system is a crucial factor for the success of SEZs. Logistics costs in SEZs in India remain among the highest for any country. Lopsided development due to lack of a holistic approach of the logistics requirement is skewing development. The state government has to accept change and adapt to the international requirements. The policy makers are urged to make effective changes to archaic law and regulations in this sector.

Marketing of SEZs should be the buzz word for prospective importers, matching demand and supply, attracting foreign and domestic investors, and so on. Basically any SEZ has to necessarily conduct international market analysis, understand its market segments and target and position itself strategically. Though the existing initiatives of the Department of Commerce such as "Invest India" and "Make in India" and "Brand India" a stronger marketing focus is essential for accelerating SEZ growth and achieving planned economic development. State government should take steps to conduct road shows and promote SEZs globally.

Strategy

1) Ancillary clusters around SEZs should be encouraged to reap the benefits of spillover effects of SEZs. Marine and agro SEZs may be encouraged for establishment in strategic locations. Segregate SEZs into agricultural and non-agricultural zones. The policy makers are urged to follow on global production networks and cluster approaches as they have worked well in the case of gems and jewellery, IT/ITES and pharmaceutical companies. However, duplication of similar efforts by the domain ministries of food and agriculture should be avoided for eliciting a better SEZ outcome. The Ministry of Commerce should consistently in collaboration with other ministries chalk out innovative and non-overlapping policies in this regard.

2) SEZs also cause urban regeneration. For instance, Vizag and Jharsuguda are turning out to be examples of urban regeneration. Strategic innovations in product, process, technology and organisation are the key to sustained competitiveness. Firms, in particular SMEs, are under tremendous pressure to innovate and restructure their operations to achieve efficiencies in production. SEZs create favourable conditions for technology transfers and learning for these firms not only by promoting interactions but also by inter-linkages and economies of scale. Facilitation in the insertion of these firms into global supply chains is also possible through SEZs.

3) SEZ-DTA combination: India being a huge market for both services and products, SEZs can be more successful if an SEZ-DTA combination can be worked out. Unlike China that mostly exports what it manufacturers, Indian encourages both exports as well as domestic consumption. Manufacturing companies in the fields of electronics and telecommunications, textiles and pharmaceuticals would benefit greatly in an SEZ that is allowed to cater to the DTA as well. As several US-based pharmaceutical MNCs are planning to set up base in India, marketing of SEZs with a combination of DTA would augur well for SEZ growth in the country.

4) IT Initiatives: Special thrust may be given to animation and gaming sector. The Gaming and Animation Park (GAP) would serve as an incubator/spring board for developing an entertainment technology-based ecosystem. Government of Andhra Pradesh wants to develop a futuristic Digital City that will serve as an epicenter of research and development and production of animation and gaming related technology in India. The state government must learn right lessons from the successful experience of other countries and strategically execute in the Indian business environment to make Andhra Pradesh as sunrise state. mg

Has TAMP helped or hindered growth

Notwithstanding that each successive tariff regulation has been a progression from the earlier one in terms of cost-based pricing, the prospective application of these tariff guidelines have created an unstable business environment for the existing port operators at the Major Ports

Shardul Thacker
Partner, Mulla & Mulla & Craigie Blunt & Caroe

The Tariff Authority for Major Ports, has in the last few years, altered the rules of ports and terminals operating in India. However, a change in the rule book has not been uniformly applicable to all ports-major and minor operating in India, leading to an absence of a level playing field for all port operators. An examination of the existing legal framework would help in understanding tariff structures better.

Legal framework of ports in India

- Port sector is governed by Indian Ports Act, 1908 and Major Port Trust Act, 1963 (MPT Act).
- Major Ports are included in Union List of Indian Constitution & within the ambit of Central Government (Ministry of Shipping).
- Minor Ports are included in Concurrent List of Indian Constitution & fall within the ambit of the State Governments.
- Gujarat, Maharashtra and Tamil Nadu have established maritime boards for administration, control and management of Minor Ports of their respective states.

Origin of TAMP

Post liberalization of the Indian economy, the Exim trade picked up. Since India didn't have enough ports and the required infrastructure to cater to such increased exim trade to augment the cargo handling capacity of the government owned ports, the Government of India (GOI) in 1996 decided to partially privatise them. Partial privatisation involved the creation of 'landlord ports' wherein the Port Trusts under the MPT Act became landlords leasing out port land to private players for development of new terminals.

The port operations at the major ports were concessioned to private operators-for the first time at Jawaharlal Nehru Port Trust (JNPT) in 1999-where a private container terminal was constructed by P&O Ports Australia, which was subsequently sold to DP World. A further terminal at JNPT was concessioned to a joint venture of APM Terminals and Container Corporation of India. Since then the Major Ports of Chennai, Visakhapatnam, Cochin, Tuticorin, Kandla have private terminals with DP World, PSA, United Liner Agencies and ABG. However, post privatisation the landlord ports suffered from a conflict of interest. The landlord ports were tasked with regulating the port operations of the private entities including the tariffs charged by them as well as operate their own terminals at the same ports. Hence to remove this vice of conflict of interest, the government felt the need to institute an independent body for fixing and regulating the tariffs of the port operators at the Major Ports. Thus MPT Act was amended and TAMP was born in 1997.

Core functions of TAMP

- Tariff determination for Major Ports and the private terminals there at;
- Rationalisation of tariff structure and streamlining tariff setting system;
- Safeguarding interests of Major Ports and port users;
- Ensuring fair and just return to the port operators;
- Encouraging competition and improve operational efficiencies of the Major Ports and the terminal operators; and
- Deployment of established costing methodologies and uniform principles in setting tariffs.

TAMP dispenses these functions by notifying the tariff guidelines issued by GOI for setting the tariffs of the port operators at these ports.

Major Ports & Minor Ports – Regulatory and Commercial aspects

Regulatory aspect:

- Tariff at Major Ports is regulated by TAMP.

- TAMP has no authority over Non-Major Ports and the terminal operators at such ports determine their own tariff.
- There are 34 terminal operators at Major Ports, out of which 20 are on PPP basis.

Commercial aspect:

- Minor Ports – Share in India's cargo traffic increased from 8 per cent to 42 per cent in last two decades.
- In 2012-13, Minor Ports handled approximately 390 million tonnes registering 9 per cent annual growth. Major Ports reported a 2.5 per cent drop in growth during the same period.

Multiplicity of tariff regimes for Major Ports and drawbacks of the tariff regulations

GOI in conjunction with TAMP has enforced multiple sets of tariff regulations for determining tariffs of the port operators at Major Ports. Till December 2014, three sets of tariff guidelines were prevailing at the Major Ports, namely,

(i) Guidelines for Regulation of Tariffs at Major Ports, 2004 (2005 Tariff Guideline);

(ii) Guidelines for upfront tariff setting for PPP projects at Major Port Trusts, 2008 (2008 Tariff Guideline); and

(iii) Guidelines for Determination of Tariffs for Projects at Major Port Trusts, 2013 (2013 Tariff Guideline).

However, the most intriguing fact is that these three different tariff guidelines do not apply to all the port operators at the Major Ports collectively but each applies to a different set of port operators selectively.

Notwithstanding that each successive tariff regulation has been a progression from the earlier one in terms of cost-based pricing namely cost plus return on capital employed approach, normative cost basis approach to a reference tariff structure under the 2013 Tariff Guideline; the prospective application of these tariff guidelines have created an unstable business environment for the existing port operators at the Major Ports. Non-applicability of the most beneficial tariff regulations to the earlier port operators and enforcing it to only the newer ones makes it a non-level playing field for the port operators.

Multiple tariff regimes at the Major Ports has led to a situation where equal port operators with similar business conditions at the same port are treated unequally as a result of being subject to different tariff guidelines. Such arbitrary application of the tariff regulations to different sets of port operators, where equals are not treated equally, violates Article 14 and Article 19(1)(g) of the Indian constitution. Article 14 states that equals should be treated alike and there should be no arbitrary discrimination amongst them. Article 19 recognizes the doctrine of a 'level playing field' and discrimination leading to an absence of a level playing field violates Article 19.This has resulted in a spate of litigations across various Courts challenging the TAMP's actions in setting tariffs for the port operators as also challenging the tariff guidelines itself.

Private players in the port sector have long complained about the TAMP regime and how it punishes efficient port operators by reducing their tariffs so that they don't have abnormal profits. Further, due to rising inflation, the tariffs before the rate cut is also not remunerative enough and private terminal operators incur a loss here also even before parting with the revenue share component of the Major Port trust. Thus, the TAMP regime makes it unviable for terminal operators to continue operating a sustainable business in the long run.

Growth of minor ports and market driven tariff regime

The new Non-Major Private Ports have expanded rapidly. Mundra port, commissioned in 1998, is India's biggest private port owned by Gujarat Adani Port Limited. It has expanded from a single terminal having two berths to two terminals and a single point moving terminal having nine berths. Similarly, Krishnapatnam Port located in Andhra Pradesh has also grown rapidly. It has twelve berths all equipped with the latest equipment.

These non-TAMP regulated ports now account for 42 per cent of the cargo share in India's Exim trade. This figure was a meager 8 per cent a little more than a decade ago. The prime reason for such exponential increase in the cargo share of the minor ports has been the non-regulation of tariffs at these ports. As a result, the tariffs at minor ports are responsive to market forces hence making them very dynamic. This flexibility and freedom afforded to minor ports in setting their tariffs gives them an advantage over the Major Ports. They can offer best in class services and charge the market rate for it, thus making the business viable and profitable in the long run. Due to such prospects, private investment has flowed in and more and more private ports have mushroomed throughout India.

Moreover since the tariffs of the private terminals at the Major Ports keep getting reduced by TAMP, it becomes difficult for them to infuse more capital to undertake capacity expansion. They are not able to invest in infrastructure and equipment to cater to the steadily increasing volumes at their terminals. As a result their customers have to wait at anchorages for days that lead to high demurrage costs for them. Since the minor ports do not face tariff regulation, they are in a better position to invest and increase capacity, thus attracting the customers from the private terminals at the Major Ports.

