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LEADERS IN LOGISTICS

Logistics Focus™

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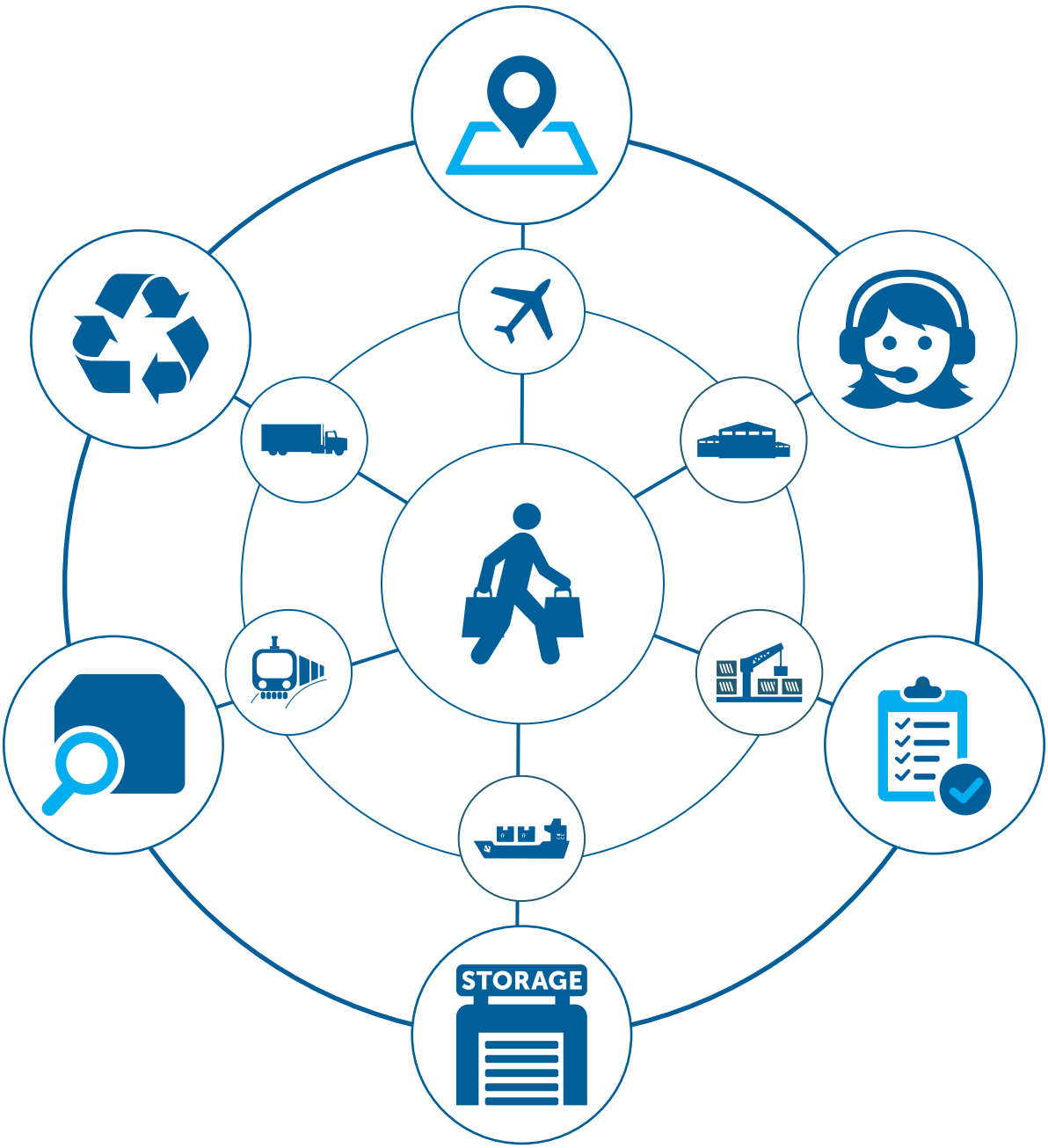

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TCI
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Transport Corporation of India Limited

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About us

Strong foundation and skilled manpower, TCI offers seamless multimodal transportation solutions. An ISO 9001:2008 certified company, TCIL is listed with premier stock exchanges like NSE and BSE.

The company progressed from being a "One Man, One Truck, One Office" set up to becoming India's leading Logistics & Supply Chain Solutions provider with a Global presence. After 50 years, TCI moves 2.5% of India's GDP by value and is the proclaimed market leader of the Indian Logistics Industry.

TCI Group has an extensive network of over 1000+ company owned offices, a huge fleet of customized vehicles and managed warehouse space of 10 million sq. ft. and a strong work force of 5000+. With its customer-centric approach, world class resources, State-of-Art technology and professional management, the group follows strong corporate governance principles and is committed to value creation for its stake holders and its social responsibilities.

TCI Supply Chain Solutions

With a Mission to be "the most admired service provider of integrated supply chain solutions", TCI Supply Chain Solutions brings a lot of commitment in its partnerships with its clients. Dedicated verticals for Auto, Retail, Telecom, Electricals, Pharmaceuticals, FMCG and Cold Chain offer specialized services to these critical sectors of the economy.

TCI XPS
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TCI XPS an express distribution specialist offers a single window door to door time definite solution for customers' express requirements. Equipped with an ISO 9001:2008 certified operations, TCI XPS delivers consignments of all sizes and weights to 13000 locations in India and 200 countries abroad.

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TCI Freight, the largest division of Group TCI, is India's foremost and Asia's leading surface transport entity. It has a strong backing in terms of its extensive and strategically located branch network and trained work force.

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TCI Global provides a single window advantage to its customers across all major South East Asian countries through a dedicated network of international offices in the region besides having strategic presence in high growth and emerging markets in Asia, Brazil (Latin America) and Africa. TCI Global offers its customers end to end services ranging from customs clearance, international inbound and outbound freight handling (air and sea), primary and secondary warehousing/redistribution, third party logistics, multimodal (air, surface and sea) services, ODC movements, mining logistics and project cargo.

TCI Seaways

TCI Seaways has well equipped ships in its fleet and caters to the coastal cargo requirements for transporting container and bulk cargo from Ports on the East coast of India to Port Blair in the Andaman and Nicobar Islands and further distribution within the islands.

KNOWLEDGE INITIATIVE OF TCI GROUP
KNIT

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Foreword

Dear Readers,

The journey of 'Logistics Focus', you all will agree has been interesting thus far. The topics covered have been varied from the contemporary topics like E-commerce, QSR, 4PL-Control Tower to conventional subjects like Production logistics & After Market Services.

Multimodal Logistics is the theme of this edition. The endeavor of the publication and all eminent writers is to enable the discerning reader to reflect, introspect and plan the way multimodal logistics will impact their supply chain today and in the coming years. A hue of GST is also added to round it up.

The subject in our view point remains complex and challenging for the government, industry and service providers thus adoption and growth of multimodal solutions and its impact on supply chain would be the prime time topic for discussions the next 5-10 years across the board rooms.

Last but not the least, sincere thanks to all writers and the TCI team behind for compiling yet another reading experience.As an addendum to this edition a reckoner titled "Multi-modal logistics" some quick definitions related to multimodal logistics will be released soon. Do ask for a copy of it!!

Look forward to your suggestions and feedback.

Thanks,

Ajit Singh
CEO- TCI CONCOR

Ajit Singh
CEO, TCI CONCOR

Ajit Singh is a veteran in the Logistics industry with over 30 years' experience. He has worked in various capacities and at senior management positions with TCI Freight & TCI XPS. Currently he is the CEO for TCI Concor and TCI Rail divisions. During this tenure TCI has successfully forayed into Rail multimodal logistics.

A

Multimodal Logistics In India : Overview and Challenges

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Tete-a-tete

-by Mr. Anil Gupta, CMD, Concor

01

He is first CMD of CONCOR and a professional transport sector specialist, having vast experience in rail related multimodal transportation

It is arguably said that in India Multi-modal logistics got its much deserved acceptance through the formation of CONCOR as a company by Indian Railways. The journey of CONCOR has been impressive, especially the last few years under the able leadership of Mr. Anil Gupta. In his tenure CONCOR also got the coveted status of "Navaratna".

We got a rare chance over a morning cup of coffee to know the thoughts and view point of Mr. Gupta on the state of Indian Multimodal industry and its future, read ahead, it is indeed thought provoking to say the least ==========

1. How would you rate the status of Indian Multimodal industry compared to western world and BRIC countries?

As compared to the western world we are still behind. But as our industry size has come of as we are already 125 billion euro dollars, likely to reach 200 billion Euros dollar by the 2020.

2. What are the good and bad aspects in Indian Multimodal industry? With reference to this, would you consider CONCOR to be a pioneer and a leader to set examples?

Indian multimodal is very complex. Since we are a very large country, we actually cannot be compared to Europe which is a very small distance country where most of the things move from door to door. In India there are very big challenges. In those challenges I must say that India has done quite well in last 10-15 years, ever since pvt sector has also come in. There are around 17 players who are engaged in multimodal transporting and very big houses like TCI, Delhi AssamCorporation and we are likely to now see further growth. On the bad aspect today is that it is not one window, it is multiple window where shippers have been going to various players to execute their door to door deliveries. We are likely to move to single window services, in the upcoming years, that is a very big challenge for us and a very big opportunity to us also.

3. What would be your suggestions to improve multimodal logistics in the country?

My honest suggestion is that yes, more and more corporate should move to providing door to door services under single trials, under single liabilities under single document which is still lacking in the country. We should stop blaming each other , we should stop telling our consigners that we are not responsible, someone else is responsible for this particular stage and should take liability at a single point, it is very important. And that is why pre requisite for going further in the industry.

4. What are your thoughts on the role of PPP in Multimodal industry?

PPP is very much required as I said ever since this sector of rail has been opened to the private player in 2006. There has been a lot of growth. PPT is welcome. It must be ensured that new investment does not lead to additional cost. You have to be cost competitive. The main challenge before us is that in India Logistics constitutes 13% of GDP we have to bring it down to 10% stage by stage and if PPP model comes up or if any other model comes up, it should target on this particular target of reducing the cost.

5. Can you please throw some light on your thoughts on liberalizing the Rail Wagon and containers ownership i.e. privatization and the impediments in the investments?

As far as Rail Wagon is concerned. In last few years railway has been quite progressing, they have permitted Wagon leasing. For containers at least there are two leasing companies already in the field who are leasing wagons. There are many more in the pipelines. There are some actively considering coming into the sector. About containers I don't understand, there are no restrictions, container is totally private. The main problem in container manufacturing in India is that it is not competitive and therefore many container manufacturing firms have actually shut the shop and gone away. We have to become competitive; we have to find out how to become competitive so that overall cost can be reduced.

6. Do you envisage foreign players entering into this segment?

Well yes there is now with the complete liberalization of new FDI policies in some railway sector, it should be possible for foreign firms to come. But let me tell you, this is not a constraint .even up to know there are foreign firms who will be coming as a joint venture partner. They are registering their companies in India and working with local partners in many areas. So that is not really a constraint but yes, the recent changes brought last year in the FDI in certain areas of Railways will be a Game Changer. It will give it a push.

Specific to CONCOR

7. How much growth CONCOR has seen this year in terms of no. of containers and Freight tones?

Well this year has been very good for us. In the first 3 quarter of this year we have grown 13.13%+ in the numbers in the exit handling. Over all handling has been more than 11%+ .Our total income has gone up by overall 11%. Gross margins have also gone up. It's been a very good year for us in the first 3 quarters so far.

8. What are your views on the recent freight hike announced by CONCOR and its impact on its business and the industry overall?

Freight hike we have to announce it till I call the other CTO's because of the holistic charges increased. We had requested to railways for taking it back. Railways have withheld a portion for two and a half months from the mid December which is likely to be restored from 1st of March. There is one aspect of surcharge on the

imports being picked up from the ports because of the port conditions. Where we have requested railways we are still in touch with them. We are requesting them to withdraw the surcharge which will help us better. But yes it will be tough with the new holistic charges and with the scenario of road transport prices actually going down because of the fall in the fuel prices; it will be a big challenge for all the container operators to grow. But we are quite hopeful that the industry will still manage to have a growth of around 6 to 7% in the next year if some rail rationalization are done we may be able to grow at 10%.

9. What would be the most popular lanes for CONCOR?

Most of the international traffic getshandled on the ports of the western cost, where Mundra, Pipava and JN port. and most of the movement between these ports are from northern India, central India and from parts of western India. So JN port – Ludhiana, JN port – Delhi , JN port- Moradabad , JN port- Kanpur, JN port– Jaipur, Mundra-jaipur , Mundra- Delhi , Pipava-Delhi , Pipava – Jaipur. These are the main ways patternised for the import export traffic. For domestic traffic we are following a hub and spoke model. Where we primarily provide dedicated services between hubs which are located in the metro of the cities of Delhi, Mumbai, Kolkata and Chennai and from these metro cities we have the spokes going into the different small cities and that is a modal which is working. So, all four links between metros are the most popular hubs for domestic traffic.

10. Does a Seasonal variation affect your business?

Seasonal variations do affect our business. There are times when after the harvesting of crops in the northern India, suddenly there is a demand for movement from north to south, north to east. In other times, there is a reverse pattern. There are some months when we have movements from south to north and movement from north to south is not matching. So those demands are there, that is the pattern of transport industry and we also have to follow the pattern.

11. How would CONCOR address the demand-supply gap in providing the containers to customers?

We are going in for different models. First of all we have more than 20,000+ containers which have been deployed in domestic circuit. We have also made a provision for customers bringing their own containers and asking us to do the transportation that is also a very popular modal. Most of the customers who have regular business , they tend to put their own containers in the circuit and from time to time we are reviewing the future anticipated demands for containers, we are also going in for leasing. Recently we have floated a tender for taking almost 1500 containers on lease for use for 3 years or more. These are ways which we use for meeting our container demands.

12. Which are the major commodities which Concor handles?

Concor is basically depending on manufacturing products, industrial products which are transported. In domestic we are transporting all kinds of industrial products moving from one part of the country to another. We also move consumer goods, like Nestle products are moved from their factory in Punjab through Delhi where the hubbing is done and we move it to all parts of the country. We are moving goods for Hindustan Unilever, Hindustan Zinc. There are corporate, there are freight forwarders who combine, consolidate

goods from different sources and then we move them to different areas. Therefore all types of commodities are being moved, except agriculture commodities. Here there is a problem of their perish ability specially

when we come to fruits and vegetables, there the movement is primarily by road. That is an area where we are quite weak. As far as import exports are concerned, if we look at the list of the commodities, it would be more than 600 commodities which are being exported and imported. We are moving almost all of them.

13. What are the challenges CONCOR has in order to increase the share of Rail multimodal in the overall transportation pie?

Concor's main aim is to transfer traffic from road to rail. But we are not in any way trying to compete with the road sector. Our model is to coordinate with the road sector. We encourage road haulers or even our business associates or our joint venture partners to take door to door contracts from the parties. For instance if they give us a contract of 1500 kms, our effort is to try and work with them that out of this 1500 , can we provide a rail leg of 1200 kms and they do the road transport themselves for the next 300 . So we are working in coordination with the main objective of transferring long distance traffic from road to rail; which is in interest of the company, which is in interest of the environment, which saves the power and cost. So this is our main motive which according to me should be the motive of all multi modal transport operators. Save cost, save carbon emission, move in a most environmental friendly manner and deliver door to door cargo services as required.