Tariffs are market driven resulting in profitability which is ploughed back to increase ports capacity and efficiency by modernisation and technology. This has resulted in reduction of demurrage to waiting vessels for berthing. Port users have found that the overall transaction costs is favourable as compared to cargo handling at Major Ports where tariffs may be controlled but demurrage and storage costs result in increased transaction cost. Recognizing such benefits of a market driven tariff regime, TAMP, on January 27, 2015, notified its fourth tariff guideline applicable to Major Ports. Interestingly its preamble states:

"Non-Major ports have expanded rapidly and now have a substantial presence which accounts for about 42 per cent of the cargo share. Further, there is no parity in the regulation mechanism between the major port trusts and the non-major ports. Whilst tariffs of Major Port Trusts are regulated following cost plus return approach, non-major ports are not covered by any tariff regulation. A need is, therefore, felt to give flexibility to the Major Port Trusts to react to the market forces and also to encourage Major Port Trusts for better performance." Pertinently, the policy is not applicable to BOT/ BOOT operators for private sector participation at such Major Ports.

The 2015 Guidelines issued under Section 111 of the MPT Act directs TAMP to frame a scale of rates only for landlord terminals to the exclusion of the private terminals at such ports, based on a market driven tariff approach. This, however, contravenes Section 48 (1) of the MPT Act under which authority to fix scale of rates for all services to be provided at the major ports have been conferred to TAMP. Pursuant to this section TAMP can frame a scale of rates for both the landlord terminals and the private terminals at the major ports. Further Section 48 (2) stipulates that differnet scales and conditions may be framed only for different classes of goods and vessels. It doesn't state that different scales could be set for different terminals in a Major Port. Therefore by implication, it could be said that TAMP should frame uniform scale of rates for both the landlord terminals and the private terminals. But under the 2015 Guidelines, different scale of rates will be framed for different terminals, hence making it contradictory to Section 48 of the MPT Act.

Moreover it also contravenes Clause 18.1 of the Guidelines for tariff regulation (1998 Guidelines) which states that the port pricing shall remain cost based only till a competitive pricing mechanism evolves. The 1998 Guidelines also provided TAMP's overall objective of fixing tariffs with an aim of moving towards competitive prices.

Thus as acknowledged by the 2015 Guidelines itself, a strong market driven tariff regime has evolved now warranting discontinuance of the cost based pricing model. Therefore, in such circumstances, depriving the private terminals at Major Ports from the applicability of the 2015 Guidelines would tantamount to injustice.

Therefore, it would not be wrong in saying that government and TAMP will make it almost impossible for the private terminals at Major Ports to function if they are excluded from adopting the market driven tariff regime of the 2015 Tariff Guideline. Moreover, such an action of government making the 2015 Tariff Guideline applicable only to the Major Port trusts owned terminals violate Article 14 of the Indian Constitution. Article 14 gives a right to every citizen to have a legitimate expectation from a business and not to be discriminated against. However, a consequence of the exclusion from the 2015 Tariff Guideline would be that it would become almost impossible for the private terminals to function at Major Ports and compete with other port operators working under beneficial guidelines.

Way forward

It is profoundly clear that TAMP regime and the tariff regulation discourages investment in the port sector at terminals operated by private operators in Major Ports are not free to fix tariffs at their own ports. Also, criticism of the TAMP regime has heightened in recent times, with some private players shying away from projects, hampering the sector's growth and throwing a spanner in the works of the government's stated Maritime Agenda. Some State owned ports like JNPT have suffered as a result, with cargo moving to other, private, non-Major Ports.

Therefore, market driven tariff regime should be the way forward. All the terminal operators at the Major Ports should be allowed to migrate to the 2015 Tariff Guideline to bring everyone on a level playing field and be on par with the minor ports which have experienced growth which is recognized by the 2015 Guideline in its preamble. This will spur competition and make the Indian port sector more robust.

Lastly, the genesis of TAMP was a conditional one; the mandate from GOI was clear that TAMP would cease to exist when enough competition is generated. It can be seen after two decades that enough intra port competition has been generated to abolish TAMP. However if TAMP cannot be abolished, the tariff regulation can certainly be done away with the Major Ports moving to market responsive tariffs. Further TAMP could come in a new avatar whose new responsibilities can be disclosures of tariffs, monitoring efficiency parameters, competition issues and dispute resolution.

A unique business model

The Shanghai MFE Centre brings together companies from across verticals in the maritime sector from across the globe offering a perfect platform for growing business while reducing operational costs

The Shanghai Maritime and Finance Excellence Center (MFE Center) received a very warm response at the Sea Asia conference organised in Singapore in April. This was the first roadshow, and the MFE Centre will be actively involved in a series of well-known maritime exhibitions worldwide to promote this original and unique business model to international clients interested in the Chinese market, particularly in the maritime and financial sector, to save operational costs and increase business opportunities.

Inaugurated during the 5th ISSDF conference in October 2014, the MFE Center has been listed as one of the top ten projects supported by Shanghai Pudong New Area, and has recently chosen to set up its core operations center in the Expo Area B, part of China's newly expanded Free Trade Zone, where many heavy weight Chinese shipping and commodity trading companies will also move by the end of 2015 or early 2016.

A one stop shop service centre

The centre will gather players from all sectors within the shipping and maritime industry value chain, creating a landmark one stop shop service platform serving all clients from around the world.

A network across China

In addition to the Expo Area, there will be a series of service centres in other major Chinese port cities, bringing together clients from the whole network.

A virtual platform

It is planned to create a unified virtual platform including screen, internet, mobile applications, in addition to prominent conferences and seminars, to deliver the much needed market information and promote the products and services proivded by participating companies.

Benefits to companies joining the MFE Centre

Cost savings

Participating companies can collectively exercise greater purchasing power leading to significantly reduced office rental cost. Companies can use the network facilities of port cities across China and cut down on maintaining their own office networks and also reduce the associated risks.

Shared office services will lead to cost savings in areas of copying and printing, video and teleconference meeting rooms, administration cost on car, flight, hotel booking, accounting and assistance in human resource management.

Enhanced brand image

The MFE Centre and its network branches will be all situated in high profile locations and supported by local governments. Participating companies will be able to enhance their own brands without additional expenses by promoting their products and services across the network branches via the virtual platform.

Improved communications

The MFE Centre will set up a library in the common area to display reports and publications from participating companies, as well as a range of industrial publications.

Leading service providers nearby will ensure that companies will have access to immediate, high level support for their own business.

A well designed telecommunication system will enable tenants to communicate seamlessly across the network, greatly improving communication, efficiency and client relationship.

Increased business opportunity

In addition to business opportunities arising between participating companies in close location in the MFE Centre, opportunities may arise with the many visitors to the centre.

Free access

In addition to paying rent lesser than the market level, companies will have free access to:

- Common area of the MFE centre, including meeting rooms, library and coffee bar
- Common areas in all network branches in other Chinese cities
- Sponsorship status at all conferences, seminars and gatherings organised by AMS, including the Lujiazui Forum, ISSDF and its associated conferences, Shanghai Ocean Forum, etc.

Target, a $400 billion

Issues relating to capital investment, logistics, tax, custom process and governmental red tape need to be sorted out for this sector to reach the ambitious goal

Reshmi Chakravorty

India has high demand for electronics despite the percentage of locally made electronics being quite low. The electronics industry in India is just a meager statistic when compared to world numbers as much of the goods consumed here are all imported. Thus, the huge mismatch in demand and supply makes India one of the major importers of electronic materials, components and finished product. Reports suggest that by the year 2020, demand would peak an estimate of $400 billion. The last decade saw a meteoric rise of countries like China, Korea, Taiwan, Singapore and Malaysia emerging as leading global IT hardware and electronics manufacturer/exporters. India has failed to keep pace with these countries and it is still in a nascent stage of development, even though the country's software industry is well developed and highly competitive in the global market. The factors India needs to keep a check on to develop into an export hub include better infrastructure, easily accessible capital, improved technology and a capable human force to ensure a relative jump in the production and export of electronics. The manufacturing of electronics and IT hardware sector in India is significantly dependent on imports of raw materials.

The Indian consumer electronics market

The Indian electronics market is divided mainly into consumer electronics and electronic components. India imported $31 billion worth of electronic items in 2013-14; of it $10.9 billion were phones mostly from China. India imports 65 per cent of its current demand for electronic products. If the situation is left unchanged, the country's electronics import bill may well surpass its oil import expenses by 2020. While the demand for electronics hardware in India is projected to increase to $400 billion by 2020, the domestic production could only increase up to $104 billion. There would a gap of $296 billion which could be imported in order to suffice for the demand, said a report by consultancy firm Deloitte Touche Tohmatsu India. Electronic items are the third most valued category of imports after petroleum products and gold in India. India imports most of its electronic equipment, including smartphones from China. India's trade deficit with China was $36 billion in 2013-14, and just phone sets contribute one-fifth of it.

The real jump in import of phones from China started way back in 2008-09 when import of phones almost tripled due to the launch of Android phones. The other top import destinations apart from China are Korea, Hong Kong and Japan.

According to Electronics and Computer Software Exports Promotion Council, India's production of consumer electronics goods during the year 2013-14 registered a growth of 18 per cent in dollar terms over the year 2012-13. Production of consumer electronics items has been growing at an annual average growth rate of 9.79 per cent in dollar terms during the past five years. Export of consumer electronic goods registered a growth of 45.26 per cent in dollar terms during the year 2013-14. India mainly exported consumer electronics to Singapore, Europe and Middle East during the year 2013-14. Consumer electronics which helped India to gain some revenue were loudspeakers, digital videos, audio compact discs, cameras and colour television sets. LG Electronics India, Moserbaer India and Samsung India were the key exporters for the last financial year.

Indian electronic component market

"Higher incomes, wider choices, and lower product prices have escalated the demand for electronic products in India and heightened the need to improve the manufacturing system, leading the companies to turn to electronics manufacturing services (EMS) to outsource their work," said **ELCINA President and Digital Circuits MD, Subhash Goyal.**

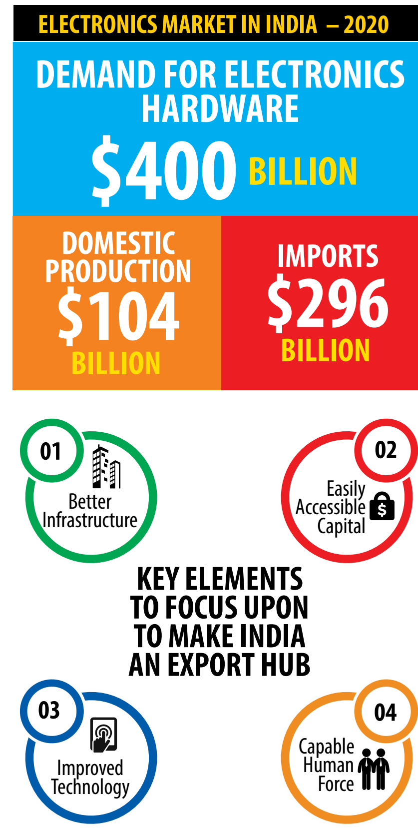
According to Frost & Sullivan analysis, the Indian EMS market grossed up revenues more than $3.79 billion in 2012 and estimates this to reach $10.67 billion in 2016. The market is expected to grow at a strong compound annual growth rate of 29 per cent during this period.

"If India can work on the capital investment, logistics, tax issues, custom process and governmental red tape, then perhaps down the years India can become an alternative hub to China for global manufacturing in EMS. Due to the above mentioned setbacks met in the whole process, an additional percentage of expense gets incurred and thus increasing the total investment," pointed out Goyal. Further, growth is curbed due to lack of fabrication plants and raw materials. It has forced EMS companies to import a majority of the materials and components from global suppliers, shrinking profit margins. While on the other hand, limited exposure to reverse engineering has restricted the design capabilities of EMS companies. "Adding to the already existing woes are the underdeveloped road infrastructure and the inadequate logistics and supply chain management. The logistics and supply chain management lacks the global standard and professional approach. While traveling from one city to another, sometimes the carrier has to cross almost 15 check posts with almost 3-4 hours halt for the same. The expensive components though come by air it takes a lot of time to clear all the custom procedures," said Goyal. The electronic component cargo which arrives from the world over either finds its way to Mumbai's container port JNPT or Chennai.

Demand estimates for key segments ($ billion)

Segments	2014	Target 2020
Semiconductor design	20.0	58.2
High-tech manufacturing	4.0	22.6
Electronic components	2.6	3.4
Electronic Manufacturing Services	1.4	2.3
Electronic systems		
IT systems and hardware	16.7	54.4
Telecom products and equipments	29.5	153.5
Consumer electronics	8.1	17.8
Others (industrial, automotive and others)	2.7	7.8
Exports	15.0	80.0
Total of all segments	**100.0**	**400.0**

Source: *A research done by Videocon*



"Higher incomes, wider choices, and lower product prices have escalated the demand for electronic products in India and heightened the need to improve the manufacturing system, leading the companies to turn to electronics manufacturing services (EMS) to outsource their work."

Subhash Goyal
ELCINA President and MD, Digital Circuits

Uphill task for India

While the prospects of India transforming into an export hub are bright, low labour and component costs are not sufficient to attract foreign investors to Indian EMS industry. "We need to make sure our supply networks are optimised for overall performance, so the issue is lowest total cost of ownership and not just lowest unit cost," pointed out Goyal. The total cost would include inventory cost and risk, and transportation costs as well as unit costs. With the introduction of National Electronics Policy, 2011 the government is trying to lure electronic component manufacturers to invest in the country. Many proposals have come up to garner interest of the investors like setting up of electronic clusters, an innovation fund and a policy to promote domestically manufactured goods in government procurement, called preferential market access, along with setting up chip fabrication units.

Infrastructure should precede investment

"More and more economies and companies will be looking at India to offer innovative and cost-effective manufacturing and service solutions. But to be able to meet that expectation, India needs to develop its infrastructure."

Ritu Gupta

With its presence in more than 100 countries worldwide, Egis group is known for offering end-to-end infrastructure and engineering solutions. The company offers the dual advantage of French expertise and experience in integrated infrastructure development, coupled with more than two decades of knowledge and understanding of the Indian markets. In India it is one of the top three engineering consultants, supported by a team of around 1200 professionals

Nicolas Jachiet
Chairman & CEO
Egis

Q Egis has been operational in India for the last two decades. Can you tell us about your experience?

A In the last two decades India has emerged as one of the key growing markets for the group. Egis India has been given the additional responsibility of managing Bangladesh, Bhutan and Nepal. Egis is extremely satisfied with the potential offered by India. The company has been involved in many key infrastructure projects in the country such as the Chennai and Kochi metro. Egis is also the PMC and design consultant for the 1,048 km long Ganga expressway. The group is one of the leading consultants in smart cities globally, with many smart cities like greater Paris or Astana in Kazakhstan already to its credit. As India gears up to develop 100 smart cities, Egis is one of the most suited partner for the government. Egis is already working on the ICT integration of Dholera, the first smart city in India, that will set the benchmark for others in the future.

Q Are there any key areas that you are looking to focus on in your India operations?

A We have the second largest number of employees in India and we intend to continue growing in this market. Although it's difficult to choose, transport infrastructure remains a bottleneck for growth while urban development remains a focus area. Prime Minister Modi laid a lot of stress on development of smart cities when he visited France and we are very keen on it as well. We are looking at developing three smart cities, including Nagpur and Puducherry. More and more economies and companies will be looking at India to offer innovative and cost-effective manufacturing and service solutions. But to be able to meet that expectation, India needs to develop its infrastructure.

Q What has been the involvement of Egis in the development of ports in Daman and Diu?

A Egis is involved in the preparation of feasibility study report, detailed engineering design, procurement of contractors and construction support for this project. The scope involves examining the feasibility of providing a minor commercial port at Daman and fishing harbours along with water based recreational infrastructure at both Daman and Diu. The feasibility report has been submitted which reveals that the minor port at Daman is not feasible due to inadequate draught. Hence, the detailed phase of the study would focus on the development of fishing ports as well as aquatic sports facilities at both these places. Presently, Egis is awaiting go-ahead from the client to commence detailed engineering activities. The project will be funded by the government of Daman & Diu U.T.

Q Can you give us some insight about the India, Myanmar, Thailand Trilateral Highway project?

A The India-Myanmar-Thailand trilateral highway is a project that has huge socio-economic impacts attached to it, not just for India but for the entire South East Asia. It is a project which aims to increase the trilateral trade between India, Myanmar and Thailand from a $2 billion to more than $50 billion in the near future. This is in line with the vision of the Prime Minister of India, to have all the ASEAN countries to work more closely and enhance bilateral relations and trade within the region, through the "Look East" Policy. As per the bilateral agreement between India and Myanmar, Egis is partnering in the planning and design of 241 km long Kalewa-Yagyi highway with the Ministry of External Affairs, Government of India. We are preparing the detailed feasibility study report for the Kalewa to Yagyi section of the Trilateral Highway. The draft feasibility report has already been submitted to the Ministry of External Affairs (MEA) for comments. Once this report is finalised, MEA shall proceed with the procurement of contractors for construction of the project. It is estimated that the entire project could be completed in about three years' time. The project preparation as well as construction cost of this highway is being funded by the Government of India. The estimated total cost of the project is around ₹1200 crore.

The key problems faced by Egis are as follows:

- From an engineering point of view, the project is a challenge since the terrain is mostly hilly with unstable slopes
- In addition, the geometrics and condition of the existing road is extremely poor, and more than 50 per cent of the present highway has been either realigned or reconstructed
- Last, though not the least, major issues were faced by the Egis teams to cross over to Myanmar along with heavy survey equipment etc. In addition, the existing banking system in Myanmar poses a major challenge to outsiders working on projects within the country.

> As India gears up to develop 100 smart cities, Egis is one of the most suited partner for the government. Egis is already working on the ICT integration of Dholera, the first smart city in India, that will set the benchmark for others in the future.

Q What has been the involvement of Egis in the development of the Chennai-Bengaluru Expressway?

A Egis has been engaged by NHAI to prepare the Detailed Project Report (DPR) for this greenfield expressway. The draft DPR has been submitted and comments awaited for finalisation of the report. In parallel, action is on for submission of necessary applications to the Ministry of Environment and Forest for environmental clearances since the expressway passes near reserve forests and a wild life sanctuary. This project has been substantially delayed primarily due to delays in finalisation of the alignment since three states (Tamil Nadu, Andhra Pradesh and Karnataka) are involved in the same. Additionally, the proposed alignment passes through hostile terrain (hilly, forested and inaccessible) which required additional time for physical surveys to be carried out. mg


Stephan Jorgensen
VP-Professional Marine Division - APAC
Navico

Aiming for the commercial market

"Our ambition is to be among the top three leading marine electronics provider in the commercial segment within the next 3-5 years."

Omer Ahmed

A specialist in manufacturing marine electronics, Navico has emerged today as one of the world's leading brands with products targeted at navigation, fishfinding, recreation and other value added applications. Incessant innovation coupled with an unprecedented product launch schedule have enabled the company to maintain its leadership position

Q Tell us about your business.

A Navico is a Scandinavian equity firm with presence in Denmark, Norway and Sweden. The company has grown to what it is today through acquisition of marine electronics manufacturers both in the commercial and recreational markets, but we happen to be very strong on the recreational side. We have four distinct areas of business – Lowrance that offer products and solutions for recreational and fisheries market; B&G offers dedicated high-end marine electronics for sailors and this is where we participate in the Volvo ocean race and other boating comeptitions; Simrad is our leisure motorboat brand and also offers solutions for the commercial marine segment; and recently launched in 2014 is the GoFree brand that offers mapping, telematics applications and software solutions.