14. What is the vision for CONCOR in the coming few years? What are the big plans?

We are quite bullish about the future; we are planning to take the business up at a CAGR of not less than 12%-13% by the next 5 years towards which we are creating

1. Capacity – at present we are developing 15 new logistic parks which are going to add capacity to my existing network of 63 terminals. So we would have by the end of 12th five year plan, almost 78 terminals which will increase capacity from the current capacity of around 3 million TU's to more than 5 million Tu's.
2. We are trying to diversify to different areas. Up to last year we were concentrating only on container handling and transport. Now we are also concentrating on bulk handling its door deliveries and road pickups. This will be made possible by railways through their policies of PFT and SFTO and we are participating in that. This will be a new business done in the same terminals.
3. We are also looking effectively at the benefits of GST which is going to now become a reality. By March 2016 GST will be implemented which will change the distribution scenario. It will hike up the demand of warehousing. It will bring new challenges. We are readying ourselves for that. We are also looking at retail chain impact in a very positive manner, more and more retail chains are coming

with FDI relaxation, there will be demand in warehousing, and there will be demand in hub and spoke movement of cargo lots going to the retail store. We are looking at movements of liquid cargo in a very big manner in the same manner in which door to door in a container which can be moved by their lifted moved on the road without any interim handling of cargos. So these are all the areas we are concentrating on which we believe will take India to a better multi modal network enabled company and will be a great boom to the business.

15. As a visionary in the Industry, what would be your inputs and tips for new comers in multimodal logistics? Where do they start from?

I would say that this sector is a very good sector for entry. It's almost a green field sector. There are a lot of opportunities. However, anybody who wants to enter this sector should enter with a great sense of planning. It is not a quick fix sector. Someone should not be entering it for making a quick buck and trying to get out. This is a sector which requires dedicated investments .The return is low spread over a longer time period. So they got to be prepared to be a "lambi race ka ghoda" so that they can actually do well and can build a firm pillar in the logistic industry and work with others and create a good return of investments for the investors in a longer period.

16. How does one keep himself informed of the trends in this industry?

It is very important for all the multi modal players to be familiar with the existing scenario which is very important as I had said earlier also transport demand is a derived demand. Now it is therefore very important for us to concentrate on what is the economic growth pattern and how is transport demand going to be generated. It is also important to realize that this being a perishable product, to that extent we have to be very alive and offer a package which is very flexible at times, because the capacity has to be utilized and returns made, These are some of the important aspects we have to look at while dealing with the future transport demand and economic sector.

The lucidity with which Mr. Gupta addressed each question of ours meant we wanted the interesting session to go on but it had to end. We sincerely believe the readers would find "action points" worth implementing in their workplace.

02

Multimodal logistics in India: an assessment

-by Editorial

India is one of the largest economies in the world and a major emerging market that has a young population, rising investment rates, large domestic demand and globally competitive firm. Even though, the unexpected global crisis has taken its toll on the economy, it is predicted that India will become the third largest economy by the year 2025 after China and the USA and has awakened the interest of significant investors.

The logistics sector in India has today become a key performance indicator of the economy. One of the primary reasons for it is that years of high growth in the Indian economy has resulted in a significant rise in the volume of freight traffic moved. This large volume of traffic has opened up new growth opportunities in all facets of logistics including transportation, warehousing, freight forwarding, express cargo delivery, container services, shipping services etc. According to the World Bank's Logistic Performance Index (LPI), India is ranked 39th place among 150 countries of the world.

Multimodal transport refers to the transport of good from one point to another via more than one mode of transport. Multimodal Logistics can be viewed as "the chain that interconnects different links or modes of transport – air, sea, and land into one complete process that ensures an efficient and cost-effective door-to-door movement of goods under the responsibility of a single transport operator, known as a Multimodal Transport Operator (MTO), on one transport document". Multimodal logistics serves to interconnect different modes of transport – road, rail, air, water – and therefore improve efficiency and speed of goods movement.

Overview & Trends

The transport and logistics sector are fundamental to the development of a country. In India, since the 1990s, the transportation infrastructure has undergone a significant change. While in the 90s, the demand for transport grew at an annual rate of 10%, in the last decade the demand in the transport and logistics industry grew along with the accelerating Indian GDP. This growth increased the demand for practically all transport services.

Quality and efficiency of India's transport infrastructure

Parameter	India	Global
Roads		
Average distance covered by a truck in a day (km)	250-400	700-800 in USA & Europe
Average vehicle utilization (km per annum)	25,000 to 90,000	40,000 in USA
Ports		
Average pre-berthing time (hours)	11.01	
Average turnaround time (days)	2.56	4 and 6 hours in Hong Kong and Singapore
Airports		
Dwell time for exports (hours)	40-50 (Delhi Airport)	4 (Sharjah); 6 (Singapore)
Dwell time for imports (hours)	110-120 (Delhi Airport)	4-8 (Sharjah); 3-6 (Singapore)

Lets have a look at fact and figures for each mode:

Road Freight:

Road transport has been a dominant segment in India's transportation sector and is considered one of the most preferred modes. It accounts for over 60% of freight traffic movement. Easy availability, customized service, door-to-door delivery and cost saving continue to work in the favour of the sector. Transport through road network also acts as a feeder to other modes of freight transport-Railways, Air and sea.

Key Facts about Road Freight:

i. The trucking industry in India is highly unorganized and fragmented.
ii. It is estimated that 20% of the industry is organized.
iii. In terms of ownership, 74% are small fleet operators with fleet of 1-5 trucks each.
iv. Only 10% are large player with over 20 trucks each.

Key Issues in Road Freight:

a. Poor quality of roads and network connectivity.
b. Stoppage of vehicles at State border check posts are a major cause of delays .It is estimated that 40% of the time lost are due to these stoppages.
c. No stringent requirement or regulations for starting a trucking business.
d. Large number of small and unorganised players, with no industry consolidation and intense competition.

Rail Freight:

Goods are transported predominantly by road and rail in India. Whereas road transport is controlled by private players, rail transport is handled by the central government. Rail is preferred because of containerization facility and ease in transporting ship-containers and wooden crates. Despite having one of the world's largest rail networks and recent privatization of the container rail industry, road transportation continues to grow and gain share from rail- albeit at a slower pace.

Key Facts about Rail Freight:

i. The freight contributes about 65% to the Indian railway's total revenue.
ii. However the rail share in freight traffic has fallen from 88% in the 1950s to about 35% in favor of the road sector due to the former's inherent disadvantages.
iii. Estimate of the modal movement of cargo highlights that In India nearly 30 % of the cargo is moved by rail.

Key issues in Rail Freight:

a. Freight tariffs in India are among the highest in the world.
b. Rail freight lacks reliability and trackability.
c. It is deficient in terms of quality of operations, speed, and customer orientation.

Sea/Marine Freight:

In India the importance of maritime transport can be gauged from the fact that Indian ports together handle about 95% of India's total trade in terms of volume and 70% in terms of value. Indian ports' traffic increased at a CAGR of around 10% in the last 2 decades and has crossed the 1,000 MT capacity mark. However, in the last 2-3 years, the segment faced a tough economic environment on account of the global slowdown, tardy creation of infrastructure and lack of an enabling policy environment.

Key Facts about Sea/Marine Freight:

i. During the last 5 years traffic at Indian ports grew at a CAGR of around 6%, while capacity increased at a CAGR of 10%.
ii. In 2012-13, traffic and capacity at Indian ports stood at 935 MT and 1,180 MT respectively.
iii. Of the total capacity, major and non-major ports account for 54% and 46% respectively

Key issues in Sea/Marine Freight:

a. There are inefficiencies in berthing, and delays in loading and unloading. i.e. high turnaround time of vessels
b. There are delays in co-ordination between ports and the Customs authorities
c. There is poor hinterland connectivity and poor port- and land-side infrastructure and outdated equipment
d. Navigation channel restrictions do not allow bigger vessels to be berthed.

Air Freight:

Over the years, an increase in the volume of merchandise trade coupled with stable GDP growth has resulted in a manifold increase in the size of the air freight segment. The demand for air cargo transportation has increased significantly also because of the shortening of product life cycle and increase in demand for express delivery.

Key Facts about Air Freight:

i. The overall air freight traffic in 2012-13 stood at 2.19 million tones.

ii. The air freight traffic is growing at a CAGR of 6.54% during 2008-09 to 2012-13.

iii. The domestic freight segment recorded a CAGR of 9.13% during the 5 years period (2008-09 to 2012-13).

iv. The international freight segment grew at a CAGR of 5.23% during the same period.

Key issues in Air Freight:

a. There is absence of integrated cargo infrastructure;

b. There are inadequacies in gateway and hinterland connectivity through rail and road;

c. There is a need for streamlining of Customs procedures in air cargo;

d. There is a need of technological up-gradation of cargo handling processes;

e. There is a need to formulate a performance based service;

To conclude, Multimodal logistics is designed to cut transit times, decongest congested modes and reduce logistics cost. Estimates indicate that Multimodal logistics can potentially reduce transit times by 40-50%. Multimodal logistics has tremendous potential to increase supply chain efficiencies. The right policy incentives from the government and interests from the private sector should together go a long way to spur growth in this sector.

Intermodal Vs Multimodal – what is the difference..?

03

- By Editorial

Intermodal & Multimodal – These two terms are often used loosely and interchangeably, but they have discernible differences.. Here, we will discuss what they mean and what they represent in day to day shipping and freight environment.

Summary:

- Intermodal – is the movement of cargo from origin to destination by several modes of transport where each of these modes have a different transport provider or entity responsible, each with its own independent contract.. Multiple carriers during a single journey.
- Multimodal – is the movement of cargo from origin to destination by several modes of transport where each of these modes have a different transport provider or entity responsible, but under a single contract.. Single carrier during a single journey.

Simply put, the key functions of both terminologies are the same, but the differentiation lies in the contract and responsibility of the movement..

Explanation:

Intermodal operation : Cargo moving from Leicester in UK to Pretoria in South Africa – Cargo is packed in Leicester and moved by truck to the port of Felixstowe by a transport service provider (could also be termed as an Intermodal service provider) under the employ of the shipper..

From Felixstowe, the carrier takes responsibility of the movement of the cargo to the discharge port in South Africa – say Durban.

From Durban port the consignee uses their transport service provider (could also be termed as an Intermodal service provider) to move the cargo by rail from to Pretoria Rail Terminal followed by a road move to their premises or a full road move from Durban port to their premises in Pretoria..

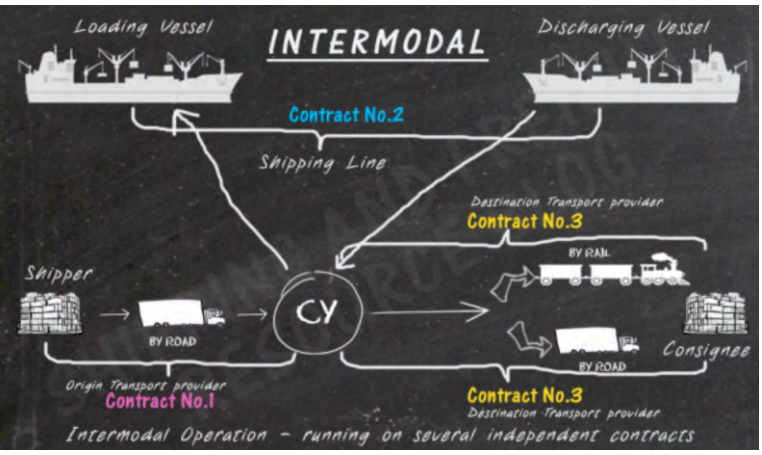
The rail and road service may be provided by the same transport service provider or could be done by two different service providers..

In this case, the carrier issues a Port to Port Bill of lading, and the whole operation is called an Intermodal Operation as it involves several contracts:

- Between Seller or Buyer and Transport service provider for road/rail movement from Leicester to Felixstowe.
- Between Seller or Buyer and Carrier for sea movement from Felixstowe to Durban.
- Between Seller or Buyer and Transport service provider(s) for rail/road movement from Durban to Pretoria.

The costs/risks for such contracts will of course depend on the Incoterms used for this trade.

Below image might help explain more clearly.



Multimodal operation : Cargo moving from Leicester in UK to Pretoria in South Africa – Cargo is packed in Leicester and moved by truck to the port of Felixstowe by a transport service provider (could also be termed as an Intermodal service provider) under the employ of the carrier.

Cargo moves from Felixstowe to the discharge port in South Africa – say Durban.

From Durban port a transport service provider (could also be termed as an Intermodal service provider) under the employ of the carrier moves the cargo by

rail from to Pretoria Rail Terminal followed by a road move to the consignee's premises or a full road move from Durban port to consignee's premises in Pretoria.

The rail and road service may be provided by the same transport service provider or could be done by two different service providers.

Here, neither the seller nor the buyers are arranging any contracts other than their contract of carriage with the carrier.

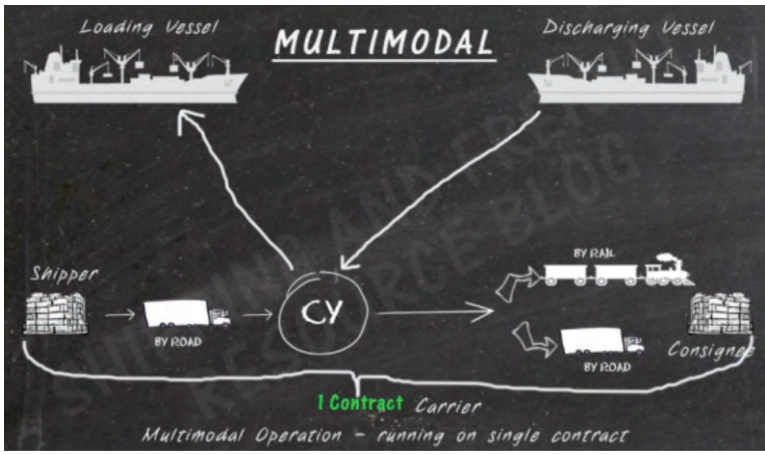
In this case, the carrier issues a Combined Transport Bill of Lading or a Multimodal Bill of Lading, and the whole operation is called a Multimodal Operation and it involves a single contract:

- Between Seller or Buyer and Carrier for sea movement from Felixstowe to Durban.

The costs/risks for such contracts will of course depend on the Incoterms used for this trade.

More often than not, the above movements on the land leg are outsourced by the carrier to transport service providers as a lot of the carriers don't have their own infrastructure to carry out these movements. However, here the carrier enters into direct contract with their service providers.

Below image might help explain more clearly.



Irrespective of the technicalities between Intermodal and Multimodal, the fact remains that the chain between "Consignor-LSP-Consignee" across modes is totally controlled by the "handshake" between the modes. The fundamentals of "Information-Document-Goods" flow remain the back-bone whether it is Intermodal or a Multimodal movement.

04

Multimodal Transportation: Potential waiting to be tapped or wasted?

- by Mr. Shantanu Bhadkamkar, Chairman – IFCBA, (International Federation of Custom Brokers Association), Vice President – AMTOI (Association of Multimodal Transport Operators of India)

Apart from being Chairman of IFCBA and Vice President at AMTOI, he is at the helm of affairs in other trade bodies in India, where he occupies important position as an Office Bearer in their Managing Committees.

Multimodal Transportation of Goods Act was originally enacted as ordinance, which shows the priority that was given for ensuring that the exporters, particularly the hinterland exporters are able to deliver goods to their customers on delivered terms. This gives Indian Exporters, particularly small exporters in the hinterland areas to compete in the global market. Multimodal Transport enables the exporters to offer their goods to their customers on delivered terms i.e. DDU, DDP, DAP.

The MT Act defines the pre-qualifications for a person to be Multimodal Transport Operators (MTOs) and establishes the liability regime. It in addition, ensures harmonisation of transport document, certainty of liabilities & responsibilities, and builds some safeguards for selection of Service Provider.