We also lead in the market when it comes to new product launches and this is very important in the recreational industry, as on your boat you will always want the newest, smartest and fanciest gadgets. But in the commercial market we study and understand the requirements of the users and accordingly our new product developments are planned, which could be upgradation of an existing product or a totally new launch.

The recreational market offers strong growth potential and we have R&D centres in seven countries, which is the result of the acquisitions Navico has made across the globe and the technologies we acquired, for instance, in North America – in the US and Mexico. Our ecosounders are made in Oklahoma, in the UK we are focusing at promoting the B&G brand, in Norway we produce our autopilot, in St Petersburg we develop software and electronic recreational charts, radars are produced in Florance. Then we have our logistic and service centres throughout the world in US, Europe and China. In the last 12 months Navico has recorded $48 million in EBITA, inspite of the huge resources we had spent in starting the commercial division that was established last year.

Q What is the percentage of each division in the business – leisure and commercial?

A This year we will be looking for atleast 20 per cent of the revenue coming from the commercial division. Then our digital division together with the recreational division will make for the 80 per cent. Of this, our digital division is byfar the smallest and the newest. This year we will also focus on moving further in the recreational market. We are also focusing at organic growth and this is another factor that comes into play when we look at our acquisition strategy and how that will turn out is really anybody's guess. As a company Navico focuses on growth for investing in organic growth. The company is also very keenly looking at acquisitions on the line to strengthen our position as a commercial player. Sixteen months ago we did an acquisition to add a full suit of radars to our portfolio. In November last year we acquired a regional company called MARIS which is one of the leading players in ECDIS systems. With these two acquisitions we have moved half way forward to where we want to be. Our ambition is to be among the top three leading marine electronics provider in the commercial segment within the next 3-5 years. We have about a thrid of the global share in marine electronics for the recreational market. Our aim is to gain a similar position in the commercial sector.

Q Has MARIS provided you that kind of access to the market?

A Absolutely, with MARIS we have about 10,000 installations globally, of which 8,000 are ECDIS, which is all of commercial. So the acquisition of MARIS is clearly a strategic stepping stone to gain a strong position in the commercial market. Soon with our radars we will be entering into the deep sea commercial market. Our growth projection both organically and through acquisitions is aimed at creating a complete package for the commercial market. So far, no company globally has a full suit of products to meet the requirements of a large commercial business. Technology integration is one of the key aspects we are focusing upon. We utilise a common platform and right from the introduction of a product into the market we ensure that it integrates well with all the other components that we offer.

Q Where is the marine electronics market growing and what are the growth factors?

A In future we see our growth happen by breaking into new areas.

Growth will be more on the communication side of things which is not our area of focus. So the key area where we would like to become an innovator is in gathering and analysing data for enabling shipowners to capture data which is taken off the boat. We will not take part in transfering data in bits and bytes, we will be focusing on capturing the data and analysing it. We will make the data key for ship owners to optimise their operations on-board and help them to save on cost by making the voyage in an optimum manner. We are having tools ready for this, for example, with our ECDIS offering we have voyage planning tool which is part of our electronic charts offering. You can integrate it with the weather forecast and calculate your fuel consumption based on the route you would take.

B & G

SIMRAD

LOWRANCE

Q How is the Asia-Pacific region and what role it has in your business?

A We conduct motor shows here and we have our commercial offices too. We have our stock points and they are located with our logistic centers. We have offices in China, Australia and Singapore where we offer spare parts for commonly used products.

The Asia Pacific market is growing tremendously as seen in the Americas, but looking at the commercial market, I think one thing that is very important to take into consideration looking at our coverage, we are not addressing the end-users directly, we exist to serve through our partners such as Jason electronics. So we are not trying to establish a reach where we are going to maybe shipowners in Asia Pacific and we sell our products directly. Rather we rely on our dealers/distributors, who I prefer to call partners and they are our extension and keep a stock of our finished products/spareparts. They will be certified by Navico and undergo training to retain the status with us. We have a strong focus on managing our relationship with our partners. All of our products are approved according to IMO.

Q How tech-savy is the fishing community?

A When it comes to earning more money they can be very tech-savy. When we help them to find their fish there is no objection to invest in the equipment that will make their lives easier and make their boats quicker. In India that's the scenario we are very keen on pursuing. The equipment used and the boats of fishermen are still not at par with the latest advanced technologies used across the globe. This is where Navico can make a difference in India. We have very advanced technology for fish finding. Our SONAR technology which is developed in-house when combined with our RADAR offerings based on pulse compression. It can tremendously increase the efficiency of Indian fishing community.

Q Which is your star selling product in the commercial segment?

A I think Vertigo Simrad 4 associated with the Simrad brand is our autopilot range. We have a very complete package of autopilot equipment for the commercial market. We can equip any type of vessel from small motorboat to large super tanker with Simrad autopilot system. For instance, the shipping corporation of India is using the Navico ECDIS applications.

Q Who are your Indian partners?

A We have four business partners in India which include Elcome Electronics lab, AS Moloobhoy, Consilium India.

Q What trends do you see in the commercial marine electronics and commercial shipping segment in the next three to four years?

A I think there will be focus on telematics and data collection. If you look at some of the largest engine manufacturers there is a very strong focus on remote diagnostics and remote maintenance. This is just like doctor without borders and telemedicine. Onboard a ship you may not have all the technical resources to solve every problem, so prevention is the key as flying out parts for repair to a struck ship may be very costly, so shipowners are very keen to monitor the health of a vessel so that there can be preventive maintenance to a larger degree. If things are not running smoothly they can step in at the port they call for to repair, but they will only be able to do that if they are able to collect data from ship machinery and analyse it to make a review and prevent unexpected breakdown of a vessel during a voyage. mg

The road to FTWZs

As the manufacturing activity increases with the Make in India initiative, the share of trade to GDP of our country is also set to rise, which will inturn drive the demand for more free zones in our country

Subhasis Ghosh
Managing Partner
Apex Group

Special economic zones (SEZs) and Free Trade & Warehousing Zones (FTWZs) were designed to provide India a boost in manufacturing and trade in the last decade. This was followed by even larger project concepts like Special Investment Regions (SIRs) and National Investment and Manufacturing Zones (NMIZs), which encompassed the concept of FTWZs from the trading/ warehousing & logistics perspective. Several projects within this framework are under implementation.

Having had the opportunity of leading the strategic phase of these mega-trading, warehousing and logistics hubs in my previous assignments, in this article, I am sharing a helicopter view of the payoffs and execution related issues of FTWZs.

What are FTWZs

An FTWZ is a sanitised zone i.e, a deemed foreign territory, envisaged to be used as international trading hubs. An FTWZ would have warehousing infrastructure, container freight stations, commercial complexes etc and are governed by the SEZ act of 2005 and SEZ rules of 2006. So as a developer if you import goods and machinery for construction of the facility, then you don't need to pay import duty, likewise there are service tax, excise, and income tax exemptions. From a supply network-design perspective, one can store imported raw materials or finished goods for two years, without paying import duty. This is not feasible in the existing container freight station (CFS) format. Further, one can do value addition in the FTWZ, which means wrapping, kitting, labelling etc., most of which is also not feasible at a CFS.

Critical success factors

The top four critical success factors for investors to enable FTWZs realise their full potential comprise of {1} location; {2} quality and completeness of infrastructure; {3} service levels – people, process and technology leading to proper service levels; and the fourth is its [FTWZ's] relationship with the ecosystem.

The success of a location depends on its attractiveness to its target customers and other stakeholders. To attract the trading customer, then the location should be near an ocean port, so that the cargo comes in, stored, gets value-added, and moves out at a relatively low transportation cost. If the target customer is looking at redistribution, which means import, value-add and sell to the domestic market, then the location must be closer to the consumption centre ie large cities. If the customer deals in a commodity that is meant for production, then the FTWZ needs to be closer to the production clusters. The challenge here is, finding contiguous land of 100 acres, being the minimum size of an FTWZ.

An FTWZ should be near a highway/expressway for smooth transportation and needs to bring in a railway line at an early stage, so that heavy cargo can move in and out. All these impact project cost and time, and land issues can contribute to the execution stretching beyond budget and time, and usually do.

The connected challenge to building a quality FTWZ is financing, which for the right quality of infrastructure could cost more than ₹600 crores. The financing challenges in India include high bank interest rates. There are infrastructure projects in China for example, that get financed at under 4 percent interest. Then there is the minimum alternative tax (MAT), which were made applicable to SEZs/FTWZs post the original concept stage, that depresses the returns on investment.

From the service levels perspective, the operating zone must have trained people, lean processes, enabling technology and information systems to ensure that the customers are able to turnaround their vehicles, store cargo and generate invoices accurately.

On the relationship with the ecosystem, for example, one must have the permanent custom officials –formally deputed at an FTWZ. Then we need the ecosystem of Custom House agents, Forwarders, Banks, transporters – this entire ecosystem needs to be fully on-board – it is like developing a small smart city with its own amenities.

Learning from similar initiatives in other countries

What has worked significantly for international free zones like Jebel Ali is that the government has helped them with enabling infrastructure besides regulatory and tax support. The roads that lead to these free zones are like our expressways, the industrial parks in China have good rail connectivity. The other thing that is working well for them is 'scale' – Suzhou Industrial Park has an area of 288 square kilometres of which of 70 sq km is the main zone around which there are several logistics parks, Lingang industrial zone is 200 sq kms and Shenzen with its districts is 2000 sqkm.

> Success factors to enable FTWZs realise their full potential are: location; quality and completeness of infrastructure; service levels – people, process and technology leading to proper service levels; and the fourth is its [FTWZ's] relationship with the ecosystem.

Some Challenges

Land being among the biggest challenges that investors have had to face in the FTWZ space, other challenges include, creating the right execution strategy and building infrastructure at the right cost.

Payoffs

A developer and an operator have distinctly different payoffs from developing a port, airport or an FTWZ. From the developers perspective this is a commercial real estate business, which would provide a steady income mainly from long leases. Some of these could be built to suit.

This is one of the few sectors where a hundred percent FDI is permitted, which means that you could source funds at a low cost of funding. Then a developer that already has a land bank can develop utilising that land bank and avail of tax benefits, and then has the opportunity for getting top-end corporate clientele as project stakeholders. So as a real estate developer one could have unit holders in the FTWZ like say DHL or Cisco, then one can extend those relationships and work to serve the same clients, at other locations as well.

An operator on the other hand could remain asset light and focus on providing service to their clients, using the infrastructure, developed to their specifications. This means that they have a higher return over a lower investment.

And of course, FTWZ's significant beneficiary is the country's economy, because they facilitate trade, generate employment, train people in good practices, bring FDI, reduce costs of logistics, encourage development of infrastructure and become a source of incremental direct and indirect taxes, when goods are transferred to the Domestic Tariff Area for consumption.

For these very reasons, China has replicated this model at several locations – an inspiration is Shenzhen which started out as an SEZ in 1979 is now a city of over 10 M people and a GDP of over $250 Billion, with its own work culture.

The road ahead

The FTWZs that are successful in India, have been so with large white goods and IT companies that are aware of the advantages and are already unit holders in these FTWZs. However, FTWZ do not have participation from all the big players yet because of several factors. For some, the location is not suitable or in some cases, companies don't find the right infrastructure. In some cases, the service levels are not adequate.

To be fair to ourselves, the successful free zones in China and Dubai have also had the benefit of time and have taken 15-20 years to be where they are today.

I am very optimistic that growth in manufacturing with the 'Make in India" initiatives, will propel growth in logistics, including export-import logistics. Further, as India reaches out to other countries across the world, increases its share of trade to GDP, there will be increased demand for such free zones.

SELF-RELIANCE A FAR CRY?

While the central government aims to make India more self-reliant to meet its energy needs, NELP's poor performance, stagnant domestic production and massive cuts in oil firms' capex after a slide in global crude oil prices do not augur well for India's plans

Prime Minister Narendra Modi recently announced, to huge applause, that India must aim to reduce its dependence on imports for meeting its energy needs by 50 per cent over a decade and a half. But realising this self-reliance goal might prove daunting.

Exploration and production from blocks awarded under the New Exploration Licensing Policy (NELP) have been less than satisfactory; and private oil firms have lowered their capital expenditure plans amid subdued global crude oil price sentiment, further stagnating domestic production.

Modi said India's dependence on imports for 77 per cent of its "energy" requirement should decline 10 per cent by 2022, and 50 per cent by 2030. But it was not clear whether he was referring to import of crude oil alone or larger energy imports – crude oil, natural gas and coal.

According to data from the Ministry of Statistics and Programme Implementation (MOSPI), India imported 189 million tonnes (mt) of crude oil in 2013-14; its total consumption during that year was 222 mt. This implies the country met 85 per cent of its demand through imports – a significant increase from 76 per cent in 2005-06, when India had imported 99 mt crude oil. However, data from the Ministry of Petroleum & Natural Gas shows India's "import dependence in the petroleum sector" in 2013-14 stood at 77.6 per cent, slightly higher than 76 per cent in 2011-12.

In 2013-14, India produced 38 mt crude oil – Oil and Natural Gas Corp (ONGC) produced 22 mt, Oil India Ltd (OIL) 3.4 mt and the others (private companies or joint ventures under the production-sharing contract, or PSC, regime) 12 mt. While ONGC's production has stagnated lately, the firm is expecting output growth in 2015-16.

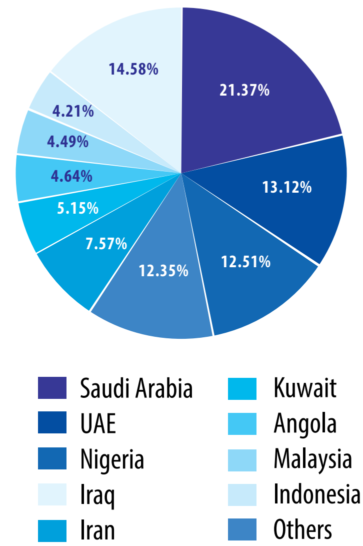
According to Budget 2015 documents, public-sector oil companies are to invest about ₹76,500 crore in project expansion in 2015-16, 5 per cent higher than the previous year. The amount includes the rise in ONGC's capex from ₹34,813 crore to ₹36,249 crore, and OIL's 11 per cent capex increase to ₹3,900 crore, even as ONGC Videsh Ltd's capex is to come down to ₹10,400 crore from ₹12,300 crore.

Unlike ONGC, private companies, cautious on subdued crude oil price sentiment, have tempered their expenditure plans. Cairn India, a subsidiary of Anil Agarwal-controlled Vedanta, has, for example, more than halved its capex to $500 million from $1.2 billion, and is reported to have laid off employees to cut cost.

Global energy consultancy Wood Mackenzie said in a report "oil and gas industry is responding to the low oil price environment with cuts in exploration budgets for 2015, which will average 30 per cent, leading to suggestions exploration activity could be significantly curtailed."

The Narendra Modi-led central government is not the first to focus on the issue of reducing India's crude oil imports. It was for this reason that the United Front government of the day had introduced Nelp in 1998. However, 16 years on, imports' share in domestic crude oil supply has only grown, in spite of Nelp. As of March 2013, India had awarded 261 blocks under Nelp. Though a total of about $20 billion had been invested in these blocks, only two or three blocks had been brought to production, and, after Nelp VI, there was a consistent decline in the number of PSCs signed, as the industry's interest waned.

India's Major Oil Suppliers

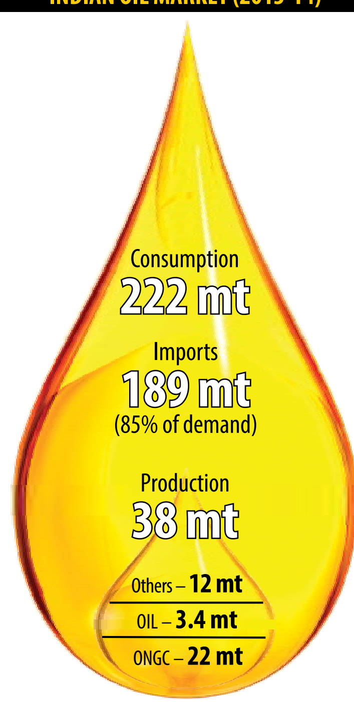


Not surprisingly, the United Progressive Alliance (UPA) government of day in July 2013 officially accepted "the performance of Nelp blocks has been far from satisfactory due to a variety of reasons. It is evident from the fact that only six of the 110 discoveries announced under Nelp are under production."

Nelp's poor performance, stagnant domestic production and massive cuts in oil firms' capex after a slide in global crude oil prices do not augur well for India's plans of cutting oil imports. "This seems wishful thinking, without a concrete plan of action. It is not feasible in practical terms," says former ONGC chairman R S Sharma. He adds even ONGC might find it difficult to get its plan of investing ₹40,000 crore in discoveries on the east coast approved by its board, as such a level of investment might not be viable at the current low gas price.

According to the Planning Commission's recent report, India Energy Security Scenarios 2047, the country's oil imports could continue to be around 80 per cent of consumption in 2030, even in a "maximum energy security pathway" scenario. According to the 'BP Energy Outlook 2035', released in February this year, the share of India's energy production (including coal, oil, gas and biofuels) in its total consumption will decline from 59 per cent at present to 56 per cent by 2035.

INDIAN OIL MARKET (2013-14)



"India's energy production rises 117 per cent by 2035, while consumption grows 128 per cent," the report says, adding oil imports will rise 161 per cent, even as a decline in oil production is offset by increased gas and coal output. The report says India's energy intensity of gross domestic product will improve slowly; in 2035, it will be 30 per cent lower than today.

A 2014 McKinsey study said India's energy demand would grow from 691 million tonnes of oil equivalent (mtoe) in 2010 to 1,500 mtoe in 2030, based on GDP estimates, composition of the economy and demand growth from industry, buildings and transport sectors, in a business-as-usual scenario. The report projects India's import of primary energy requirements will rise from 30 per cent in 2010 to 51 per cent in 2030, assuming efficiency gains and a dip in energy intensity from 0.56 kg of oil equivalent per dollar in 2010 to 0.47 koe per dollar in 2030. mg

Source: Hellenic Shipping News

COMPLETE SOLUTION TO POWER YOUR SHIP

"We are offering a complete system which includes the engine, propellers, gearbox and other equipment as required to deliver power into the vessel."

Omer Ahmed

For the past 90 years, people turn to Caterpillar when it comes to developing infrastructure, energy and natural resource assets. As one of the world's leading brands in manufacturing construction and mining equipment, diesel and natural gas engines, industrial gas turbines and diesel-electric locomotives, Caterpillar has made sustainable growth possible on every continent. The company principally operates through its three product segments - Resource Industries, Construction Industries and Energy & Transportation

Seckin Uz
Managing Director - West Asia
Caterpillar Marine

Q How is the marine propulsion market?

A With the current oil prices scenario we expect some downturn but at the moment the market is quite strong. We are not seeing much effect at the moment because we have a time gap between a shipbuilding contract signed and equipment purchased. So it will be the shipbuilding industry that will feel it first if they do not get any new shipbuilding contract. But for us we are getting more orders on the propulsion side. China is the strongest market for us. In my region of focus that is West Asia, I would say Turkey is in a good position in shipbuilding for Norway, Iceland and also for its own domestic use and certain European customers as well. The Middle East market is also quite strong, not from the ship builders perspective but from the shipowners view. There are a lot of shipowners in Middle East. India is quite slow as there are shipyards facing financial problems and few yards are playing very low. In India offshore passenger vessels and Navy business are major activities.

Q Do you supply propulsion engines for all kinds of vessels?