While the Act has met the above objectives, mere enactment of enabling provisions for Multimodal Transport Contract alone is not sufficient for development of International Multimodal Transport or Multimodal Logistics. The regulatory provisions need to be backed up by the development of infrastructure and other support systems, including trained manpower. In fact in none of the countries where Multimodal Transport has developed well and where Multimodal Transport has evolved to give best logistics solutions, there isn't any specific law for Multimodal Transportation of goods. Multimodalism is therefore more about infrastructure where advantages of each mode, facilitated by multi-modal connectivity are used to the best and the entire transportation chain is both synchronized and optimized.

As we have a huge coastline and a big network of rivers, the development of coastal shipping& inland waterways is extremely important. For Coastal Shippingto develop, we need to develop a string of ports with good connectivity along the coast, develop navigation channels and solve problems related to making the route navigable for coastal shipping. Yet major consideration for success of coastal shipping& IWT will depend on development of connectivity.

India also has a vast network of railways in addition to coastline & rivers, and yet the only effective and reliable mode of transport is road, and is likely to be so for many years to follow as the development of IWT & Coastal Shipping calls for huge investments in infrastructure. Both movement of rail and inland waterways is important, this is particularly so for movement of heavy cargo, odd dimension cargo, hazardous cargo and project cargo.

In addition to the environmental benefits, development of these three modes will reduce the burden on the roads.

The development of multimodal transport has to be primarily driven by creation of infrastructure and issues related to infrastructural developments.

A Quick interactive session with Mr. Shantanu Bhadkamkar

1) Tell us about your association and how it works towards promoting multimodal transportation in India?

We at AMTOI have always endeavoured to have a harmonious maritime community to bring consensus amongst all segments of our community, whilst making representations to various authorities.

AMTOI has always tried to bring together all the segments of the maritime community under one common platform to promote Multimodalism in India. Our members in additional to multimodal transport are engaged in shipping, shipping agency, general freight forwarding, transport by trucks, CFS and custom brokers.

AMTOI has been promoting the concept of self-regulation and fortunately it is found favour with the governments. AMTOI proposes SRO model for regulation of Multimodal Transport Operators.

AMTOI also works closely with the local state governments and national bodies of the service providers such as ports, railways, shipping lines, road transport operators for development of multimodal transportation in India. This includes joint advocacy of regulatory matters and suggestion for optimal use of existing infrastructure and development of or growth in existing infrastructure.

Our views have been sought on various topics such as GATS (General Agreement on Trade in Services) negotiations for maritime transport services sector.

Our views have been sought on various topics such as GATS (General Agreement on Trade in Services) negotiations for maritime transport services sector.

- AMTOI has been involved follow policies and legislations:
- Deliberations on Shipping Trade Practices Act
- MMTG Act amendments
- Drafting of Coastal Shipping policy
- Drafting of International Shipping Policy

- Simplification of renewal process as a MTO with DG shipping
- Policy Level Changes to get MTO's to operate bonded warehouses as a registered MTO have been recommended by AMTOI.

AMTOI is engaged in numerous trade services, the important ones are as follows:

- 'Multimodal Times', a quarterly newsletter is released for our members and trade at large on different aspects of multimodal transport and related activities and keeps them informed about important developments in this field in India and abroad.
- 'Multimodal Weekly', a weekly mailer to keep all our members informed of local and international news pertaining to Multimodal trade.
- ' AMTOI Day', an event to get all the stake holders related to Multimodal transportation together on acommon platform and to celebrate the achievements of the year gone by and announce next year's action plan
- 'Organize seminars and workshops', on topics related to Multimodal Transport

  Conduct training courses in multimodal transport,
  - Framing a code of conduct for multimodal transport operators,
  - Promotion of Multimodal website which acts as a portal for the entire Multimodal transport trade.

AMTOI representation is sought on various trade bodies and is currently represents on various committees such as:

- National Co-ordination Agency
  (a) Standing Committee on Promotion of Exports (SCOPE) by sea,
  (b) Standing Committee on Promotion of Exports (SCOPE) by Air,
- Committee for drafting of an act for regulating the activities of freight forwarders and other intermediaries
- Committee for drafting of proposed Maritime policy
- Representation in PTFC (Permanent Trade Facilitation Committees) across locations in India
- Committee for Amendment of the Multimodal Transportation of Goods Act, 1993 and many more

2) In spite of many advantages of rail transport, why is there not a substantial shift in cargo from road to rail?

Railway gives priority to passengers and passenger related issues even while it is cargo which is the rich source of revenue. Whatever success CONCOR has achieved is due to it being a single focused subsidiary of development of containerized movements. Railway should therefore give as much importance to cargo as to the passenger by either segregating the two as equally powerful division of the ministry or by creation of subsidiary separately. There have already been suggestions by Chambers, Associations and Trade Bodies to the government for creation of single ministry of all modes for cargo logistics and logistics related issues. Such harmonisation approach will ensure the usage of the best mode of transport making the entire transportation chain efficient with optimal use of infrastructure. Similarly single ministry for all modes will ensure that there will not be any modal

bias while development and each segments will get opportunities to grow to best of its potential and will be used to the best of its utility. Similarly railways need to as efficient in schedule for goods train as for passenger train. Only because the cargo does not scream, it doesn't mean that it is less important for economy. The customers need economical and green means of transport. However, they need reliability, punctuality and security of cargo even more. Cases of missing shipments, delayed shipments, damaged cargo and indifference in dealing with customers will means people turning away from railways even if it was more economical.

Similarly, it is equally important that the comparison should be apple to apple i.e. transportation cost should be measured on door to door basis, transit time should be measured on door to door basis. In case of road transport almost all truck owners are private sector operators who have invested almost everything they have in their business. Hence they are both cost conscious and service conscious and are therefore able to offer competitive rates to the customers and respond to the customer's needs. Both imports and exports related transportation needs are time sensitive and demands high level of reliability and predictability. If due to delay of any kind, the cargo doesn't reach the port in time it means delay of shipment. This also means incidence of storage charges. In an international market where competitiveness at premium not only exporters will not be able to absorb the cost but his customer / buyer also will not place the order if the cargo is delayed by one week. Similarly, when it comes to imports, in material hungry economy such as India, the factory need to be supplied with raw material, consumable, components, spares and other production related material in time. The manufacturers can't afford to excessive inventory nor can they afford stoppage of their production.

3) What solution do you suggest to overcome the challenges by the industry?

It is said that the logistics cost to GDP ratio in India is high. A common myth that needs to be debunked, that logistics contributes 13% of GDP; it not a contribution, it is the cost of GDP. However, it should also be noted that only 30% of the logistics cost comprises of transportation cost.

It is extremely important to create logistics hubs & multimodal transport hubs.

There are multitude of trade bodies and trade bodies related to various issues. India will need single federation of logistics and logistics related industry so that all stake holders can be brought on a single platform so that their voice will be heard by the decision makers and policy makers. Logistics sector doesn't apply for any sops or subsidies. However, Indian Freight Forwarders, Multimodal Transport Operators can't be given a step motherly treatment where the foreign forwarders or foreign entities have greater tax efficiency than the Indian Freight Forwarders. Uncertainty in levy of service tax plagues the industry. In such a situation of uncertainty the survival itself is at stake, the Multimodal Transport Operators will not consider investment in this sector.

4) Role of Coastal Waterways and Inland Waterways in Multi-modal logistics? How effective are their respective associations?

Coastal Shipping and Inland waterways are neglected segments of transportation, and in that order. India had great tradition of inland waterways. However today it is the least used mode of transport. Development of Inland waterways is extremely important for decongestion of roads, reduction on fossil fuels and movement of heavy cargo, odd dimensions cargo, hazardous cargo in a manner i.e. both optimal in terms of cost, safety, security and least amount of environmental impact on human settlements.

5) How does insurance work when a client or LSP choses to use multi-modal, how are his goods protected or how does LSP approach a situation in the event there is a mishap, can you throw some light on this?

Cargo insurance and liability insurance are two entirely different matters. The insurance companies offering cargo insurance, settle the claim of the customer under subrogation or rights and they in turn take the recourse on the carrier and the carrier's liability insurance company settles the claim with the cargo insurance company. It is therefore not prudent to mix up the issues of development of Multimodal Transport with the issues related to cargo insurance. For one normally expects that cargo insurance company should charge lower insurance premium when the shipper uses Multimodal Transport as a means of transportation of goods as Multimodal Transport Operator is adequately insured for liability. The ability of the cargo insurance company is the right to recourse under the subrogation is high.

The government favours the Development of new manufacturing clusters in 2nd tier cities. For the cluster to be successful, it is important that Multimodal hubs are created in these manufacturing clusters and that while creating this manufacturing clusters, creation of Logistics Park and other support activities are adequately factored.

This sector also needs research innovation and education (not just training). To quote, Vice Admiral Robert B. Carney, USN, "Because of my wartime experience, I am insistent on the point that logistics know-how must be maintained, that logistic is second to nothing in importance in warfare, that logistic training must be widespread and thorough, and that it is folly to waste time on mediocre talent."

THE WAY FORWARD

building for the future

"Logistic considerations belong not only in the highest echelons of military planning during the process of preparation for war and for specific wartime operations, but may well become the controlling element with relation to timing and successful operation."

- Vice Admiral Oscar C. Badger, USN

The above two quotes from Defense Experts shows that logistics is so often undermined in importance, situation is even more severe in civil areas & commercial enterprise.

It is not just the government but in private sectors save exceptions in some areas such as retail logistics and do not get attention of top management and the people heading logistics divisions are rarely ever amongst the best talents of the company. As much as infrastructure needs to improve the understanding of the logistics needs improvement at all levels.The professionals, top management of this business function also needs to improve. People outsource activities that they understand, outsourced activities will breed incompetence if done without expertise. Hence, development of this segment which is important to strengthen logistics knowledge across all the segments i.e. regulatory authorities, authorities in charge of development of infrastructure, logistics service providers and the customers i.e. the service receivers.

Frankly, we all as SCM & Logistics practitioners and the industry and government, all entities put together need to realise the latent/potential demand of the multimodal logistics, across all modes, literally make it "rise like a phoenix from ashes"!!!!

B

Various modes of Multimodal dotting I's and crossing t's

5. Green Logistics for Chemical Industry- "Linkages to Multi-modal movement"
   - by Mr. Jasjit Sethi, CEO, TCI SCS

6. Air Logistics- Adding wings to Indian Logistics industry
   - by Mr. P C Sharma, CEO, TCI XPS

7. Coastal Shipping –The Neglected Mode of Transportation
   - by Mr. G. Kannan, Head Of logistics & Corporate SCM in Larsen and Toubro

8. Mastering Multimodal
   - by Mr. Jayant Sastry, Senior Vice President, Central Procurement, ACC & Ambuja Cement

Green Logistics for Chemical Industry- "Linkages to Multi-modal movement"

05

- by Mr. Jasjit Seti, CEO, TCI SCS

Mr. Jasjit heads TCI Supply Chain Solutions, which is part of Transport Corporation of India Group. Mr. Jasjit Sethi, CEO, TCI SCS, is a well known expert in the logistics & SCM industry and an alumni of Harvard Business School.

If we're talking about 'green transport' then inevitably we are talking about using trains. Nothing wrong in saying so!!! This article is written with prospective of a customer view point.

Why sooner or later there will be no way around offering environmentally friendly and economical alternatives to road freight transport.

The future belongs to multimodal logistics. The reasons for this are numerous. For example, forwarders, and in particular branded companies, increasingly have to deal with customers who are demanding sustainability in logistics. Therefore, logistics companies are required to offer suitable solutions. These will then automatically be multimodal because if we're talking about 'green transport' then inevitably we are talking about using trains. Furthermore, forwarders would also consider entering the market with sustainable logistics of their own accord, if they were able to get the costs under control.

Economic efficiency is crucial

Logistics service providers are not immune to the trend and are keen to serve their customers' demands for multimodal concepts. They react to the requirements and at the same time demand an infrastructure on which to develop appealing solutions. "And this is often the sticking point", Mr. Jasjit Sethi knows from experience, "because 'appealing' means that the concept not only has to be sustainable, but also economical."

In addition, the complexity of multimodal logistics is disproportionately higher than unimodal transportation from A to B. This means that the modal split for SMEs can really only be realised by using strong outsourcing partners. "If logistics service providers offer good solutions, then it will also be appealing to SMEs to give their logistics activities a 'green label'," Mr. Jasjit Sethi is convinced.

Multimodality in practice

What is actually required in order to implement multimodal concepts? "First of all you need sound transport management", Jasjit Sethi explains. Many issues have to be resolved in advance, including volume of goods and requirements such as routing times. "It is then possible to determine which consignments would benefit from a modal split with regard to economy."

"The pressure on companies to address multimodal logistic options is growing", concludes Jasjit Sethi, "but the concepts must be intelligent." Therefore, it makes sense to develop these with specialised partners.

Movement of Chemicals

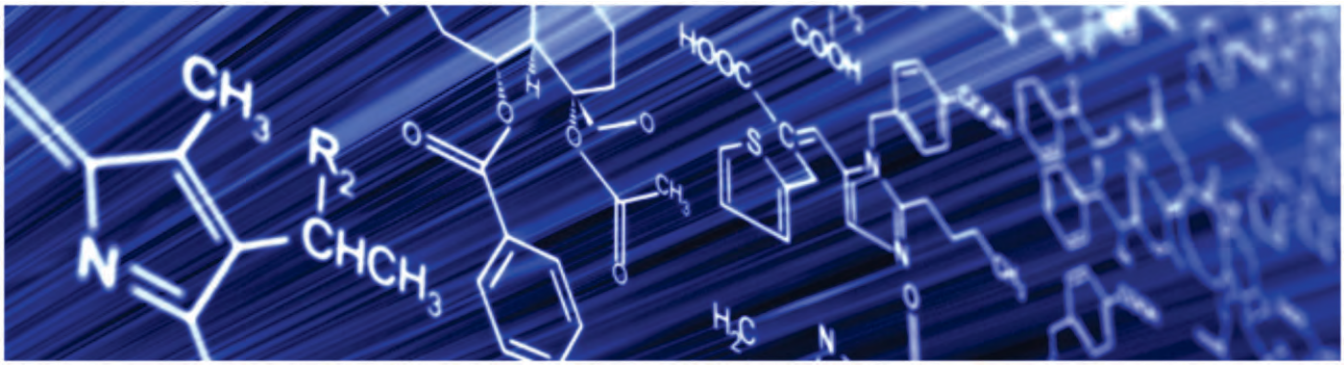
The encouraging growth of chemical industry in India has naturally brought the issues concerning hazardous & non-hazardous chemical transportation into sharp focus. Besides the bottlenecks pertaining to infrastructure, suitable storage facility, equipment and technology, the lack of continuous interaction between the chemical industry and logistics service providers is posing serious challenges to the growth of the sector. However, with the government providing a few sops in the areas of storage facility, equipment, etc., the logistics sector seems to be moving on the right track.

The unprecedented growth of the chemical industry in India has led to the increase in the proportion of hazardous chemicals in the total freight traffic. There is a rising demand to store and distribute temperature-sensitive products in potent conditions, which has resulted in a higher need to monitor cold chain supplies in the country. Hazardous materials transportation risk management involves establishing, organising, planning, executing and monitoring a set of operations that aims to decrease the probability of accidents and reduce the relevant potential consequences. This risk management process pertains to preventive and repressive safety measures.

The preventive measures aim to eliminate the potential causes of accidents, i.e., the roadway system defects, mishandling by drivers, mechanical errors in vehicles, etc. Besides, driver training, policies related to driving hours, container specifications, vehicle and mechanical conditions monitoring equipment and routing through safe roadway segments are other important elements. Such norms are hardly being followed in India, despite the growth of logistics business.

while the logistics business in India is on the rise, transportation of chemicals is still marred by certain challenges with respect to real-time tracking and tracing, qualified personnel to handle chemical cargo, cost-effective special packaging solutions, immediate custom clearance, retaining the temperature at trans-shipment hubs and gateways, and compliance to regulatory requirements at the origin and at the destination.

Frequent changes in regulations



The rules for transportation of chemicals in India are quite stringent. The Indian government has constituted various regulations to ensure that proper precautions are taken while transporting chemicals. While frequent changes in policy can be irksome, one has to keep in mind that this is aimed at ensuring safety for people and product, and not meant to bother the logistics industry. Reputed companies follow the norms,

and hence stay ahead of competition. Such companies work closely with their customers to make sure all requirements pertaining to safety are adhered to. Any change in the regulations is implemented in the supply chain at the earliest and due care is taken to ensure that it does not affect the customer's consignment, thus reducing the time taken at port. There is a need for frequent interaction between chemical manufacturers and logistics service providers. This will benefit the chemical industry in many ways when it comes to reduction of losses, handling issues related to environment and difficulties in transportation, etc.

Road versus rail

The process of globalisation is expanding India's position in the world trade, leading to a rapid climb in transport volumes in recent years. The expansion of the logistics infrastructure has been unable to keep up with this pace of globalisation and increase in transport volumes in the country. For this reason, transport capacities have already reached their limits. This calls for the need to look at other avenues.

"all customers are surly, efforts to shift freight from road to rail. However, the rail infrastructure in India, although the largest in the world, is yet at a nascent stage as far as freight transportation is concerned. The Indian government is currently striving to exploit the potential of its railroad infrastructure and the same has resulted in investments into this particular sector. Perhaps, in the next decade India's railroad network would emerge as an important part of the logistics matrix. Currently, railways has its own constraints in terms of end-to-end connectivity, time-bound distribution of cargo, etc. This results in preferred option for road transports.

The industry players are optimistic about the initiatives taken by the government as far as rail transport is concerned. In future, it is likely that the share of railways in terms of freight transportation may go up substantially. There are some positive steps by the government in terms of dedicated rail-freight corridors. But all these measures are at a nascent stage to overtake transportation by truck.

In future, many companies will definitely opt for transportation via rail route more than what is currently been seen. "We plan to improve the existing freight capacities in the country and implement further techniques to ensure smooth movement of hazardous chemicals, while also trying to gauge the possibilities of boosting transportation of hazardous chemicals in India by rail mode.

India vis-à-vis developed countries

Despite its unique production and distribution qualities, matching supply to demand has specifically impacted the chemical industry. While the shift means increased use of ocean transport for imports and exports, companies managing smaller shipments are opting for truckload and rail intermodal services in place of rail bulk. Forward staging of inventories in tank storage and bulk facilities appears to be declining as many third party logistics (3PL) service providers report more products moving directly to consumption.

The infrastructure facilities for storage and transportation of hazardous chemicals are not up to the mark in the country. The poor

road conditions and the age-old technology that is used in the functioning of the Indian rail lead to excessive time consumption and delay in the transportation of hazardous goods.

The government regulations in the country are stringent but are ignored. The lack of trained staff to handle the packaging and transportation of hazardous chemicals, lack of awareness about the new trends and technologies used in the developed countries and clustered third party logistics supply chain are some of the issues that plague the transportation of hazardous chemicals in India and have prevented the emulation of the current trends in the market.

In foreign countries temperature-sensitive cargos are tagged with temperature measuring units and are monitored through GPS throughout the supply chain system. If at any given point of time it is noticed that there is an imbalance in set temperature, corrective measures are immediately taken. Whereas in India, though such facilities are available, due to the cost factor such practices are not in use, barring few reputed companies.

On a positive note

Everything is not bad for chemical transportation segment. Growth of the chemical industry has been the most encouraging factor for players in the logistics space. For this reason, many domestic and international logistics service providers are investing extensively in this space, which will result in best practices and added expertise being brought into this particular segment. In the next few years, we shall also see a lot of innovation being brought into this space as Indian customers will look to expand as they try and meet global demand.

The Indian government has been making positive moves in the direction of encouraging the industry. Grants to establish new storage facilities to the tune of 25 per cent of capital expenditure, reduction in peak import duties on equipment imported for storage facilities and taxes on them, are some of the incentives provided. The measure will definitely boost the morale of the logistics players and facilitate the smooth functioning of chemical logistics sector.

One should, believe in following right practices and take initiatives to reduce not only the carbon foot print but also build in efficiencies. However the practical aspects of being "Responsible" to cost considerations will always be a challenge.

06

Air Logistics in India

- Mr. P C Sharma, CEO, TCI XPS

Mr. P C Sharma is President and CEO, TCI XPS. He is heading TCI XPS a division of Transport Corporation of India Limited.He is the driving force behind sustained growth and success of TCI XPS. He is an alumni of Harvard Business School.

Air Cargo Logistics play a vital role in the economic development of a nation. Airlines, Air Cargo terminal operators, Ground Handling service providers, Integrated Express Service Providers, Forwarders, Domestic Cargo Transport service providers and Custom House Agents are the key players in the entire Air Cargo supply chain. Thus the Air Cargo industry presents a wide variety of service providers coming together to move goods both domestically and internationally with a single minded purpose of faster and efficient delivery. These business entities in Air Cargo logistics industry in turn interact with a number of cross-border regulatory agencies the principal among them is the Customs establishment. Speedier services in the Air Cargo supply chain facilitate large number of business entities to become more competitive. Globally, more than one – third of the value of goods traded internationally is transported by air and therefore Air Cargo industry is considered as a barometer of Global Economic Health. From the point of view of Airline industry, Air Cargo Services contribute near about 20% of their revenue. India's international Air Trade to GDP ratio has doubled from 4% to 8% in the last twenty years.

Forecast of Air Cargo volume for India made in the report suggests that the domestic and international Air Cargo throughput is expected to grow by eight to ten times the present level in the next twenty years. Catering to the growth of this magnitude would involve expansion of infrastructure facilities, simplification of procedures and adoption of Information Technology / Automation besides development of Human Resources in the sector.

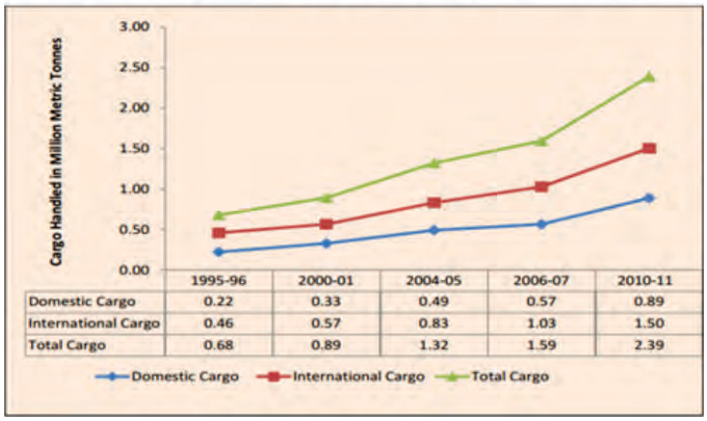
Need of the hour

The demand for air cargo transportation has increased significantly over the last few years, because product life cycles have shortened and demand for rapid delivery has increased. Changing business models such as Just- in-Time Manufacturing and Global out sourcing models have contributed to the rapid growth of air cargo logistics business. In such a changing business environment, where speed-to- market is a competitive imperative, movement of inventory is no longer viewed as a compartmentalized process. Rather, the sourcing of inputs, parts and components and the delivery of final product are all viewed as a continuous value-adding chain. Efficient supply chain management therefore

offers significant benefits including lower inventory and intermediary costs; and simplicity in order placement, delivery and management of suppliers and customers. These benefits directly contribute to making businesses more competitive.

Air cargo represents about 10% of the airline industry's revenues. As 35% of the value of goods traded internationally is transported by air, air cargo is a barometer of global economic health .The fortunes of the transport and logistics industry are closely connected to the economic cycle. When economic activity is buoyant, demand for transport and logistics services is equally strong. Consumer and business demand for goods and services inevitably translates into higher demand for transport and logistics services.

Graph 7: Trends in growth of Air Freight Traffic throughput at Indian Airports



	1995-96	2000-01	2004-05	2006-07	2010-11
Domestic Cargo	0.22	0.33	0.49	0.57	0.89
International Cargo	0.46	0.57	0.83	1.03	1.50
Total Cargo	0.68	0.89	1.32	1.59	2.39

Performance of Air Cargo throughput in Indian Airports

Total Cargo Handled at Indian Airports has grown 3.5 times in the last 15 years at a CAGR of 8.7%. Domestic Cargo Handled has grown 4 times at a CAGR of 9.7%. Similarly, International Cargo Handled at Indian Airports has grown 3.2 times at a CAGR of 8.2%. However, in the last 3 years, Domestic Cargo throughput is the fastest growing segment (CAGR of 13.6%) as compared to International Cargo throughput at a CAGR of 9.2%.

Drivers of Air Cargo Traffic in India

- Emergence of E-commerce industry as fastest growing industry in India has really come as a boon for Air logistics. According to a pwc report, In India, about 90% of the goods being ordered online are moved by air.
- There is a significant untapped potential for air-cargo in India. An indication of the same can be gauged from the fact that the total air-cargo volume of 2.3 million MT handled in FY-11 by all Indian airports put together is less than that handled by individual airports like Hong Kong, Memphis, Shanghai, Incheon, Anchorage and Paris.
- Just-in-time manufacturing coupled with global outsourcing business model will continue to push demand for Air cargo business in India. Faster movement of raw materials, components, parts and spares help firms in maintaining lower inventories.
- Express industry is certain to grow many folds in future as they provide end to end solutions, which are fast, reliable, on demand, integrated and door to door and can be tracked and controlled throughout the journey.

Key Challenges -Infrastructure Bottlenecks

- Inadequate and overloaded infrastructure facility: Airports were developed primarily from passenger stand point of view, and thus requirement of cargo facility development was not taken seriously. Cargo is

generally the last part to be thought of and is relegated to that part of the airport, considered not important otherwise. This leaves the entire logistics of cargo – infrastructure and facility in woefully inadequate and poorly managed area of the airport.

- Gaps in Key facility infrastructure at Cargo terminals in Gateway airports: There has been a lack of planned and integrated development of airports to cater to the needs of cargo business. Lack of adequate and appropriate air-cargo infrastructure at airports remains the key stumbling block to the future growth of the air cargo sector in India. Some of the key facility infrastructure which are lacking at majority of the air cargo complexes are:

Comparison of air cargo infrastructure operations in India with global best practive

Global best practices	Cargo operations in India
Segregated facilities for different types of cargo	Most terminals don't offer separate facilities, except rooms
Dedicated and specialized perishable handling facilities that cater to end-to-end supply chain needs	Inadequate investments in cold chain infrastructure (temp-controlled warehouses, trucks) to handle agricultural, pharma and other perishable commodities
Proper waiting area for trucks	Agents use the cargo terminal landside as a truck packing/holding area, leading to congestion
Agent warehouses, office spaces and other processing facilities close to cargo terminal	Agent warehouse are often located within the city
Promotes transshipment handling/hub operations	Cargo terminal operators need to have separate license handling area for transshipment handling
Dedicated facilities for Air Express Operations with air side and city side access, multiple freighter parking bays	No fixed and dependent on decision of individual airport operations. Very few dedicated freight packing bays,

I. Shortage of landside truck docks, vehicle holding area and air side operational space.

ii. Insufficient entry gates and lack of upgraded handling equipment and trolleys.

iii. Lack of specialized storage and handling facilities for hazardous, radioactive and valuable cargo.

iv. Lack of sufficient cold storage capacity for perishables cargo.

- Bottlenecks in truck docking: The floor area at the truck dock is the first entry point for offloading the cargo before shifting for clearance. Reports received from the users of cargo terminals indicate that dwell time for trucks waiting outside the Air Cargo Complex ranges from 8 to 12 hours in one of the major

gateway airports during peak seasons. In today's competitive environment it is ironic that export cargo vehicles are not off loaded due to lack of adequate space availability. Limited number of truck docking bays for imports also is said to severely limit the ability of the cargo terminal operator to clear the cargo on time resulting in delay and accumulating daily back log of undelivered cargo.

- Absence of off-site facility such as Air Freight Station (AFS) for cargo processing: Traditionally almost all activities related to air cargo processing (including weighing, screening, customs examination, ULD formation, etc.) have been done at the Cargo terminals in the airport area. With the growth of cargo volume, the current space at most Cargo terminals in country is proving woefully inadequate, leading to severe congestion issues.
- Regulatory Hurdles and Other Processes / Procedures / Systems: Speed of delivery is crucial to efficient logistics. Regulatory processes and the regulatory environment play a key role in the movement of cargo by air and express delivery industry. Regulatory obligations are required to be fulfilled within a very short delivery timeframe. A simple, transparent and efficient regulatory environment without compromising on regulatory requirements is necessary for enabling faster movement of cargo/EDS by air. Significant amount of investments mad in creating infrastructure would become futile if the regulatory framework

does not assist in the full realization of the potential of this infrastructure. As the regulatory environment impacting the air cargo/EDS industry spans over various departments/Ministries, every wing of the Government has to work in a concerted manner to ensure that the overall objective of economic development is advanced without barriers.

Way Ahead in Air Logistics

Air Cargo is becoming an increasingly important aspect of Indian external sector. Though some improvements have been witnessed in the recent past, numerous bottlenecks continue to bedevil the chain

of air cargo sector. As a result, the turnaround time for exports/Imports at gateway Indian airports is significantly longer compared to other major air ports in the Asian region. This compromises the competitiveness of Indian industry and also compromises Indian trade potential and thus it needs to be addressed on priority. Given the critical need to enhance efficiency of Air Cargo operations in Indian Airports and to meet challenges of growing needs of business and industry for their air freight operations it is essential to lay down a comprehensive policy framework governing air cargo operations in the country.

The importance and effectiveness of Air –Road multimodal Logistics if ever has been proven and tested due to the rapid advent of E-Commerce industry in India. Suddenly capacity and costs have become a constraint. Connect with Road is being questioned, the location of hub, whether at the point of pick-up or at airport is a strategy. The entire paradigm has shifted; new as well as established players have to scale up big time to support the boom in demand, infrastructure support is required, of course far cry from global standards.

Coastal Shipping –The Neglected Mode of Transportation

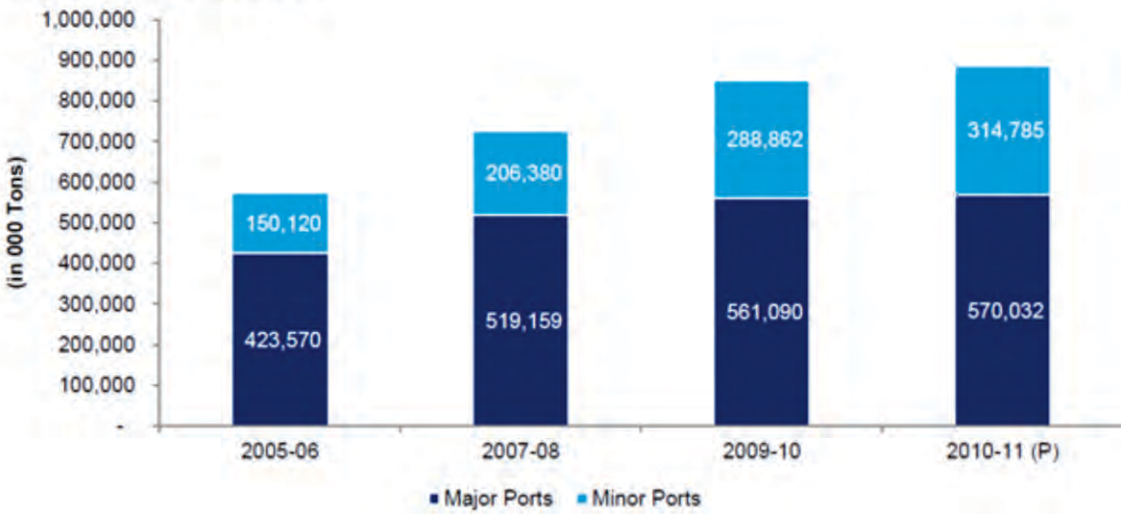
07

By Mr. G. Kannan, Head Of logistics & Corporate SCM in Larsen and Toubro

He has vast experience in marketing of consumer products for over 2 decades and held various positions for domestic and international sales. He has vast experience in freight forwarding, contract logistics, ship chartering. He is a specialist in movement of odd shaped, over weight cargoes, within and outside the country.