A We supply for very wide range of vessels including government vessels. We are careful on the governmental business as it requires more sophistication and is time consuming, unlike offshore construction that takes shorter time. We are not into combat vessels but we are more in auxilliary vessels, especially for navy. In Turkey we have signed contracts for Pakistan Navy and Turkish Navy as well for supplying auxilliary vessels.

Q Are these engines off-the-shelve or customised?

A The high-speed engines are mostly standard but there are different attachments to it which have to be customised. Medium speed engines are more customised – built for a particular project. Propulsion engines are entirely customised – they are designed to suit the vessel into which they need to be fitted.

Q How do the emission regulations affect your business?

A At Caterpillar we have a big budget for research to meet the upcoming regulations.

Q What is the market size you enjoy?

A We have presence across the globe with a big range of dealers offering technical and aftersale support. In India Gmmco is our dealer. So basically we operate through dealers.

Q At what stage you get into customised propulsion?

A All projects are custom made to suit to vessels requirements. We don't have off-the-shelve propellers to offer. During the design of the ship orders are placed for the propulsion equipment. At the early stage we communicate with all the ship designers/builders to develop best fit propellers.

Q You recently acquired Berg Propulsion. How does it fit into your business strategy?

A The acquistion took place in 2013 and it will help Caterpillar to supply the entire system instead of only the power or propulsion equipment. These operations are managed by Caterpillar Propulsion under Caterpillar Marine. We operate through the dealers, and we are offering a complete system which includes the engine, propellers and other equipment with gearbox as required to deliver power into the vessel. In this way Caterpillar Propulsion can design and start with the right direction by designing the propellar and go to the engine side and select the correct engine for the vessel according to the operation. So we have the full control of the power on the propulsion side which will benefit our customers. Having all the engine components designed and developed under one roof has both commercial and technical benefits.

Q Caterpillar launched twin-fin propulsion system. Tell us about it.

A Twin-fin is a concept which is in line with our strategy to develop propulsion system according to the operational profile of the vessel. If some existing vessel is using azimuth thrusters in their own application, we recommend them to use a commercial propellar system with twin-fin which has two fins designed to fit into the hull which increases efficiency and also gives the advantage of retrofitting easily into the existing hull. Instead of azimuth you can fit twin-fin and the rudders behind it easily. We have a case in which we supplied for a seismic vessel which had azimuth thrusters that malfunctioned many times. This is a new vessel I am talking about, just two and half years old. We offered them this twin-fin solution which they found very attractive as it increases the efficiency, bullock pull and we completed this major retrofit within five days. We can manufacture the fins, propellar and other components in advance and then the vessel is docked for replacement of azimuth thrusters with twin-fins and rudders, and within five days the vessel is back in operation.

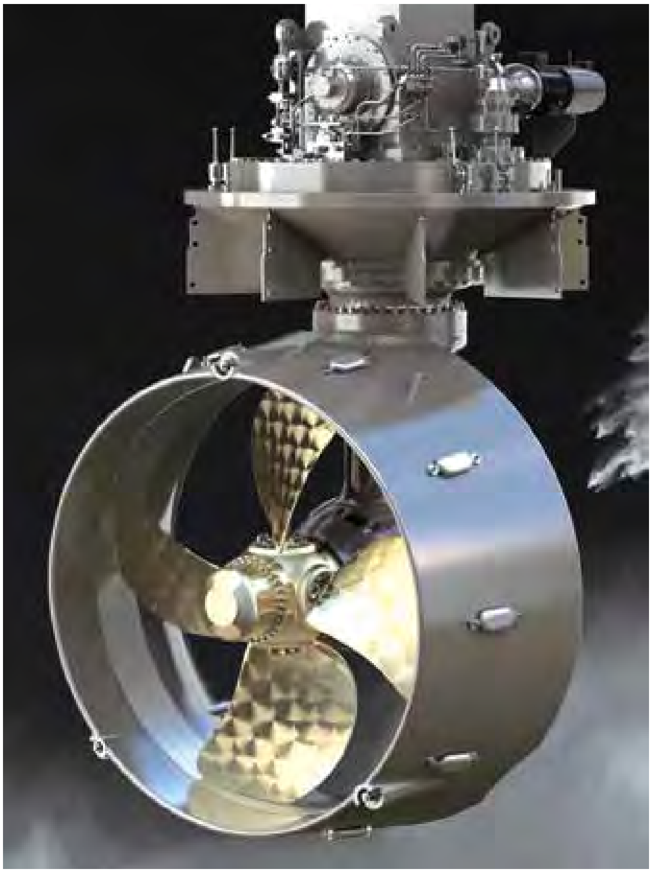
It has been very beneficial for a company called Polarcus, as it increased their efficiency. They have been pulling eight streamers for seismic operations and now they can pull 12. We offer solutions for both retrofitting and new building. We are cooperating with different designers to develop the fins and best propulsion systems. Both retrofitting and new building are both a big market for twin-fin.

Q Do you offer propulsion systems for tugs?

A Caterpillar is very strong in the tug business and our high-speed engines are very famous in this segment. Caterpillar aims to offer a full concept for tug boats which is a strong segment for us. We design azimuth thrusters for tug boats which are generally light or medium duty. Our azimuth thrusters for offshore vessels are designed for heavy duty. Our new azimuth thrusters designed for tug boats attach all the components onto the engine which makes the azimuth thruster very compact. So the ship builders will benefit by getting a full package including the engine, shaftline, clutch, pumps and all accessories from the CAT dealers, which is easy to install and supported by the aftermarket.

Q In which vessels more of CAT engines are installed?

A Tug segment with high speed engines is a major part. Then we have offshore vessels with medium speed engines and bigger offshore vessles, anchor turners from 60 tonnes to 300 tonnes. An upcoming market segment in my region is lift boats with CT propellars, PSVs in offshore, DP zero or DP two vessles with azimuth thrusters. CAT gensets are supplied mostly in my region, and this is an upcoming market segment in all regions such as China, Vietnam and Middle East. In addition to these, in my region in Turkey, there are fishing vessels, double liner ferries that use our engine and propulsion systems.



MTA Azimuth thruster

Q What is the usual lifespan of this propulsion system?

A They have a functional life equal to the operational life of the ship in which they are installed. The propulsion system if properly maintained and repair and maintenace is timely done then they can last for the life time of the vessel. It's very rare, unless in case of accidents that propulsion systems are changed in a vessel.

Q Do you see any technologies change in the propulsion systems?

A We have quite many innovations and are always improving to get new patterns into the market. We also team up with certain institutes for research purpose. We see more demand for feathering propellars. In a twin engine vessel you can run only one engine and the other engine can be feathered for slow steaming.

Q What is your biggest concern?

A Today, everybody's concern is the oil price, but we still don't feel any effect at this time and we are looking at future to recover on that. mg

ASIA / EUROPE

Drewry: Oversupply impacting Asia-Europe rates

Carriers received some respite recently as Asia to Europe spot rates surged after weeks of decline. However, weak Q1 demand figures have exposed their gamble on ULCVs, according to Drewry's latest insight report.

Following 14 weeks of falling Asia to North Europe spot market freight rates, carriers finally had a win recently as rates on that route surged by 153 per cent. The World Container Index benchmark for Shanghai to Rotterdam went from a data series low of $670 per 40ft container to $1,698/40ft.

The latest numbers from container trade statistics show that combined Asia to Europe and Mediterranean volumes declined for the first time in over two years in Q1, 2015, registering a 1 per cent fall against the same period in 2014.

It is likely that other Asian trading nations such as Vietnam will continue to increase its share of the market – Vietnam had 4.1 per cent share of Asia to Europe container trade in 2014, up from 3.7 per cent in 2013 – but as China is so far ahead any slowdown will be impossible to completely cover.

From May until the end of 2015 there will be 630,000 teu worth of capacity from new ships of 10,000 teu and above scheduled for delivery, with similar levels slated for 2016 and 2017. The order-book for 2018 and 2019 is already filling up and the data in the chart does not include reportedly imminent big new orders from Maersk Line and China Cosco. Drewry assumes that all of the 14,000+ teu vessels – cumulative capacity of 503,000 teu for the remainder of 2015 – will enter the Asia-Europe trade, which poses a huge risk to carriers in a slowing market.The Drewry view: The rush to order the biggest containerships might pay off in the long run but, at present, that gamble has backfired and carriers are faced with overcapacity in Asia-Europe, making it very difficult to see how rates will become sustainably profitable.

OMAN

The rise of Oman

Oman's continued growth relies on improved integrated logistics infrastructure and regulatory reforms, noted Kim Fejfer, CEO APM Terminals, as he pointed at the plans for further infrastructure investment and the expansion of free trade zones as key factors for the continuing growth of Oman as a gateway and commercial center for the Persian Gulf Region.

"Oman has a good opportunity to improve its business environment in terms of ease of doing business, developing integrated transport chains that can even better link road, rail and air transport through a world-class port, capable of accepting the largest vessels in the world and to further develop world-class industrial parks and free zones near these maritime gateways," said Kim Fejfer. He added that "by simplifying the business regulatory environment Oman will attract even more entrepreneurs and capital that will reduce barriers to cross border trade."

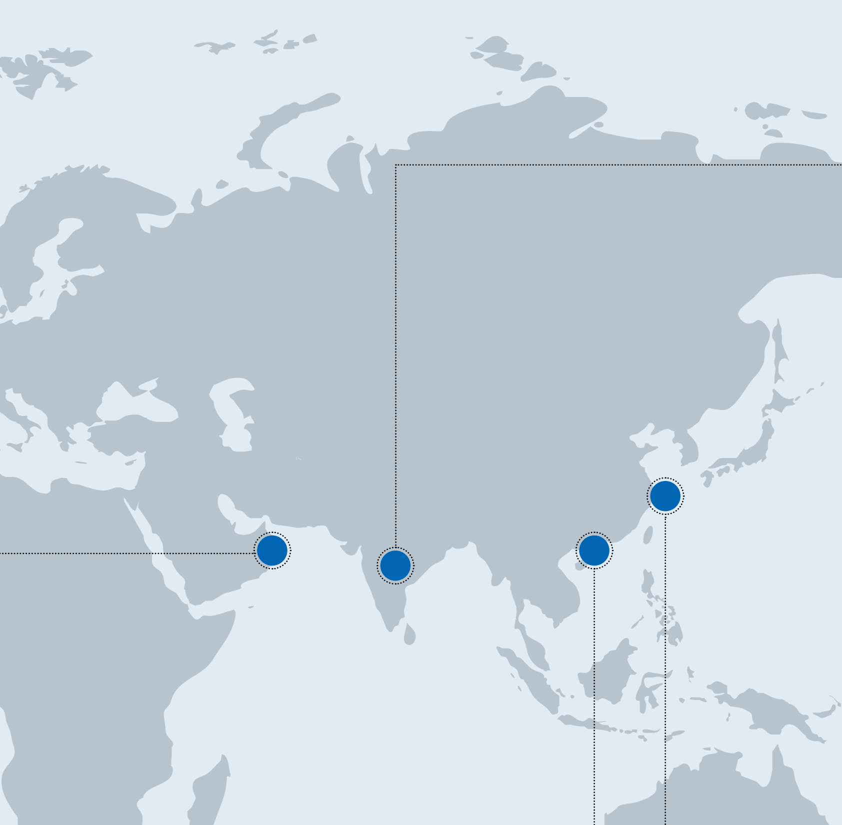
Additional investments are planned at the Salalah Free Zone totalling $15 billion by 2028, with chemicals and materials processing, manufacturing and assembly, and logistics and distribution facilities to the specific target market areas. A caustic soda facility and an LPG plant are scheduled to be operational by the end of Phase I of the expansion plan by 2018. An essential component of the economic growth will be the linking of sea and air logistics centers to free trade zones. A 20-year Port Master Plan in-progress until 2030 includes the development of a Salalah Hub that involves direct rail connections to commercial and population centers within the GCC, the construction of food processing, distribution and warehousing facilities, and new terminals for cruise ships and liquid bulk storage. Upgradation of the port's annual general cargo handling capacity to 20 million tonnes of dry bulk commodities and more than 6 million tonnes of liquid products is already underway. Managed by APM Terminals, the Port of Salalah is one of the most productive container facilities in the Middle East, handling three million teus in 2014. During the year, the port also handled 10.3 million tonnes of general cargo, representing an increase of 30 per cent over 2013. Current plans to link the port to the GCC rail network will provide efficient transportation to inland locations while reducing truck traffic and diesel engine emissions.

NIGERIA

Corruption and operational bottlenecks overshadow port reforms

Corruption and operational bottlenecks at ports that serve as the gateway to the eonomy of Nigeria, are the key challenges that the incoming administration of Muhammadu Buhari (President-elect of Nigeria) is expected to resolve, if the port reforms of 2006 are to make a significant impact. According to shippers, the reforms brought some level of improvements over the past decade by transfering cargo handling operations from government to private companies, but bad road infrastructure and extortion by government officials add to the cost and traffic congestion, defeating the core objective of the reforms to improve efficiency and reduce cost by 30 per cent.

Kickbacks demanded particularly in government ministries, agencies and departments severely impact a lot of businesses, reveals Aminu Musa, a shipping expert in Lagos. Due to the kickbacks, many of the importers try to maneuver, underdeclare and classify goods in lower tariff index in connivance with Customs officials in order to pay lower duty. According to Seaports Terminal Operators Association of Nigeria (STOAN), despite over $1 billion being cumulatively invested in modernising and upgrading the ports terminals, and acquiring about 1,300 cargo handling equipment across various terminals in the country, the bottlenecks and high cost persists largely because of large-scale physical examination of containers, and illegal levies imposed by multiple government officials.



INDIA

Plan to reduce crude oil imports

India is an oil importing nation and hence the country has benefited from the recent slump in crude oil prices. In order to reduce import dependency on crude oil, the Narendra Modi Government is taking a number of initiatives to increase domestic production of crude oil and to promote conservation of petroleum products, Dharmendra Pradhan, Minister of State for Petroleum & Natural Gas, said.

Steps taken to accelerate the pace of exploration and production of oil and gas in the country are:

1. Project for survey of about 1.5 million square km. of unappraised area in the Indian sedimentary basins has been started through national oil companies to gather geoscientific data for identifying prospective blocks.
2. Re-assessment of hydrocarbon resources making use of geoscientific data gathered over the past couple of decades has been initiated to get a better understanding of the prospectivity of Indian sedimentary basins.
3. A national data repository has been developed and is under trial now. It is a platform which will help access the geoscientific data easily and help in carving out new hydrocarbon blocks.
4. A policy framework for relaxation, extension and clarification at the development and production stage under the PSC regime to remove rigidities in timelines with a view to early monetisation of hydrocarbon discoveries has been approved.
5. Revision in domestic gas price, with provision for premium for difficult areas (deep water, ultra deep water and high pressure, high temperature areas) has been approved.
6. Extension of 40 per cent subsidy to private companies operating in the North East Region has been made.
7. Exploration of shale oil and gas by national oil companies has been taken up.

CHINA

Excess vessel capacity pushes Chinese shipyards into red

Yangzijiang Shipbuilding (Holdings), China's biggest private shipyard, expects the industry to shrink significantly in the next three years, reversing almost a decade of boom. In three years' time, there might be only 30 "active" shipyards in China, down from more than 100 now, reveals Yangzijiang chairman, Ren Yuanlin. There will be mergers, acquisitions as well as closures as the industry restructures.

In the first quarter, orders at Chinese shipyards fell 77 per cent. Shipbuilders have sought government support as excess vessel capacity has brought down shipping rates, prompting certain shipowners to cancel contracts.

China Huarong Energy that was once the nation's largest private yard, ran into financial difficulties during the past two years due to slump in contracts and competition with state-owned builders. Yangzijiang, which is listed in Singapore, was reviewing a proposal made by China Development Bank, Bank of China and others to buy a stake in the shipbuilding and offshore engineering businesses that Huarong was selling, Ren said.

Last year, the government had identified 51 shipyards, including Yangzijiang, deemed worthy of policy support. Utilisation of shipbuilding facilities in the country fell to 60 per cent this year, which was significantly lower than the global average and the optimal level for the industry, Yangzijiang said. In 2010, the rate was 75 per cent.

Yangzijiang won $370 million of orders in the first quarter, down from $1.07 billion a year ago. Its orderbook stood at $4.6 billion at the end of March, with deliveries stretching until the end of 2016.

HONG KONG

Port industry at the cross roads

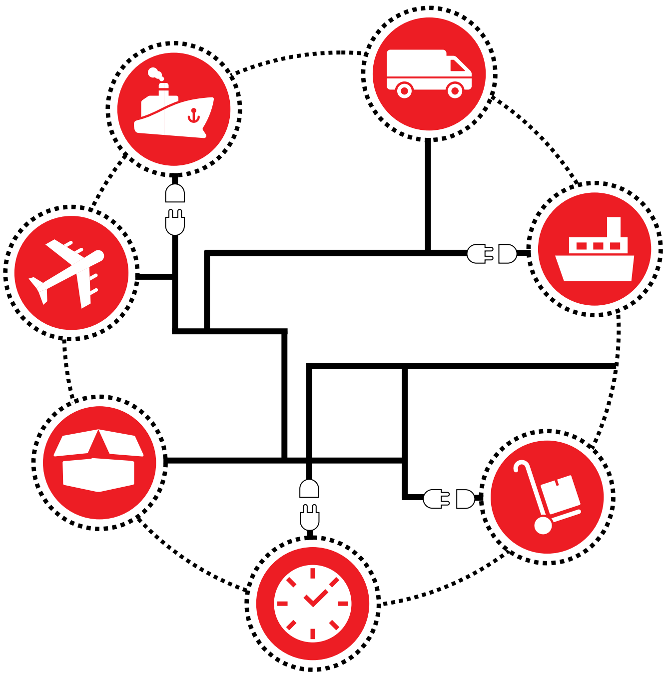
According to the findings of a study on the strategic development plan for Hong Kong Port to 2030, its long-term competitiveness and sustained growth are in jeopardy due to several factors that undermine its handling capacity. One is the rising deployment of mega container vessels to call at hub ports. Their sheer size and huge volume of cargo carrying capacity tend to drive down container handling volumes per vessel-call at the port due to insufficient yard capacity, resulting in lower productivity and terminal congestion.

Studies commissioned by the government both in 2004 and 2014 point at the same set of key measures to safeguard the industry's competitiveness for the foreseeable future. These include enlarging the container terminal yard storage areas, adding barge berths and allowing the rationalisation of existing on-terminal facilities.

Hong Kong's port industry can either prosper by maximising the use of its existing Kwai Tsing Port facilities or watch shipping lines move their ship calls to other regional ports. The Kwai Tsing container terminals finished the first quarter of 2015 down 9.8 per cent in throughput year-on-year, with March recording a rare double-digit drop of 16.2 per cent year-on-year. It also marked nine consecutive months of year-on-year fall in throughput.

A second trend is the substantial increase in barge traffic affecting the port's handling capacity, as more cargo containers are being handled by river barges. In 2008, the average barge waiting time at the Kwai Tsing container terminals was about two hours; now it can take more than two days during peak periods. For container vessels, the average waiting time has risen from 2.8 hours to up to 13 hours at congested periods.

A third trend is the port's increasing reliance on international transshipments. These have strained handling capacity as the efficient movement of containers across terminals has been undermined by limited yard space. With container throughput projected to grow at a modest rate until at least 2030, the Kwai Tsing container terminals will exhaust all its buffers in the coming years, unless capacity addition is done.