Coastal shipping is hampered in the country by inadequate port- and land-side infrastructure, cumbersome custom procedures, and low port productivity. In addition, coastal shipping operators are finding it difficult to access credit for acquisition of vessels. Coastal shipping is a viable alternative to movement of freight by road and rail and has the additional advantage of being eco-friendly with a low socio economic cost. It can serve to relieve congestion on overstretched road and rail routes. The coastal traffic has been increasing at a rapid pace, yet its share in the total freight traffic in the country is very low.

India's Port Sector Traffic Growth

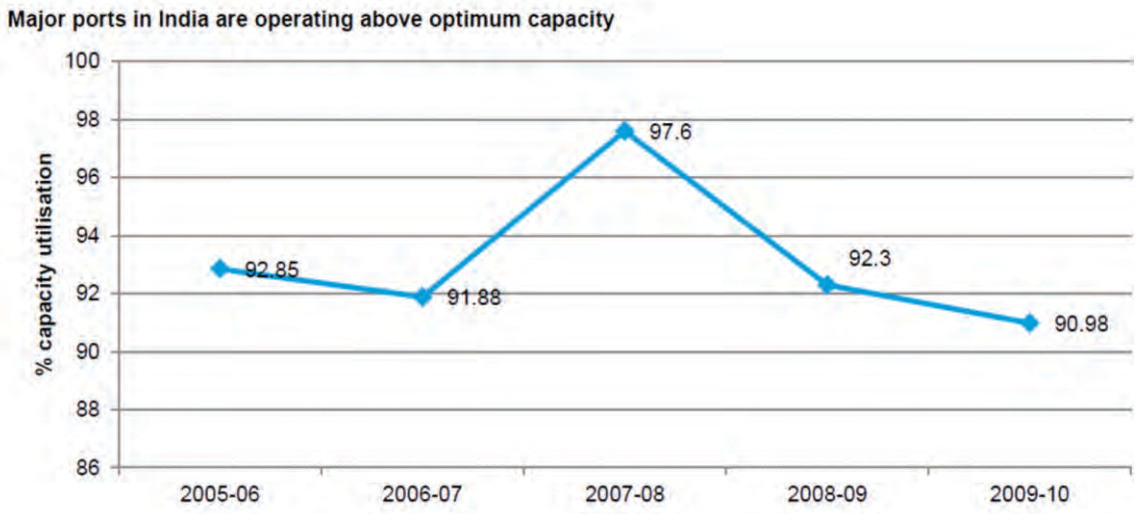


Port Sector in India

India currently has 12 major ports and 187 minor ports. Port traffic grew at 7.66% p.a. between 2005-06 & 2010-11. While non-major ports registered a double-digit growth at 13.55%, traffic at major ports grew only at 5.37%. POL, iron ore, and coal constitute a major chunk of traffic at both major and non-major ports.

Although the sector witnessed significant growth in cargo traffic, it has still not been able to optimize operations owing to technical and institutional constraints as under –

- **Capacity constraint:** As of 2009-10, around 8 of the 12 major ports were operating at more than optimum range of 70-75% capacity utilisation. Vizag, Tuticorin, Mormugao, & Mumbai ports are in fact



experiencing more than 100% utilization. Correspondingly, the average capacity utilization at non-major ports was around 77% in 2009-10.

- **Inefficient cargo handling & low productivity:** A study placed in the Parliament in February, 2010 by the Comptroller and Auditor General of India, highlighted that cargo handling services at ports were inefficient. A predominant number of berths did not have the dedicated facilities necessary for the quick handling of cargo. Around 55% of the equipment available at all ports, except at JN Port, were running beyond their rated economic lives, resulting in low productivity.

  The average pre-berthing time at major ports varies between 0.4 hours and 23 hours. The average turnaround time also varies between two to five days. In contrast, the turnaround time at globally competing ports like Singapore or Hong Kong is between four and six hours.

- **Inadequate drafts & poor connectivity with other modes:** Future shipping trends point towards larger vessels with a minimum of 6000-8000 TEUs and a few vessels with 12000-14000 TEUs. These future generation vessels would require drafts between 13 to 15.5 mtr.

  Due to current draft restrictions, several Indian ports are unable to handle larger vessels typically with more than 9.5 mtr. draft. This could lead to shipping lines moving to other ports. Therefore, there is a need to firm up dredging plans and also improve productivity through removal of constraints like inadequate infrastructure, absence of seamless connectivity with other modes, etc.

  The dredging of the JNPT approach channel has just begun. The channel is planned to be dredged to a depth of 13.9 mtrs. in the first phase and then to 16.1 mtrs. in Phase 2. This is a promising sign for the sector.

- **Cumbersome institutional arrangements & other issues:** Institutional and regulatory arrangements need to be reviewed to provide for speedy development of ports. Similarly, the procedure regarding environmental clearances needs to be rationalized.

  Other issues facing Indian ports relate to high cost structures, different tariff setting frameworks for major & non-major ports, port security, land acquisition, etc.

  Adequate connectivity to the port acts as a catalyst for the port "s growth. Despite having proper depth and adequate facilities, ports may be stranded for the want of containerized cargo, while other ports may be burdened with an excess they can "t handle. The Committee of Secretaries (CoS), Government of India has recommended that a minimum 4-lane road and double line rail connectivity be provided at major ports. Minor ports, which are now showing high growth, also consider connectivity as an important parameter to further growth in business.

Port	Investments (Rs. in crores)			
	Phase 1 + Ongoing (2010-12)	Phase 2 (2012-17)	Phase 3 (2017-20)	Total Investment
Chennai	1,000	-	225	1,225
Kolkata	30	1,075	-	1,105
V. O. Chidambaranar	127	640	300	1,067
Ennore	576	446	-	1,022
Cochin	803	40	-	843
Visakhapatnam	396	150	200	746
JNPT	681	45	-	726
Paradip	615	-	-	615
Mumbai	333	-	-	333
Kandla	45	116	-	161
New Mangalore	70	-	-	70
Mormugao	-	-	-	-
Total	**4,676**	**2,512**	**725**	**7,912**

Type of cargo, place of delivery and customer preferences are among the various factors considered while deciding on the mode of transport of goods. Keeping in mind the planned capacity expansions and the projected traffic numbers, the Ministry of Shipping has planned various rail-road connectivity projects for the major ports. The following table enlists the phase-wise rail-road projects planned by the Ministry.

Carriage by Sea – An advantage

Coastal shipping – or short sea shipping is an alternate mode for transportation that can help address thechallenges faced through use of road and rail. World over use of sea/waterways for transportation is a much more prevalent mode. India as a very significant dependence on road to move cargo. In the case of China, waterways have a larger share than that of road. There are many inherent advantages of this mode

of transportation. Coastal shipping or use of water as a mode of transportation is much safer, more economical and less polluting. It is clearly evident from the numbers represented in the chart. Waterways are 50% cheaper than road and nearly 30% cheaper than rail. The coastal leg, apart from being more fuel efficient, can also carry larger parcel sizes and provides a great opportunity for consolidation of loads

As regards project cargo because of oversize and overweight it has to be transported within and outside the country by water only and road movement should be minimal. It is seen that most of the ships are unable to come to minor ports because of low draft in the channel and there is an additional cost of transporting the cargo by barge to a major port and transshipping to a bigger vessel resulting in loss of time and money.

As the Prime Ministers Make in India pitch is getting shriller, a vast and geographically diversified country like India offers an excellent opportunity to practice the concept of Multimodal Transport in its true form. This concept helps to build advanced concepts Land Bridges,Rail-Road-Inland waterways-Sea, Ro-Ro etc. The country needs a manufacturing push,given the sectors lower contribution to the GDP, Lots of raw materials and finished goods will have to move which calls for a coordination among the four modes of transport-road,rail,avaiation and shipping. To ensure a seamless multimodal system that helps to reduce transit cost.

The Government aims to develop an Inland Water Transport Grid covering 4500kms on the lines of the National Highways Grid. There is an estimated 20000crores to develop these water routes to shift bulk cargoes and look at an alternative mode of transport. This would be 30% cheaper than expenses involved by road. The grid would include the six national waterways, which have been notified by the government. The waterways would pass through several states including Uttar Pradesh, W Bengal, Bihar, North east Odisha, Kerala, Puducherry and Andhra. These cover majority of the rivers barring Narmada, Tapi & Cauvery.

The six NWG are as follows:

1. NW1 Allahabad-Haldia stretch of Ganges-Bhagirathi-Hooghly river system	1620 kms.
2. NW2 Sadiya-Dhubri stretch on the Brahmaputra	891kms
3. NW3 Kottapuram –kollam stretch of west coast canal,Champakara and Udyogmandal canal	205 kms(Kerala)
4. NW4 Kakinada-Puducherry stretch of canals Godavari and Krishna stretch	1095kms
5. NW5 Talcher-Dhamra stretch of the Brahmani river,East coast canal and Mahandi river delta	625 kms
6. NW6 Lakhipur to Bhanga of River Barak in assam	121kms

Challenges:

Looking at the statistics and also looking at the global penetration, there is a compelling case for a modal shift of freight from road and rail to waterways. So, why is it that only 6% domestic cargo moves through the coastal mode? There are many reasons that contribute to this low utilization.

Regulation/Legislation: There is a definite need for bring in a comprehensive coastal shipping policy. The Ministry of Shipping, Government of India is working on a new policy to promote coastal shipping. This document is expected to address concerns around fiscal incentives, infrastructure and regulations like less stringent manning norms and freedom from customs.

Infrastructure: While there is general shortage of infrastructure for vessel and cargo handling at Indian ports. There is a need for dedicated infrastructure to handle coastal vessels. There is need to improve operating efficiencies and bring down the overall cost for users. Increasing the draft at many of the minor ports and developing rail and road connectivity are some of steps required. To further augment the connectivity and usage, we need to build terminals and handling facilities on our inland waterways, so that the 14,500 kilometers of river network can be used and connected with the ports Awareness: Expanding the cargo profile, today composition of the domestic cargo is basically dominated by POL, Coal and Iron ore – constituting 90% of all cargo. There is a need to promote container and general cargo.

Consistency of Service: To promote greater use of our coastline and inland waterways for freight movement, there is a need to address the concerns of the user community, without whom there can be no growth however much we may develop the infrastructure or amend policies. There is need to have reliability of service, regular frequency, simplification of administrative requirements and most of all development of a complete door to door multimodal solution with coastal linkages. Coastal shipping cannot be a standalone solution. Considering the geographic expanse of the country, there is a need for integrating coastal shipping into the transport network, in ways such that the waterways would supplement the rail and road network and by doing so ease the burden on them.

The Way Forward:

Need to promote other types of cargo is critical step; containerized cargo has been growing at a steady rate both in the Exim as well as domestic. Ro-Ro movements to meet the demands across the country along with other general cargo could provide the increment volumes needed to make coastal movement viable. Change in the merchant shipping rules by permitting cabotage, simplification in the administrative requirements for enabling foreign flag vessels to operate on coastal routes. This would ensure higher availability of ships and more tonnage for coastal movement as against the current 100 plus (apart from tugs, dredgers, OSVs) with a DWT of about .7 million. The future of the port sector in India, especially for the minor ports hinges a lot on coastal movement and inland waterways. Minor private ports have to play an extremely critical role in the development of coastal shipping. The government needs to encourage PPP models for development of infrastructure at ports and rivers to develop connectivity and promote coastal movement. While the debate on cargo vs infrastructure has been ongoing, the port developers need to build capacity for attracting domestic cargo and by doing so reduce waiting time and improve operating efficiencies.

While the article may sound gloom-doom for the coastal industry but it is contrary to it, the coastal and inland waterways both are looking up. More players are entering the scene and services at west coast to south are testimony to this fact. Coastal shipping and Inland waterways would surely compete with road effectively in years to come.It is not only cost effective but adds to the 'green' initiative too.

Mastering Multimodal

- by Mr. Jayant Sastry, Senior Vice President,
Central Procurement, ACC & Ambuja Cement

08

More than 30 years experience in cement and fertiliser industry. Worked in sales, marketing, supply chain streams. Travelled extensively in india and outside and gained varied field experience in markets and customer behaviour. Attended management and leadership programmes in IIMs and IMD, Lousane. A regular panelist and speaker in supply chain summits.

Multimodal transport (also known as combined transport) is the transportation of goods under a single contract, but performed with at least two different means of transport; the carrier is liable (in a legal sense) for the entire carriage, even though it is performed by several different modes of transport (by rail, sea and road, for example). The carrier does not have to possess all the means of transport, and in practice usually does not; the carriage is often performed by sub-carriers (referred to in legal language as "actual carriers"). The carrier responsible for the entire carriage is referred to as a multimodal transport operator, or MTO.

The Cargo Industry is still an expanding market. The need for a comprehensive logistics systems in transportation, communications and information sector, continues to grow. Freight forwarding services alone are no longer sufficient, special deals are to be initiated on regular intervals to lure the customers to maintain them on permanent status, especially to cater to the increasing needs of seasonal vendors.

This is with the object to provide most economical, smooth, reliable and speedy carriage of shipments to various destinations on selected mode of transport which must not only ensure hassle-free service but should render sizable savings in the freight expenses. This vital information of costing must arrive to the shipper well in advance to make proper planning in co-ordination with logistic company.

This is essential in order to ascertain reliable and timely transportation scheduling and delivery throughout the logistic-chain, from the shipper to the consignee.

The cargo market demands a global solution and network linking all four modes of transportation i.e.

(a) Air
(b) Road
(c) Rail &
(d)Sea.

Air freight or ocean? Rail or road? The right multimodal mix can cut costs, help to reduce inventories, increase responsiveness, and lower carbon emissions. The question is, which mix is the right one?

Globalization has left businesses with a headache: ever-longer and more complex supply chains, full of inventory. Ocean freight may be cheap, in short, but it slows responsiveness. Air freight is fast, but costly. Road freight provides door-to-door flexibility, but carries a penalty in terms of both carbon emissions and cost. Rail freight, meanwhile, offers lower costs and lower carbon emissions, but only between fixed points.

Smart strategies for integrating the right transport modes together within a single multimodal framework, reckon experts, can not only save companies up to 80% in cost but also deliver

on other important strategic objectives. A shift to multimodal can reduce or even eliminate warehousing, by using ocean freight legs as "floating warehouses in transit," as well as cut carbon emissions and improve responsiveness.

"Finding the right mix for a business is a very individual process,There is no hard and fast 'right' answer. Getting the right mix between multimodal solutions depends on many factors – such as the product in question, the volume and frequency of shipments, the distance traveled, and more."

Conducting an in-depth, individual analysis is essential. "In addition to the basics of cost and speed, shippers consider reliability, predictability of lead times, and overall ease of use when considering the best mix of modes. Risk and reliability play a part too, as does carbon reduction to meet environmental targets.

80%

cost savings can be achieved by switching to multimodal.

As companies mull the right multimodal mix, shifts in freight patterns can be seen right across the United States, Europe, and Asia. Consumer goods and electronics, for instance, which once relied almost exclusively on air in order to get products into customers' hands faster, now commonly go multimodal using rail or sea as markets are saturated and prices of goods have dropped. On the other hand, time can also be the primary factor for mode selection. During highly orchestrated global launches, the latest must-have tech gadgets are shipped on high-priority consignments by air to destinations across the globe, as consumers line up around the block, prepared to pay premium pricing on launch day.