BE CONNECTED, BE EFFICIENT

Internet of Things can enable logistics and warehousing businesses increase efficiencies by reengineering existing processes and provide new services that challenge traditional business models

Internet of Things (IoT) has emerged as a key enabler in connecting the unconnected, which includes physical objects, people and intangible things. IoT is projected to generate $8 trillion in value worldwide over the next decade which accounts for more than 42 per cent of the overall value generated by Internet of Everything (IoE). IoE connections can be machine-to-machine; machine-to-person; or person-to-person. This value will come from five primary drivers: innovation and revenue; asset utilisation; supply chain and logistics; employee productivity improvements; and enhanced customer and citizen experience. Supply chain and logistics alone are estimated to provide $1.9 trillion in value, which is a promising indication of the untapped potential and profits to gain from utilising IoT in the logistics industry.

Smart warehousing

With thousands of different types and forms of goods being stored in the average warehouse today, every square meter of warehousing space must be optimally utilised to ensure specific goods can be retrieved, processed, and delivered as fast as possible. The result is a high-speed, technology-driven environment that is ideal for IoT applications. From pallets and forklifts to the building infrastructure itself, modern warehouses contain many "dark assets" that can be connected and optimised through IoT. In the warehouse, the widespread adoption of pallet or item-level tagging – using low-cost, miniscule identification devices such as RFID – will pave the way for IoT-driven smart-inventory management.

Let's examine a few instances of IoT in action in a warehouse. For starters, wireless readers capture data transmitted from each pallet as it arrives through inbound gateways. This data could include information on the product such as volume and dimensions, which could then be aggregated and sent to the warehouse management system (WMS) for processing. This capability eliminates the time-consuming task of manual counting and volume scanning of pallets. Cameras attached to the gateways could also be used for damage detection, by scanning pallets for imperfections.

Once pallets are moved to the right location, tags transmit signals to the WMS to provide real-time visibility into inventory levels, thus preventing costly out-of-stock situations. If any item has been misplaced, sensors can alert the warehouse manager, who can track the item's exact location for corrective action. For quality management, sensors monitor the condition of an item and alert warehouse managers when the temperature or humidity thresholds are about to be compromised. This would allow warehousing staff to take corrective action, ensuring service quality and greater customer confidence.

During outbound delivery, pallets are scanned through an outbound gateway to ensure that the right items – in the right order for delivery – are being sent. Stock levels are then updated automatically in the WMS for accurate inventory control.

Beyond goods stored in a warehouse, IoT can also drive optimal asset utilisation. By connecting machinery and vehicles to a central system, IoT enables warehouse managers to monitor all assets in real-time. Managers can be alerted when an asset is being over-utilised or when an idle asset should be deployed to do other tasks. For example, a variety of sensors could be deployed to monitor how often assets in a sorting system, such as conveyer belts, are in use or idle, and at what times. Analysis of the data could then identify optimal capacity rates and tasks for the assets. One such innovation is Swisslog's "SmartLIFT" technology. The solution combines forklifts sensors with directional barcodes placed on the ceiling of the warehouse and WMS data to create an indoor GPS system that provides the forklift driver with accurate location and direction information of pallets. It also delivers a dashboard for managers to observe the real-time speed, location and productivity of all forklift drivers as well as visibility on inventory accuracy. Bobcat (a US-based equipment manufacturer) deployed the solution in its warehouse and reported a 30 per cent increase in pallets per hour with no inventory errors.

Predictive maintenance

Connected assets in a warehouse also enable predictive maintenance for warehouse transport systems. As one example, sensors could be placed on a sorting machine to detect levels of physical stress by measuring throughput or the temperature of the machine. Cameras can also be employed to detect package damage or pileups as they occur. All of this data could then be collected and combined for predictive maintenance analytics, which can schedule maintenance appointments and calculate the expected lifetime of the machine at its current level of usage. Any pile-ups are alerted to staff so they can be fixed before causing serious damage.

Worker health and safety

IoT can also drive higher levels of worker health and safety through a connected workforce and connected vehicles. Statistics from the Industrial Truck Association (ITA) and the US Occupational Health and Safety Administration estimate that there are about 8,55,900 forklifts in operation in the United States alone. Those forklifts are estimated to contribute to more than 100,000 accidents per year, which causes 94,750 injuries. Almost 80 per cent of forklift accidents involve a pedestrian. Multiplied on a global scale, this demonstrates the potential scale for improving safety within the warehouse.

Sensors and actuators combined with radar or cameras attached to forklifts can allow them to communicate with other forklifts and scan the environment for hidden objects that could cause a collision. Forklifts could be programmed to slow automatically at intersections when another forklift or pedestrian is detected around the corner.

Many accidents also result from workers loading the pallet incorrectly. Such accidents could be avoided by using pressure sensors to detect when a load has become too heavy, and also when an uneven load has been placed on the forklift. Ravas (a Netherlands based warehouse machinery manufacturer) is developing smart forks that incorporate weight scales as well as load-center measurement technology for pallet trucks. By alerting the driver when load capacity has been exceeded or when the load center is uneven, safety is increased.

IoT technologies can also prevent falling pallets and products. A mix of sensors and cameras could be employed to detect risks from imperfect storage and calculate the likelihood of a pallet or item falling from a shelf.

The connected workforce

In the near future, workers will opt-in to the IoT system, connecting via their smart phones, scanners, and wearables – in fact, smart glasses and other wearables are likely to bring an exciting new stage in machine-to-human interaction in the warehouse.

The emergence of the connected workforce provides new opportunities to monitor the health and fatigue of workers, track the fixed process paths of workers, and analyse where warehouse managers can improve walkways or change a process to make workers' lives easier and safer. One such solution is under development from Locoslab, which provides precise localisation of mobile devices in indoor environments using active and passive RFID technology. It monitors the movement of people and objects within an indoor environment and applies location analytics to understand where processes can be improved.

Energy management

Sensors can also be integrated into the warehouse infrastructure itself. In an average warehouse, ordinary lighting accounts for up to 70 per cent of energy used. Smart warehouse energy management connects HVAC and utilities networks, including connected LED lights, to optimise energy consumption. In addition to automatically dimming and lighting according to activity, such systems regulate the energy consumption of devices, heating, and ventilation. The resulting reduction in energy consumption cuts overhead costs along with the carbon footprint of the warehouse.

Freight transportation

Through IoT, logistics providers will gain clear visibility on the movement of goods – meter by meter and second by second – as well as item-level condition monitoring to ensure that goods arrive in time, at the right place, and intact. As we have seen, location and condition monitoring through IoT will provide a new level of transport visibility and security. Telematics sensors in trucks and multi-sensor tags on items transmit data on location, condition (whether any thresholds have been crossed), and if a package has been opened (to detect possible theft).

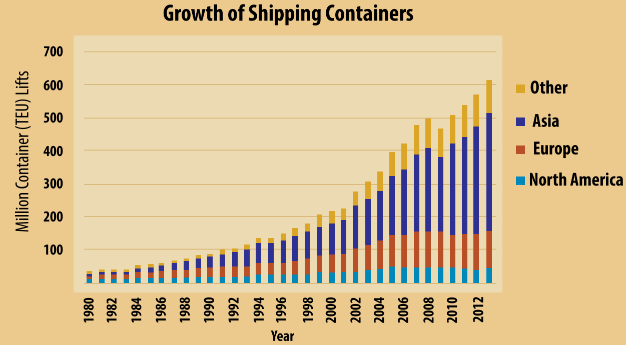
Source: Compiled from the 'Internet of Things in Logistics' report published by DHL and Cisco.

20 Ways THE SHIPPING CONTAINER TOOK OVER THE WORLD

BEFORE SHIPPING CONTAINERS

- Before shipping containers, individual goods were loaded directly onto cargo ships. This was known as break-bulk shipping
- An average ship would hold approximately 200,000 individual pieces of cargo
- It would take around a week to unload and load each ship!
- Before shipping containers 60-75% of the cost of transporting cargo by sea was made up of portside costs including labour, loss of time and damage (including theft) to cargo

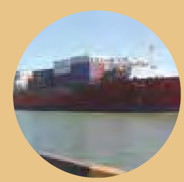
21ST CENTURY SHIPPING CONTAINERS



THE BIRTH OF SHIPPING CONTAINERS

The shipping container was invented in **1956** by Malcolm McLean, an American Entrepreneur

In **1956** 'Ideal X', the world's first container ship, set sail carrying **58** shipping containers from New York to Houston



Shipping containers popularity rocketed during the Vietnamese war, as over **1,200** containers a month were delivered there to help the war effort

Each year around **500,000 shipping containers** are abandoned and are re-purposed for other uses- such as building homes

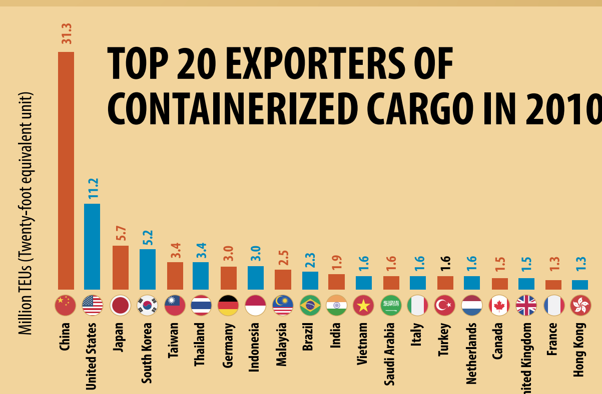
The largest container ship can carry over **19,000** containers

Approximately 675 shipping containers are lost at sea each year

As you read this there are **20 million** containers currently traveling across the oceans

that's over 1,000,000,000 bananas!

TOP 20 EXPORTERS OF CONTAINERIZED CARGO IN 2010



BEFORE SHIPPING CONTAINERS

Before shipping containers, loading cargo cost **$5.86 per ton**

Before containers, cargo could be loaded at around **1.3 tonnes per hour**

In 1955 **0%** of goods were shipped using containers

AFTER SHIPPING CONTAINERS

It now only costs **$0.16 per ton** to load cargo

Cargo can now be loaded at a rate of over **10,000 tonnes per hour**

Now over **90%** of every purchased item has been shipped inside a container