Increasing resilience and sustainability

The right multimodal strategy can also help companies increase their supply chain resilience and sustainability. For instance, for companies relying mainly on trucks, roadwork and frequent traffic jams can cause problems for time-sensitive deliveries. Switching to rail or inland waterways for part of the distribution requirement can prove to be the right choice – even for non-bulk cargo and shorter distances.Combining

rail and air freight may also be a means to lower costs and still have a day definite service. Another choice may be combining sea and air.

More than meets the eye

"Multimodal is more than about connecting the different transport modes to leverage the individual strength for a customer. Focus is on making the entire shipping process from booking to billing consistent, as simple as possible for the customer from every origin to every destination, no matter the transport mode, for B2B and B2C shipment profiles. Customers deserve reliable lead times, full shipment visibility, a

proactive customer service, and easy pricing rounding up a truly multimodal offering.

Applications such as transportation planning tools are also aiding multimodal decision-making with centralized IT systems pooling special knowledge to support businesses in planning and organizing intermodal transports. And as rail begins to displace road freight in the multimodal mix, carriers are starting to deliver solutions that meet shippers' needs in a rail freight environment.

Multimodal Transport can be viewed as the chain that interconnects different links or modes of transport - air, sea, and land into one complete process that ensures an efficient and cost-effective door-to-door movement of goods under the responsibility of a single transport operator.

Advantages of Multimodal Transportation

a) Minimises time loss at trans: shipment points: Multimodal transport, which is planned and coordinated as a single operation, minimises the loss of time and the risk of loss, pilferage and damage to cargo at trans-shipment points. The multimodal transport operator maintains his own communication links and coordinates interchange and onward carriage smoothly at trans-shipment points.

b) Provides faster transit of goods: The faster transit of goods made possible under multimodal transport reduces the disadvantages of distance from markets and tying-up of capital. In an era of Globalization the distance between origin or source of materials and consumer is increasing thanks to the development of multimodal transport.

c) Reduces burden of documentation and formalities: The burden of issuing multiple documentation and other formalities connected with each segmented of the transport chain is reduced to a minimum.

d) Saves cost: The savings in costs resulting from these advantages are usually reflected in the through freight rates charged by the multimodal transport operator and also in the cost of cargo insurance. As savings are passed onto the consumer, demand increases.

e) Single window operation: The consignor has to deal with only the multimodal transport operator in all matters relating to the transportation of his goods, including the settlement of claims for loss of goods, or damage to them or delays in delivery at destination.

f) Reduces cost of exports: The inherent advantages of multimodal transport system will help to reduce the cost of exports and improve their competitive position in the international market

Logistic Challenges in India:

There are some ground level challenges that can be faced. Some of these requiring resolutions are as follows:

a) Trade performance and economic growth: Increase in organized retail sector,FMCG, textiles, consumer durables sector, auto and auto components (AutoLogistics) and India's share of global trade.

b) Focus on Supply Chain management: Increased usage of 3PL, Warehousing /storage companies by traders, manufacturers & EXIM cargo ensuring just in time delivery to the customer and reduced time for movement of goods.

c) Government thrust on Infrastructure Development: Indian Railways investment ofRs. 100,000 cr. over the next 5 years for dedicated freight corridor (N-S & E-W), improved port connectivity and PPP for warehousing and storage facilities onvacant RLDA land.

d) Congestion of the land transport accesses to ports, resulting from retention in ports of certain container handling/processing activities, such as container stuffing/stripping and customs inspection

e) Poor rail (and sometimes road) access to ports, often resulting in extra container or Cargo handling
f) Poor coordination of rail and road loading/unloading activities in ports
g) Institutional blockages to the free flow of transit vehicles and cargo in the hinterland
h) Incompatible customs and immigration procedures on either side of land borders
I) Lack of a single transport authority document for door-to-door consignments involving more than one mode; and
j) A fragmented approach to railway tariff-setting in international transport corridors,

putting rail at a competitive disadvantage with other transport modes and encouraging the use of less efficient modes.

The above are some fundamentals which one should pick-up in the domain of multi-modal logistics. This article is more for the beginners and for setting up the tone for articles ahead. Do refer the case study on the way bulk cement is transported by using customized railway wagons successfully by ACC.

A case in the point

Movement of Bulk Cement

Yet another first in the seven-decade history of ACC cement in India has been the introduction of Bulk Cement, an alternative to bagged cement, which is of particular advantage to large consumers of cement. Internationally, the trend is to move cement more and more in loose form rather than bagged. In fact, over 90 percent cement in the USA, and other European countries is transported and sold in bulk, unlike in India, where only one percent is transported in bulk.

ACC has pioneered the introduction of multi modal transport of cement. Cement is manufactured in their plant at Wadi in Karnataka. The same is stored in silos before pumping the loose cement into the Bulker type wagons called the BCCW type of wagons. ACC has procured 4 such Bulk rakes for transport of loose cement to its packing plant at Kalamboli near Mumbai. The cement is then bottom discharged from the wagons and is pumped to silos and bagged in the packing plant. There is option to send both Bulk or Bag cement to the Mumbai market- this supply chain has reduced costs, opened up opportunity to offer Bag or Bulk cement to customers and has applied the principle of Rail cum road- in the first leg and last mile supply chain.

This is an example in the multi modal transport concept in cement leading to increased efficiency, service and savings.

C Best practices & Way Forward

9. Antwerp: The active Landlord Port
   -by Mr. Raj Khalid, Representative for India, Port of Antwerp

10. Goods and Service Tax (GST): Much needed now than perhaps ever before
    -by Mr. Prahlad Tanwar, Director, Transport & Logistics, KPMG

11. Multi Modal Logistics Parks: A Key Factor for Economic Development of a Country:
    - by Mr. Naresh Kumar Baranwal, Whole Time Director, TCI Developers Limited

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Antwerp: The active Landlord Port

- by Mr. Raj Khalid, Representative for India, Port of Antwerp

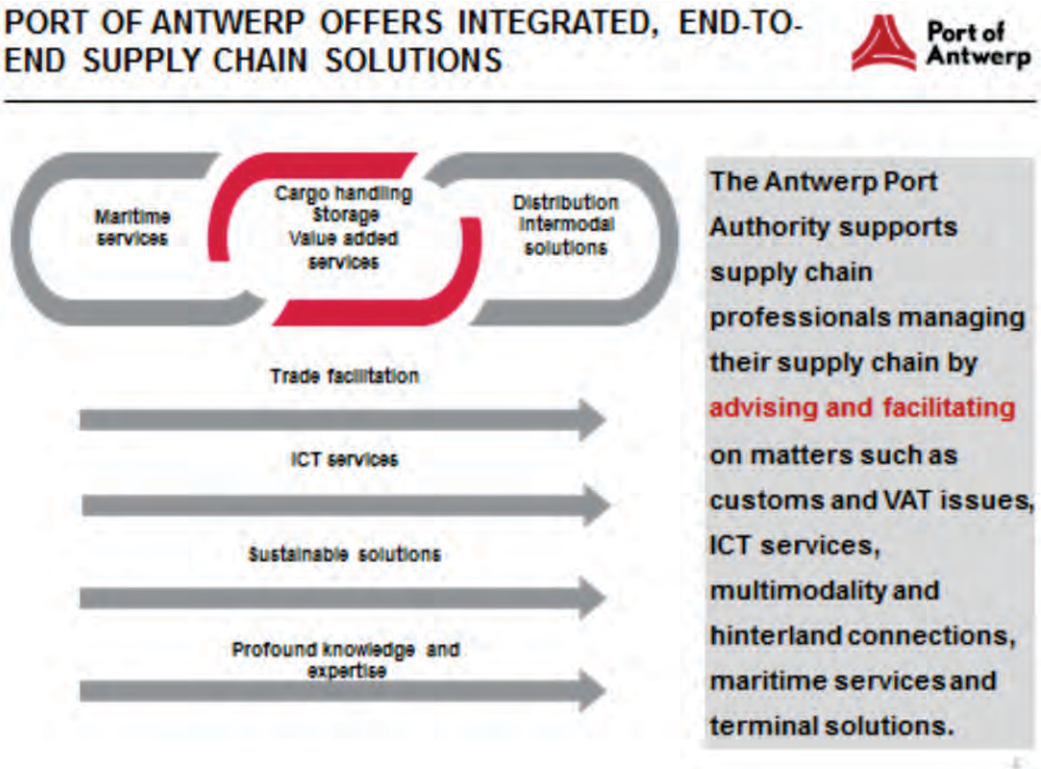
He is a well known veteran in the Global Port Industry.

Antwerp has changed the definition of Landlord Port to that of an Active Landlord Port. This means the port actually looks out of its own boundaries and tries to effect better solutions for customers, beyond the port.

The role of the Antwerp Port Authority is defined as

Supporting our customers in setting up efficient supply chains

The port considers itself as a crucial link in the supply chain of its customers.



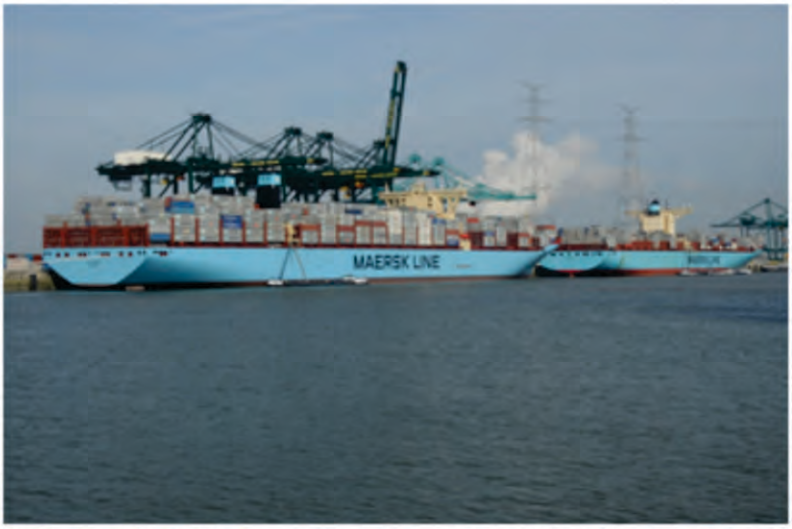
The port actively builds up foreland links to ensure optimum sailings from overseas locations to Antwerp. This better enables customers to ship and receive their cargo via Antwerp Port. The Port Authority also looks into the hinterland to facilitate better hinterland connections by rail, barge and road.

Antwerp is blessed with an inland location about 100km inland on the river Scheldt with the nautical ability to handle the largest of container vessels.

NAUTICAL EXCELLENCE FOR ALL ULCS AT FULL CAPACITY

On October 18, Antwerp successfully received its first 18.000 teu vessel!

Port of Antwerp



mv Mary Maersk (18.400 teu) and mv Evelyn Maersk (15.500 teu) simultaneously in Antwerp (October 18, 2013)

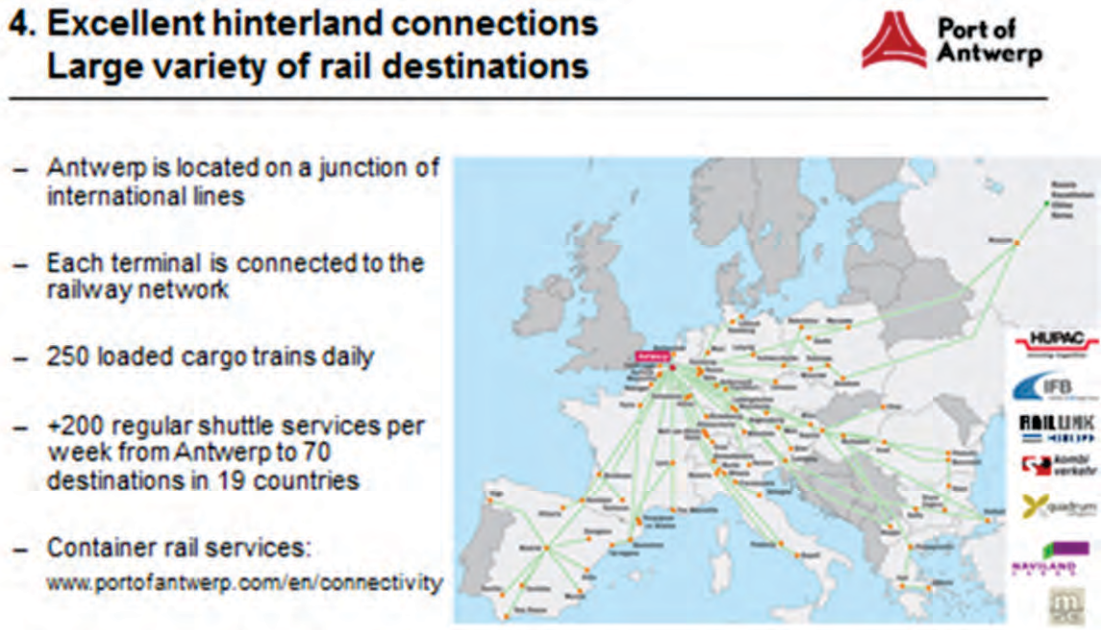
The Port has very good connections to the European hinterland via Excellent integrated quadrimodal connections to the European hinterland..These are via Road, Rail, Barge and Pipeline. The current 34% share of cargo moved by barge will increase to 42% over the period till 2020.

Thanks to its intermodal network, the Port of Antwerp manages to extend its natural hinterland to major production and consumers markets in Italy, UK, France, Germany, Austria, and Eastern Europe.

4. Excellent hinterland connections
Daily barge connections with EU hinterland

Port of Antwerp

- 48 000 handled barges in 2013
- 915 barge calls per week to 350 destinations in Europe
- 85 barge operators frequently connected to the port of Antwerp
- 190 container shuttles per week to 67 destinations in 7 countries
- Daily departures by conventional barge and tanker to the European hinterland, in function of the availability of the goods
- All container barge sailings can be consulted on the Port of Antwerp Connectivity Platform: www.portofantwerp.com/en/connectivity



The above facilities are the result of years of constant work to an agreed long term plan to improve the competitiveness of the Port and to offer a better service to customers who have reposed their faith in the facilities at the Port of Antwerp.

The current plan envisages the construction of the largest lock in the world to provide better access to the terminals, a railway link to the Left Bank to better enable containers to move to the hinterland and the development of new areas for logistics and other value added services.

The commitment of the CEO, the Chairman and the Board extends to all those who work in and for the Antwerp Port Authority.

The main difference between Indian Ports and International ports like Antwerp is that they are "PORT CITIES", the city co-exists with the port activities and plays an inherent part in the development and growth of the port; totally missing around Indian ports. Time for port authorities and governments to work towards this.

Goods and Service Tax (GST): Much needed now than perhaps ever before.

10

- by Mr. Prahlad Tanwar, Director, Transport & Logistics, KPMG

With an experience of around 13 years in Industry, he Focuses across all roles/ functions - Developing innovative supply chain solutions for customers across various industries, helping them take their products to the world and enabling global sourcing in the most effecient manner.

Introduction

The Goods and Services Tax is a comprehensive value-added tax to be levied on goods and services, which is to replace all indirect taxes being imposed by the centre and states: e.g. central excise, service tax, VAT etc. It is built on a destination-based taxation system, wherein tax is levied on final consumption. GST in India is envisaged to be a dual tax, encompassing levies by both central and state tax administrations on the same base, to include components on State GST (SGST), Central GST (CGST) and Integrated GST (IGST). The new regime is expected to broaden the tax base, foster a common market across the country, reduce compliance costs, and promote exports.

The first steps towards GST implementation were taken in 2006, with plans to introduce the tax by April 2010. Several challenges in implementation prompted the Finance Minister to revise the date of introduction to April 2013, with three sub-committees working to sort-out the issues. We have come a long way since, being the closest ever to implementation, with the Constitutional Amendment Bill having been introduced in the Parliament for ratification.

Components of GST

Intra-State transactions

- Central GST ('CGST')
- State GST ('SGST')

Inter-State Sales and Branch Transfers

- Inter-State GST ('IGST')

There has been a lot of uncertainty in the market in reference to the implementation of GST and the direct and indirect impact it will have on the companies and the market, at large. On one hand, several warehouses of companies may become redundant and they might require to set-up new ones involving restructuring and significant capital investments. While some companies may also require to change their billing, accounting and taxation practices to ensure compliance and benefit from the regime.

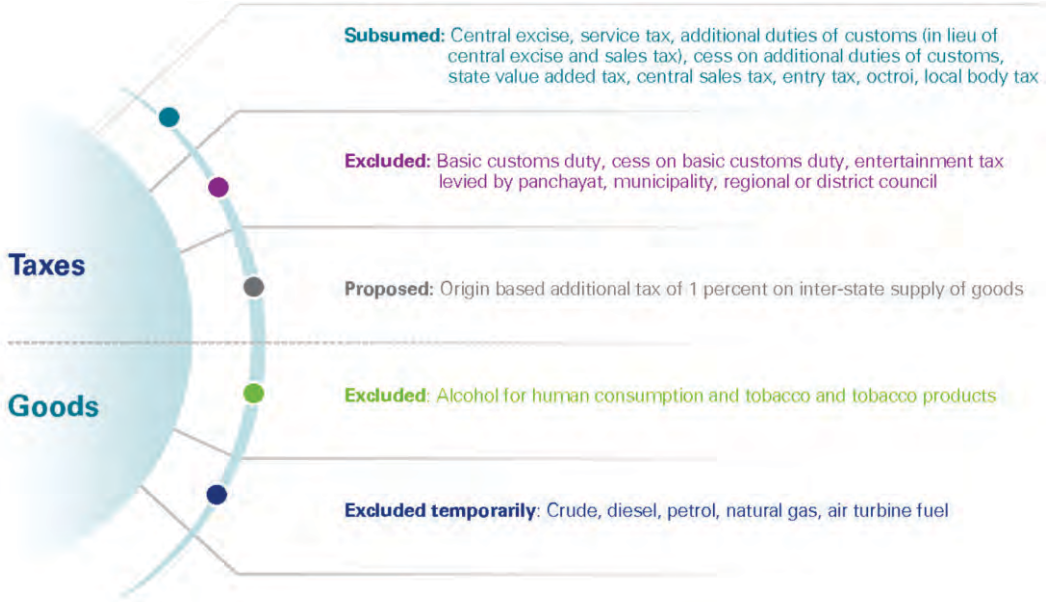
With the bill expected to be passed during the current budget session, the market is hoping that the budget will be able to provide a clear roadmap for GST implementation along with expected timelines, to be able to effectively plan their next steps in light of the new regime.

"GST implementation will change the market dynamics, with emergence of new hubs and changes in business models and practices, creating several new opportunities. It will be interesting to see how companies attune themselves to the new regime."

GST through the years –Pathway to implementation

2015	Finalizing the framework, drafting of the law etc., GST hoped to be rolled out by 2016-17
2014	Finance Minister releases funds for compensation to States. Constitution Amendment Bill introduced in the Lok Sabha
2013	Three Sub-committees formed to sort-out the contentious issues. Report submitted by the Standing Committee and the amended bill sent to States for consideration

2012	Negative list and Place of Provision of Service Rules announced
2011	Union Cabinet approved the Constitutional Amendment Bill, placed it before the Parliament and referred it to the Standing Committee
2010	Finance Minister revised the date for introduction to 1 April 2013. DOR released comments on the discussion paper
2009	First Discussion Paper and report of the Task Force set-up by the Thirteenth Finance Commission, released
2006	Finance Minister announced the introduction of the Goods and Services tax with effect from April 2010



GST preparedness

With the introduction of the Constitution Amendment Bill in the Parliament as the first step towards GST introduction, the government also needs to prepare for GST implementation in the background. The amalgamation in taxation would require a strong IT backbone to ensure seamless integration and processing, in addition to setting-up a dedicated GST Council to ensure stability and restrict unilateral amendments to the state GST laws. The government has been working in the direction of GST implementation, including setting-up a panel for creating the IT backbone, pilot run of modules and discussions on the proposed rates.

There have also been several discussions in the market on the proposed rates for GST with inputs and recommendations from various committees. The central government proposed a separate rate of 20, 12 and 16 percent for standard goods, concessional goods, and services, respectively, to be standardised over three years to 16 percent, while the National Institute of Public Finance and Policy proposed rates ranging from 19 to 27 percent based on various permutations and combinations. With the introduction of the Constitution Amendment Bill in the Parliament as the first step towards GST introduction, the government also needs to prepare for GST implementation in the background. The amalgamation in taxation would require a strong IT backbone to ensure seamless integration and processing, in addition to setting-up a dedicated GST Council to ensure stability and restrict unilateral

Preparations for GST implementation

- Nandan Nilekani lead technology panel for GST
- GST Network and Portal
- NSDL assessments of the state's IT infrastructure
- Pilot testing of certain GST modules
- GST Rate

amendments to the state GST laws. The government has been working in the direction of GST implementation, including setting-up a panel for creating the IT backbone, pilot run of modules and discussions on the proposed rates.

The information technology infrastructure panel lead by Nandan Nilekanito create a technology support for GST was set-up earlier. Furthermore, the creation of a GST Network as a special purpose vehicle for providing common information technology infrastructure to the Centre and the states has been a step in the right direction, along with the Common GST Portal providing three core services (registration, returns and payments). Further, the National Securities Depository Limited (NSDL) has also been assessing the readiness of the State's IT Infrastructure for certain modules for the proposed GSTN, including common formats for GST return and registration forms. The NSDL has also been conducting pilot runs of certain GST modules in some states.

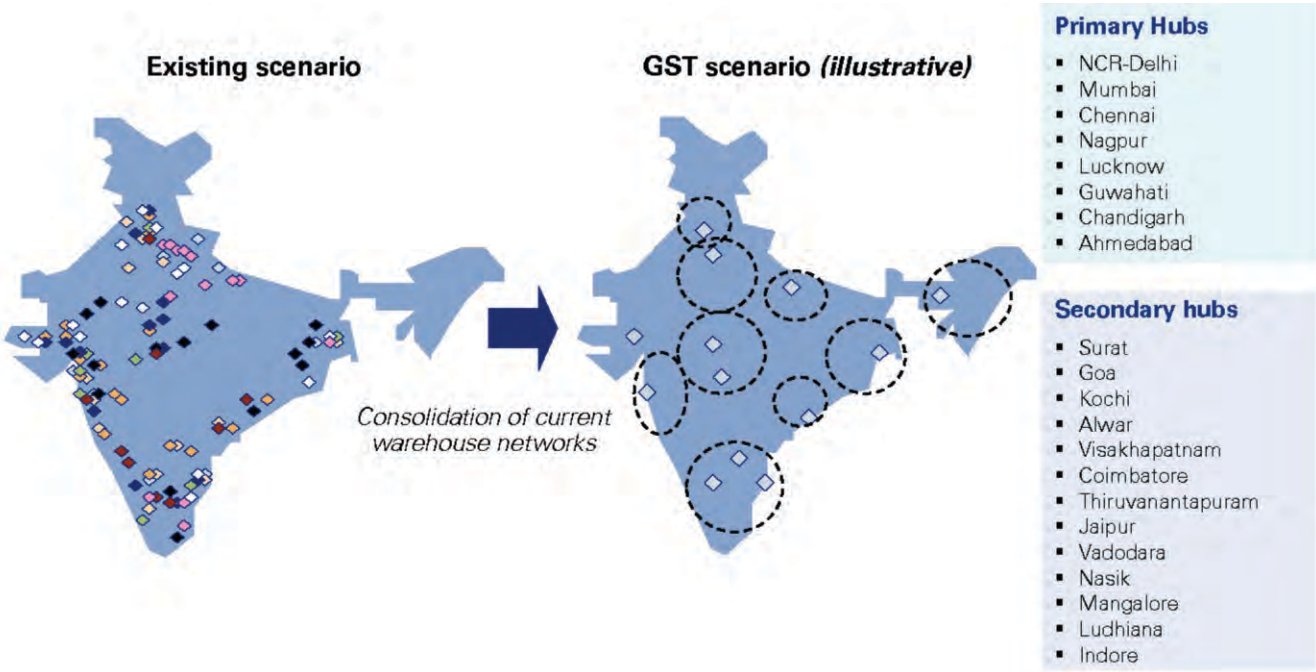
There have also been several discussions in the market on the proposed rates for GST with inputs and recommendations from various committees. The central government proposed a separate rate of 20, 12 and 16 percent for standard goods, concessional goods, and services, respectively, to be standardised over three years to 16 percent, while the National Institute of Public Finance and Policy proposed rates ranging from 19 to 27 percent based on various permutations and combinations.

Impact of GST

The GST regime aims at simplifying various indirect taxes and replacing them with a single tax. According to a study by the National Council of Applied Economic Research, the rolling out of GST is expected to boost India's GDP growth by 0.9-1.7 per cent. Additionally, it provides an efficient way to mobilise revenue and reduce the fiscal deficit. It will also require companies to realign their supply chains to cut costs, in addition to removing cascading taxes which will be beneficial to the sector and help ease the burden of tax compliance.

Consolidation of current warehouse networks

The rollout and implementation of GST will lead companies to re-design and optimise their networks to move to a hub and spoke model, with primary and secondary hubs. Companies will see a change in the warehousing network with cities such as; Guwahati, Lucknow, Nagpur, and Chandigarh emerging as primary hubs in addition to key cities such as; NCR-Delhi, Mumbai, Chennai, etc. Additionally smaller cities



such as; Surat, Alwar, Nasik, Indore, etc. may emerge as secondary hubs to move to a hub and spoke model for distribution.

Changes in the logistics landscape

Tax on interstate transactions would only be a pass through and therefore, location of a plant/warehouse manufacturer would become tax neutral. The interstate sales will attract tax which would be creditable,

stock transfers will also attract tax which would be creditable resulting in blockage of working capital. Below are some changes expected in the logistics landscape:

- Shift of trend in movement of goods:
  - interstate freight likely to increase
  - reduction in number of depots
  - reduction in stock transfers
- Identification of the number and appropriate location of depots
- Developing efficient distribution plans: movement points, quantity for distribution
- Optimising the tax implications
- Assessing cost for opening and operating depots

The removal of cascading taxes is further expected to bring down the tax paid by consumers, thus leading to decrease in price of goods which will further boost consumption. While in the medium-term, changes in logistics landscape and infrastructure may require a lot of capital investment for restructuring and planning, companies are expected to benefit from this in the long-term with efficiency in the supply chain leading to a 15-20percent logistics cost reduction, lower inventory systems, improved service levels, etc.

Future Outlook: Key Considerations

Along with the much awaited relief, the GST regime will bring its associated challenges, from establishing a workable framework of law, to implementation on a nation-wide basis for the government as well as for businesses. Establishing a GST council to ensure implementation, along with a strong IT backbone will be critical. Furthermore, the changes in the logistics landscape will not only spur changes in the infrastructure market dynamics, but also spur dominance of organised LSPs in the market.

GST council	Establishing a GST council will be critical to ensure stability in the regime and restrict unilateral amendments to the state GST laws leading to distortion.
Warehousing hubs	Smaller warehouses and hubs will be re-aligned/merged to give way to larger warehousing hubs, closer to the manufacturing locations or key markets. The warehouses will also see a higher degree of automation and technology implementation.
Organised service providers	The GST regime is expected to push the emergence of organised service providers, since taxes will no longer be added costs for businesses. The long standing practice of engaging with unorganised players for tax considerations is expected to change.
Petroleum products	Petroleum products have currently been excluded from the GST net. This will have severe implications on logistics, where motor spirits are a large cost component for the business. Petroleum products can be included in the GST fold but with special rates.
Place of supply rules	Appropriate rules will need to be framed for determining the place of taxation. A basic model could be to provide for payment of taxes in the state from where the transportation commences. The challenge however lies in making provisions for LSPs to capture credits in reference to the expenses incurred along the route/journey.

Outlook

The GST reform is critical to prompt growth in the Indian economy. The regime will facilitate a common market across states and integrate the country through a uniform tax rate. Introduction of GST will not only simplify the tax system, but also help incompliance across states, boost revenue from tax, bring down the tax paid by consumers and enhance exports.

From a business perspective, it will be interesting to note how the implementation brings about several reforms in the sectorwith companies realigning their supply chain networks for optimising and rejigging their accounting and taxation practices in light of the new system, creating huge opportunities in the market.

GST has been a long pending reform, which is expected to sort the problems and loopholes in our existing tax system, contributing to India's growth story. The market expects the government to provide a clear roadmap on the implementation plan for GST along withthe associated timelines, to address the concerns looming around the topic.

11

Multi Modal Logistics Parks: A Key Factor for Economic Development of a Country

- by Mr. Naresh Kumar Baranwal, Whole Time Director, TCI Developers Limited

Mr. Baranwal is a qualified Chartered Accountant having 32 years of experience in the areas of corporate accounts, Audit, Project Planning and Execution. He has now donned a new challenging role of being a Director of TCI Developers and leading its successful foray into building modern warehouses, cold storages, commercial properties, etc.

Transportation plays a key role for the socio-economic development of a country. The pace of economic growth is largely influenced by the efficiency of transportation system, as most economic activities are possible only if transport is available to make them so. In social-economic development, transportation, being an integral part of the production and marketing chain, is an indispensable input both in the pre-harvest and post-harvest operations. The complex functions of this chain, start from carrying various inputs like in agriculture seeds, farm equipments, labourers, fertilizers, pesticides and in industry raw materials, minerals, different chemicals and services etc., from the sources of supply to yards, assembling the final produce at the central locations of the farm or at the other appropriate nearer places for its further processing, moving the goods to local market or local store within the same village or town to the wholesale market located at another village/town and from there to the godowns and finally to the ultimate consumption places. Poor and inefficient transport facilities hinder both the quality and quantity of the product and limit the marketability of final produce. Multimodalism refers to transportation of goods between two points by more than one mode of transport. This could be by road-rail, road-rail-coastal or any other combination. The distance over which the goods have to be transported is an important consideration because the characteristics of the line-haul charges and terminal charges vary widely from mode to mode.

In general, road transport is the cheapest mode of transport over short distance, railway is cheapest over medium to long distance and water transport is cheapest for very long distance. Obviously the multimodal system would work only if it is economical to the user and it would be economical if there is efficiency in operations.

Multimodal Logistic Park would help a user to take care of issues including efficient interface arrangements; goods warehouse facility, quick documentation arrangements and customs offices when import & export are involved.

About Multi Modal Logistics Parks:

Multimodal Logistic Park, as the name suggest, is one centralized place for all types of transportation activities and value added services needed by exporters and local traders for shipment of their goods. It also works as an interlinking point for all modes of transport at one specific place.

Multimodal Logistics Park provide all types of transportation facilities at a place for the end user or defined as a rail, road based inter-modal traffic handling facilitation complex comprising container terminals, bulk/break- bulk cargo terminals, warehouses, banking and office space and facilities for mechanized handling, inter-modal transfers, sorting/grading, cold chain, aggregation / de segregations etc. to handle freight traffic. The key components of a Multimodal Logistics Park are warehousing, transport and value-added services.

As the region is more geared for international as well as intra-regional exchange, a well functioning integrated transport network needs to be constructed to secure efficient flows of freight. Major functions of multi modal logistic hub, basically rail based and intermodal traffic handling facility are storage & warehousing (Open and closed warehouses for different products), handling, processing, domestic transportation and international transportation. While major functionaries are warehouse: uses for handling export cargo as well as domestic cargo for further distribution, ICD: custom clearance & bonded warehouse, rail siding: dedicated leased lines and common user lines (including Ro-Ro operations), truck terminals: distribution to dealers, collection and feeding in concerned region and port: concerned with rail and road transportation.

Multimodal Logistics Park - Indian Scenario:

The country began to experience rapid economic growth, as markets opened for international competition and investment. The GDP has been growing between 7% and 9% over the last 6 years. According to a report compiled by the Confederation of Indian Industries (CII) the unprecedented growth is holistic and contributed by all sectors such as industries, agriculture and services.

Under the draft policy, the ministry proposes to have three types of logistic parks Large Multimodal Logistics Parks (LMLPs): Set up on more than 300 acres, Medium sized Multimodal Logistics Parks (MMLPs): Developed on 50-300 acres and Small Multimodal Logistics Parks (SMLPs): Covering Less then 30 acres. While all three categories will generally have multi-user facilities, the small and medium sized parks could also be set up for handling dedicated needs of major rail freight owners.

Concept of multimodal logistics parks is relatively new in the country. Despite the fact that the country has the second largest network of roads (3.83 million km), the second largest rail network (63,000 km), 128 airports, 13 major ports, 1 corporate port and about 200 non-major ports(intermediate & small ports) but, this infrastructure counts far little in terms of quality.

The cost of transport of goods (per unit) is still very high as compared to the other developed countries. The

industry has attracted only limited private investments, that too more recently following the privatization and the direct investments of the private players. As a result, the Indian logistics industry accounts for a mere 2% ($100 billion) of the $5,000-billion global logistics industry and currently it is by and large very fragmented. The industry is hampered by high transaction costs, more time taken in processing exim containers (12-13 days compared to 3-5 days in France and Denmark), excess documentation (an average1-1 documents as compared to 2-3 in France and Singapore), and high cost of handling exim containers.

India ranks 47th in the World Bank logistics performance index out of 155 countries in the year 2010. Nearly 94% of the logistics and distribution requirement is dominated by a large number of small fleet owners (5-10 trucks) and these accounts for 80% of the revenues. Even the freight forwarding segment of the industry is dominated by small time customs brokers and clearing agents. The logistics cost, which includes transportation, warehousing, packaging, holding and inventory, accounts for nearly 13% of India's GDP which is very high when compared to developed countries such as Japan and USA.

Benefits of Multimodal Logistics Parks include:

MMLPs can help in saving of cost in transportation. In otherwords these services help in the reduction of costs which are incurred in the transportation of goods. This is possible because of use of right modal for the movement.

1. One of the main features of MMLP is that it reduces the transit time of the goods. Thus reducing the inventory cost both for logistics operators as well as for the ultimate user of the transport mode.
2. It helps in the proper utilization of the assets as the transit time is less and the goods vehicles and the other hardware are free to use for the other business. Thus the per unit cost of the transportation of goods can be reduced considerably.
3. Helps in the balanced growth of all the modes of transport.
4. Helps in optimal modal choice.
5. Helps in proper utilization of assets like railways or other modes of transport.

Future of logistics infrastructure: Logistics Parks

It is critical for governments, association, organizations, and local municipal authorities to start focusing on B to C sector. For Example 10 years back a truck used to take 52 hours to travel from Delhi to Mumbai, while now it takes only 42 hours, which is a significant improvement. However, when we say Delhi to Mumbai, we actually mean Gurgaon to Bhiwandi or UP border to Panvel, which are outskirts of Delhi and Mumbai respectively. While the consumers live inside Delhi & Mumbai, it takes approximately 24 hours to cover the 50 kms distance between Gurgaon to Delhi or Bhiwandi to Mumbai.

Infrastructure is an important piece in the entire supply chain and this has to be super efficient because it handles huge amount of transactions. The transactions volume become large as we go towards the Consumers which are becoming larger.

The functional element of the supply chain, the demand it creates to infrastructure and the functionality of the infrastructure is very critical. Talking about the government side of the infrastructure, we are talking about the roads, toll markers, congestion on the roads, entry restrictions period, which is a big barrier in the efficiency of a supply chain leading to TAT being effected, money value gets affected leading to the delay in overall service. To speed up the time to market, and move products seamlessly through in and reduce the overall turn around time, the focus on B to C is critical and that is where the focus is required.

The acceptance of Logistics Parks, the offerings it has, is yet to be experienced by the industry and the LSPs, primarily because of one major fact that there is no cost arbitrage., warehousing does not get any allocation while mapping out lands by various entities. The concept is yet to pick up and GST only may bring in the much desired change in the adoption of Logistics Parks.

D

Case in point
Multimodal Movement

12. Collaboration for Knowledge Management – Project Logistics
    - by Mr. Pramod Sant, Vice president – Head of Imports Exports and Export control and customs with Siemens Ltd.

13. Bulk Material Handling Safety and Reliability Through Rail - Road
    - by Editorial

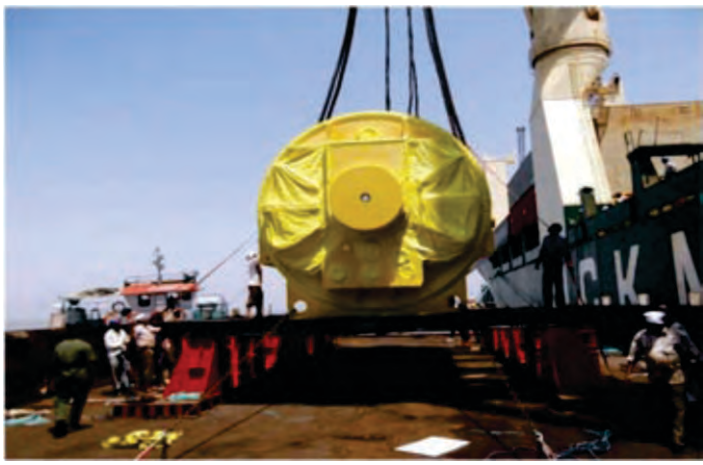
Case Study : Collaboration for Knowledge Management–Project Logistics

12

-by Mr. Pramod Sant is Vice president –Head of Imports Exports and Export control and customs with Siemens Ltd.

He has been working with Siemens Ltd for more than 25 years and has extensive experience covering various areas like SCM, Logistics, operations management and Project Management.

Successful collaboration is built upon the twin pillars of a common vision and mission. Upon these thrives a diverse workforce, acting as a single unit, moving and working in unison to attain its cherished goals. Working together, in tandem, is how Henry Ford defined the essence of success. Each working day brings together a geographically spread workforce in the common pursuit of organisational objectives. The story of Unosugen / Dgen power projects - illustrates one such instance where local and international teams partnered to create a remarkable tale of success.



Handling power projects logistics is a highly complex and specialized job. Each project normally has cargo of approximate 45,000 tons. Those projects where movements of equipments like turbine, generators and transformers which are 300+ tons point load are generally more complex as ODC movements too come into play. Some projects even require 2-3 years for completion. Each project is carried out geographically in different and remote areas and as such government policies, customs and other duties too need to considered in movement and implementation thus increasing the complexity.

Organizations that have a specialized team for Project Logistics often face the challenge of skill gap. For example, teams who work together on any one project often get transferred to other roles. The knowledge and experience that has been gathered by them while working on a particular project does not get documented and hence cannot be used to tackle similar problems again.

Some organization opts for hiring specialists' for the specific time of the project. With number of such projects increasing it gets difficult for organizations to depute specialist manpower everywhere around

world. The cost of services of these specialists is also a deterrent. Another issue is that specialists do not have experience in handling critical local issues.

I present here a case study of how Siemens handled the logistics of a large power project by harnessing the local and global talents and created a true example of how corporate can benefit from Knowledge Management. The case study describes how the global expertise of the german team and local knowledge of their Indian counterparts combined to result in improved cost savings and create history for the energy division.

The Background

The Road to Success The Energy division of Siemens AG had bagged the Sugen project in 2003. Located near Surat in the Indian state of Gujarat, the project became a classic example of combining global expertise and local knowledge. But it was not smooth-sailing. The project saw its share of unprecedented challenges. When the opportunity came along to upgrade the existing capacities of the projects in 2011-2013, the export import and logistics arms of The company picked up the gauntlet. They devised an innovative Knowledge Management collaboration model.

The Road to Success

Unosugen and Dgen are the combined cycle power projects with advance class gas turbines. The combined order value for the project was 900 mio Euro. The two teams got down to dissecting the hurdles and challenges faced at Sugen. The new Unosugen project was meant to enhance the power generation capacity of the existing Sugen plant. Dgen was intended to generate additional power at the Dahej Special Economic Zone in Gujarat. The key to success lay in a simple formula: a knowledge collaborative model to harness the strengths of both the local and German teams.

A clear delineation of responsibilities was, therefore, made between the German logistics team and the logistics team in India. Offshore (German equipment and machinery shipped to India) and onshore (custom clearance and transportation to project site) responsibilities were entrusted to teams that were best suited for the role. The German team has expertise in handling heavy lift and vessels hiring and barging. They have more experience in assessing methods statements etc. An important contribution came in the form of local expertise of the Indian team about various transporters their capability,road permits approvals , timely customs clearance and roué survey and bypass .

The final presentation was made before the Project Management officials, which assessed the finer points and gave a goahead. The negotiation teams comprised the experts from both sides.

Crossing the Hurdles, Together

Projects were to be handled together, keeping only one supplier for both offshore and onshore operations. On the basis of technical competence, commercial bid, international presence and local expertise in India, Deugro, a specialist in turnkey projects, was finalised as the partner to offer seamless onshore and offshore operations for the entire project.

A finely tuned strategy allowed the teams to cross all major hurdles. Delay caused by a prolonged monsoon was offset by expediting the widening and construction of bypass roads.

Once heavy machinery in the form of transformers, generators and gas turbines began rolling in at the port, the rest of the project went ahead smoothly. The Unosugen project has been completed within the stipulated time and budget with savings.

Case Study : Bulk Material Handling Safety and Reliability Through Rail - Road

13

-by Editorial

A upcoming Multimodal Logistics player Rail + Road end to end solutions creates synergies and efficiencies in your supply chain , faster turn around time, lesser carbon footprints, and a cost effective alternative to only truck transportation. The multimodal logistics player has a joint venture with one of the govt rail organizations.

The joint venture creates a dynamic relationship between the two primary and cost effective modes of transportation prevailing in the country to offer end-to-end multimodal logistics solutions.

The company leverages the existing strengths, infrastructure and capabilities of the parent organizations and create synergies using the rail infrastructure of govt. rail organization and the road infrastructure of private player to establish an integrated rail-road cargo service .

The company aims to build up on a strong operational experience, sound cargo management expertise and a professional team of rail movement specialists to emerge as a leading rail cargo service provider. Information Technology is the mainstay and the company has deployed state-of-the-art systems to ensure safe , reliable and cost effective transportation of cargo.

The company experience and in-depth knowledge of the country , networks and freight systems, enables us to respond timely and professionally to all kinds of complex railway transportation requirements of our customers.

About The Client: The Company is one of India's leading metal and mineral companies around the Raipur and Raigarh area. It has facilities in Raipur and in and around area.

Scope of Work:

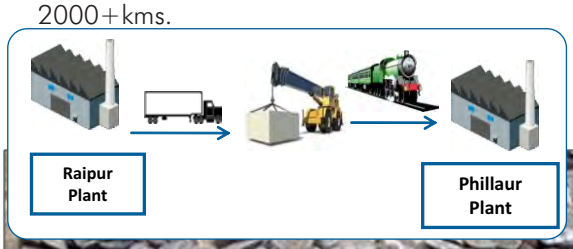
- Movement from Raipur to Phillaur, Punjab
- Commodities to be transported included Pig iron and sponge iron.

The Challenges:

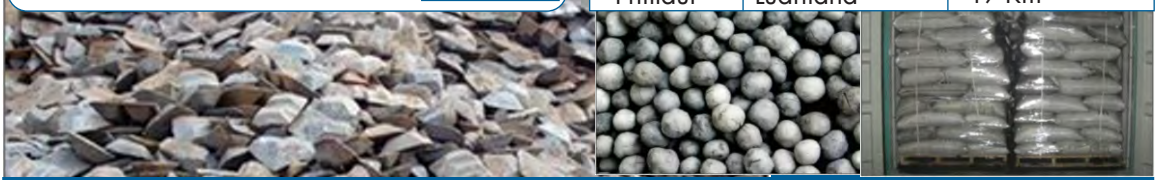
- Material to be transported was part loose and part packed in bags.
- Maintaining strict transit time.
- Material Safety in transit.
- Cost Effective Logistics for transporting a total weight of 1890 MT and a distance of 2000+kms.

Solutions Offered :

- 90 TEU Container Used.
- 1890 MT total load.
- Cost Effective Rail-Road Multimodal Movement.
- First and Last Mile through company's Vehicles.
- Hub and spoke model for faster and safer execution.



From	To	Distance
Raipur	Phillaur	1542 Km
Raipur	Raigarh	258 Km
Phillaur	Chandigarh	122 Km
Phillaur	Ludhiana	49 Km



With the Rail-Road combination, The multimodal company was able to execute safe, damage free and timely movement of the metals.

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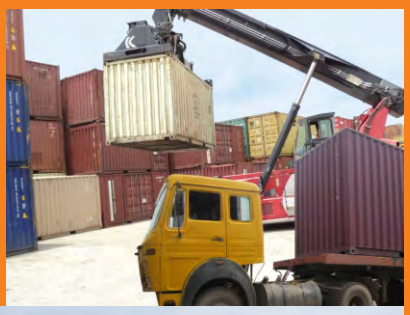

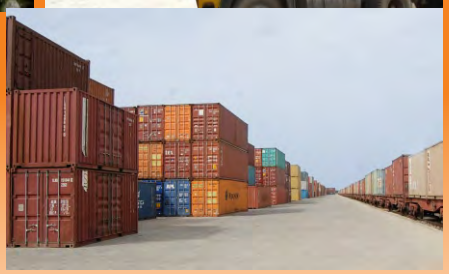

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- Typical Products Cargos - Tiles Marble, Sanitary wares, Agro Products, Machineries, Electronic & Engineering, Consumer Products, etc.
- TCI's new service, from Mundra to Kochi (Cochin), intended to serve Punjab, UP, MP, NCR, Rajasthan and Gujarat production areas for consumption in South and return cargo from South.
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Key Industries

Retail / E-tail

- Network Design
- Vendor to DC / Store platform and logistics
- Distribution Centre Design, Management,
- Value Added Services : QC, kitting, packaging
- Distribution - Milk Run, B to C, Collection on Delivery
- Reverse Logistics & Processing

Chemical

Adherence to Statutory Health Safety & Environment Practices

- Solids, Liquids, Gases
- Production Logistics
- Raw Material Stores, QC, Silo Charging
- Finished goods store & Value Added Services
- Freight Desk, Transportation
- EXIM Services : Bonded warehousing, Custom Clearance

Auto

Design to Execution:

- Production Logistics, Returnable Management, Kitting and Line Feeding
- CBU Logistics, Multi-modal Logistics, Yard Management
- Aftermarket Logistics & Distribution Center
- Parts Consolidation Center (PCC) for EXIM

Hi-Tech

Consumer Products:

- Production Logistic, Kitting and Line Feeding
- Distribution for B- B & B-C over surface & air
- Distribution Center Management
- Aftermarket & Reverse Logistics

Projects & Equipment

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- Yard / Distribution Center Management
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